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**CAUSES OF DIFFERENTIAL PERFORMANCE OF THE FAMILY  
PLANNING WORKERS AT UPAZILA LEVELS**

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## EXECUTIVE SUMMARY

The major objective of the present study was to identify the causes of differential performance of family planning workers at the Upazila level. This identification of the causes suspected to affect the performance level required us to collect the information from the Upazila level officers, grass-root level workers (FWV, FPA, FWA), community leaders (both formal and informal) and currently married women. In addition, information on the community characteristics was collected through observation and informal discussions with the local people.

A number of variables had been considered in the analysis of the differential between the high and low performing areas. The available data suggest that workers belonging to the high areas are relatively better off in terms of landholding status than the workers belonging to the low areas. The high areas have been found to have a greater average number of FWA's per union than the low areas. The officers from the high areas have on the average, longer service experience than those from the low areas. Relatively more officers in the high areas have the basic training.

Duration of the training was comparatively longer for officers of the high areas. Total marital fertility rate was high in the low areas compared to that in the high areas. The rate of contraceptive use is significantly different between the two areas. The use rate is 33.7 per cent in the high areas while it is 30.1 per cent in the low areas. Also, detailed analysis of the community characteristics suggests that the high performance areas are generally nearer to the clinics/FWCs, have better communication facility, better general services, more educational institutions, better health facilities and higher literacy rate than the low performance areas.

Apart from the variables that have been found to contribute in the differential between the two areas, there are findings common to both the areas that might demand consideration. In both the areas, the services of the nutrition program as well as MCH services are relatively poor compared to other services. About 60 per cent of the FPAs, 70 per cent of the FWAs and only 40 per cent of the FWVs reported that they had visited their supervisors once in a week prior to the date of interview.

A vast majority of the workers as well as of the officers in both the areas have expressed their dissatisfaction with the training they received and their

salary structure. A large majority of the FWAs reported that integration of health and family planning had created problems among the personnel of the two departments. The most stated problems were difficulties in administration, lack of coordination between the workers of the two departments, lack of motivational work by the health workers at field level and differences in opinion between the high officials of the two departments. This is substantiated by the fact that about half of the officers from both the areas reported that integration of health and family planning departments had been causing problems in running the administration. The most stated problems were lack of cooperation between the workers of the two departments.

They suggested disintegration of health and family planning departments in order to improve the family planning program activities. More than 70 per cent of the workers from both the areas reported that they had not received cooperation from the local religious leaders in promoting the family planning program.

The workers suggested that more training, increases in the number of field level workers, training the local leaders on family planning, increases in facilities for education, increases in the number of family welfare centres and coordination of health and family planning departments are the important considerations to be taken into account for the improvement of the family planning services, while the community leaders emphasized on educational facility and agricultural development. Lack of communication and problems of transportation were also mentioned as obstacles. The need for elevating the socio-economic status of the workers and for strengthening information education and communication activities for improving the family planning activities has been mentioned by the officers.

The above findings have important policy implications. Increase in the number of FWAs per union, better training of longer duration for the officers, better landholding status of the workers, better educational facilities might contribute to better performance of the workers. Poor MCH and nutrition program services is highly likely to aggravate infant and child mortality situation and that, this negatively influences contraceptive use has been the findings of many researches. As such, improvement of these services is warranted for family planning program success. On the other hand, integration of health and family planning departments has been found to be causing a number of problems mainly the lack of coordination between the workers of the two departments. The problem should be given due atten-

tion for identification of the reasons before it is too late. Both the workers and the officers have expressed their dissatisfaction with their salary structure.

This reflects lack of incentive in the job might have direct effects of the success of the program. The government may review the situation so as to arrive at the optimal solution given the economic constraints, the country is facing.

Religious superstition has been found as a dominant obstacle to the success of the program. An overwhelming majority of Bangladesh population are Muslims. The local leaders of this religion should be made aware that Islam does not oppose family planning. This awareness on the part of the religious leaders might make a much greater contribution to the success of the family planning program their efforts made in many other directions.

In addition, the opinions and suggestions of leaders, workers and others involved in the study suggests that an overall socio-economic development may be a substantial contributor to the success of the family planning program.

However, the results of this study should be taken with caution. This is because of the problem in the definition of the criterion on the basis of which the areas were classified into the high performing and low performing groups. The criterion used was the percentage of target achieved as a measure of field worker performance. The target for an Upazila is set on the basis of its previous year's performance as well as population size. As such, percentage of target achieved is unlikely to be a surrogate measure of the field worker performance. Probably, as a result of this methodological flaw, the prevalence of contraceptive use did not appear to differ in the two areas. The data on the percentage of target achieved were used due to lack of availability of better information.

