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**IMPACT OF FAMILY SIZE ON HEALTH AND WELL-BEING:
A STUDY OF SOME SELECTED AREAS OF BANGLADESH**

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Rajshahi, May 2003

**IMPACT OF FAMILY SIZE ON HEALTH AND WELL-BEING:
A STUDY OF SOME SELECTED AREAS OF BANGLADESH**

**A Dissertation Submitted to the Institute of Bangladesh Studies,
University of Rajshahi, Rajshahi, Bangladesh in Partial
Fulfillment of the Requirements for the Degree of
Doctor of Philosophy in Social Work**

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Rajshahi, May 2003

**Dedicated to
my respectively father
Nurul Islam Talukder who passed away**

DECLARATION

I do hereby declare that the thesis entitled "**Impact of Family Size on Health and Well-being : A study of Some Selected Areas of Bangladesh**" submitted to the Institute of Bangladesh Studies, University of Rajshahi, Bangladesh for the Degree of Doctor of Philosophy is a completely new and original work done by me. It has not been submitted earlier partly or wholly to any University or Institution for any Degree or Diploma.

Abdul Hoque Talukder 06.05.03

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CERTIFICATE

I have the pleasure to certify that the thesis entitled "**Impact of Family Size on Health and Well-being : A study of Some Selected Areas of Bangladesh**" is the personal work of Mr. Md. Abdul Hoque Talukder. As far as I know, no other person was any way associated with its preparation. I also certify that I have gone through the draft thesis thoroughly and found it satisfactory for submission to the Institute of Bangladesh Studies, University of Rajshahi in partial fulfillment of the requirements for the Degree of Doctor of Philosophy in Social Work.



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ACKNOWLEDGEMENT

I am indebted to so many people and institutions who have helped and supported me in the development of this thesis that I cannot possibly mention them all. So I must select only a few.

First, I must recognize the contribution of my supervisor Dr. Profulla Chandra Sarker, Professor of Social Work, University of Rajshahi for his timely suggestions, guidance and undivided attention given at every stage of the thesis, whose ceaseless follow up and friendly behaviour reached me to the success.

I express my gratitude and regards for my indebtedness to Dr. M. Ali Akbar, Professor of Social Work, University of Rajshahi and Dr. Mizanur Rahman, erstwhile Senior Scientist, International Center for Diarrhoeal Disease Research, Bangladesh (ICDDR,B). Their able guidance with critical insight and innovative ideas, suggestions and untiring support throughout my research work, for my continuous study and improvement.

I must gratefully acknowledge the financial support and cooperation of Dr. Sadia A. Chowdhury, Dr. Aslam, Dr. Manjoor Hossain of Health and Population Division (HPD, BRAC), for their continuous encouragement regarding the completion of this thesis.

I owe special thanks to Dr. M. Zainul Abedin, Director of the Institute of Bangladesh Studies, University of Rajshahi, Professor Mahmud Shah Qureshi, Professor Atful Hye Shibly, Dr. Priti Kumar Mitra, former Director of IBS, faculty member Dr. M. Mostafa Kamal and other faculty members who gave me their valuable suggestions and encouragement. I want to thank Mr. Zaedur Rahman, Secretary and other IBS staff for extending their hands of cooperation as and when required.

I wish to thank Mr. Abu Bakar Siddique Bhuiyan, chairman of Anthropology, Dr. Rezaul Karim, Chairman of Social Work Department, University of Rajshahi, Mr. Abdur Rouf Bhuiyan, Executive Director of

CDF, who offered many insights and ideas and gave generously of their time in reading and commenting on the manuscript.

I am also thankful to my friends and colleagues Dr. A.K.M. Rafiqullah, Dr. Humayun Kabir, A.K.M. Nurul Islam, Dr, Fazlul Huq, Ms. Khadiza Akhter, Ms. Masuma Ferdousi, Ms. Protima Sen for their encouraging advices and cooperation.

Mr. Rohini Kanta Paul, who ably assisted his deserve special recognition, not only for typing the manuscript, but taking care of the myriad of details with efficiency, I also wish to express thanks to all librarian including ICDDR,B, NIPORT, IBS for their hearty help and cooperation rendered me.

I wish to remember my respectively uncle Mr. A.K. Azad, my wife Salina Begum, my son Saki, daughter Sejuti for their sacrifice and encouragement which enhanced my concentration in this challenging task.

Md. Abdul Hoque Talukder

Rajshahi, May 2003

GLOSSARY

BBS	:	Bangladesh Bureau of Statistics
BCPS	:	Bangladesh Contraceptive Prevalence Survey
BDHS	:	Bangladesh Demographic Health Survey
BFS	:	Bangladesh Fertility Survey
BRAC	:	Bangladesh Rural Advancement Committee
CDF	:	Credit and Development Forum
CPR	:	Contraceptive Prevalence Rate
CPS	:	Contraceptive Prevalence Survey
DHS	:	Demographic Health Survey
ENHR,B	:	Essential National Health Research, Bangladesh
FP	:	Family Planning
GDP	:	Gross Domestic Product
HPD	:	Health and Population Division
IBS	:	Institute of Bangladesh Studies
ICDDR,B	:	International Centre for Diarrhoeal Disease Research, Bangladesh
IUD	:	Intra Uterine Device
KAP	:	Knowledge Attitude and Practice
L	:	Large
LF	:	Large Family
MCH	:	Maternal and Child Health
NGO	:	Non Government Organization
NIPORT	:	National Institute of Population Research and Training
RU	:	Rajshahi University
S	:	Small
SF	:	Small Family
TFR	:	Total Fertility Rate
VOC	:	Values of Children

ABSTRACT

The study examines the impact of family size on family health and well-being. The dependent variable of the study was health and well-being, the independent variable was family size. The survey, case study, observation methods were used to conduct this research work. The sample size of the study were 400 eligible couples (200 from small and 200 from large families). The data were collected from 12 villages of Gazipur and Dhaka district began October 2000 and finished November 2001.

The study reveals that the small family can ensure better health and well-being than that of large family in terms of better ability to meet basic family needs, more investment on children, more accumulation of wealth.

The findings of the study and observation at the field level as well other study review reflect fertility behaviour among fertile couples regarding expectation and satisfaction about offspring with popular emphasis on son dominate family size norm. Thus, the sex behaviour and family as a social institution is intercepting both at micro (family) and macro level (national) life style. The over all analysis of the study and review of literature are imperative that the family planning and welfare services should have more intensified as a policy measure for ensuring, health and well-being at family level with focus on rural area to establish small family as norm in Bangladesh.

CONTENTS

Declaration	i
Certificate	ii
Acknowledgement	iii
Glossary	v
Abstract	vi
Contents	vii
Chapter One : Introduction	1-15
- Background	
- Nature of Family Planning Programme	
- Explanations of Fertility Transition	
- Conceptual Framework	
- Family Health and Well-being	
- Objectives and Scope of the Study	
- Specific Objectives of the Study	
Chapter Two : Research Methodology	16-25
- Selection of the Study Area	
- Study Unit	
- Selection of Samples	
- Procedures of Data Collection	
- The Survey	
- The Observation	
- The Case study	
- Difficulties in Data Collection	
- Major Indicators of Health and Well-being	
- Data Processing and Analysis	
- Limitations of the Study	
Chapter Three : Values of Children and Family Size Norms	26-56
- Conceptual Approaches to VOC	
- The Socio-demographic Approach	
- The Social-structural Approach	
- The Micro-economic Approach	
- The Social-psychological Approach	
- Measurement of the Values of Children	
- Class and Culture	
- Parental Sex and Child Sex	

- Stage of Family Formation
- Values of Children and Family Size
 - Positive General Values
 - Negative General Values
- Measurement of Family Size Norms
 - Large Family Values
 - Small Family Values
- Demand for Children
- Net Productivity of Children
- Son Preference and Fertility
- Daughter Preference and Fertility
- How Sex Preference and Sex Composition Affect Contraceptive Use and Fertility
- Ideal Family Size and Sex Composition of Children
- Family Size, Fertility and Family Planning
- Demand for Fertility Limitation

- Chapter Four : **Demographic and Socio-economic Background of the Eligible Couples** 57-63
- Age of the Couples
 - Pregnancy and Fertility History
 - Average Number of Living Son and Daughter
 - Level of Education of the Couples
 - Occupation Status of the Couples
 - Annual Income of the Family
- Chapter Five : **Impact of Family Size on Health and well-being** 64-95
- Housing condition
 - Nature and Number of Dwelling Houses and Rooms
 - Area of Living space
 - Size and Ownership of Kitchen
 - Land Ownership Pattern
 - Cultivable Land Owned by the Family
 - Kitchen Garden Owned by the Family
 - Household Assets
 - Household Assets Owned and Used by Per Family Members
 - Value of Household Assets by Family Size
 - Family Expenditure
 - Family Expenditure Trend for the whole Year
 - Monthly Expenditure of the Families
 - Amount Spent on Basic Needs

- Goods Bought by the Family During their Family Life.
- Savings and Credit
 - Total Savings of the Family
 - Loan Taken by the Family
 - Reasons for Selling Assets
 - Reasons for borrowing Money
- Consumption Pattern of the Family
 - Information on Food Intake (1st Round)
 - Information on Food Intake (2nd Round)
 - Information on Food Intake (3rd Round)
- Investment on Children
 - Mean Per Capita Yearly Expenditure
 - Time Used on Rearing Children
- Level of Education of Children
 - Education of Children by Family Size
- Mothers work and Leisure Time
 - Daily Work of Mothers
 - Leisure Time of the Mother
- Advantages and Disadvantages of Children
 - Advantages of less Children in the Family
 - Disadvantages of More Children
- Health Status of the Families
 - Family Members Sickness
 - Money Spent for Treatment by Families
 - Occurrence of Sickness Among Members of the Families
 - Cost and Nature of Treatment of the Families.

Chapter Six : **Conclusion and Policy Implications** 96-101

References 102-107

Tables :

01	Fertility Decline in Bangladesh	06
02	Reasons Given for Preference Sons	43
03	Reasons for Wanting Daughter	47
04	Sum and Mean No. of Son and Daughter by Family Size	49
05	Age of the Couples and Their Family Size	58
06	Pregnancy and Fertility History of the Wives	59
07	Average Number of Living Son and Daughter by Family Size	59
08	Level of Education of the Couples in relation to Small and Large Family	60
09	Occupation of the Husband and Wives by Family Size	61

10	Annual Income of the Family by Family Size	62
11	Nature of Houses and Rooms by the Family	64
12	Area of Living Space of the Family	66
13	Size and Ownership of Kitchen by Family Size	67
14	Cultivable Land Owned by the Family Size	68
15	Kitchen Garden Owned by the Family	69
16	Household Assets Owned and used by per Family Members	70
17	Value (Tk.) of Household Assets by Family Size	71
18	Family Expenditure Trend for the Whole Year	72
19	Monthly Expenditure of the Families	73
20	Amount Spent on Basic Needs by the Family	74
21	Expenditure Pattern of Large and Small Size Families	75
22	Total Savings of the Family by Family Size	76
23	Loan Taken by the Family at Present and After one Year of Marriage	77
24	Reasons for Selling of Assets	78
25	Reasons for Borrowing Money by the Family	79
26	Information on Food Intake of the Families	80
27	Information on Food Intake of the Families (2 nd Round)	80
28	Information on Food Intake of the Families (3 rd Round)	81
29	Mean per Capita Yearly Expenditure for Children	82
30	Time Used on Rearing Children for the Last 3 days	83
31	Education of Children % by Family Size	84
32	Daily Work of Mothers	86
33	Leisure Time of the Mother of Small and Large Family Spent by Events	87
34	Advantages of Less Children as Opined by the Couples	88
35	Disadvantages of More Children Opined by the Couples	89
36	Family Members Sick for the Last 15 Days	91
37	Money Spent for Treatment by Families for the Last 15 Days	92
38	Occurrence of Sickness Among Members of Families for the Last 15 Days	94
39	Cost and Nature of Treatment of the Families	94

Figures :

01	Population Pyramid, Bangladesh 1999-2000	03
02	Geo-Social Map of Bangladesh	17
03	Level of Education of the Couples	60
04	Area of Living Space of the Family	66
05	Mean Per Capita Yearly Expenditure for Children	82
06	Education of Children by Family Size	85

CHAPTER ONE

Introduction

Background

Bangladesh, a small country having a land area of 147,570 square kilometres. It lies between $20^{\circ} 30'$ and $26^{\circ} 45'$ North Latitudes and $88^{\circ} 00'$ and $92^{\circ} 56'$ East Longitudes. It is almost entirely surrounded by India, except for a short South eastern frontier with Myanmar and a Southern Coastline on the Bay of Bengal.

Bangladesh is one of the largest delta lands in the world. The most significant feature of the landscape is the extensive network of large and small rivers that are of primary importance in the socio-economic life of the nation. The country has a sub-tropical climate with three prominent seasons: monsoon, winter and summer. Mean annual temperature vary between $57^{\circ} F$ and $80^{\circ} F$, and annual rainfall from 50 inches in the west to 100 inches in the south east and 200 inches in the hilly regions of the north. The fertile delta is frequented by natural calamities such as flood, cyclone, tidal-bore and drought.

Bangladesh gained independence on March 26, 1971 following a 9 months war of liberation. The country was ruled by Muslim from the early 13th century until June 23, 1757, and then by the British from June 24, 1757 until August 13, 1947. While under British rule, it was a part of British India. When the British left, British India was divided into two independent states - Pakistan and India, with what is now known as Bangladesh becoming part of Pakistan to

form its east wing. As part of Pakistan, Bangladesh was known as East Pakistan and remained so known until it was liberated.

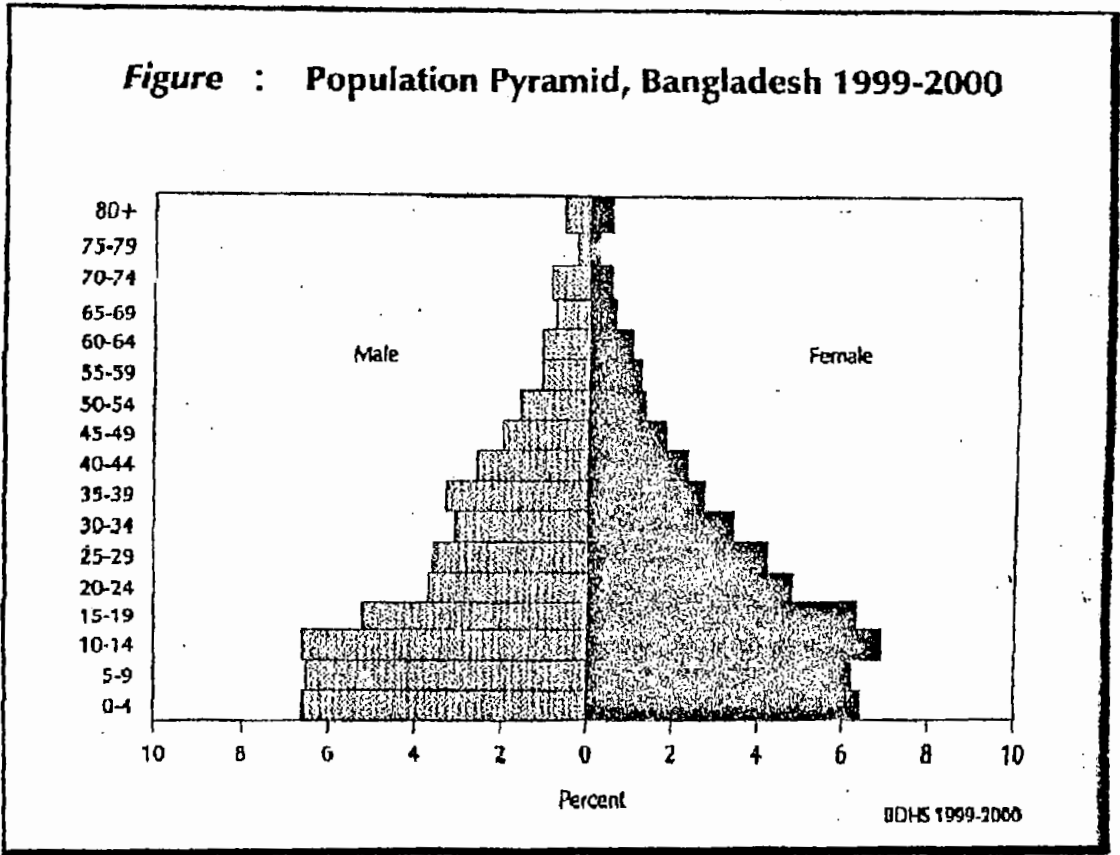
For administrative purposes, the country is divided into six divisions, 64 district, and 490 Upazillas (sub districts). Muslims constitute almost 88 per cent of the population of Bangladesh. Hindus about 11 per cent, and others almost one per cent. The national language of Bangladesh is Bangla, which is spoken and understood by all. The country is culturally homogenous except for the differences brought by religions and tribal cultures. The people, in general belong to one ethnic origin, however, there are some ethnically different tribal populations (1.2 percent) in the hilly and north-western regions of the country.

Agriculture is the most important sector of the nation's economy. It accounts for 30 per cent of the gross domestic product (GDP) and provides employment to 64 per cent of the workforce. Jute is the main non-food crop and the main cash crop of Bangladesh. Less than 20 per cent of the cropped land area is used for crops other than jute and rice. Industry, though small, is increasing in importance as a result of foreign investments. Prospects for mineral resources, gas, coal, and oil, appear to be bright. However, the per capita income is only US \$ 375 and half of Bangladesh's population entered the 1990s with incomes below the poverty line (World Bank, 2001:XVII). Unemployment/under employment is a serious problem, and pressure on the land in rural areas has led to influx of people from rural to urban areas (BDHS, 1996-97: I).

With an estimated population of more than 130 million, Bangladesh is one of the most densely populated countries in the world. According to the 1999-2000 Bangladesh Demographic and Health Survey (BDHS), about 45 per cent of its

population were under 15 years of age, 52 per cent are between 15 and 64 years, and 3 per cent are age 65 or over, and about 48.9 per cent of the female population were within the reproductive age (15-49). Since marriage is almost universal, the seeds of further growth are built-into its population age structure. It was estimated that about 2.5 million persons were being added each year to its population (Mitra *et al*, 1997). One projection suggested that the population of Bangladesh may stabilize at 211 million by the year 2056 (Mitra *et al.*, 2001: 2).