# TABLE OF CONTENT

<b>ACKNOWLEDGEMENTS</b>	<b>i</b>
<b>TABLE OF CONTENT</b>	<b>iii</b>
<b>LIST OF TABLES</b>	<b>ix</b>
<b>LIST OF FIGURES</b>	<b>xv</b>
<b>EXECUTIVE SUMMARY</b>	<b>xvi</b>
 <b>CHAPTER ONE : <i>INTRODUCTION AND METHODOLOGY</i></b>	
1.1 Introduction	1
1.2 Objective of the Study	6
1.3 Methodology	6
1.4 Determination of the Number of Workers and the Number of Unions in the Sample	7
1.5 High and Low Performnce Upazilas	7
1.6 Selection of Upazilas	8
1.7 Selection of Unions	8
1.8 The Survey of Family Planning Officers/Workers at Upazila Level	9
1.9 The Survey of Comunity Leaders	9
1.10 The Survey of Comunity Characteristics	9
1.11 The Survey of Currently Married women	9
1.12 Instrument of Data Collection	10
1.13 Pretest and the Finalization of Interview Schedules	10
1.14 Training of Fie'd Staff	11
1.15 Field Work	11
1.16 Data Processing	11
 <b>CHAPTER TWO : <i>DESCRIPTIVE ANALYSIS OF VARIOUS CATEGORIES OF SAMPLES</i></b>	
2.1 Introduction	13
2.2 Characteristics of the Community	14

<b>2.2.1</b>	<b>Introduction</b>	<b>14</b>
<b>2.2.2</b>	<b>Distance of the Locality from the Upazila Headquarters</b>	<b>14</b>
<b>2.2.3</b>	<b>Transport System</b>	<b>16</b>
<b>2.2.4</b>	<b>Communication System</b>	<b>17</b>
<b>2.2.5</b>	<b>General Services</b>	<b>18</b>
<b>2.2.6</b>	<b>Institutional Facility</b>	<b>19</b>
<b>2.2.7</b>	<b>Irrigation</b>	<b>20</b>
<b>2.2.8</b>	<b>Educational Institutions</b>	<b>21</b>
<b>2.2.9</b>	<b>Health and Clinical Facility</b>	<b>23</b>
<b>2.2.10</b>	<b>Newspaper Readers and Radio Sets</b>	<b>24</b>
<b>2.2.11</b>	<b>Literacy Rate</b>	<b>24</b>
<b>2.2.12</b>	<b>Conclusions</b>	<b>26</b>
<b>2.3</b>	<b>Characteristics of the Community leaders</b>	<b>26</b>
<b>2.3.1</b>	<b>Data Source</b>	<b>26</b>
<b>2.3.2</b>	<b>Socio-Economic Characteristics of the Leaders</b>	<b>27</b>
<b>2.3.3</b>	<b>Age Distribution</b>	<b>27</b>
<b>2.3.4</b>	<b>Level of education</b>	<b>27</b>
<b>2.3.5</b>	<b>Occupational Pattern</b>	<b>27</b>
<b>2.3.6</b>	<b>Land Ownership</b>	<b>28</b>
<b>2.3.7</b>	<b>Income Pattern</b>	<b>28</b>
<b>2.3.8</b>	<b>Use of Family Planning Methods by the Leaders</b>	<b>29</b>
<b>2.3.9</b>	<b>Awareness and Involvement of Community Leaders in Family Planning Programs</b>	<b>30</b>
<b>2.3.10</b>	<b>Perceptions and Opinions of Community Leaders About Development Programs</b>	<b>30</b>
<b>2.3.11</b>	<b>Opinion of the Leaders About Number of Children a Family Should Have</b>	<b>30</b>
<b>2.3.12</b>	<b>Opinion of the Leaders About the Activities Required to Promote Family Planning Programs</b>	<b>31</b>
<b>2.4</b>	<b>Characteristics of Field Level Workers</b>	<b>36</b>
<b>2.4.1</b>	<b>Introduction</b>	<b>36</b>
<b>2.4.2</b>	<b>Characteristics of Field and Clinic Level Workers</b>	<b>39</b>