Figure : Population Pyramid, Bangladesh 1999-2000



It should be noted that whatever may be the national concern about the consequences of population growth, the decision about family size remains an

individual and private matter. Some analysts therefore had suggested that family planning approach may *precipitate* fertility decline only if there is a large and growing *demand* and/or if such demand may be stimulated by educational campaign (Pritchett 1994). It is also argued that since almost all parents in Bangladesh know about family planning. There was little need for persuasive campaign to convince them of its value (Stalker 1997: 49). The important challenge is persuade couples to use the available services of fertility control to limit their family size.

The family planning programme is being promoted with the assumption that families can improve their living condition by having a small family. But this intuitive assumption about the benefit of a small family has not been empirically established, particularly among the poor. It is therefore important to understand and analyse the nature of benefits of having a small family as opposed to a large family. Does a small family contribute to family health and well-being? Accordingly, the main object of the study was to examine the actual and perceived health, economic and social impacts of family size at family level. The study aimed at understanding the advantages and disadvantages of small families as opposed to large families.

Throughout Bangladesh's history, one of the most urgent issues has been the rapid population growth and its impact on national development (Stalker, 1997: 47). Bangladesh has a long history of population control efforts (Akbar and Halim 1978: 39-50). All development plans since the early 1960s, had given top priority to its population problem. In 1976, rapid population growth was declared to be the *number one problem* of the country. The government, from a

sense of urgency, has set a target of reaching the *replacement level of fertility* (2.2 children per women) by 2005. This would require the increase of the family planning acceptors from about 49 percent in 1996 to around 70 percent by 2005. This is a stiff target, difficult but not impossible¹ to achieve only if the couples take advantage of services and facilities of fertility control to limit their family size to two children.

Nature of Family Planning Programme

The family planning programme designed to control rapid population growth began in Bangladesh in an *unfavourable* environment. It was realised that a spontaneous spread of contraception was not realistic. The programme therefore assumed that the couples would require considerable counselling and reassurance before they might be willing to try modern methods of contraception (Cleland 1993: 27). A door-to-door service delivery has been the centrepiece of the population control programme. The government deployed educated and trained cadre of female field workers to reach out the fertile married women on a *regular and predictable* basis, to offer reversible contraceptive methods and to refer for clinical ones and treatment contraceptive side-effects to the local clinics (Caldwell and Caldwell 1992: 292-293). A significant number of non-government organisations were also engaged in promoting family planning². It was claimed that such sustained outreach efforts had played an important role in fostering family planning in early years (Hossain and Phillips 1996).

But the progress of family planning programme was disappointing until the mid-1980s. Since then, there seems to be growing recognition by the married

couples about the adverse consequences of population growth at family level. This was reflected in the rise of contraceptive users, decline in preferred family size and faster than anticipated decline in fertility rate (Mitra *et al.*, 1997). There is wide consensus that fertility transition was underway in Bangladesh since the mid-1980. Thus, the DHS of 1991 found (Hossain and Phillips 1996: 99) that:

- nearly every couple had been approached repeatedly by family planning workers;
- virtually all fertile women had knowledge of modern methods of contraception;
- the adoption of contraception was no longer a taboo in the community; and
- about 40 per cent of them had tried at least one of the methods of contraception.

The 1993-94 DHS found that the acceptors had increased to about 45 per cent, that the average family size desire had declined to 2.5 children and that the fertility rate had come down to 3.4 children. The 1996-97 DHS found that :

- the rate of acceptor had gone up to 49 per cent;
- the family size norm was unchanged (3.4 children);
- the fertility level had continued to decline at a slower rate; and
- the population growth rate was estimated around 1.8 in 1997.

Fertility Decline in Bangladesh

Source	CPR	TFR
1971-75: BFS/ 75	7.7	6.3
1984-88: BFS/ 89	31.0	5.1
1989-91: CPS/ 91	40.0	4.3
1991-93: BDHS/ 1993-94	45.0	3.4
1994-96: BDHS/ 1996-97	48.0	3.3
BBS/ 1998	50.0	3.2
1999-2000: BDHS	54.0	3.3

Source: NIPORT 1997: 30.

Note: BFS- Bangladesh Fertility Survey

CPS: Contraceptive Prevalence Survey

BDHS: Bangladesh Demographic and Health Survey.

These findings obviously indicated that a sustained fertility transition was underway in Bangladesh.

Explanations of Fertility Transition

It was hoped that political, economic and environmental situations of the country would speed up the demographic transition in Bangladesh (Ministry of Health and Family Welfare, 1994: 61-63).

The analysts disagree about the extent and causes of fertility decline. Cleland (1993:13-19), by analysing the 1989 Bangladesh Fertility Survey data, concluded that the fertility during 1950-70s had remained constant and that much of the decline recorded by the 1989-Survey might be *spurious*. According to him, there was no indication of conscious and widespread effort to regulate the number of births and whatever decline recorded in 1980s was *limitation rather than postponing of births*. He however conceded that *a radical transformation of reproductive behaviour* was in underway in Bangladesh since the mid-1980s (Cleland *et al.*, 1993).

There was divergence of views about *how* this transition began a country that had not yet shown any pronounced positive social and economic change (Caldwell *et al.*, 1999). There was however consensus that the significant and sustained fertility decline in Bangladesh had not been solely driven by socio-economic development or rising poverty, or even by a strong programme effort but by a complex interaction between *demand* and *supply* (Caldwell *et al.* 1999: 34-36, Stalker, 1997: 47-48).

On supply side, the family planning programme had played a major part by providing a highly *personalised* service -- door-to-door counselling, supply of

contraceptives and referrals by 2,400 government and about 7,000 non-government field workers³. Moreover, the family planning programmes was transformed into family welfare programmes and was expanded to incorporate a more *holistic* concern for reproductive health and to meet people's individual needs (GOB 1997; Schuler and Hossain 1998).

On the demand side, the parents could reduce the number of births as they could experience that their children were more likely to survive than before. The success of immunisation and related health programmes, coupled with continued improvements in control of communicable diseases are the obvious factors in the decline of infant and child mortality. The infant mortality rate had come down to 77 per 1000 births in 1998. The sharp rise in the expectation of life at birth is due to the massive reduction in infant and child mortality. At the same time, the parents could make an informed decision about acceptable methods of fertility control in an environment which no longer hostile or negative towards fertility control. The average live births (TFR) had declined to 3.2 births in 1998. The desired family size had appreciably come down to around 3.2 children⁴. The relative importance of demand and supply factors has remained a debated issue.

At the societal level, more women are completing primary education, and working outside home. It was found that the participation of poor women in micro-credit programs in rural Bangladesh tends to strengthen their economic role and women's participation in income-earning activities was positively associated with contraceptive use (Schuler and Hashemi 1994: 73). The micro-credit programme gives women socially legitimate reasons to move about and to associate with one and another in public places. Their attendance to weekly

meetings increases their mobility and visibility, exposes them to new ideas, and helped them become more skilful at interacting in the public sphere. It was found that when the number of contraceptive users in a community increased, through diffusion effect, it became easier for the non-participant women to adopt family planning.

A qualitative analysis indicated that the increased economic burden of large families, growing influence of a monetary economy, critical changes in schooling, penetration of modern urban influence into village life together with a strong program has contributed to the rapid decline in fertility in Bangladesh (Simmons 1996 : 252).

Conceptual Framework

The fundamental micro-economic and sociological perspective suggests that in general, human behaviour is purposive and is directed to maximising utility: chooses to advance well-being or satisfaction and avoid pain and distress. The observed variability in human choices can be attributed economic and social factors (Morgan and Niraula 1995: 541). It is however, acknowledged that an individual's capacity to make decisions is constrained his awareness, expectations and culture-specific norms. Demographic phenomena are outgrowth of human behaviour that is purposive and future-oriented, occasionally externally constrained (Astone *et. al.*, 1999). Since the couples have access to information and services of fertility control at doorstep, the couples will use fertility control measures if a small family is beneficial for their well-being. It is unrealistic to assume that children are desired solely or even primarily because of their value as productive assets. But it is also a rare

case in which this consideration is entirely absent in their decision to have an additional child.

Public policies that seek to effect behavioural change such as birth and death registration, dowry system, have not been successful in Bangladesh. This was truer with the *non-coercive* fertility regulation policies. The experiences showed that success of the fertility reduction policies however efficiently implemented, depended on the couples willingness to use contraception for spacing and limiting child bearing. So, we can assume that the success of fertility regulation policies depends on the couples' realisation, from their day to day experience, that small families are good for their health and economic well-being.

In most theories of fertility decline, the main underlying cause of fertility decline was identified as falling demand for children in response to economic and social change. Acceptability and access to fertility control services might influence may speed up a decline but effect of the supply side factors was contingent upon and subordinate to demand factors (Cleland 1993: 23). The relative importance of demand (motivation to space or limit births) and supply factors (accessibility and quality of fertility control services) has remained a debated issue (Biddlecom and Parrez 1997: 108). Almost similar conclusions were arrived at about fertility transition in Bangladesh (Caldwell *et al.*, 1999; Simmons 1996).

We therefore, assumed that fertility transition was dependent on significant change in the perceived and actual economic costs and benefits of children to parents. This was also based on the realisation that child bearing has significant

influence on the health of mother and children. Since child bearing is a conscious choice, it is based on the perceived and actual advantages of spacing and limiting family size. This means that *fertility transition is primarily dependent on significant change in the actual and perceived economic costs and benefits of children to the parents.*

To our knowledge, no comprehensive empirical study was conducted in Bangladesh to examine the impact of family size on the health and well-being of families. There were studies, which had recorded the opinions about the advantages and disadvantages of large and small families (Akbar and Halim, 1978: 71-74). There were studies of the effect of fertility on infant and child mortality and nutrition. Some studies provide some information about the health implications of child bearing (Rao, Gopalan, Fauvean, et al. 1988: 643-51). So, the proposed study was designed to explore this important issue in order to bridging the gap in our knowledge.

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Family, Health and Well-being

Generally family can be defined as a primary group related by marriage, blood, or adoption constituting (at least for a period) a single household (Noel, Timms, 1977: 73). The family is a domestic group which provides the most intimate needs of its members, a realm of privacy, familiarity and security. It consists of the allocation of a pattern of rights and duties defining that area of life concerned with marital, parental and domestic relationship (Sarker, 1997:7). The family may be divided in different types viz. nuclear, supplementary nuclear, joint and extended, on the basis of membership pattern, social and economic dependency and living condition (ibid). In this study the

family is categorised as small and large to compare the impact of family size on health and well-being. The small family is defined (i) a nuclear type of family where married eligible couple with their offspring live together and partake their meals from a common kitchen (ii) having one to three children and (iii) the age of the wife will not less than 25 but not exceeding 49 years. Similarly the large family is also defined as (i) nuclear type of family where married eligible couple with their offspring live together and partake their meals from a common kitchen, (ii) having four or more living children, (iii) the age of the wife is not less than 25.

In the past, health meant only the absence of disease or illness. Today, though, health has a broader meaning. Health is the state of well-being that includes how one feel physically mentally and socially.

The term 'well-being' is wider and relative, but is an essential cultural characteristic of modern society. It assure provisions for meeting social needs recognized as basic for the well-being of the people and for the functioning of the social order. The means of ensuring the well-being of a people, in fact, may be determined as much by the national mood-the values and belief of the day and the place-as by the economic situation. In the end, it is not the level of a nations wealth that is important. It is the basis for the distribution of that wealth that matters (Wormer, 1997: 5). However, in this study well-being is defined as meeting basic needs, investment on children and accumulation of wealth at family level.

Objectives and scope of the study

The main object of the study was to examine the actual and perceived health and socio-economic advantages and disadvantages of small families vis-a-vis large families. Considering the main objective of the study and the limitations of empirical knowledge in the field, we used some questions which helped to formulate the specific objectives of the study.

Some of these questions are :

- i. What is the economic and time costs of rearing children in relation to family size?
- ii. How does family size affect on child care and consumption patterns of the family members?
- iii. Is there any effect of family size on education of the children?
- iv. Is there any relationship between child morbidity and mortality with family size?
- v. Does family size affect wealth accumulation, savings and indebtedness?
- vi. How does family size affect on family health?

In the light of above questions we can formulate some assumptions on the impact of family size. We can assume that a couples reproductive behaviour is more or less rational, and is based on an assessment of the health and well-being considerations. Thus, a smaller family would be able to :

- a. arrange better feeding, clothing of the family members and schooling of the children;

- b. achieve quality housing for healthful living with adequate room/space with privacy;
- c. accumulate more assets, saving and free from debt and achieve better health condition of the mothers and children as well as less morbidity among the family members.

Therefore, the research hypothesis of the study is : **a small family size contributes to family health and well-being in terms of better ability to meet basic family needs, more investment on children, more accumulation of wealth and lower rate of morbidity among its members, especially mothers and children.** Accordingly, the dependent variable of the study is family health and well-being and the independent variable is family size. The relative advantages of a small family vis-a-vis a large family will be examined in the light of the following specific objectives and selected indicators.

Specific Objectives of the study

On the basis of above questions and hypothesis, the specific objective of the study are :

- i. To ascertain the respondent's opinion about advantage and disadvantages of small and large families.
- ii. To ascertain the differential condition of small and large families in terms of consumption pattern.

- iii. To examine the effect of family size on monetary and time cost of child-rearing.
 - iv. To ascertain the incidences of illness and health care cost of mother and children in relation to family size.
 - v. To examine for comparison of wealth, savings, sale of assets and debt status of small and large families.
-

Notes

¹Among the NGO clients, acceptor rate is already around 60 percent. So, an improvement in quality of services integrated with health care and poverty alleviation programmes is expected to accelerate the acceptors (Amin 1997).

²NGOs accounted for about 30 per cent of the distribution of the contraceptives (Stalker 1997: 48).

³But sheer costs of maintaining a cadre of outreach workers necessitate huge operational costs of service delivery, and this approach may not necessary and sustainable (Janowitz *et al.*, 1999). Nearly every couple has been approached repeatedly, adoption of contraception has become normal behaviour and fixed supply points clinics, satellite clinics, and social marketing outlets exist at convenient locations throughout the country (Hossain and Phillips 1996). So what an expensive outreach programmes can do?

⁴The family size preference was still above the replacement level of 2.2 children per couple (Mitra *et al.*, 1997: 89). There is doubt effectiveness of opinions about family size. But there is consensus that fertility depends on the deliberate action of the married couples. Akbar and Halim (1978: 56) concluded that the couples of all economic classes were aware of the pressures of family size and the costs of proper upbringing of their children. Thus, the data 1989 DFS showed that if the couples able to prevent all unwanted births, the TFR in 1988 would have fallen from 4.64 to 3.65 (Islam and Islam 1993).

CHAPTER TWO

Research Methodology

Several methods and techniques have been applied to conduct this research. The methods and techniques applied for this study are interviewing, observation and case study. Each and every method has been applied in times of need and situation of the study. After developing specific objectives of the study we selected the appropriate study design that included the selection of the study area, definition of study unit, sampling design, preparation of the interview schedule, data collection. We also devised the major indicators in order to measure health and well-being of the study population.

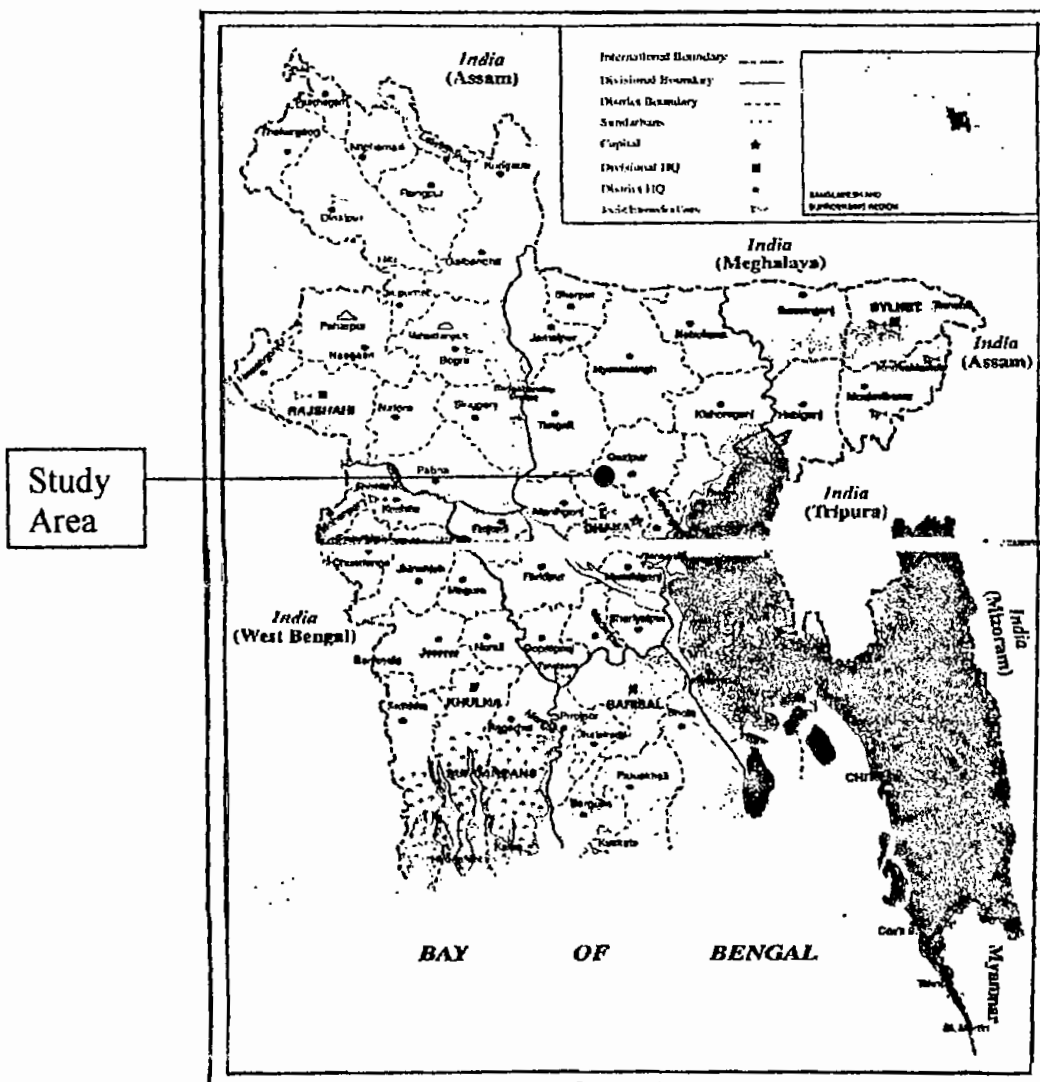
Selection of the Study Area

The data for the study were collected from rural households that were mainly dependent on agriculture and related occupation. The study site comprised of 12 villages: 10 of Gazipur Upazila¹ under Gazipur district and 2 adjacent villages of Savar Upazila under Dhaka district. The villages were 25-30 kilometers north-west of Dhaka City. A geo-social map is given below to locate the study area (Figure : 1).