<b>2.4.3</b>	<b>Age Distribution</b>	<b>40</b>
<b>2.4.4</b>	<b>Marital Status and Age at Marriage</b>	<b>40</b>
<b>2.4.5</b>	<b>Number of Children Everborn and Number of Children Living</b>	<b>40</b>
<b>2.4.6</b>	<b>Religion</b>	<b>41</b>
<b>2.4.7</b>	<b>Education</b>	<b>41</b>
<b>2.4.8</b>	<b>Landholding Status</b>	<b>42</b>
<b>2.4.9</b>	<b>Ever Use of Family Planning</b>	<b>42</b>
<b>2.4.10</b>	<b>Current Use of Family Planning</b>	<b>43</b>
<b>2.4.11</b>	<b>Length of Service</b>	<b>43</b>
<b>2.4.12</b>	<b>Basic Training</b>	<b>43</b>
<b>2.4.13</b>	<b>Types of Activities on Which Training Received and Duration of Training</b>	<b>44</b>
<b>2.4.14</b>	<b>Frequency of Visit to Their Supervisors</b>	<b>53</b>
<b>2.4.15</b>	<b>Awareness of the Workers About the Constraints of the Family Planning Methods</b>	<b>54</b>
<b>2.4.16</b>	<b>Problems Faced in Work for the Children Aged Less than Five Years</b>	<b>55</b>
<b>2.4.17</b>	<b>Types of Activities Supervised and Type of Activities Report to the Supervisors</b>	<b>55</b>
<b>2.4.18</b>	<b>Activities Reported to UFPO by FPAs</b>	<b>61</b>
<b>2.4.19</b>	<b>Average FWAs and FPAs</b>	<b>61</b>
<b>2.4.20</b>	<b>Activities Done by the FPAs for Acceptance of Family Planning</b>	<b>62</b>
<b>2.4.21</b>	<b>Average Eligible Couples Per FPAs</b>	<b>62</b>
<b>2.4.22</b>	<b>Views of FPAs on the Nature of Problems</b>	<b>63</b>
<b>2.4.23</b>	<b>Number of Families Visited Last Week</b>	<b>63</b>
<b>2.4.24</b>	<b>Type of Advice Provided Last Week</b>	<b>63</b>
<b>2.4.25</b>	<b>Number of Clients Referred to the Clinics</b>	<b>63</b>
<b>2.4.26</b>	<b>Frequency of Visit to the Old Clients</b>	<b>64</b>
<b>2.4.27</b>	<b>Problems in Receiving Family Planning Materials</b>	<b>64</b>
<b>2.4.28</b>	<b>Cooperation of Local, Formal and Informal Leaders in Promoting the Family Planning</b>	<b>64</b>
<b>2.4.29</b>	<b>Degree of Satisfaction of Local People on FWAs Activities</b>	<b>71</b>
<b>2.4.30</b>	<b>Family Welfare Visitor and their Supervisors</b>	<b>71</b>

2.4.31	Field Visit	
2.4.32	Type of Activities Performed in the Field	71
2.4.33	Number of Clients Visited Last Week	72
2.4.34	Number of New Clients Visited by Methods	72
2.4.35	Number of Old Clients Who Visited the Clinic Last Week	73
2.4.36	Type of Advice Provided to Clients Who Visited the Clinics	78
2.4.37	Problems of Integration of Health and Family Planning Program	79
2.5	Characteristics of Upazila Level Officers	82
2.5.1	Age	82
2.5.2	Length of Service	83
2.5.3	Training	83
2.5.4	Duration of Training	84
2.5.5	Use of Training	85
2.5.6	Satisfaction of Upazila Officers on Clinical and Non-clinical Services	85
2.5.7	Attitude of Upazila Officers and Local Leaders Towards the Family Planning Program	86
2.5.8	Problems of Family Planning Program	86
2.5.9	Integration of Health and Family Planning	86
2.5.10	Job Satisfaction	87
2.5.11	Suggestion for Improvement of Family Planning Program	87
2.6	Characteristics of the Sample Women	98
2.6.1	Current Age	98
2.6.2	Socio-Economic Characteristics of the Respondents	98
2.6.3	Fertility	99
2.6.4	Level of Current Pregnancy	99
2.6.5	Age Specific Marital Fertility Rates	99
2.6.6	Average Children Everborn by Duration of Marriage	99
2.6.7	Cumulated Fertility	100
2.6.8	Infant and Child Mortality	100
2.6.9	Indirect Estimates of Infant Mortality	100
2.6.10	Knowledge of Family Planning Methods	106

2.6.11	Knowledge of Specific Methods	107
2.6.12	Ever Use of Family Planning Methods	108
2.6.13	Age Differentials	109
2.6.14	Number of Methods Ever-Used	109
2.6.15	Method Specific Ever-Use	109
2.6.16	Ever-Use by Number of Children Everborn	110
2.6.17	Ever-Use by Number of Living Children	111
2.6.18	Socio-Economic Differentials	112
2.6.19	Differentials by Education	112
2.6.20	Differentials by Religion	112
2.6.21	Differentials by Respondent's Occupation	112
2.6.22	Differentials by Occupation of the Respondent's Husband	124
2.6.23	Current Use of Family Planning Methods	124
2.6.24	Current Use by Specific Methods	124
2.6.25	Current Use by Specific Methods and Current Use	125
2.6.26	Current Use by Number of Living Children	126
2.6.27	Current Use by Education	126
2.6.28	Current Use by Occupation of the Respondents	126
2.6.29	Current Use by Family's Economic Condition	127
2.6.30	Couple Registration Card	127
2.6.31	Frequency of Visits by the Workers	127
2.6.32	Respondent's Opinion About Their Local Leader's Participation in Family Planning Program	127
2.6.33	Reasons for Non-Use	128
<b>CHAPTER THREE : <i>MULTIVARIATE ANALYSIS</i></b>		<b>141</b>
3.1	Introduction	141
3.2	Discriminant Analysis	141
3.3	Findings	145
3.4	Factor Analysis	146
3.5	The Variables	147
3.6	Findings	148