The selection of study villages was based on practical consideration – easy access and convenient location for repeated field visits for data collection. Initially seven villages were selected; but gradually, the number of villages was increased up to twelve² in order to obtain a reasonable number of sample households.

The selected villages were more or less similar in terms of their socio-economic settings as well as the accessibility to important facilities that might influence health and socio-economic well-being. The villagers were expected to have access to the modern media of communication (i.e. radio, television and newspapers). The villages were also well connected with Dhaka City. The selected villages however had no NGO activities. It was assumed that NGO interventions might have influence on income and other related services.

Figure : 1 Geo-Social Map of Bangladesh



Study Unit

Since the study was designed to assess the consequences of family size on health and well-being, we selected the nuclear (monogamous) family as the study unit. We defined family as married couple with their unmarried offspring who live together and had meals from the same kitchen. As we have noted, a *small family* was defined as having one to three children and a *large family* as having four or more living children. Although slogan was having a 2-child family, we had decided to use one to three children as small family in view of the prevailing family size norm found in the recent DHS.

Thus, the study units were currently married fertile couples whose wives 25-49 years age. They were assumed to have *completed* their family size. In order to ensure completed family size criterion, we selected the couples whose last child was 5 years. The lowest age of the last surviving child was fixed at 5 in order to assess the effect of family size, especially in terms of education of children. We assumed that this criterion would help us understand the differentials in investment on children, child rearing costs (time and money) and expectations among small and large families.

Selection of Samples

The process of choosing respondents for the study involved several steps. At the first stage, we purposively selected villages as study sites. At the second stage, all households of the selected village were identified through a house-to-house complete survey in order to prepare an up-to-date *sampling-frame*. Initially, seven villages were selected as study area. But gradually, the number

of villages was increased to twelve in order to obtain the required number of sample households³. A total number of 1600 households were identified in 12 villages. After the construction of sampling-frame on the basis of set criteria, a total of 400 families -- 200 small and 200 large families were *randomly* selected. The reasons for the selection of both small and large family from the same villages were to make a comparative analysis of large and small families in similar settings. The people of the selected villages were exposed to similar modern media of communication and were well connected with the metropolitan city. The selected families were from all economic categories in order to assess the consequences of family size on the people of different economic strata.

Procedures of Data Collection

The core data for the study came from interviewing. Besides, qualitative illustrations were used to supplement quantitative data in order to illustrate various aspects relevant to the objectives of the study.

The Survey

At first, a complete survey of all households of the selected villages were made. The survey schedule included information on all the members of the households. The Interview schedule had two parts; the household and the individual part. The household part was used to identify eligible respondents who should be interviewed in the survey, while the individual part was administered to the respondent to obtain the pertinent survey information.

The draft schedule was prepared by the researcher. But the schedule was also reviewed by the supervisor. After review, the schedule was modified. The modified schedule was pre-tested and, based on the pre-test result, finalized. In the household part of the schedule all household of the villages were listed to identify eligible couples of small and large family.

The Interview schedule contains some questions intended to be answered specifically by the husband, some specifically by the wife, some by individually, and some jointly. With the exception of a few attitudinal questions, the complete schedule can be answered by the wife alone if necessary.

The survey was designed to identify and list eligible couples -- the small and the large families in the selected villages. The list was used as a sampling frame. For easy communication, the interview schedule was frame in *Bangla*. The survey was completed during the month of October-November 2000. The collection of the *core* was completed during October 2000 – November 2001.

The Observation

The observation method has been applied at the time of data collection through questionnaire keeping in view to get more reliable, accurate and authentic information. Usually, gesture, posture and mode of expression of the informants have been observed at the time of interaction between the interviewer and the interviewee. Observation method is one of the important tools to collect reliable information especially where the people are illiterate, less educated and the women roughly observed the seclusion.

The Case Study

The case study method is a very popular form of qualitative analysis and involves a careful and complete observation of a social unit. It is a method of study in-depth rather than specific nature. Burges has used the words “The social microscope” for the case study method.

An integrated part of research methodology, the case study method was choosed to ensure a part of this research with qualitative findings and micro level analysis to probe attentively of the facts relating to central concepts of family size and well-being. The case studies done under the such area, provided quality information which highlights the social and economic aspects of family situations but sample drawn for the study reflects different conditions of families within the some social strata in regard to family size and well-being. These cases gives insight of the research that social phenomenon and norm of small family greatly influence towards family in overall well-being as a unit of the society and enhance expectation and efforts for better quality of life. A guideline was developed to study different cases from the universe to get representative data.

Difficulties in Data Collection

During the data collection we had faced several problems. In most cases, the husband was absent at the time of interview, and it caused difficulties in obtaining reliable information on household income and expenditures, future plans and aspirations from the housewife. Repeated visits to the respondents house were needed to interview the husband. Due to lack of awareness, the respondents did not understand the objectives of the research. As a result, some

of the interviewees were less attentive during the interview. It affected the reliability of the data. Some of the respondents were not willing to spare time for interview.

Major Indicators of Health and Well-being

The major indicators used to measure the health and well-being of the small and large families. The indicator selected and formulated carefully to make them self-explanatory.

Meeting basic family needs: consumption of food and clothing, meeting health and housing needs.

Investment on children: costs of children rearing; meeting basic needs of food, clothing, schooling, medical care and time spent for the children by parents.

Accumulation of wealth: quantity of cultivable land, homesteads and housing, ownership of household assets, savings, indebtedness of the family.

*Morbidity*⁴: incidence of illness and diseases among the family members (Rao *et al.*, 1970: 928). We used self-perceived measurements (Murray and Chen 1992:481-82). These were verbally reported: (1) symptoms and impairments, (2) functional disability, and (3) health service use. The symptoms and impairments were measured by asking respondents about the occurrence of illness over a defined time period. The number of days restricted to bed or days lost from work or school were two commonly used measures (Murray and Chen, *ibid*: 485) was used for the measurement of functional disability. For the use of health care was measured by asking respondents from where they had received treatment during their illness.

Data Processing and Analysis

Data processing, which included editing, coding, computer entry and analysis. The editing and coding of the data was done by the researcher. Editing was done to verify whether the survey questionnaires were correctly filled-in at the time of interviewing. The quantitative data were classified and tabulated in accordance with the objectives of the study. Appropriate statistical techniques were used in presentation of the data. Qualitative data and case illustrations were organised and presented in descriptive form in order to supplement quantitative data.

Limitations of the Study

Like other social research we had some limitations in the present study. First, the research design was not appropriately developed to see the impact of family size on the different economic strata. The findings therefore, showed the relationship between family size with health and well-being of the family. The fundamental limitation of the study design was the over simplified assumption that differences in family well-being and health status were due to only family size. We may accept that the family size is one of the variables but cannot explain fully the differences in family well-being and health status. In order to overcome these limitations we have used “controlled” variables and illustrative qualitative case histories. We hoped that for an exploratory study the study design together with analysis procedures would be enough to guide further rigorous studies.

The sample size were not well enough to assess the impact of family size on health and well-being. Moreover, through survey method by it's nature we could only able to gathered qualitative data rather quantitative ones.

It was difficult to match small and large family with their socio-economic background and the wealth acquired of their own at the beginning of their family formation.

One of the criteria to select sample unit was almost completed. We did not include children aged under five of the families. so that we were not able to measure health and economic impact of the family as most ailment occurs in those age and child rearing cost also higher in post- natal period.

It was expected that both husband and wife would be interviewed jointly. But at the time of data collection only 21 per cent of the husband were found among the total respondent.

This awareness of the limitations led us to take measures to overcome some of the limitation of survey data. This were inclusion of case studies, observation, repeated field visits, checking, rechecking of the schedule, etc.

Notes

¹Gazipur Upazila is the largest Upazila in respect of population and the second largest Upazila in respect of area of Gazipur district. It included the former Joydebpur and Tongi Upazilas. The Upazila occupies an area of 446.38 Sq. Km. including 0.31 Sk. Km. ring and 54.52 Sq.Km. forest area. It was loacted between 25.33 and 24⁰ north latitudes and between 90⁰20. The Upazila is bounded on the north by Sreepur Upazila, on the east by Sreepur and Kaligonj Upazilas and Rupgonj Upazila of Narayangonj District, on the south by Uttara and Mirpur Thanas of Dhaka District and on the west by kaliakair Upazila and savar Upazila of

Dhaka District (See theMap).

The Upazila consists of two Municipalities, 8 Unions and 244 villages. The average population of union was 40,384, and 1,324. There are 116,163 households.

The average household size for the Upazila was 5.1 persons. The construction materials of roof of the dwelling house were 22% straw/bamboo, 69% tile/C.I sheet, and 9% concrete cement. About 72% of the households were using tube-well, 10% tap, 17% dug-well, and the rest one percent were using pond, and canal / river as the main source of drinking water. In Gazipur Sadar Upazila, 33% of the households had sanitary latrines, 46% had *katcha* latrines and 21% had no latrine at all.

In Gazipur Upazila, about 50% of the households owned various quantity of cultivable land. But only about 35.41% of the households depended on cultivation including sharecropping, 1.07% on livestock, forestry and fishery, 0.03% on pisciculture and 7.68% as agricultural labour as the main source of household income. Other sources of household income were non-agricultural labour (2.94%), business (14.71%) and employment (28.31%).

The literacy (7 years and above) was 43.8% for both sexes, 51.3% for male and 34.7% for female. The child-woman ratio (children 0-4/ women 15-49) per thousand for the Upazila was 573.

The distribution of working people shows agriculture (12.21%), industry (5.36%), construction (0.93%), transport and communication (1.64%) business (6.53%), services – self employed (0-69%) and others (17.65%).

²The villages were Sataish , Chandara, Tilarghati, Bhadam, Bakral, Andarul, Rajnagar, Gutia, Dharail Gusulia, Yarpur and Tayebpur.

³ The sample size 200 from each category was considered as adequate for the micro level study.

⁴ Morbidity was defined as a deviation from the state of physical well-being.

CHAPTER THREE

Values of Children and Family Size Norms

This chapter seeks to identify and analyse the values of children to parents, family size norms and fertility behaviour of the couples in the area under study.

The values of children (VOC), especially of sons, is an important aspect of population study for better understanding the reproductive behaviour. Empirical findings confirm that the value given to children especially to sons, and the importance is given to having both sons and daughters in a family in order to make a complete family to have a significant bearing on fertility behaviour of people (couple) (Alauddin, 1980:34).

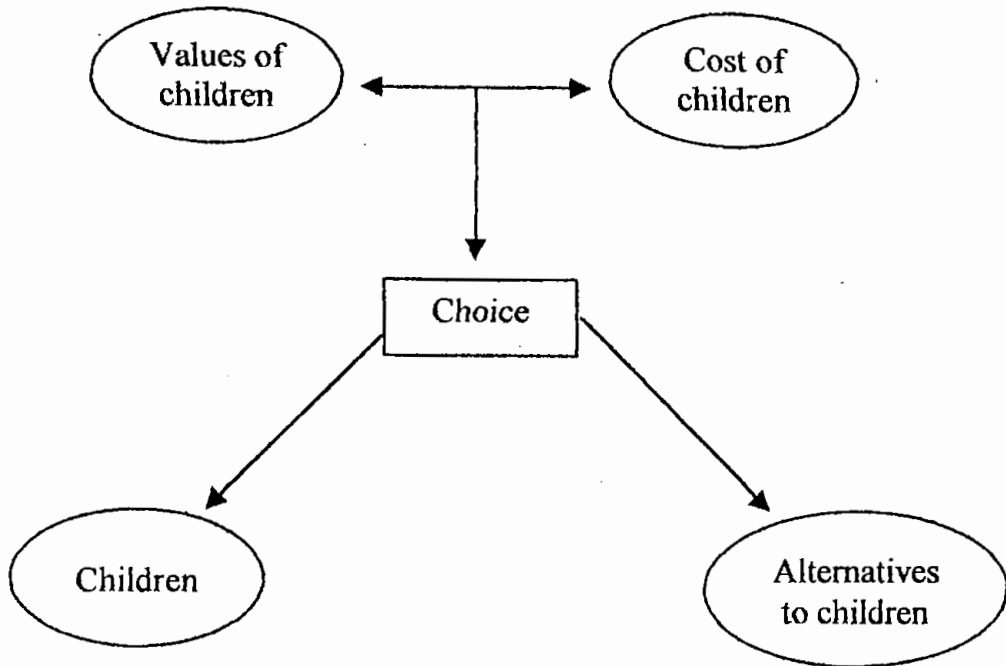
Conceptual Approaches to VOC

The values of children has in fact been used most often by psychologists and economists, but the topic itself is hardly new or limited to these academic disciplines. A basic assumption of most micro level research in this area is that the positive and behavioural process that is related to the number and timing of births.

As part of the process, children are compared to other possible sources of satisfaction (Fawcett, 1977 :92).

- Alternatives to children
- Substitutes for children
- Functional equivalents of children
- Child surrogates
- Tastes for alternative goods or services
- Preferences competing with children

A simplified version of the systems shown below :



Fawcett (1977) expressed some additional assumptions for a micro level framework.

1. That people act in anticipation of future reward and costs.
2. That children provide important satisfactions in life, but not without cost.
3. That people differ with respect to types so satisfactions and costs that are important to them.

4. That these differences are related to both internal psychological factors and external social and economic factors, which also affect the desirability and availability of alternatives to children.
5. That the balance of satisfactions and costs of children changes over the life cycle.
6. That choices about children versus alternatives are made by people at some point in the life cycle, although not necessarily for every birth.

Fawcett (1977: 93-94) also discussed a broader theoretical view pointing out differences and similarities among four approaches within the field of population studies that deal with the VOC at different levels of conceptualization. These approaches are: (1) the socio-demographic, (2) the social-structural, (3) the micro-economic and (4) the social psychological.

The Socio-demographic Approach

The socio-demographic approach emphasizes on long-term changes in socio-economic circumstances that produce corresponding changes in the values and cost of children (as well as awareness of alternatives), and thus a demographic transition takes place. However, the values and cost of children are conceptualized in very broad terms and is usually inferred, not measured.

The Social - structural Approach

It tends to be more contemporary and action oriented. There is obviously substantial similarity between the socio-demographic and socio-structural approaches. However, the important difference is that the social-structural

approach gives greater emphasis to mediating factors (roles, norms, the utilities and costs of children) and is oriented more towards the individual level (reproductive motivation) and the question of choice more specifically, the lack of choice owing to social structural constraints.

The Micro-economic Approach

The Micro-economic Approach has been summarized by Sterlin (1975:54) as: The conventional theory of consumer behaviour views the individual as trying to maximize satisfaction, given a range of goods, their prices, and his own tastes and income. In the application of the theory to fertility analysis, children are viewed as a special kind of goods, and fertility is seen as a response to the consumers demand for children relatively to other goods. In the last few years, a special variant of this approach has emerged, deriving chiefly from a 1965 article by Becker and distinguished by use of the concept of a “household production function”.

The Social-psychological Approach

It is in a sense, the broadest of the four approaches, as it attempts to incorporate all dimensions of the VOC that are relevant to child bearing decisions. However, these dimensions are usually assessed only from the perspective of the actor-perceptions of changes in the economic value of children across generations, expectations of the economic burden of a particular family size, awareness of social pressures and constraints, and so on (Fawcett, 1977:97).

The four approaches to the VOC discussed above, each have distinctive features, but they have also much in common about children, Certainly the children are not the unintended outcome of sexual activity, rather, children are a source of satisfactions to their parents and the value of these satisfactions depends on an array to psychological , social and economic needs (Schultz, 1971:149).

Measurement of the Values of Children

It has been proved that VOC can be meaningfully measured using direct assessment techniques. That is, people are able to articulate their positive and negative orientations towards children in structured interview situations, in response to various projective testing instruments and through self administered scales and questionnaires (Fawcett, 1977:100). But different influential factors affect in measurement of the VOC. These factors are (1) class and culture;(2) sex of the parent and child; (3) stage of family formation (ibid).

Class and Culture

Different pattern of the values of children have been shown for persons belonging to different social classes and culture. In Africa, for instance, Caldwell (1979:84) has shown that the perceived economic value of children in rural areas in related to the prevalence of subsistence farming and to school attendance rates. In India econometric techniques have been used by Rosenzweig and Evanson (1975:32) to show that fertility is directly related to

factors affecting the economic returns to child labour force participation, while being inversely related to school attendance rates. In Indonesia and Nepal village studies by Nag et al. (1978, unpublished) have documented the actual economic contribution of children in rural households for both household maintenance and directly productive work, leading to a tentative conclusion that households with more children are economically more efficient in certain types of peasant societies.

In the cross-national study of the VOC, the similarities of comparable social classes, across countries were more impressive than differences attributable to nationality and culture. However, two dimensions that seem to reflect cultural differences are worth noting religion and son preference. In the Philippines, which was only Catholic country studies, positive orientation towards children and large families were pervasively strong, tending to override class differences. In the Philippines and in Buddhist Thailand, disapproval of abortion was extreme, In Korea and Taiwan, where sons have special cultural significance that is partly attribute to religious beliefs and rituals, the preference for sons was strongest. From evidence as such, it is apparent that general value systems can also have an important influence on the perceived value of children and in some circumstances can carry greater weight than the more immediate economic and social factors affecting the family (Fawcett, 1977: 102).

With the changing reality, the values of children and family size norm gradually shifting from joint to nuclear, large to small and it has socio-cultural

bearings which is reforming for a new values and norms in this regard. Different studies in this area and under this current study the findings reflects that the values of children and Present family norm changed to a great extend which is positive in the formation of small family size norm. It is evident from the findings and observation in the study area as well as in the broader Bangladesh society both urban and rural areas the small family preferred 3 or less children. The study findings also suggest the traditional values of bigger family, 'greater respect and importance in the society' as a norm is diminishing day by day. The values of children and small family norm in different economic and social class reflects a trend of accepting small family norm. There is also a trend of giving equal values both son and daughter in the middle class while it is found reverse in case of upper and lower class.

Parental Sex and Child Sex

Within social classes, men and women seem to have a generally similar orientation towards children. Where differences did occur, however they could in most cases by readily ascribed to the effects of socially defined sex roles.