## **CHAPTER FOUR : *CONCLUSION AND POLICY RECOMMENDATION***

<b>4.1</b>	<b>Conclusion</b>	<b>155</b>
<b>4.2</b>	<b>Policy Recommendation</b>	<b>155</b>
	<b>REFERENCES</b>	<b>157</b>

## LIST OF TABLES

<i>Table number</i>	<i>Title</i>	<i>Page No.</i>
1.1	Program Performance in Bangladesh	4
1.2	Yearwise Estimated Projected Birth Rate and Required Contraceptive Prevalence Targets Under Third Five Year Plan	5
1.3	Number of Unions, Number of Family Planning (Union Level) Workers in the Sample by High-Low Groups and Districts	12
2.2.1	Distribution of Unions by Distance for High and Low Performance	15
2.2.2	Distribution of Unions by Composite Index Reflecting the Level of Transportation Facility	17
2.2.3	Distribution of Villages by General Services Facility	18
2.2.4	Distribution of Villages by General Service Facility, High and Low Performance Areas	19
2.2.5	Distribution of Sample Study Units by Level of Facility, High and Low Areas	20
2.2.6	Distribution of Villages by Composite Score, High and Low Performance Areas	21
2.2.7	Distribution of the Unions by Composite Score, Low and High Performance Areas	22
2.2.8	Distribution of Unions by Composite Health and Clinical Facility Score, Low and High performance Areas	24
2.2.9	Distribution of the Sample Villages by Literacy Rates, Low and High Performance Areas	25
2.3.1	Per cent Distribution of Local Leaders by Current Age and by High Low Areas	31
2.3.2	Socio-Economic characteristics of the community Leaders by High and Low Areas	32
2.3.3	Per cent Distribution of Leaders of Current Use of Family Planning Methods by Areas	33
2.3.4	Awareness and Involvement of Leaders in Family Planning Programs by Areas	34

<i>Table number</i>	<i>Title</i>	<i>Page No.</i>
2.3.5	Distribution of Leader According to Their Opinions and Quality of Services by Areas	35
2.3.6	Distribution of Leaders According to the Type of program Required for the Overall Development of Government Family Planning Programs in Their Areas	35
2.3.7	Per cent Distribution of Leaders by Their Opinion About the Number of Children a Family Should Have by Areas	36
2.3.8	Opinions of the Leaders According to the Type of Activities Should be Done to Make Government Family Planning Program Successful	37
2.4.1	Socio-Demographic Characteristics of Family Planning personnel by Their Ever Use of Family Planning Methods and Socio-Economic Characteristics	45-47
2.4.2	Distribution of Family Planning personnel by Their Ever-Use of Family Planning Methods and Socio-Economic Characteristics	48
2.4.3	Distribution of Family Planning Personnel by Their Current Use of Family Planning	49
2.4.4	Distribution of Family Planning Personnel by Their Length of Service	49
2.4.5	Distribution of Family Planning Personnel by Their Basic Training on Family Planning Methods	50
2.4.6	Distribution of Family Planning Personnel by Their Types of Training	50
2.4.7	Distribution of Family Planning Personnel by Duration of Training in Weeks	51
2.4.8	Distribution of Family Planning Personnel by Whether They Received Other Training	51
2.4.9	Distribution of Family Planning Personnel by Types of Receiving Other Training	52
2.4.10	Distribution of Family Planning Personnel by Their Duration of Receiving Other Training	53
2.4.11	Distribution of Family Planning Personnel by Their Frequency of Visits to the Supervisors	56

<i>Table number</i>	<i>Title</i>	<i>Page No.</i>
2.4.12	Distribution of Family Planning Personnel by Frequency of Visit to Their Supervisors During the Last Month	56
2.4.13	Distribution of Family Planning Personnel by side Effects of Various Methods	57-58
2.4.14	Distribution of Family Planning Personnel by Their Satisfaction on Training, Salary, Designation and Working Hour	59
2.4.15	Distribution of Family Planning Personnel, by Types of Problems Faced in Their Work for the Children Aged Less Than Five Years	60
2.4.16	Distribution of Family Planning Personnel by their Types of Activities Supervised	60
2.4.17	Distribution of Family Planning Personnel by Their Activities Reported to the Supervisors	61
2.4.18	Distribution of FWAs by their Activities Reported to UFPO	65
2.4.19	Distribution of FPAs by Number FWAs	65
2.4.20	Distribution of FPAs by Their Activities for Motivation of Villagers Towards Accepting Family Planning	66
2.4.21	Distribution of FPAs According to the Number of Constraints in the Field	66
2.4.22	Distribution of FWAs by Number of Families Visited Last Week	67
2.4.23	Distribution of FWAs According to the Number of Women Advised for MCH and Family Planning Services Last Week	67
2.4.24	Distribution of FWAs by Number of Clients Referred to the Clinic for Various Clinical Methods During the Last Month	68
2.4.25	Distribution of FWAs by Frequency of Visits to the Old Clinets	69
2.4.26	Distribution of FWAs Whether Face any Problems in Receiving Family Planning Methods	69
2.4.27	Distribution of FWBs Whether Receive Cooperation from the Local Formal and Informal Leader	70
2.4.28	Distribution of FWAs According to Whether Local People Are Satisfied with FWAs Activities	71
2.4.29	Distribution of FWVs by Their Supervisors	73
2.4.30	Distribution of FWVs Whether They Visit to the Field	74

<i>Table number</i>	<i>Title</i>	<i>Page No.</i>
2.4.31	Distribution of FWVs by Their Types of Activities Performed in the Field	74
2.4.32	Distribution of FWVs by Number of Clients Visited During Last Week	75
2.4.33	Distribution of FWVs by Their Number of Clients Visited the Clinic for Accepting Family planning Methods During the Last Week	76
2.4.34	Distribution of FWVs by Their Number of Old Clients Visited the Clinic During the Last Week	77
2.4.35	Distribution of FWVs by Type of Services for the Clinic	78
2.4.36	Percentage Distribution of Respondents by Their Opinion About Problems of Integration	80
2.4.37	Percentage Distribution of Respondents by Their Suggestions for Improving the Family Planning Service	81
2.5.1	Mean Age Distribution of Upazila Level Officers by Low and High Areas	83
2.5.2	Mean Length of Service of Upazila Level Officers by Low and High Areas	83
2.5.3	Distribution of Upazila Officers UHFPO/UFPO/UMO by Their Basic Training	84
2.5.4	Upazila Level Officers by Their Mean Duration of Training	84
2.5.5	Distribution of Upazila Level Officers by Degree of Usefulness of the Training Received	85
2.5.6	Satisfaction on Various Clinical Services (UHFPO/UMO/UFPO)	88
2.5.7	Attitude of Various People Towards Family Planning Program (UHFPO)	89
2.5.8	Attitude of Various People Towards Family Planning Program (UMO)	90
2.5.9	Attitude of Various People Towards Family Planning Program (UFPO)	91
2.5.10	Problems of Family Planning Program (UHFPO/UMO/UFPO)	92
2.5.11	Distribution of UHFPOs/UMOs and HFPOs by Their Problems of Integration on health and Family Planning	93

<i>Table number</i>	<i>Title</i>	<i>Page No.</i>
2.5.12	Satisfaction on training, Salary, Present Designation and Number of Working Hours (UHFPO)	94
2.5.13	Satisfaction on Training, Salary, Present Designation and Number of Working Hours (UMO)	95
2.5.14	Satisfaction on Training, Salary, Present Designation and Number of Working Hours (UFPO)	95
2.5.15	Distribution of UHFPO by Suggestion to Improve Family Planning Program	96
2.5.16	Suggestion of UFPO/UMOs to Improve Family Planning Program	97
2.6.1	Age Distribution of Sample Women by Areas	101
2.6.2	Socio-Economic Characteristics of the Respondents by Areas	102
2.6.3	Percentage Distribution of Respondents by Age at First Marriage	103
2.6.4	Percentage Distribution of Currently Married Women by Pregnancy Status and by Areas	103
2.6.5	Age Specific Marital Fertility Rates by Areas	104
2.6.6	Average Number of Children Everborn and Living Per Currently Married Woman by Duration of Marriage	104
2.6.7	Average Number of Children Everborn and Living Children Per Currently Married Women by Age and Areas	105
2.6.8	Infant Mortality Rates Derived from the Direct Information by Areas	105
2.6.9	Infant and Child Mortality Rates Estimated from Data on the Proportion Dead Among Children Everborn by Areas	106
2.6.10	Percentage of Currently Married Women Under 50 Years of Age Having Knowledge of Family Planning Methods by Age and Areas	113
2.6.11	Percentage of Currently Married Women Under 50 Years of Age Having Knowledge of At Least One Method, At Least One Modern Method and At Least One Traditional Method	113
2.6.12	Percentage of Currently Married Women Under 50 Years of Age Having Knowledge of Specific Methods by Age (High Area)	114
2.6.13	Percentage of Currently Married Women Under 50 Years of Age Having Knowledge of Specific Methods by Age (Low Area)	115