Women, who spend more time with children and tend to have a narrow range of alternative social relationships, generally give greater emphasis to the emotional relationship between parent and child and to the value of companionship from children. Not surprisingly, women also are more concerned than men about the emotional and physical burden of child bearing. On the economic side women are more likely to stress expectations of economic help from children, perhaps reflecting their general economic

dependence on others. Men are more concerned than women about the economic costs of raising children, probably because they carry the major responsibility for economic welfare of the household (Fawcett, 1977 : 102).

Preferences for sons and daughters also are related to the definition of sex roles and to the sex of the parent. In general, sons are wanted especially to serve long term economic, social and religious functions to help in the house, business or farm, to contribute the family name, and to provide security in the parent's old age. Daughters, on the other hand, are wanted especially for the practical help in the household that they provide while they are still children and remain with the family. There is also a tendency for fathers to want sons and mothers to want daughters, for purposes of companionship . Sons and daughters are wanted also for reasons related to stereotyped ideas about the personality, qualities of boys and girls, and partly because of these ideas, there is usually a desire to have children of both sexes. But Maloney et al.,(1981 : 114) found that husbands tend to want more children than wives. In India also, various studies have shown that men desire more children than women , and the men do not easily accept the women's argument that women need more time for domestic chores (Aziz & Maloney ,1985: 156)

The sex of the parents is a determinant factor for expectation and preference regarding for son and daughter. The social norm, cultural and social economic status of the present day are also influencing regarding the preference to son and daughter. Still today our social bondage is mutually responsive and dependent. As a result parents expect child to take care at their old age and daughter can not help it because after marriage she had to accept the

detachment with the parents both socially and geographically.

Based on findings and observation in the rural area in general and in study area particular it is evident that after marriage daughter is not allowed to stay with parents along with bridegroom which is social stigma in our society. As a result father and mother both expect more son than the daughter. In fact, in the lower economic class considered daughter as a socio-economic burden as they can not provide economic support to the family. Moreover, they become a burden to provide dowry during marriage. Still, even in the rural area the family generally expect at least one daughter.

Stage of Family Formation

The motivational context for child bearing changes with the birth of each successive child. The first birth signifies for the parents such powerful factors as adulthood, parenthood, virility or femininity, fulfilment, of the marriage, and the establishment of a family within a community of families (Fawcett, 1977: 104).

The social motivation are reinforced by more personal ones, not the least of which is kind of curiosity motive to experience child birth and parenting, to create a new life and reproduce the self, to witness the growth and development of one's own child. At the same time, negative motivations are relatively weak at this stage. The most important, it appears to be loss of freedom of opportunity costs, but for most people this affects the timing rather than the occurrence of the first birth (ibid). The effects of the first birth on motivation

for a second child are of particular interest, there is some evidence that the peak of child bearing motivation occurs between the first and second birth (Campbell et al., 1976: 27-29).

The process of family formation after the second child is at once less clear psychologically and more important demographically. From a psychological standpoint, most needs would appear to have been met by having two children. Yet many people go on to have three or more children, it is precisely these children that represent the growth in population (Fawcett, 1977:105).

It is a social orientation and psycho-physical need for reproduction which is a common expectation to have conjugal life and have child after marriage. After marriage family formed but another expectation emerged for children and popular preference is son as a first issue. It was found that in most of the cases male sex of children is a dominant factor to decide the family size. The study findings deflect that the non farm activities are increasing and son become asset when he becomes an earning member of the family which helps economic security and enhance economic support to the parents.

Values of Children and Family Size

In order to study the value and cost of children, Fawcett (ibid : 98-99) has been developed a number of classification schemes.

Positive general Values

1. Emotional benefits: Happiness, love, companionship, fun; also viewed in reverse as relief from strain and assistance of boredom of loneliness.

2. Economic benefits and security : Benefits from children's help in the house, business, or farm, from care of siblings, and from sharing of income, old age security for the parents, including economic support, physical care, and psychological security.
3. Self-enrichment and development: Learning from the experience of child bearing, becoming more responsible and mature; incentives and goals in life: being viewed as an adult, a grown woman or man; self fulfillment, feeling of competence as a parent; being needed and useful.
4. Identification with the children : Pleasure from watching growth and development of children; pride in children's accomplishments; reflection of self in children.
5. Family cohesiveness and continuity : Children as a bond between husband and wife; fulfillment of marriage; completeness of family life; continuity of family name and traditions; producing heirs, having future grand children.

Negative General Values

1. Emotional Cost : General emotional strain ;concern about discipline and moral behaviour of children ; worry over health, noise and disorder in household; children as nuisance.
2. Economic Costs : Expenses of child rearing; educational costs.
3. Restriction or opportunity Costs : Lack of flexibility and freedom, restrictions on social life, recreation, travel, lack of privacy; restriction on career or occupational mobility ; on time for personal needs and desires.
4. Physical Demands : Extra housework, caring for children; loss of sleep, general weariness.

5. Family Costs : Less time with spouse; disagreements over rearing of children; loss of spouse's affection . (Fawcett, 1977:99).

It is also revealed that in traditional social settings, children are perceived to be of special value due to their labour services to the household and as an insurance against risks in unfavorable circumstances, thus making the desire for large families a rational force to keep the value of children high (Naushin 1980: 3-4).

Measurement of Family Size Norms

Social norms may be defined as a norm the validity of which receives general acceptance in a society (Reading, 1976: 141). Accordingly "the concept of family size norms implies the standards held by a given population concerning the number of children, a couple should ideally have and also the attitudes towards deviation from the ideal". Usually the family size norms of a society is measured by the average number of living children that married fertile couples desire or prefer to have. (Akbar & Halim 1978: 51). Family size norms are governed by some values. These values varied from society to society.

Large Family Values

1. Sibling relationships : Desire for another child to provide companionship for existing children; enriching the lives of children; avoiding an only child.
2. Sex preferences; Specific desire for a son or daughter; desire for a certain combination of sexes among children.

3. Child survival: Concern that existing children may die; need for more children to have enough survive to adulthood.

Small Family Values

1. Maternal Health : Concerns that too many pregnancies, or pregnancy when the mother is beyond a certain age, is bad for the mother's health.
2. Societal Costs :Concern about over population, belief that another child would be a burden to society.

Mother for smaller family is said to be determined by preference for children, usually measured by family size norm. There is of course a subtle difference between the family size norm and the ideal family size. The family size norm would mean societal preference and the number of children one is expected to have. Whereas ideal family size represents individuals preference and the number of children one would wise to have (Akbar & Halim,1978:128). Couples lowered their intended family size mainly because of economic pressures, although it is important to remember that average working class and affluent families view economic pressure differently (Salaff,1985:208). It appears that in areas where economic condition are improving desired family size is declining considerably. Whatever may have been the case in the past, with respect to the relationship between economic security and the need for sons, people in rural India today seem to be aware of the costs of large families and to be content with smaller number of children including sons(Vlassoff,1990:19).

It is evident that limiting family size can increase women's ability to participate in productive activities, which in turn can contribute to the economic well-being of the family. This argument based on the assumption that productive activities compete for a women's limited time and hence women with a small number of children to rear are able to engage more in economic activities than those with larger numbers of children (Podhustia et al., 1990:31).

The data gathered in the study area shows that large family values is no more a popular concept because in the rural areas land holding and agriculture base income is decreasing and non agriculture occupation demands education and skill for the children to earn bread for the family. Therefore, small family size norm is becoming prominent day by day.

Demand for Children

Several economists and sociologists have emphasized the role of the demand for children as an important source of change in the reproductive behaviour of individuals. By using the standard micro-economic consumer approach it was theorized that children are perceived by parents as other durable goods and the changes in income and prices will predictably influence the demand of couples for children (Becker et al.,1985:38). Because child-bearing and rearing involve a significant amount of time and money, parents who choose to have more children weigh the reward from having another child against the rewards of other goods and services that could have been attained instead, thus making the demand for children change with the income and time costs (Mahmood,1992:3).

In agrarian societies like Bangladesh, direct economic benefits are the predominant advantages in having children. On the one hand, the farm labour and income contribution of children to the family from an early age and the expected help and security for parents in the old age are important considerations underlying a high demand for children. On the other hand, direct economic costs are of less significance in determining the demand for children in these societies.

In traditional cultures like Bangladesh, where in most cases women are economically dependent on their husbands and live without the economic and social support of their natal kin, children, particularly sons, are an important source of strengthening their social position in the household; such factors are conducive to a high demand for children (Mahmood 1993: 19)

A population prefers one sex to the other generally because of some definite utilities associated with the preferred sex. These utilities, however, vary from one society to another and also within different segments of the same society. In the context of Hindu society of India, Mamdani writes that the first duty of a married woman is to become a mother; her *dharma* (duty) is to bear children, particularly sons (Mamdani: 109). Mamdani appears to overlook the noneconomic value of sons because in his study, the ultimate goal of having sons is to acquire economic prosperity (Karki, 1988:170).

The children are considered likeable and attractive in most cultures, and people enjoy having them around, the desirability of their presence may be stronger in

South Asia than in some other world areas. Aziz and maloney (1980:149) found that elderly members of the family who do not approve a family planning measures tend to believe that quantity of children is more important than quality. They feel that more children would earn more (ibid : 150). To them children are cheap capital assets, the more the sons, the more the earners in the family. Having fewer children does not materially improve their problems of immediate struggle for survival. In fact, a large number of surviving children are economically desirable for a family in the rural areas in particular (Akbar & Halim, 1978:86).

It is evident that wealthy people, particularly those with land, want many children for economic reasons. But there are reverse result also. In a study of Maharastra villages, Vlassoff found 87 per cent of the villagers depend on farming for their livelihood, has produced evidence that having sons was no guarantee even for old age security for parents, let alone for economic prosperity. this study casts doubts on the view that sons represent "poor men's capital".

Demand for children is an usual reproductive behaviour for the couples to spread the life up to next generation to be inherited parents including their assets. It is a common perception that family is a social and economic unit of the society where grown up children can share economic responsibility in the family. Moreover, there is a common expectation that children have positive helping role in the day to day family management and fulfilled psychological and social demand. It is imperative from present study findings that it is a very common expectation from the couples after marriage.

Net Productivity of Children

A child's productive life cycle within the parental household can be conceptualized as having four distinct phases (Cain,1977:212). After the initial period when the child is completely dependent, the child becomes increasingly economically active but produces less than he or she consumes. Then comes a period during which the child produces more than he or she consumes but less than an adult produces. Finally the child's productivity becomes equivalent to an adults. But this productive life cycle may be more appropriate for males than for females. A female child may never pass through phase three because of being primarily engaged nonincome-producing house work and became of early marriage.

Children of both sexes begin to work put in relatively long hours of work at young ages. Male children appear to become net producers at least by age 12, compensate for their cumulative consumption by age 15, and compensate for their own and one sister; cumulative consumption by age 22, male children, in particular, may represent a means of supplementing income and accumulating economic wealth within their parents life time (Cain 1977: 224).

It is observed and findings suggest that children are being rear up to prepare them to become productive family member in due course of time. They start playing the helping role in the family from the childhood (teenage) and become social and economic contributor when they grown up and afterwards take major role in family sustenance and betterment.

Son Preference and Fertility

The old age security value of children had been categorized as socio-economic types, because help in old age can be both economic and social needs. For poor parents, help from children is primarily economic. For parents who are not constrained financially, though help in old age is non-economic, often taking the form of companionship for example, or emotional support. The reasons given for wanting sons in Table 3.1 are primarily non-economic.

Table 3.1
Reasons Given for Preference Sons.

Reasons of preference for son	Small family			Large family			Total	
	Husband	Wife	Total	Husband	Wife	Total	Husband	Wife
Old age security	54	57	111	73	78	151	127	135
Economic assistance	50	25	75	70	52	122	120	77
Family strength	42	20	68	66	50	116	108	76
Continuation of lineage	59	57	116	75	77	152	134	134
Religious and ritualistic	52	55	107	49	44	93	101	99
Social status	39	29	68	42	32	74	81	61
Inheritance of property	20	16	36	48	34	82	68	50
Dowry	18	22	40	25	28	53	43	50
Total	338	287	621	448	395	843	782	682

Note : The couples have been given more than one reason in different combinations for the preference of son.

It is believed that the sons keep alive the name and identity of the parents especially father in the patrilineal society like ours. It is also believed that the main objective of procreation of son is to keep or maintain the lineage after the

death of the parents. For the Hindus the act of marriage is a sacred duty to perpetuate one's lineage and to save the ancestors from going to hell (Kapadia, 1966:30). As a result the birth of a boy calls for joy as a new members of the lineage who will carry the family name and perpetuate family traditions. Some of the parents reported that the sons is the *bangser bati* or light of the lineage (Sarker, 1997:78-79).

The Chinese people believed that they must have at least one son to worship their souls and comfort their spirits after they die (Salaff, 1985:203). The old age security value of sons (socio-economic) and the religious value (non-economic) appear to be the most important dimensions of the value of children in the mid-hills population of Nepal (Karki 1988:174). For these and other reasons, it is not surprising to often hear people say, "let it be late, but let it be a son". To understand the underlying determinates of high fertility in Bangladesh, the question of the prevalence of son preference is important because of the possible influence of such preference on the process of family formation and completed family size(Mannan,1988:55).

A number of Researchers have argued that a strong preference for sons helps to sustain high fertility. For example, models developed in the early 1960s suggest that son preference may lead couples to have more than their desired number of children. Recently, park (1983) has shown the effect of son preference on fertility in Korea from world Fertility Survey data, and Gadulla et al, (1985:41) have shown the women with more sons were more likely to practice contraception of Egypt (Bairagi, 1986:302). In Pakistan, results show that the number of living son is indeed an important major factor in

determining the desire for additional children both urban and rural women (Mahmood, 1992:19).

Williamson found son preference to be specially strong in North Africa and south Asia. More recently, of the 40 developing countries studied, World Fertility Survey found that countries with the strongest son preference were Bangladesh, Jordan, Korea, Nepal, Pakistan and Syria (Mannan, 1990:33). In some cultures, women are less likely than men to prefer sons, although sometimes women want a son just to please their husbands. It should be noted that in many societies women are routinely blamed and often abandoned for not producing son. Because it is believed that man plants seeds and the woman is merely the soil and thus she is responsible for producing offspring (Sarker, 1997:73).

Inkeles and Smith have studied sex preference of male factory workers in six countries and found son preference was highest in Bangladesh (90.5%). The percentage who preferred a girl was 1.7, 5.0, 1.8, 4.5, 3.6 and 3.4 for Bangladesh, India, Nigeria, Israel and Argentina respectively (Mannan, 1990:51). In a study Mannan found preference for son is higher among women whose husband's work either in agriculture or in fishing. Son preference is weak among women with husbands in the professional or clerical positions, followed by wives of businessman. Barring one or two groups son preference exhibits a positive correlation with land holding size of the household i.e. preference for boy is stronger among rich peasants (Mannan:41). Preference for son is more pronounced among women with no formal education compared to women with some grade passed. It is also higher for women whose

preference for women whose husbands have at least 10 years of schooling (Mannan, 1990:41). Preference for son is more pronounced among women with no formal education compared to women with some grade passed. It is also higher for women whose husbands have at least 10 years of schooling (ibid).

Daughter Preference and Fertility

A very high proportion of rural respondents stressed the religious value of daughters. The birth of daughter, in some Nepalese communities, is hailed as event that will bring prosperity and some religious occasions require the presence of females. For instance, Tihar, the second most important festival of the Hindus, requires the presence of one's sisters to make it a happy occasion (Karki 1988:174).

In the Hindu society of the Nepalese, gaining relatives through daughters than sons has more significant connotation. According to the Hindu scriptures, parents earn religious merit when they perform *Kanyadan* (give a virgin daughter to a boy in another family) (Karki 1988:175). In Latin America and Philipines, there is a tendency for women to prefer girls (Williamson, 1982:24)

The perception that daughters are valuable for avoiding loneliness is stronger among urban as compared to rural parents. More urban than rural respondents mentioned this as a value of daughters. Girls, it is felt, are more playful and enjoyable as children than boys (Karki, 1988:175).

In the present study we found that girls are more useful than boys in the household and familial work. This pattern is much more pronounced among small than large family respondents. It is only the urban wives who realize the practical utility of girls, although lightly more urban than rural husbands mentioned this reason for wanting girls as well which reflected in table 3.2.

Table 3.2
Reasons for Wanting Daughter

Response	Wives (%)		Husbands (%)	
	Large family	Small family	Large family	Small family
<i>Economic Reasons</i>	10	44	16	17
Practical help	10	44	16	17
<i>Socio-economic Reasons</i>	3	6	2	2
Old age security	3	6	2	2
<i>Socio-psychological & cultural Reasons</i>	86	51	81	80
Religious occasion	53	25	52	37
Avoid loneliness	13	19	12	26
Make relatives	19	7	15	17
Other	1	0	2	0
Total	100	100	100	100

Note: Total percentage may not add to 100 due to rounding.

How Sex Preference and Sex Composition Affect Contraceptive Use and Fertility

It is generally argued that the traditional social and economic structure of the Pakistani society keeps the values of children relatively high and the demand for contraception relatively low, resulting in the persistence of high fertility in the country. This similar fact also prevailing in Bangladesh (Mahmood, 1992: 1).

In the present study we found that, family size preference and the decision to practice contraception are both affected by son preference that is, the desire to have at least one living son. The proportion of couples with at least one living son who desire additional children is very low compared to their counterparts with no son. Also, virtually no couples without sons, in both the large and small families, were practicing contraception. Among those who reported current contraceptive use, the mean number of living sons was higher than the mean number of living daughters. It is also found more acceptors are from small family than from large families.

Apparently, the effect of son preference on fertility can be observed only when a high level of contraceptive practice exists. This was the case, for instance, in South Korea, where the effect of non preference showed up only after the third birth, when parents began to practice contraception. Similar findings have been reported in Taiwan (Karki, 1988:170). Bairagi, in a study found that 82 per cent of women who did not yet have a son or a daughter indicated they would continue bearing children until they had a boy, and 71 per cent until they had a girl (Bairagi & langsten, 1986:304). It can be argued that if the desired number sons and daughters have already been born, women will be more likely to use contraception and less likely to want additional children (Mannan, 1990:31).

Ideal Family Size and Sex Composition of Children

Couples fertility behavior usually governed by ideal family size and sex composition of the children. Most couples are guided in their desire for

additional children by an ideal sex composition which is commonly found to comprises two to three sons and one daughter. The women in the study areas want to have children of both sexes but their preference for sons is much stronger and the number much larger compared to those for daughters. It has found that couples in many developing countries like Bangladesh, deliberately surpass their desired parity unless they have one or two sons by the time they reach the most preferred family size (Mannan, 1990:32). Our finding also confirms the same Table 3.3 that small family have more sons than daughter. But large family have more daughter than sons.