<i>Table number</i>	<i>Title</i>	<i>Page No.</i>
2.6.14	Percentage of Currently Married Women Under 50 Years of Age Having Ever-Used Family Planning Methods by Age and by Areas	116
2.6.15	Percentage of Currently Married Women Under 50 Years of Age Having Ever-Used Family Planning Methods and Number of Methods Ever-Used by Age and by Areas	117
2.6.16	Percentage of Currently Married Women Under 50 Years of Age Having Ever-Used Specific Family Planning Methods by Age (High Area)	118
2.6.17	Percentage of Currently Married Women Under 50 Years of Age Having Ever-Used Specific Family Planning Methods by Age (Low Area)	119
2.6.18	Distribution of Currently Married Women Under 50 Years of Age Who Ever Used Family Planning Methods by Number of Children Everborn and by Age (High Area)	120
2.6.19	Distribution of Currently Married Women Under 50 Years of age Who Ever Used Family Planning Methods by Number of Children Everborn and by Age (Low Area)	121
2.6.20	Distribution of Currently Married Women Under 50 Years of Age Who Ever Used Family Planning Methods by Number of Living Children and by Age (High area)	122
2.6.21	Distribution of Currently Married Women Under 50 Years of Age Who Ever Used Family Planning Methods by Number of Living Children and by Age (Low area)	123
2.6.22	Percentage of Currently Married Women Under 50 Years of Age Having Ever Used Family Planning Methods by Socio-Economic Characteristics by areas	129
2.6.23	Percentage of Currently Married Women Under 50 Years of Age Who are Currently Using a Specific Method by Areas	130
2.6.24	Percentage of Currently Married Women Under 50 Years of Age Who are Currently Using Specific Methods of Contraception by Age (High Area)	131
2.6.25	Percentage of Currently Married Women Under 50 Years of age Who are Currently Using Specific Methods of Contraception by Age (Low Area)	132

<i>Table Number</i>	<i>Title</i>	<i>Page No.</i>
2.6.26	Percentage of Currently Married Women Under 50 Years of age Who are Currently Using a Method by Age and Areas	133
2.6.27	Percentage of Currently Married Women Under 50 Years of Age Who are Currently Using Specific Methods of Contraception by Number of Methods Known (High Area)	134
2.6.28	Percentage of Currently Married Women Under 50 Years of Age Who are Currently Using Specific Methods of Contraception by Number of Methods Known (Low Area)	135
2.6.29	Percentage of Currently Married Women Who Currently Using Contraceptive Methods by Number of Living Children and by Areas	136
2.6.30	Percentage of Currently Married Women Under 50 Years of Age Who are Currently Using Contraceptive by Educational Level and by areas	136
2.6.31	Percentage of Currently Married Women Under 50 Years of Age Who are Currently Using Contraception by Occupation of the Respondents and by Areas	137
2.6.32	Percentage of Currently Married Women Who are Currently Using Contraceptive Methods by Family's Economic Condition and by areas	136
2.6.33	Percentage of Currently married Women Whether They Have Couple Registration Card by Areas	138
2.6.34	Percentage of Currently Married Women by Frequency of Visits by the Field Workers	138
2.6.35	Percentage Distribution of Respondents According to Their Opinion Whether Local Leaders Participate in Family Planning Program	132
2.6.36	Percentage of Currently Married Women Who are Not Currently Using a Method by Stated Reasons	140
3.1	Standardized Discriminant Function Coefficients as Well as the Relative Contribution of the Individual Variables to the Total Distance Measured	145
3.2	Equimax Rotated Factor Matrix	152
3.3	Equimax Rotated Factor Matrix	153
3.4	Factor Score Coefficients	154

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# CHAPTER ONE

## INTRODUCTION AND METHODOLOGY

### *I. I INTRODUCTION*

In most of the developing countries, the family planning program represents a major effort for the reduction of future population growth. The Government of Bangladesh recognizes the high rate of population growth as a primary socio-economic problem and has outlined a high priority to the population policy of the country. The high priority given to population policies in Bangladesh has brought into sharper focus the need for the evaluation of the performance of the various workers who have been working at the grassroot levels. The Bangladesh Family Planning Program has passed through various phases. These include the introduction of family planning services in hospitals and urban clinics (1960-65), integration of family planning services with health services (1970-75), creation of multisectoral community based family planning and maternal child health program under the Ministry of Population Control (1975-80) and recently greater emphasis put on integrated services of health and population control (1980-85). Since independence there has been a tremendous increase in official attention to population issues. This is reflected in the awareness and concern in policies and programs, in training of personnel and development of relevant institutions, and in growing research efforts.

Despite an early and relatively strong commitment on the part of the government to family planning programs, there has been a modest success in increasing the level of contraceptive prevalence in Bangladesh.

Many surveys conducted in recent years indicated that although universality of knowledge in family planning has been achieved, there is a tremendous gap between knowledge and actual use of contraception (BFS, 1975 ; CPS, 1979 ; CPS, 1981). This is incisive from the following information :

Time point	Percentage of currently married women using contraception
Bangladesh Fertility Survey (BFS), 1975	9.6
Contraceptive Prevalence Survey (CPS), 1979	11.2
Service Statistics System, MIS (SSS), 1980	16.6
Contraceptive Prevalence Survey (CPS), 1981	18.6
Contraceptive Prevalence Survey (CPS), 1983	21.7

Although the current use of contraception has increased since 1975 it falls short of the target set in the population policy program. In many studies it has been suggested that accessibility to and availability of contraception would increase its use rate. In recognition to this, the Ministry of Health and Population Control, Government of Bangladesh recruited grass-root level workers to increase the use rate of contraception and thus to make the family planning program a success. During 1975-78, the Population Control Division recruited 19,451 field workers of various categories. These include 12,337 FWAs, 4,362 FPAs and 2,722 FWVs. The main purpose of recruitment was to provide family planning and clinical services at the door-steps of the eligible couples.

At the grass-root level the family planning program has two types of permanent workers (full time). One is mainly responsible for motivating couples towards accepting clinical and non-clinical family planning methods. This type consists of two categories of field workers namely, Family planning Assistants (FPAs) and Family Welfare Assistants (FWAs).

The FPAs (one in each union) are males and are responsible for supervising the work of FWAs. In addition, they are supposed to do independently motivation work by organizing group meetings and through home visit. The family planning field staff consists of three female family welfare assistants and one family planning assistant per union. The FWAs are mainly responsible for motivation and supply of contraceptives as well as for counselling within their respective areas. The FPAs and the FWAs are supervised by non-medical official at the upazila health complex. Paramedical family planning and MCH services at the union level are provided by a female family welfare visitor stationed at family welfare centre. Her supervisor is the physician at the Upazila health complex who has been designated as the medical officer for MCH

and family planning. Although health and family planning field staff was introduced in early 1970s, the extensive network of field workers and supervisors has been relatively ineffective in delivering health and family planning services (Pillsbury et al. 1981). Table 1. 1 shows the year-wise program performance in Bangladesh since 1969. To make the family planning program more effective, it is essential to examine the program deficiency so that appropriate policy intervention can be made. Program efforts are being made on continuous basis and as such the variations in the performance rates among thanas or among unions need to be examined for a successful population policy program. Various factors such as personal characteristics of the workers, community characteristics, service facility available to the grass root level workers, organizational characteristics, job satisfaction, frequency of visits by the field workers, quantum and quality of follow up services etc. may be related to such differential performance. To make the family planning program a success in rural Bangladesh, it is necessary to identify the factors associated with poor performance. This will help policy makers to take appropriate strategies for an effective implementation of the program in areas of relatively poor performance.

*Table 1.2* shows the contraceptive prevalence targets as envisaged in the Third Five Year Plan. The demographic objective in the Third Five Year Plan is set at reducing the crude birth rate from 39.0 to 31.0 by the year 1990. The level of contraceptive that would be required to reach the target is about 40 percent.

The success of the program depends on the active participation of eligible couples and on the availability of and accessibility to the family planning services. Available statistics indicate that the level of performance varies significantly by areas.

**Table 1. 1. Program Performance in Bangladesh.**

Period	Number of couples* protected (in 000)	Percentage change with respect to the base year 1969-70
1969-70	956	100
1970-71	404	- 58
1971-72	96	- 90
1972-73	179	- 81
1973-74	158	- 83
1974-75	242	- 75
1975-76	922	- 4
1976-77	739	- 23
1977-78	1065	+11
1978-79	1002	+5
1979-80	1046	+9
1980-81	1514	+58
1981-82	1604	+68
1982-83	1911	+100
1983-84	2482	+160

*Source :* Management Information System (MIS) Unit of Population Control Division.

\* The assumptions for calculating the number of couples protected in a given year are as follows :

- One CYP (Couple Year of Protection) = One sterilization
- One CYP = One IUD
- One CYP = 150 pieces of condom
- One CYP = 15 cycles of oral pill
- One CYP = 4 dozens of injections
- One CYP = 150 pieces of foam tablet
- One CYP = 4 Vials of Emko

For example if 750 cycles of oral pill have been distributed in a given

year, then these pills are to have protected  $\frac{750}{15} = 50$  couples.

There has been little attempt to investigate the causes of differential performances among the Upazilas. A review of literatures show that the studies conducted (Mabud, 1978 ; Quddus, 1979 ; Zaman, 1980 ; Ghyasuddin, 1982 ; Waliullah, 1982 ; Khan, 1982) by various researchers focussed mainly on the characteristics of field workers of different categories and the relationship between these characteristics and their field performance. The study by Ghyasuddin (1980) has investigated supervisory activities performed

*Table 1. 2. Yearwise Estimated Projected Birth Rate and Required Contraceptive Prevalence Targets Under Third Five Year Plan.*

Year	Estimated birth rate	Required contraceptive prevalence target
1985	39.0	25.0
1986	37.6	28.0
1987	36.2	31.0
1988	33.8	34.0
1989	32.4	37.0
1990	31.0	40.0

*Source :* Proposed Third Five Year Plan, Planning Commission, Government of Bangladesh.