Table 3.3

Sum and Mean No. of Son and Daughter by Family Size

Size of Family		Son	Daughter	Total
Large (N=200)	Mean	2.43	2.61	5.03
	Sum	485	521	1006
Small (N=200)	Mean	1.44	0.95	2.39
	Sum	287	190	477
Total N=400	Mean	1.93	1.78	3.71
	Sum	772	711	1483

In Matlab Koenig et al. (1986) found that women expressed a mean ideal family size of 4.5 children and 2.7 sons. They desired for a minimum of two children and one son thus appears to have remained almost universal among Matlab. This sort of expression is also found in the areas under study. Ideal family size and sex composition may vary in different socio-economic settings. Singapore National Sample Survey 1973 data showed that although the average Singapore family had 4.2 children, 3.1 children was considered ideal. However, among blue collar worker, 35.4 percent considered four or more

children “ideal”, while the corresponding figure for clerical workers only 7.3 percent (Salaff,1985:200).

It is proved that there is no social norm in Gazipur and Savar about family size. Most couples indicated certain number of children as ideal for their own families. The findings show that both in small and large families, relatively few considered two children as ideal number, most of them wanted 3-4 children. It was also revealed that most couples did not want “small family” of two children, male or female as the popular shogan goes (Akbar&Halim,1978 :61-63). The average size of completed family was 5.9 living children (6.6 parity) in urban area and 6.4 living children (7.1 parity) on rural area (ibid).

There was a distinct downward trend in the preferred family sizes during the late 1970s and 1980s, there has been little change in the recent years. The mean ideal family size declined from 4.1 among currently married women in 1975, to 2.9 in 1989 (Huq and Cleland, 1990, 53) and to 2.5 in 1993-94 (Mitra et al., 1994:88). However it has remained constant at 2.5 between 1994 and 1999-2000 (BDHS, 1999:18)

Therefore, Nilufar (1981:31) emphasized on underlying preferences of children of the couples. She inferred that a fertility decline in Bangladesh can not be expected, even though 50 percent of the respondents have a desired family size of four or less, unless a change in underlying preferences in bought about. Thus Repetto (1972:70) concluded that among the general population, son preference and number of living sons are not family size are more likely to derive from economic consideration.

Family Size, Fertility and Family Planning.

In this study, we classified family as small and large defined to include 1-3 and 4 or more children respectively. It is revealed that perceived costs of children are negatively related to size preferences. That is, women who believed that large families involve economic and other costs and those who desire at least some formal education for boys and girls have somewhat less extreme preferences for large families. However, among women wanting different levels of formal education regarding preferences for large families (Nilufar, 1981:105). Mahmood also expressed similar view that rural women who are sending their young children to school are more likely to want no more children with significant difference from those who have none enrolled in school.

In the developing world, the parents in a typical large family want their children to help them in the family farm, store, or home industry (Akbar & Halim, 1978:127). Raising an additional child did not cost them much. They were neither seriously affected by an additional child nor did they gain much accepting birth control. Their major anxiety in life was not family size but day-to-day survival. They were neither indifferent nor totally ignorant of the availability of fertility control means. But their expressed desire to have no more children has not consistently reflected in their family (Akbar & Halim, 1978: 127).

Parents who choose to have a truly small family- one or two children generally do not expect economic benefits from children, are more oriented towards a

psychological appreciation of child bearing, and appear to be influenced heavily by quality and convenience considerations (Fawcett, 1977: 106).

Repetto emphasized the importance of family size norms in determining actual fertility in all countries and holds that in the less developed countries, couple had more children because they wanted them, not because they were ignorant of how to avoid having them (Repetto, 1972: 70).

Karki found that no respondents reported using any form of birth control before the birth of a first child. In addition, the rural respondents had, on average, approximately four births before adopting contraception. Urban couples had about three births before beginning family planning (Karki, 1988: 176). This similar fact also in Bangladesh as expected, fewer women use contraception before having their first birth. After the first child contraceptive use increases sharply, peaking at 65 percent among women with three children, after which it decline slightly (BDHS, 1999:57).

Nepalese couples generally believe that family planning should begin only after they achieve their desired family size and sex composition (Karki, 1988:176). However, respondents without a living son do not practice contraception at all. Apparently , even those respondents who have one child start thinking about birth control measures, if the child is a son (Karki 1988: 177). Similar fundings confirm in the present study in case of small and large families.

Akbar and Halim (1978:51) opined that a couple now can effectively regulate their family size if they are motivated to do so since most act in their own

perceived interests. It is assumed that couple's fertility decisions and behaviour can be explained by family aspiration and expectations, economic constraints and social norms relating to desired family size.

Family type is also a determinant of the desire for additional fertility. Women living in nuclear family would be more likely to want fewer children than those in extended households because nuclear family living is more egalitarian, conjugally oriented, and closer to the western pattern of family organization (Mahmood, 1992:21). Therefore, there is a negative relationship between small family and practice of contraception. A verbal preference for smaller families or even a genuine desire for fertility behaviour unless such a desire is followed by the practice of contraception (Akbar & Halim, 1978: 87).

In deciding whether or not to have an additional birth or to use contraception, sex composition of children and number of sons are the most important determinants. Accordingly, the highest proportion of users was found among women with three sons and one daughter (34.1%), followed by women with three sons and two plus daughter (31.7%), as against 25% for women with three sons and no daughter (Mannan, 1990:54).

In Taiwan, it is found that ideal family size and the practice of family planning are meaningfully related to the perceived economic cost and utility of children, and these finding also interpreted in relations to the effects of economic development on perception of the value and cost of children (Fawcett, 1977: 101).

Demand for Fertility Limitation

Among the factors determining the desire for no more children, the major findings are that beside the strong and all-persuasive effects of the life-cycle factors (such as parity, age, and the number of living son) (Mahmood), Khan and Sirageldin, using Pakistan National Impact Survey of 1968-69, attempted to assess the quantitative impact of certain socio-economic variables on completed as well as desired fertility. They summarized that besides women's age and age at marriage, income adequacy and the number of sons were significantly related to the additional children wanted (Mahmood, 1992: 1). Some parents emphasized social and psychological reasons for not desiring any more children. They reported that too many children were "bothersome", might create "chaos" in the family, the wife would not be able to take adequate care of the children or would adversely affect "family happiness" (Akbar & Halim, 1978: 78).

But there is exception in respect to socio-economic condition of the parents. Salaff (1985:208) showed that some average working class parents bore the additional child they wanted when the demand for their labour rose, and without their wages, many reduced their family size goal by one because of the direct costs of child bearing and rearing. In contrast, demand for children's education and certification remained strong among affluent working and middle class parents. This was also confirmed by other studies that the poor may remain indifferent to an additional child because, it may mean an extra mouth, but does not affect very much their existing low levels of living. But to the middle and the upper income groups, an additional child not only means an additional

month to feed but also an additional burden for “proper upbringing” (Akbar & Halim, 1978: 99-100). Mahmood (1992:22) pointed out that school attendance of the children pushes up the cost of raising children and can lead to reduced desire for additional children, while child work increases the value of children (Mahmood 1992: 22).

Repetto viewed three determinants about the demand for fertility limitation, such as (1) the effect of social, legal or institutional influences on the distribution of income within the family; (2) the effect of differences in the capacity of children to contribute to family income, because of restraints on child labour, or for other reasons; (3) the effect of differences in the potential earnings of women outside the household.

It is expected that an increase in financial costs of children (i.e., feeding, clothing, and educating) may be a negative factor demand for children. But in modern societies, is not likely to significantly affect demand for children because modernization makes these new costs affordable (Turke, 1989 : 75).

It is obvious that the economic pressure of an additional child effects different classes differently because of differences in the perceived utilities of having a child and the costs of upbringing. For example, wealthy family do not limit the size of their families and are happy to have as many children as Allah grants them. The members of the community do not mind even if they have 10 or 12 children, as long as they can support them (Aziz & Maloney 1985 :152).

But due to modernization this attitude have been changed. It was found, the wealthier families in rural areas represents the rural elite class with greater

exposure to mass media, transport and communications, and a higher socio-economic status in the community, all contributing towards reducing desired additional fertility of women in recent years (Mahmood, 1992:19). However, the desire for additional children declined noticeably in Bangladesh over the past decade. In 1991, 45 per cent of married women with two children wanted to have another child in the future (Mirtra et al., 1993:84). In the 1999-2000 BDHS survey, the proportion is only 30 per cent.

The impact of education may operate through different paths to reduce the desire for children. In urban areas, the secondary and higher education of women is important in increasing the desire for no more children, where primary schooling is not. In rural areas, on the other hand, educational attainment is not significant in affecting desired fertility, indicating an interaction between residence and women's education (Mahmood, 1992:15). The white-collar families, where couples are likely to be more educated, have higher aspirations for the quality and education of their children; and they have smaller family size norms. Providing strong reasons for a reduced desire for children (Mahmood, 1992:16).

CHAPTER FOUR

Demographic and Socio-Economic Background of the Eligible Couples

This chapter deals with the demographic and socio-economic characteristics of the eligible couples. The demographic aspects include age, pregnancy, number of living and dead children, sex composition of children and socio-economic characteristics include education, occupation, income of the couples of both small and large families.

Age of the Couples

The classification of the population by age and sex is of fundamental importance in demographic analysis. It may be mentioned that in our methodology one of the set criteria was to select samples from fertile women whose age ranged 15-49 years. We had selected special type of couples who presumed to have completed child bearing. They had at least one child, and the age of their last child was above five years. This obviously excluded the younger couples. This is reflected in the Table 4.1.

Table-4.1
Age of the Couples and their Family Size

Age (years) \ Couples	Husband			Wife		
	Large family %	Small % family	Total %	Large Family %	Small Family %	Total %
25-29	1.0	2.0	1.5	16.5	20.5	18.5
30-34	5.5	13.5	9.5	24.5	37.0	30.7
35-39	18.5	26.5	22.5	26.0	24.0	25.0
40-44	18.5	26.5	22.5	12.5	9.0	10.8
45+	56.5	31.5	44.0	20.5	9.5	15.0
Total	100.0	100.0	100.0	100.0	100.0	100.0

The above Table shows that most of the wives (74%) are in the 25-39 age group for both small and large families. Similarly most of the husbands (66%) of small and large families belong to 40 and above age group. As we would be expected, the couples with smaller families were younger than the couples having larger families. It is no wonder that some of the couples having smaller families wanted more children contradicting our assumption that the couples having a child aged 5 years and other wanted to have more children.

Pregnancy and Fertility History

This section deals with the pregnancy and fertility history of the wives. The mean number of pregnancy, total live births, boy and girl live births, children dead, and still birth are presented in table 4.2.

Table-4.2
Pregnancy and Fertility History of the Wives

Pregnancy History	Large family		Small family		Total	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Number of Pregnancy so far	5.165	1.668	2.805	0.991	4.210	1.964
Number of Total live Birth	5.000	1.182	2.410	0.681	3.705	1.615
Number of boy live birth	2.407	1.172	1.425	0.792	1.915	1.113
Number of girl birth	2.605	1.428	0.990	0.802	1.798	1.411
Number of children dead	0.580	1.081	0.335	0.682	0.458	0.911
Number of son dead	0.350	0.794	0.180	0.457	0.265	0.653
Number of girl dead	0.225	0.580	0.150	0.446	0.188	0.518
Total still Birth	0.015	0.122	0.015	0.122	0.015	0.122

On an average pregnancy were occurred in the large and small family 5.615 and 2.805 respectively. But still birth remain same for the both large and small family (0.015). Mean number of live birth for small family is 2.410 which is almost double in case of large family (5.000). It is interesting to note that mean number of girl live birth is higher (2.605) than mean number of boy live birth (2.407) in the large family. On the contrary, mean number of girl live birth is less (0.990) in comparison to mean number of boy live birth (1.425) in the small family. It may be mentioned here that generally people expect more boy than girl. Therefore, small family got their expected son-daughter combination and completed their family size. But in case of large family they failed to get their expected combination and consequently delayed to limit their family size.

Average Number of Living Son and Daughter

The Average number of living son and daughter by family size are presented in table 4.3. The large family have more daughter than son, on an average 2.61 and 2.43 respectively. But the evidence is inverse in case of small family. Their mean number of daughter is 0.95 and mean number of son is 1.44. Therefore, the mean number of son is 1.93 and mean number of daughter is 1.78 irrespective of large and small family.

Table-4.3
Average Number of Living Son and Daughter by Family Size

Size of family	Son		Daughter	
	Mean	Std. Deviation	Mean	Std. Deviation
Large Family	2.43	1.23	2.61	1.37
Small Family	1.44	0.81	0.95	0.80
Total	1.93	1.15	1.78	1.39

Level of Education of the Couples

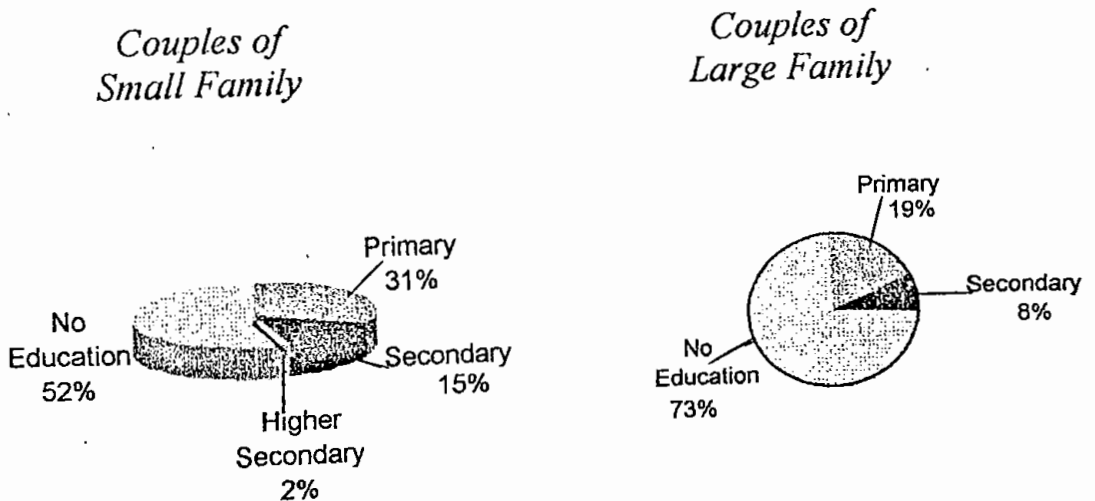
Education is a key determinant of the life style and status of the individual enjoys in a society. It affects almost all aspects of human life, including socio-demographic and health status. Especially parents education maintained better relationship between number of children should have for a family. Studies have consistently shown that educational attainment of the couples have strong effects on family size.

Table 4.4
Level of Education of the Couples in Relation to
Small and Large Family.

Education	Small family		Large family	
	Husband %	Wife %	Husband %	Wife %
No education	46	60	66	78
Primary	31	31	21.5	18
Secondary	20	09	12.5	04
Higher Secondary	03	-	-	-
Total	100.0	100.0	100.0	100.0

The Table-4.4 shows that both husband and wife of small family are more literate than large family (47% and 28% respectively). Accordingly, 66% husband and 78% wife of large families have no education and that is for 46% husband and 60% wife of small family. From these figures it is apparent that husbands are better educated than their wives. However, it can be assumed that education of the couples of small family have strong motivation to limit their family size small.

Figure : Level of Education of the Couples



Occupation Status of the Couple

Occupation means the activities of the couples through which they earn to maintain their family. Occupation may be primary and secondary. Primary Occupation has been consider here. A table is given below to get the occupation of the couples.

Table 4.5
Occupation of the Husbands and Wives by Family Size

Occupation	Husband %			Wife %		
	Large family	Small family	Total	Large family	Small family	Total
Housework	-	-	-	98.0	95.0	96.5
Agriculture	36.0	43.0	39.5	-	-	-
Service	23.0	18.5	20.8	0.5	3.0	1.8
Business	22.0	19.0	20.5	-	-	-
Day labour	10.0	13.5	11.8	0.5	1.0	0.8
Other's	9.0	6.0	7.5	1.0	1.0	1.0
Total	100.00	100.00	100.00	100.00	100.00	100.00

Table 4.5 shows that 98 percent wives of large family are engaged in housework activities compare to 95 per cent of small families. Only 5 per cent of small family are engaged in service, day labourer and other occupations. But the diversified occupation have been observed among the husbands.

Maximum number of husbands (39.5 Percent) work in agricultural land and this percentage is 36 and 43 for large and small family respectively. Of the total husband, 20.8 per cent were engaged in service and 20.5 per cent were doing business, day labour was 11.8 per cent. More than 40 per cent husbands were engaged in service and business which is interesting findings for an agriculture based society. But it is evident to note that the study villages are

proximate to Tongi Industrial area and big business centre of Tongi bazar which facilitate them to engaged in such non agriculture works.

Annual Income of the Family

Annual income of both small and large families calculated on the basis of two dimension as per earning member and family as a whole. It is expected that the amount of annual income of the large family would be bigger than small family. But the fact is quite average .The average family income of small family is higher (TK. 6273) than for the large family (TK.4694). The result indicating that though earning members are more in the large family compared to small family but average per capita income is lower due to large family size. A Table (4.6) is given below to get the clear picture in this context.

Table 4.6
Annual Income of the Family by Family Size

Family	According to earning member			According to family as a whole		
	Mean	Std. Dev.	Cases	Mean	Std. Dev.	Total
Large	46554.1714	12423.6911	1412	4694.4776	1786.1764	200
Small	6207.2562	13100.8577	890	6273.4280	2954.1665	200
Total	2554.6255	12709.4911	2302	5483.9525	2562.9401	400

CHAPTER FIVE

Impact of Family Size on Health and Well-Being

This chapter is an attempt to show the impact of family size on health and well-being. Thus, it includes housing condition, living space, land ownership, household assets, family expenditure, savings and credit, consumption pattern, investment on children, their education, mothers work and leisure, advantages and disadvantages of children, health status and money spent for treatment by small and large families.

5.1 Housing Condition

Nature and Number of Dwelling Houses and Rooms

The basic function of the houses is to provide shelter to their occupants. Most of the houses are found made locally available materials. A Table is stated here to get a clear idea about the nature of houses and number of dwelling rooms.

Table 5.1.1

Nature of Houses and Rooms Owned by the Family

No. of houses & rooms	Number of houses		Number of rooms	
	Large	Small	Large	Small
Nature of houses				
Pucca / Semi Pucca	11	15	223	209
Tin shed house	173	169		
Thatched	24	20		
Total	208	204	6.33	4.25

We find from Table 5.1.1 that number of houses are almost same for the large and small families. It was expected that the large families would have more houses and rooms as their family members are more than small families. But the difference is not so significant. It was evident that in the same house rooms were made to meet the practical needs of the family members. As we reported most of the households selected for the study lived in the tin shed houses. It was also relevant to say that pucca houses are found only in the small households, similarly semi pucca houses are also belongs more in the small households. That means, small families are more well-off than large families. As per calculated on the basis of family size (large family-7.76, Small family-4.45) the Table also shows that on an average per room used by 6.33 persons of large family and 4.25 persons of small family use the same which reflects that small families living conditions are more comfortable than large families. Realization from this evident that house had some influence on the parental motivation to limit family size. Moreover, Congestion and overcrowdness, lack of privacy are one of the obvious reflection of large and small family size

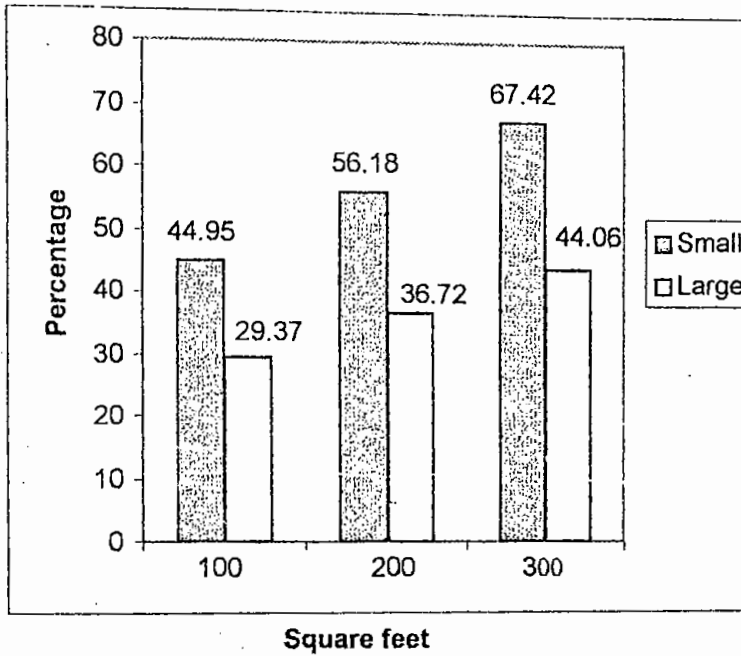
Area of Living Space

As per family size living space should have to be more than double for the large families in comparison to small families. But Table 5.1.2 Shows that the difference is not so significant. Rather small families enjoy more living space and get more comfort than large families.

Table 5.1.2
Area of Living Space of the Family

Square Feet	Small Family %	Large Family %
100	44.95	29.37
200	56.18	36.72
300	67.42	44.06

Figure 5.1.2
Area of Living Space of the Family



The Table and figure also shows that average space per person is bigger in small family than that of the large family. It is also interesting to note that there is increase of space about 7 sft. from one strata to next for the large family and the space available is about 11 sft. from one strata to the next for each person of the small family. Moreover, the difference of per person room space is more than 20 sft. for small family than that of the large family. To quote a wife in a large family;

We have a house of 150sft. We sleep on a mat in the floor along with my adult daughter and son. As a matter of fact there is problem of maintaining privacy in spacing.

Thus it reflects and highlight the comparative advantage of small and large families in their socio-economic well-being. A Table is stated here to know this area of living space in relation to family size.

Size and Ownership of Kitchen

Every family should have a kitchen to prepare their daily foods. Some have separate kitchen and some have kitchen joint with their living house and some have no kitchen at all. They cook their food at courtyard.

Table 5.1.3

Size and Ownership of Kitchen by Family Size

Family Size	No separate Kitchen	Ownership & Area (sq.ft.)			
		Self owned		Paternal	
		0-20	20-80	0-20	20-80
S	95	90	01	14	-
L	98	79	-	23	-

The Table 5.1.3 Shows size and ownership of kitchen by family size. Among the respondent families, 102 large and 105 small families have kitchen respectively. Out of 102 large families, 79 have constructed kitchen themselves and 23 got from parental source. The area of kitchen that own themselves is 0-20 square feet for 90 small and 79 large families. While the area of kitchen that inherits it is 0-20 square feet for 14 small and 23 large families. Only one kitchen of small family have a size of 20-80 square feet.

feet. Here also a trend of more self ownership of kitchen by small families than that of large families.

5.2 Land Ownership Pattern

Cultivable Land Owned by the Family

Land is one of the main sources of income in Bangladesh. In a peasant community land determines who eats and who does not. The cultivable land determines the socio-economic position of the occupants. A Table is given below the cultivable land owned by the family.

Table 5.2.1
Cultivable Land Owned by Family Size

Ownership source land in decimal	Self owned		Paternal		Total	
	S	L	S	L	S	L
0-20	07	02	02	05	09	07
20-80	30	28	03	07	33	35
80-140	27	29	07	08	34	37
140-200	09	09	05	04	14	13
200+	05	06	01	06	06	12
Total	78	74	18	30	96	104

Table 5.2.1 shows that the cultivable land owned by the large and small families. On average large families have more land than small families. But if we consider whether land owned from paternal source or owned by their self initiative, it was evident that more small families got land by their self initiative

than large families. On the other hand, large families owned more land from paternal source which is less for the small families. The land ownership process reflects the advantage of small family size. To quote a wife in a small family :

We did not inherit any land from other sources. After marriage, we bought 3 bighas of land. At present we are more or less well to do. We also bought 4 kathas of homestead land.

Kitchen Garden Owned by the Family

Kitchen garden owned by the families are positively related with small families. We find from Table 5.2.2 that among the families only 23 have kitchen garden. out of them 17 small families have their self owned land. On the contrary, only 03 families of the large size category have 20 decimals land inherited from paternal source. Of the 17 small families owned kitchen garden 14 have 20 decimals and 03 have 20 and above decimals of land. The figures reflect that small families are wealthier than large families.

Table 5.2.2

Kitchen Garden Owned by the Family

land size decimal \ Ownership	Self owned		Paternal	Total
	L	S		
0-20	L	03	03	06
	S	14	-	14
20+	L	-	-	-
	S	03	-	03

5.3 Household Assets

Household Assets Owned and Used by Per Family Members

For everyday use household assets are necessary for a family irrespective of large and small size. Owned more household assets indicate a family

economically solvent. In fact, wealthy family owned and consumed more household assets in comparison to poor family.

Table 5.3.1
Household Assets Owned and Used by per Family Members

Item		No. of item owned		per head	
		S	L	S	L
Furniture	Cot	133	135	6.69	10.46
	Show case	33	17	26.97	83.06
	Almirah	27	30	22.97	47.07
	Cloth stand	97	87	9.18	16.23
	Table/Chair	91	82	9.78	17.22
	Radio/TV	53	43	16.79	32.84
Household assets	Bi-cycle	07	08	127.14	176.5
	Torch/Lantern	141	149	6.31	9.48
	Umbrella	118	127	7.54	11.12
	Clock/Watch	86	84	10.35	16.81
Ornaments	Gold	85	87	10.48	16.23
	Silver	87	107	10.23	13.20
Other		27	31	32.97	45.55

Note: Above per head calculation made of the basis of total numbers of family members both small and large families which are 890 and 1412 small and large family respectively.

We find from table 5.3.1 that item wise household assets owned by the large and small families are almost same in respect of quantity. The items are gold ornaments, silver ornaments, torch or lantern, umbrella, cloth stand, cot, table-chair, clock or watch, radio or television etc. Therefore, family size has no significant affect having household assets. Though generally it is expected that large family would have more household assets for their use in practical life situation. But findings shows that the possession and use of household assets by the members of large and small size family is quite distinct. The users per cot is 10.09 person for large family while user for the same is 6.70 persons in case of small family. To quote a wife of large family:

There is no cot in the house. We keep our clothes in a hanging rope. We don't have pillows for all family members. There are few crockeries which are necessary for cooking only.

To quote a wife of small family;

There are one table and two chairs in the house for the reading of our son and daughter. Besides, there are one *Alna* (dress stand), one wooden *Almirah* and two cots in the house.

It has clearly depicted that in all the household items as regard possession and use the small family members have about double access than that of large family members.

Value of Household Assets

Table 5.3.2 shows that on an average the value of household assets is owned by small family are much higher than large family. The difference becomes sharper when we calculate per capita household assets. The per capita household assets calculated 832 taka for the large family and 1373 taka for the small family. Here strong inverse relationship found between family size and household assets. Havanon et al., (1992) also found that small family size, compared to large family size, could help social mobility both in terms of accumulation of wealth and in terms of occupational mobility.

Table 5.3.2
Value (Tk.) of Household Assets by Family Size

Family Size		Total	Per Capita
Large Family	Mean	5818.64	832.24
	Std. Deviation	7781.98	1131.92
Small Family	Mean	6010.25	1373.62
	Std. Deviation	9473.88	2207.35
Total	Mean	5914.44	1102.93
	Std. Deviation	8658.96	1772.73

5.4 Family Expenditure

Family Expenditure Trend for the Whole Year

In the present study we tried to know whether expenditure of the families remain same or fluctuate for the whole year.

Table 5.4.1
Family Expenditure Trend for the Whole Year

Family Expenditure	Almost same	Less	More	Fluctuate	Total
Large	64	04	-	132	200
Small	51	03	04	142	200
Total	115	07	04	274	400
%	28.8	1.8	1.0	68.5	100.0

Table 5.4.1 shows that from large families 64 respondent almost same and 51 from small families. Majority of the families opined that expenditure was not constant rather it varies time to time. Only 4 families of small family respond that their expenditure is more than they told at the time of data collection. Similarly 4 families from large and 3 from small category replied that their expenditure was less than they told during the time of interview. It was evident that the expenditure of the families is reliable according to calculation by the respondents and the cross check by the investigators.

Monthly Expenditure of the families

Items of monthly expenditure of a family includes food, cloth, education, treatment, housing, recreation etc. The volume of expenditure varies one family to another. But it was expected that if the families are large, expenditure of the family would be more. But table 5.4.2 shows almost reverse.

Table 5.4.2

Monthly Expenditure of the Families

Family	Sum	Mean
Large	88491.19	442.46
Small	107488.02	537.44

The monthly expenditure of small families were more higher than large families. It means if family size can be kept small the family members could consume better, could enjoy more benefit which reflect the well-being of the family. Therefore, relationship between family size and income has negative reflection. The total and mean income of families depicts that small families have higher income which shows higher level of economic status, small families seem to have better standard of living.

Amount Spent on Basic Needs

Human being cannot survive without fulfillment of basic needs. Food, cloth, shelter, education, health and recreation are the common basic human needs of Bangladeshi people. It was expected that families having more members would spend more money for their essential commodities than having less members. But Table 5.4.3 presented that small families spend more money in comparison to large families for other commodities except food.

Table 5.4.3

Amount Spent on Basic Needs by the Family

Head of Ex. \ Taka	Family size	<500	500-2000	2000+
Food	L	01	84	115
	S	01	172	27
Cloth	L	79	07	-
	S	71	13	-
Education	L	103	06	-
	S	100	11	-
Treatment	L	126	16	01
	S	109	19	02
Recreation	L	12	-	-
	S	04	-	-
Transport	L	18	01	-
	S	25	04	-
Others	L	10	-	-
	S	12	02	-

The lone large family spent <500/- while 84 families Tk. 500-2000, and 115 families Tk. 2001 and more on food for the last month. On the contrary, 172 small families spent Tk. 500-2000 and 27 families 2000 and above for food. Large families were found to spend more money against food since they have large number of family members. If we critically review the expenditure pattern and amount spent on different items of basic needs, it reflects that small family might bring more well-being. To quote a wife of small family;

Our daughter has six sets of dress and two pair of shoes. The son has 3 half pants, four full pants, six shirts and two pairs of shoes. I have two sharees to wear at home and three quality spare sharees to wear when I go out.

To quote a wife of large family;

We do not have good additional set of dress, other then the clothes we daily wear. We try to provide some new clothes to our children during the Eid festival. But we are unable to do the same in all the Eid ceremony.

Goods Bought by the Family During their Family Life

Table 5.4.4 shows that 2.2% of large family and 1.6% of small family did not bought any goods or property of their own accord during their family life. It is also evident that there is a positive relation between increased amount of buying goods with small family in comparison to large family. About 1.9% of large family bought 10,000/- or above amount of goods while this proportion is 28% for small family.

Table 5.4.4

Expenditure Pattern of Large and Small Size Families.

Amount in Tk. Family	None bought	-5,000 Rarely bought	5,00/- 10,000 occasionally bought	10,001+ Frequently bought	Total
Large	43 22%	100 50%	19 10%	38 19%	200 100%
Small	31 16%	96 48%	17 9%	56 28%	200 100%

5.5 Saving and Credit

Total Savings of the Family

In the study findings 156 large families and 147 small families were found without any savings which means 9 small families seem to save more than

that of large one. It is also revealed that in comparison to large family, increased number of small families save money at present.

Table 5.5.1

Total Savings of the Family by Family Size

Family Savings (in Tk.)	Large (N=200)	Small (N=200)
Up to 5000	33 17%	39 20%
5001-10000	03 2%	07 4%
10001+	08 4%	07 4%
No Savings	156 78%	147 74%

The Table 5.5.1 shows that 06 and 04 more small families save up to Tk. 5000/- and 5001-10000/- respectively that large category. Therefore, there is an inverse relationship between increased number of savings and family size except Tk. 10001+ strata where 01 large family save more in comparison to small family. It might be happened due to more earning member the large family in comparison to small family.

Loan Taken by the Family

At present loan taken by the families for various reasons. But out of 200 Ninety nine small families did not take any loan and this number is 92 for the large families.

Table 5.5.2

Loan Taken by the Family at Present and After One Year of Marriage.

Loan (in Tk)	Loan not taken		<5000 .		<10000		10000-<15000		15000	
	After Marriage	At present	After Marriage	At present	After Marriage	At present	After Marriage	At present	After Marriage	At present
family										
Large	193	92	02	66	03	12	-	05	25	02
Small	196	99	02	72	01	10	-	06	13	01

Table 5.5.2 shows that taka more than 15000/- loan taken by the 25 large category family out of 108 families. This figure is double in comparison to small family (13 only). The statistical Picture regarding credit taken by large and small families reflects that small families tend less requirement of loan, which highlights economic empowerment of small families. To quote a wife of large Family;

It is very hard to run the big family with our limited income, that's why, we are to fast often. Sometimes we are to run on credit. We take loan from the landlord for whom my husband works. Afterward repay slowly against labour. Our grown up two son sometimes work as day labour and contribute to the family expenditure. We are happy for this. But also worried about that when they will get married, they will have to run their family and they would not be assist us.

Reasons for Selling of Assets

Both small and large family sold out their assets for various reasons. These reasons were broadly categorized as social and economic. Among economic reasons. Family maintenance, business, going abroad, buying land, loan repayment are included. Social reasons includes daughter's marriage, making house, treatment.

Table 5.5.3

Reasons for Selling of Assets

Reasons	ECONOMIC					SOCIAL			Other
	Family maintain ance	Business Purpose	Going abroad	Buying Land	Loan repayment	Daughter's Marriage	Making house	Treatm- ent	
Family Large	16 40%	03 7.5%	04 10%	02 5%	02 5%	11 27.5%	-	01 2.5%	01 2.5%
Small	12 25.54%	08 17.02%	06 12.77%	02 4.26%	02 4.26%	05 10.64%	08 17.02%	02 4.26%	02 4.26%
Total	28 32.19%	11 12.65%	10 11.49%	04 4.60%	04 4.60%	16 18.40%	08 9.20%	03 3.45%	03 3.45%

S,n=47

L,n=40

From the Table 5.5.3 it is found that 80% family from large category did not sold out any assets and this figure is 76.5% for the small family. Rest of the families both of small and large category sold out their assets for various reasons. These reasons were fall in two broad categories viz, economic and social. In economic category, the dominant factors are family maintenance followed by business purpose, going abroad, buying land. and loan repayment. Among Social Category daughter marriage is dominating followed by making house and treatment. It was evident that 40% of the large family sold out their assets for family maintenance. This ratio was 25.47% in case of small family. for social reasons, again a good number of large family sold out their assets (27.5%), The proportion in case of small family was more less (10.46%). The Table shows that the small families tend to sold out their assets due to business Purpose, going abroad, making house which are economically returnable and large families tend to family maintenance, daughter marriage are economically non returnable.

Reasons for Borrowing Money

The data found from the following Table (5.5.4) are almost same as revealed in the Table 5.5.3 Main reasons of borrowing money is maintain the family in both cases of large and small families. The figure are 63 and 56 for large and small families respectively, followed by business purpose. buying land / boat / net / cow / rickshaw , treatment of the family, making or repairing house etc. The data showed that 11families of large category borrowed money for the purpose of daughter's marriage while only one small family borrowed money for this purpose. The data revealed that daughter's marriage is really a burden for the large family as their family size is not limited.

Table 5.5.4

Reasons for Borrowing Money by the Family.

Reasons Family	Mainten ance of Family	Business Purpose	Buying/land/b cat/net/cow/Ri ckshaw	Making/ Repairin g house	Going abroad	Daughte rs marriage	Lense in land	Treat ment	Children education	Culti vation
Large	63	18	16	04	06	11	02	07	05	05
Small	56	14	13	10	02	01	02	13	01	03
Total	119	32	29	14	08	12	04	20	06	08

Note : N = 108 (LF), 101 (SF)

5.6 Consumption Pattern of the Family

Information on Food Intake (1st Round)

Family Size have an inverse relationship on food intake. In the following Table (5.6.1) data shows that quantitatively small families were taking more food than large families. They are taking more Protein, Carbohydrate and Vegetables in their breakfast, lunch and dinner also. It could be happened due

to that small family numbers are able to provide sufficient food for the family members.

Table 5.6.1

Information on Food Intake of the Families

Food taken by Family		Fish	Meat	Pulse	Egg	Bread	Puffed rice	Milk	Fruit	Vegetables	Chatni	Rice
Meal												
Breakfast	L	97	02	13	05	06	06	03	01	94	35	193
	S	100	07	24	08	06	05	03	-	103	22	198
Lunch	L	143	09	33	06	-	03	03	-	60	16	200
	S	151	12	33	05	-	09	09	-	81	05	198
Dinner	L	144	05	27	02	-	-	11	-	67	11	198
	S	159	07	33	04	-	-	15	-	78	04	200

Note : The family took more than one item in every meal

Information on Food Intake (2nd round)

In the second round data collection on food intakes we also found that small families are taking more protein including meat, egg, fish etc. than large families which reflect solvency of small family (Table 5.6.2). It is generally assumed that having less number of family members ensured both quantity and quality of foods where large number of family members can not.

Table 5.6.2

Information on Food Intake of the Families (2nd round)

Food		Fish	Meat	pulse	Egg	Bread	puffed rice	Milk	Fruit	Vegetables	Chatni	Rice
meal												
Breakfast	L	32	-	34	03	31	04	-	-	88	12	167
	S	25	08	15	07	34	04	01	02	82	26	161
Lunch	L	63	06	44	06	02	-	03	01	97	12	194
	S	67	16	43	05	05	01	03	01	95	08	193
Dinner	L	61	18	48	01	03	-	08	-	105	13	196
	S	61	20	49	04	03	01	14	05	113	14	196

Information on Food Intake (3rd round)

In the 3rd round of food intakes data collection we got something different findings in comparison to 1st and 2nd round. Here except egg, milk and vegetables large families were taking more food than small families (Table 5.6.3). This might happened due to seasonal variation as this round data were collected at the end of rainy season.

Table 5.6.3

Information on Food Intake of the Families (3rd round)

Food		Fish	Meat	Pulse	Egg	Bread	Puffed	Milk	Fruit	Vegetables	Chatni	Rice
meal Breakfast	L	52	07	15	02	01	05	01	11	106	20	187
	S	38	07	16	04	05	01	02	06	113	29	188
Lunch	L	95	13	34	01	01	01	01	11	104	06	192
	S	87	10	31	04	02	03	03	07	121	02	188
Dinner	L	90	18	27	02	01	02	08	07	99	01	192
	S	88	12	25	05	02	04	13	08	127	01	189

5.7 Investment on Children

Mean Per Capita Yearly Expenditure

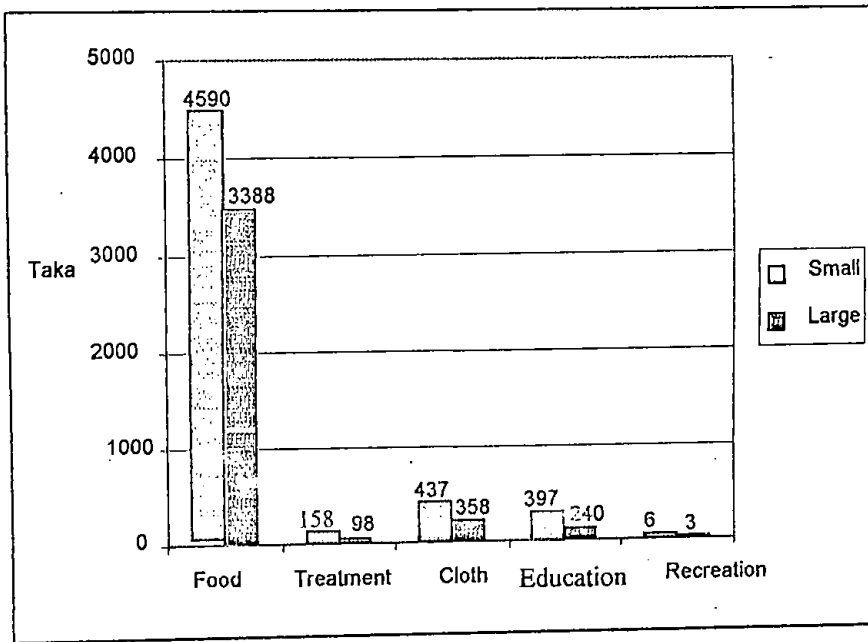
Money spent for rearing children is one sorts of investment for future return of the parents. In the research hypothesis it was assumed that small family would be able to invest more money for their children.

Table 5.7.1

Mean Per Capita Yearly Expenditure for Children

Family Size		Food	Treatment	Cloth	Education	Recreation	Other
Large Family	Mean	3388.70	98.25	358.43	240.24	3.44	11.76
	N	199	199	199	199	199	199
	Std. Deviation	1351.61	122.19	265.51	343.71	28.89	120.10
Small Family	Mean	4590.46	158.79	437.33	391.51	6.18	4.42
	N	181	181	181	181	181	181
	Std. Deviation	1386.46	377.15	273.30	433.15	46.14	59.46
Total	Mean	3961.12	127.09	396.01	315.15	4.74	8.26
	N	380	380	380	380	380	380
	Std. Deviation	1492.83	276.18	271.78	396.25	38.50	96.07

Fig. 5.7.1 Mean Per Capita Yearly Expenditure for Children (in Taka)



The Table and figure 5.7.1 shows that Mean Per capita annual child rearing cost in Tk. was very much significant and distinct between two categories of family viz, large and small. The average rearing costs on food, treatment,

cloth, education and recreation is much more higher in small families than that of large families. In case of per child rearing cost, the data shows that large families spent less in all items for each child. It was imperative that small family can afford more for better rearing of their children as future human resource of the family and nation at large that brings micro and macro well-being in the society. In a study Nag et al., also expected that at later stages in a fertility declined investments in the human capital of children would be greater in households with fewer number of children.

Time Used on Rearing Children

Time use on rearing children means how much time the parents provide for rearing of their children in addition to their professional responsibility and household activities. A table is given below in this context.

Table 5.7.2

Time Used on Rearing Children for the Last 3 Days (in hours)

Reared by	Time used in hours				
	Family	No time	1-6 hrs.	7-11 hrs.	12+ hrs
Husband	L	181	11	02	06
	S	174	20	01	05
Wife	L	39	50	24	87
	S	43	48	41	68
Elder son/ Daughter	L	172	19	05	04
	S	196	02	02	-
Relatives	L	194	05	01	-
	S	195	03	02	-

The Table 5.7.2 shows that a significant number of husband, elder son/ daughter and relatives use no time for child rearing both in large and small

families. The Raito ranges from 86% to 98% about no time use for child rearing which reflect the traditional behaviour style of child rearing. The wife using no time is found only 19.5% and 21.5% for both large and small family respectively. It is interesting to note that only 5.5% husband, 25% wife and 9.5% elder son/ daughter uses 1-6 hours for large family while the same for small family is 10%, 24% and 1% respectively. This reflects positive aspects of small family size. In case of 7-11 hours, wife of small family can devote more time for children, which highlight advantage.

5.8 Level of Education of children

In any society, education is a matter of paramount national importance. Both at individual and national level education are an item of consumption, a form of investment and avenue of employment. But due to economic hardship at family level parents cannot provide education to their children though they wished to educate them.

Table 5.8.1

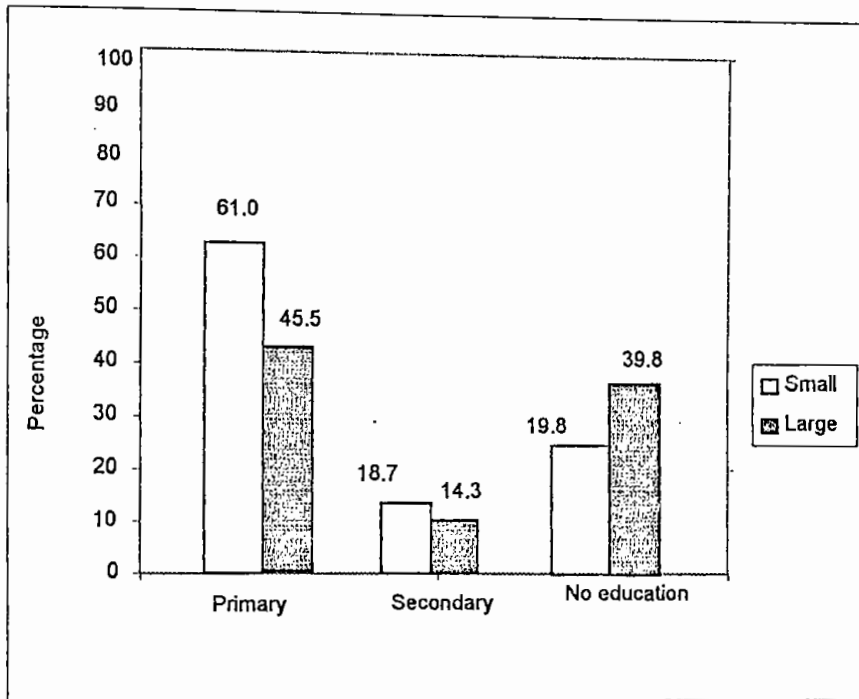
Education of Children % by Family Size

Education	Large	Small
No Education	39.8	19.8
Primary	45.5	61.0
Secondary	14.3	18.7
Higher	0.3	0.4
Total	100.0	100.0

The education of children by family size is Presented in Table and figure 5.8.1. It is revealed that 39.8% children of large family have no education while only 19.8% children of small family have no education. In the small

family 61% children have completed their primary education while this percentage is 45.5 in case of large family. Similarly 18.7% of small family children completed secondary education while this ratio is 14.3% for large family children.

Figure 5.8.1 Education of Children by Family Size



Therefore, education of children are positively related with small family. The figure (5.8.1) clearly shows children from small family have better education than those of large family. To Quote a Wife of a large family;

We have strong desire to educate our children to our utmost capacity. We shall try to give higher education to our son. We shall give marriage to our daughter after she passes S.S.C Examination. A house tutor has been engaged in order to facilitate the education of our children.

Podhisita et al., conducted a study in two rural Thai villages. It was found that children from small families were more likely to continue on to lower secondary and upper secondary compared to children from large families.

To Quote a Wife of a large family;

Our children did not take education because we did not realize the importance of education as we were illiterate. Later on, even when we wished, we could not provide education to our children as the number of children increased which led to family deficit and economic hardship.

5.9 Mothers Work and Leisure

Daily Work of Mothers

Daily work of mothers indicates the daily activities both inside and outside of house. But it should be mentioned that most of the mothers are involved in household activities from dawn to dusk irrespective of family size. A Table is given below to get the clear picture of activities of mothers.

Table 5.9.1
Daily Work of Mothers (in hours)

Hours	Work													
	Look after children		Cook		House cleaning		Food, bath, toilet		Look after domestic animal		Gardening		Economic work	
	L	S	L	S	L	S	L	S	L	S	L	S	L	S
1-3	70	83	58	47	140	136	197	199	63	73	01	03	02	02
4-6	34	50	132	144	51	40	03	01	22	17	-	01	06	01
7+	49	17	05	04	07	08	-	-	01	02	-	01	24	02
No work	47	50	05	05	02	16	-	-	114	108	199	195	168	195

The Table 5.9.1 narrates about the day to day work of mothers in both large and small families. The time spent by activities shows that the mother of small family can devote more hours of the day on looking after children, food and bath of children and caring domestic animal than that of mothers in large family. The home cleaning demands more time from the mothers of large family. Free time for mothers in small family is comparatively higher than that of large family. The use of time by mothers of small family is higher in economic activities that are 97.5% (S) and 84% (L). It is evident that the time management of mothers in small family is better than that in large family.

Leisure Time of the Mother

Usually the mothers of the disadvantaged families do not get reasonable leisure time though their activities do not count likewise the counterpart of males. Because this activities are not remunerative. But mothers get rest in addition of their activities which is required because of tropical climate. There is no specific time to get leisure but they create space for leisure according to their requirement. A table is given in this context.

Table 5.9.2
Leisure Time of the Mother of Small and Large Family by Type of Leisure

Hours	Type of Leisure											
	Sleep		Gossip		Roam around		Listen Radio/ Watch T.V.		Sit idle / Lie		Sewing/ embroidery	
	L	S	L	S	L	S	L	S	L	S	L	S
00	-	-	64	60	17	174	154	118	195	19	188	176
1-3	-	-	13	11	23	22	41	76	04	04	10	21
4-6	02	02	03	24	02	04	01	05	-	-	-	02
7-9	18	17	01	01	-	-	-	01	01	-	02	01
10+	4	1										
	14	27	01	-	-	-	-	-	-	-	-	-

Table 5.9.2 shows that highest times are use in sleep (7-9 hours), gossip (1-3 hours) 2nd highest and 3rd highest time use in listening Radio/ watch TV. (1-3 hours) respectively. The ratio of time use in the above mentioned 3 events by mother of large and small family are 92%, 66.8%, 21.5% and 86%, 58%, 38%, respectively. This proportion depicts more rational use of time by the mothers of small families than that of the large ones. The leisure time used by rural mothers of study population on roam around and sewing work is not much significant.

5.10 Advantages and Disadvantages of Children

Advantages of Less Children in the Family

The opinion of husbands from both large and small families shows common understanding and agreement that less children are advantageous for family life. They focussed on better living, good health, invest more for children, easy rearing, education, and savings. The wives from both category of families high lighted several aspects about advantage of less children more candidly .

Table 5.10.1

Advantages of Less Children as Opined by the Couples

Advantages Couples		No response	Better living	Personal time	Good health for all	Better marriage of children	Invest more on children	easy rearing	educate easily	save more	Better accom-odation
Husband	L	181	19	-	05	-	01	05	11	02	-
	S	174	09	03	05	-	17	05	03	04	03
Wife	L	02	174	19	73	07	11	41	154	49	01
	S	04	86	20	46	05	102	27	70	33	06

In the Table 5.10.1 they focussed on better living, more personal time, good health, investment for children, easy rearing, education and savings. The most

significant portion of large family wives (87%, 37% and 77%) mentioned about better living, good health and easy education respectively for less children. The wife of small families (44%, 51% and 35%) highlight on better living, investment on children and easy education of children which rationalized. To quote a wife of a small family;

We run over livelihood more or less in a well manner. It is perceived that small family automatically brings peace and happiness to the family.

5.10.2 Disadvantages of More Children

It is evident that having more children is disadvantageous for a family. Nowadays very few couples are indifferent to family size.

Table 5.10.2

Disadvantages of More Children Opined by Couples

Disadvantages		Unable to feed	Unable to educate	unable to provide treatment	Inadequate money for rearing	Hamper personal comfort	Cur tail to personal time	Lack of proper care to children	Ill health of family member	Need more accommodation	Daughter marriage expensive	No response
Husband	L	15	12	05	05	-	01	-	01	04	02	182
	S	15	10	05	06	-	01	02	01	07	-	179
Wife	L	164	150	44	26	18	05	50	25	38	22	06
	S	132	118	47	55	18	08	31	21	38	19	08

The Table 5.10.2 shows the picture of disadvantages of more children in family. The wives highlighted more critically than their husband. They pointed out about food, cloth, education, treatment, rearing, care, accommodation and marriage of daughter. They reflected that more children and the reasons of disadvantage for the above aspects of life. The large family wives (82%, 75%, 25%) mentioned about food / cloth, education and child care while the wives

of small families (66%,59%,28%) respectively pointed out that the disadvantages of more children is quite intense on food, cloth, education and rearing of children. Both category wives have common view on accommodation and daughters marriage, Thus the data confirm disadvantage of more children on family well-being. To quote a wife of large family;

Though late we could realize the disadvantages of more children. So, we don't want any more children and now I take oral pill regularly. We have an idea that if we had more children they would earn more and in return solvency would come in our family but we did never thought that they are to bring up with food, clothes etc.

To quote a wife of small family expressed her realization;

Both of us (husband and wife) came from the large family with more brother and sisters. So we are experienced the disadvantages of large family. Moreover, we learnt the disadvantages of large family from the Radio, TV, and the educated people.

5.11 Health Status of the Families

Family Members Sickness

The concept of incidence of sickness is associated with the morbidity, which disturbs the normal physical and mental functioning. A table is given below to get the idea how many family members were sick in relation to family size.

Table 5.11.1

Family Members Sick for the Last 15 Days

Family	Days			
	1-5	6-10	11+	Total
Large	05 11.37%	16 36.36%	02 4.54%	23 52.27%
Small	07 15.91%	12 27.28%	02 4.54%	21 47.73%

The table 5.11.1 explains the frequency of sickness by days in both small and large families. During last 15 days 44 persons were found sick among small and large families. Among sick members 52.28 and 47.73 per cent were sick from large and small family respectively. Table shows that 11.37 per cent members were sick 1-5 days, 36.37 per cent were sick for 6-10 days and 4.55 members for 11 and more days. Among small family 15.91 per cent were sick for 1-5 days. 27.28 per cent for 6-10 days and 4.55 members for 11 and more days.

The most significant finding is that duration of sickness ranging for 6-10 days happens more frequently in large family than small ones . It is imperative that small family can afford expenses for treatment and special attention for nursing during sickness, as a result early recovery for sick members are possible. It respects better health well-being in small family. .

To quote a wife of small family;

All the members of our family posses good health. Diseases are seldom seen. In case of illness we take medicine in consultation with an M.B.B.S. physician.

To quote a Wife of large family;

Every member of our family posses of ill health. We frequently become ill with fever, cold and dysentery. Generally, we take herbal medicine or wait with patience. We have neither been to any M.B.B.S. physician or any hospital. Because we can not afford to meet the medicine and two way transport cost.

Money Spent for Treatment by Families

The concept of treatment is also associated with the curative aspect to get rid of sickness. How much money is spent for treatment depends on the economic condition of the patients and their guardians. Moreover the cost of treatment depends upon the methods used for treatment. For example, if the patients used aopathic method then the cost will be automatically higher. Because the aopathic medicine is expensive than the homeopath, ayurvedic and folk. A table is given below in this context.

Table 5.11.2
Money Spent for Treatment by Families for the Last 15 Days

Types of Treatment		Money Spent		
		-500	501+	Total
Modern Treatment	L	39 27.86	12 8.57	51 36.43
	S	42 30.0	17 12.15	59 42.15
Traditional	L	88 62.86	01 0.71	89 63.57
	S	78 55.71	03 2.15	81 57.86

N=140

Table 5.11.2 presents an inverse relationship between family size with types and cost of treatment. It is evident that small family members received more modern treatment than large family. The table shows that 42.15 per cent small family members got modern allopathic treatment while only 36.43 from large family. Similarly large families seem to receive traditional treatment than small families. About 63.57 per cent family members of large family received traditional treatment in comparison to 57.86 per cent of small family size. It was found that more than TK.500 spent for treatment are 9.29 per cent for large and 14.29 per cent for small families. Less than TK. 500 spent for treatment is 90.71 for large and 85.71 per cent for small families. It proves that small families are motivated for modern treatment and able to spend more money for treatment which is the reflection of family size.

Occurrence of Sickness among Members of the Families

Table 5.11.3 represents nature and number of sick members of the family last 15 days during the 2nd and 3rd round of morbidity data collection. It was found that in the 2nd round, 17 and 11 family members were sick from large and small family respectively. In the 3rd round it was 188 and 144 for large and small family. It was also observed that wife were more sick than husband for both large and small family. Similarly in the 3rd round, family members were found sicker in comparison to 2nd round. As data were collected at the end of rainy season for the 3rd round it might have seasonal effect on morbidity. The children's were also sicker in the large family. It was 130 and 72 for large and small family respectively.

It is clearly indicative that health care and treatment affordability are higher in the small family while occurrence of sicknesses of women and children is less in small family than the large ones.

Table 5.11.3

Occurrence of Sickness among Members of the Families for the Last 15 Days

Period		Sick members				Total No. of Sick members
		No. of sick family	Husband	wife	Children	
2nd round	L	15	-	01	16	17
	S	11	-	01	10	11
3rd round	L	116	25	49	114	188
	S	112	31	51	62	144

Cost and Nature of Treatment of the Families

The nature of treatment is different which is also associated with the culture of the people in terms of customs, beliefs and value system. The nature of treatment is divided here in connection with traditional and modern. A table is given below in this context.

Table 5.11.4

Cost and Nature of Treatment of the Families

Cost + Family size		Up to Tk.500		Tk.500+	
		L	S	L	S
2 nd round	Modern	10	13	13	06
	Traditional	57	46	02	01
	Total	67	59	15	07
3 rd round	Modern	28	32	09	05
	Traditional	54	44	02	01
	Total	82	76	11	06

Table 5.11.4 shows cost of treatment and nature of treatment received by the families. In the 2nd round 82 families from large and 66 family of small family were found sick. But in the 3rd round the number increased 93 and 82 numbers from large and small family respectively. This increased might happened due to seasonal variations. For treatment most of the families both from small and large families spent less than 500 taka for the last 15 days. It was also found that large families were more trends to using traditional treatment than small family, which reflects awareness about health among the small families. To quote a wife in a large family;

When we become sick we do not go to any physicians immediately. After suffering of illness for some days, we become usually cured. But if we suffer long time, we take the advice of local Homeopath, *Kabiraj* (herbal Physician) or religious treatment.

CHAPTER SIX

Conclusions and Policy Implications

The study critically examined and pursued to find out a comparative picture of small and large families in regard to health and well-being. The hypothesis formulated for the study was “small family size contributes to family health and well-being in terms of better ability to meet up basic needs, more investment on children, more accumulation of wealth and lower rate of morbidity among its members.” Data collected for the study and analyzed those in the light of objectives and tested the hypothesis. The findings reflected that hypothesis is proved to a great extent to be accepted.

The collected data was processed and analyzed with major focus on socio-economic characteristics of the study population to find a correlation and establish causal relationships among the variables drawn a conclusion in the light of the main objectives of the study.

If we critically review the findings all aspects of the study in totality, we may conclude that the small family can ensure better health and well-being than the large family in any society, particularly the developing countries like Bangladesh. Because health and well-being have consonance with economic,

education, social and demographic status of the families. Thus, the study has examined and proved that family health and well-being is very much dependent on family size. Based on the major findings of the study and new insight understood, it may be suggested that a country having decreasing population policy to realize a good balance between population growth and scarce resources should have intervention of sensitize the younger people particularly the eligible couples to adopt a norm of small family size in order to reduce high fertility.

The Government of Bangladesh has been giving emphasis in favour of small family norm. The underlying object of such emphasis is to ensure the socio-economic well-being of small families. Accordingly, family planning in Bangladesh was initiated in the early 1950s on the simple belief that given adequate knowledge and means, individual couples will regulate their fertility for their own benefit and for the welfare of their families. But still little empirical evidence is available to document the effects of family size on households. Thus, the findings of the present study will contribute to bridge this gap. The findings will also promote the knowledge of and consciousness about the real benefit of small and large families among the eligible couples and help the policy makers, planners and programme implementers working in this field to evolve appropriate strategies of persuasive campaigns in promoting family planning for setting norm of small family in Bangladesh.

The family as a social and economic unit of our community life has unique characters that reflected in the findings of the existing study. The basic factors

of needs of human being have great influence to determine the family size. Among the influencing factors, education played crucial role while individual family aspiration has also stimulation effects. The education both formal and social from the life experiences has contributed to determine the family size and well-being. Therefore, we can conclude on the basis of facts and experience that family size greatly contributed towards well-being of the family at micro level in the Bangladesh community at large. Thus, Family size, health and well-being are immensely related with each other.

But till today, almost half of the population of our country are illiterate. The present study suggested that educated parents are strongly motivated to limit their family size. Education, especially female education has the most potential effect to raise and enhance the status of the women, to open up newer opportunity for them, to keep them in school longer, to delay their marriages, to loosen adherence to purdah, to facilitate use of contraception, to decrease infant morbidity and mortality, to increase participation in various development activities, and to accelerate the process of demographic transition. Educated parents aspired education for their children. Therefore, the policy makers and planners should give a big push in the field of education especially for female education in order to reducing fertility.

One of the dominating factor for increasing fertility in our country is value of children especially for preferring son by the parents for their old age security. In this context government should intervene various inter-related social and economic development efforts in the rural area, are likely to contribute to the

creation of "Psychological modernity" among the people with regard to value of children, family size norms, desirable ages of marriage for women and men, favourable attitude toward birth control and actual family planning practice. There is evidence that structural changes through introduction of development programs, particularly through introduction of modern institution such as cooperatives and mothers clubs have created such psychological modernity.

The relationship of contraception with access to the transportation system suggest that development of the rural transportation infrastructure is likely to have favourable implications for contraceptive practice. Studies done elsewhere (Fawcett, *et al.*, 1967; Parsons, 1974) have demonstrated similar striking effects of geographic proximity to clinics on rates of acceptance of family planning. Transportation infrastructure will facilitate organization, implementation and supervision of development activities in the rural area by field level workers.

The ultimate fate of the fertility control program depends upon whether it succeeds in making the people in the villages sympathetic to the programs goals such that they take steps translate the goals into concrete plans of action and voluntarily implement them. Partnership with the *Gram Sarker* (Local Self government) in client recruitment, service delivery and supervision of field level workers will facilitate achieving the fertility reduction goal.

Infant and child mortality are still high in the rural community of our country. Therefore, it would be more useful to reduce fertility rate through

comprehensive use multiplication by covering all age group of fertile couple of socio-economic and preventive as well as promotive health sectors, giving particular attention to lower socio-economic groups.

Moreover, the available studies, suggested that the concept of integrating population and family planning with other development policies as well as to determine the measures of functional integration for population and development goals are of crucial importance.

Future population growth will be determined by three components: 1) Uncontrolled fertility, 2) desired large family size, and 3) Population growth rate. The contribution of population momentum to the future growth of the Bangladesh population completely dominates the other two components that is more than four-fifth of the 85 million to be added by middle of this century to the stage of momentum. Only 15 per cent of the growth will be due to uncontrolled fertility, and 3 to 4 per cent will be due to high desired family size (streatfield, 1998:8).

According to BBS (2002) source, CPR is 54 percent as on 2002. But among country like Bangladesh, still rely primarily on a single method. Greater effort must be made in Bangladesh to achieve more of a balance of methods, increasing especially the longer term, cost effective methods like injectables and IUDs through improved clinical service standards. In addition need more persuasive campaign in favour of small size family norm and use of

contraceptive to limit family size at micro level and depress fertility at macro level.

Thus, the usual approach to minimizing uncontrolled fertility is to provide effective family planning use, with some back up (e.g., menstrual regulation) in cases of contraceptive failure. The approach to reducing highly desired family size includes, but cannot be limited to, providing motivation, information, etc., to low parity couples. Largely though, it requires motivation and social mobilization that minimize gender preference for sons. This requires economic changes that ensure non-familial security for elderly parents and unusually alternative roles for women so that child bearing is not the only option for them. It also requires levels of child health whereby parents can be reasonably certain that their children will survive to adulthood.

The findings of the study and observation at the field level as well other study review reflect fertility behavior among fertile couples regarding expectation and satisfaction about offspring with popular emphasis on son dominated family size norm. Thus, the sex behaviour and family as a social institution is intercepting both at micro and macro level life style. The overall analysis of the study and review of literature are imperative that the family planning and welfare services should have more intensified as a policy measure for ensuring health and well-being at family level with focus on rural area to establish small family as norm in Bangladesh.

REFERENCES

- Ahmed, Nilufar R.(1981) "Family Size and Sex Preferences among Women in Rural Bangladesh", *Studies in Family Planning*, vol. 12, no. 3 pp.100-109.
- Akbar, Md. Ali, Md. Abdul Halim (1978) *Socio-Economic Factors Affecting Family Size Norms and Fertility Pattern in Bangladesh*, The University Grants Commission, Dacca.
- Akbar, Md. Ali (1981) "A Study of the Constraints to Service Delivery System in Bangladesh", *The Journal of the Institute of Bangladesh Studies*, IBS Rajshahi University, vol. V. pp. 125-140.
- Alauddin, Mohammad (1980) *Socio-Economic Determinants of Fertility in Bangladesh: A Review*, Institute of Social Welfare and Research, Dacca University, Dacca.
- Aziz, K.M. Ashraful, Clarence Maloney (1985) *Life Stages, Gender and Fertility in Bangladesh*, International Centre for Diarrhoeal- Disease Research, Bangladesh, Dhaka.
- Bairagi, Radhesham and Ray L. Langsten, (1986) "Sex Preference in Children and its Implications for Fertility in Rural Bangladesh", *Studies in Family Planning* vol. 17, no. 6, part I, pp. 302-307.
- Baker, Noor Laily bt. Dato Abu, Tan Boon Ann, Tey Nai Peng, Rohani Abd, Razak (1985) *Ethnicity and Fertility in Malaysia*, Institute of Southeast Asian Studies, Singapore.
- Becker, Stan (1999), Measuring Unmet Need : Wives, Husbands or couples, *International Family Planning Perspectives* 25 (4), December, PP. 172-179.
- Becker, Stan (1999), Measurin Unmet Need : Wives, Husbands or Couples, *International Family Planning Perspectives*, 25(4), December, PP. 172-179.

- Bongaarts, John (1978) "A Framework for Analyzing the Proximate Determinants of Fertility", *Population and Development Review*, vol. 4, no. 1, pp. 105-132.
- Cain, Mead T. (1977) "The Economic Activities of Children in a Village of Bangladesh", *Population and Development Review*, vol. 3, no. 3, pp. 201-227.
- Caldwell, John C and Pat Caldwell (1992) "What Does the Matlab Fertility Experience show?", *Studies in Family Planning*, Vol-23 (5), September-October, PP. 292-310.
- Caldwell, John C, *et al.*, (1999), "The Bangladesh Fertility Decline : An Interpretation", *Population and Development Review* 25(1), March, PP. 67-84.
- Chang, Ming - Chang, Freedman, Sun Te-Hsiung, Ronald, (1987) "Trends in Fertility, Family Size Preferences, and Family Planning Practice; Taiwan, 1961-1986", *Studies in Family Planning*, vol. 18, no. 6, pp. 320-337.
- Cheung, Paul P.I. (1990) "Micro-Consequences of Low Fertility in Singapore", *Asia Pacific Population Journal*, vol. 5, no. 4, pp. 35-46.
- Cleland, John *et al.*, (edit) (1993), *Bangladesh Fertility Survey, 1989: Secondary Analysis*, National Institute of Population Research and Training, Dhaka.
- Fawcett, James T., Aree Somboonsuk and Sumol Khaisang (1967), "Thailand: An Analysis of Time and Distance Factors at an IUD Clinic in Bangkok," *Studies in Family Planning*, 19 PP. 8-12.
- Gubhaju, Bhakta and M. Shahidullah (1990) "The Decomposition Analysis of Recent Fertility Decline in Fiji", *Asia-Pacific Population Journal*, vol. 5, no. 4, pp. 47-56.
- Havanon, Knodel, John Napaporn, Werasit Sittitrai (1992) "The Impact of Family Size on Wealth Accumulation in Rural Thailand", *Population Studies*, vol. 46, no. 1, pp. 37-51.
- Ho, Teresa J. (1979) "Time costs of Child Rearing in the Rural Phillipines", *Population and Development Review*, vol. 5, no. 4, pp. 643-662.

- Hossain, Mian Bazle and Jame F. Phillips (1996) "The Impact of Outreach on the Continuity of Contraceptive Use in Rural Bangladesh", *Studies in Family Planning*, 27(2), March-April, PP. 98-106.
- Janowitz, Barb *et al.*, (1999). The Importance of Field Workers in Bangladesh Family Planning Programme, *Asia-Pacific Population Journal*, 14(2), June, PP. 23-36.
- Islam, Nurul, M. Mazharul Islam (1993) "Biological and Behavioural Determinants of Fertility in Bangladesh: 1975-1989", *Asia-Pacific Population Journal*, vol. 8. no. 1, pp. 3-18.
- Janowitz, Bard *et al.*, (1999). The Importance of Field workers in Bangladesh Family planning programme, *Asia-Pacific Population Journal*, 14(2), June, PP. 23-36.
- Kapadia, K.M. (1996) *Marriage and Family in India*, Oxford University Press, Delhi.
- Karki, Yagya B. (1998) "Sex Preferences and the Value of Sons and Daughters in Nepal", *Studies in Family Planning*, Vol. 19, no. 3, pp. 169-178.
- Khuda, Barkat ed. (1980) *Fertility level and Attitude and the Value of Children in Bangladesh*, Bangladesh Development Studies, Dhaka.
- Knodel, John, Napaporn Havanon, Werasit Sittitrai (1990) "Family Size and the Education of Children in the Context of Rapid Fertility Decline", *Population and Development Review*, vol. 16, no. 1, pp. 31-62.
- Koenig (1986) *Family Size Preferences and Contraceptive use in Matlab, Bangladesh; 1975-1984* ICDDR,B, Dhaka: Bangladesh, August, Dhaka.
- Koenig, Michael A. *et al.*, (1987) "Trends in Family Size Preference and Contraceptive use in Matlab, Bangladesh", *Studies in Family Planning*, vol. 18, no. 3, pp. 117-127.
- Mabud, Mohammed A. (1985) *Women's Development, Income and Fertility*, The External Evaluation Unit, Planning Commission and Canadian International Development Agency, Dacca.

- Mahmood, Naushin (1992) The Desire for Additional Children among Pakistani Women: The Determinants; *The Pakistan Development Review*, vol. 31, no. 1, pp. 1-30.
- Maloney Clarence, A.K.M. Aziz, Profulla C. Sarker (1980) *Beliefs and Fertility in Bangladesh*, ICDDR,B, Dacca.
- Mambasi, Mahmud (1972), *The Myth of Population control*, Monthly Review Press, London.
- Mannan, M.A. (1990) *Interactions between Infant Mortality and Fertility*, Bangladesh Institute of Development Studies, Dhaka.
- Mitra, S.N., Ann Larson, Gillian Foo, Shahidul Islam (1990) *Bangladesh Contraceptive Prevalence Survey 1989*, Mitra and Associates, Dhaka.
- Mitra, S. N., Ahmed Al-Sabir, Anne R. Cross, Kanta Jamil (1997) *Bangladesh Demographic and Health Survey 1996-1997*, Niport, Dhaka.
- Mitra, S.N., Ahmed Al-Sabir, Tulshi Saha, Sushil Kumar (2001) *Bangladesh Demographic and Health Survey 1999-2000*, Niport, Dhaka.
- Morgan, Philips and Bhanu B Niraula (1995), "Gender inequality and Fertility in Tow Nepali Village," *Population and Development Review*, Vol. 21(3).
- Murry, Christopher J.L. Linclon, C. Chen (1992) "Understanding Morbidity Change", *Population and Development Review*, vol. 18, no. 3, pp. 481-503.
- Nag, Moni, White N.F. Beigamia, K.C. Pect (1978) "An Anthropological Approach to the Study of the Economic Value of Children in Java and Nepal", *Current Anthropology*, vol. 19, no. 2.
- Parsons, J.S., *Distance and Diffusion of Family Planning Adopters : A view from a Philippine Municipality*, Hawaii, Department of Geography, University of Hawaii.
- Potter, Joseph E., et al., (1976) "The Rapid Decline in Columbian Fertility", *Population and Development Review*, vol. 2,3 and 4, pp. 509-528.

- Pritechett, Lant H (1994) Desired Fertility and the Impact of population policies, population and Development Review, Vol. 20(1) PP. 01-55.
- Rao, Kamala Gopal (1974) *Studies in Family Planning*: Abhinav Publications, New Delhi.
- Repetto, Robert, (1972) Son Preference and Fertility Behaviour in Developing Countries", *Studies in Family Planning*, vol. 3, no. 4, pp. 70-76.
- Salaff, Jaset W. (1985) Family Size Intentions and Socio-Economic Status in Singapore, 1974-1981", *Studies in Family Planning*, vol. 16, no. 4, pp. 199-210.
- Sarker, Profulla C. (1997) *Social Structure and Fertility Behaviour*, Centre for Development Services, Dhaka.
- Schuler, Sidney Ruth and Syed M. Hashemi (1994), "Credit Programs, Women's Empowerment and contraceptive use in Rural Bangladesh," *Studies in Family Planning*. Vol. 25(2), March/April, PP. 65-76.
- Schuler, Sidney Ruth and Zakir Hossain (1998), "Family Planning Clinics Through Women's Eyes and voices: A case study from Rural Bangladesh", *International Family Planning perspectives*. Vol. 24(4), December. PP. 170-175.
- Schultz, T. Paul (1971) "An Economic Perspective on Population Growth", *Rapid Population Growth: Consequences and Policy Implication*. The John Hopkins Press.
- Simnrom, Ruth (1996), "Women's Lives in Transition : A Qualitative Analysis of Fertility Decline in Bangladesh," *Studies in Family Planning*, Vol. 27(5), September-October, PP. 251-268.
- Streatfield, L. (1998), *Population Momentum in Bangladesh and Policy Options*, NIPORT, Dhaka.
- Turke, Paul W. (1989) "Evolution and the Demand for Children", *Population and Development Review*, vol. 15, no. 1, pp. 61-90.

- Vlassof, Carol (1990) "The Value of Sons in an Indian Village: How Widows See It",
Population Studies, vol. 44, pp. 5-20.
- Williamson, Nancy E. (1982) Sex Preference and its Effect on Family Size and Child
Welfare, *Draper Fund Report*, No. 11.
- Wormer, Katherine Van (1997) *Social Welfare A World View*, Nelson Hall
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