by different level of workers. He has outlined lack of adequate supervision followed by bad communication, job dissatisfaction and social and religious constraints as the main reasons for poor performance of field workers. Mabud (1978), in his study, concluded that the present supervisory system is weak because of a lack of adequate training in supervision. Meherun Nahar Khan, in her study (1978), also concluded that due to a lack of knowledge and skill, the field workers have failed to utilize facilities and resources available in various agencies for their program activities. The main reason, she has identified, is the lack of supervision by the FPAs. No study, however, made an attempt to provide information on training of grass-root level workers, supplies and services provided at the local level, and motivation activities of the workers and their performance in reaching the objective (except the one of Waliullah, 1982). The present study will bridge the gap in understanding the problem and will help to pinpoint the problems in areas of poor performance. This will also provide a basis to evaluate the effectiveness of existing system and make future policy decisions.

## *1. 2 OBJECTIVES OF THE STUDY*

In order to identify the factors related to low performance vis-a-vis high performance and the contribution of each factor to the overall variation, the present study aims at investigating the differential causes of performance of the family planning workers in Upazilas.

Thus, the main objectives of the study are :

1. to identify the factors responsible for high and low performance of the family planning workers at the field level and to determine the extent of variation due to personal characteristics of the workers (such as age, education, training, religion, social status) ;
2. to determine the extent to which attitudes, knowledge and behaviour of the community leaders' influential persons and of persons engaged in development works influence the variation in the performance (influence the eligible couples and the family planning workers) ;
3. to determine the extent to which the community characteristics such as literacy rates, level of development, communication and transportation facility influence the variation in the performance ;
4. to determine the extent to which the characteristics of the eligible couples (demographic, social, economic, etc.) are responsible for the variation in their participation ;
5. to determine the extent of variation due to the varying levels of the supply of contraceptives, clinical facility, counselling and guidance service, frequency of field visits and supervisions, group discussions, etc.

## *1. 3 METHODOLOGY*

Keeping in view the objectives of the study, the following samples surveys were carried out :

1. The survey of family planning workers at union level.
- ii. The survey of family planning officers/workers at Upazila level.
- iii. The survey of community leaders.
- iv. The survey of the community characteristics.
- v. The survey of currently married women.

#### 1.4 DETERMINATION OF THE NUMBER OF WORKERS AND THE NUMBER OF UNIONS IN THE SAMPLE

While determining the sample size of unions we considered the performance rate of a family welfare assistant as a variable. In order to determine the number of unions to be included in the sample we tried to answer the following question: What should be the sample number of family welfare assistants for Bangladesh so that the probability that the estimate for Bangladesh does not differ from its true value by more than 10 percent, is 0.95 i. e. taking the maximum difference of 10 percent we need  $n$  such that  $\text{Prob} [|p - P| \leq .1P] = .95$  so that,

$$\sqrt{\frac{N-n}{N-1} \times \frac{P(1-P)}{n}} = 1.96$$

$$(.1)^2 P^2 = (1.96)^2 \frac{N-n}{(N-1)} \times \frac{P(1-P)}{n}$$

The variance is maximum at  $p = .5$  and in that case  $P^2 = P(1-P)$ .

Since  $N=13416$ , we can take  $\frac{N-n}{N-1} = 1$ .

or,  $n = \frac{3.8416}{.01} = 384$  (approximately)

Hence, if we take a sample of 384 family welfare assistants, the estimate for achievement rate for Bangladesh will provide a 95 percent confidence interval.

In order to get 384 family welfare assistants, we need to have  $\frac{384}{3} = 128$  unions (since there are three FWAs in each union).

#### 1.5 HIGH AND LOW PERFORMANCE UPAZILAS

One of the main objectives of the study is to identify the factors responsible for high and low performance of the workers in Upazilas. In view of this, it was decided to divide all the upazilas into three equal groups: High, Medium and Low performance Upzilas.

The MIS report, 1982 provided the achievement rate (as a percentage of the target) of each Upazila. Generally, targets are set to achieve a predetermined fertility level. Before targets for annual numbers of users and acceptors are set, it is necessary to consider the nature of the expected fertility trend. In Bangladesh, methodwise national target is set on the basis of the previous years' performance and experiences. In case of a district, a specific target is computed by allocating the national working target in proportion to its previous years' performances. Then a second target is computed, this time making the allocation in proportion to the size of its population. The average of these two targets is the target fixed for the district. The same procedure is followed for the Upazilas also. However, there remains a possibility that a district (or a Upazila) with a high performance in the previous year, is likely to have a high target.

All the 450 Upazilas were then arranged in descending order of the performance rate. The top 150 Upazilas were included in the high performance group, the middle 150 Upazilas in the medium group while the bottom 150 Upazilas in the low performance group. Keeping the objectives in mind, only the high performance and low performance groups were considered for further sampling while the medium group was excluded.

#### *1. 6. SELECTION OF UPAZILAS*

The high performance group consisted of 150 Upazilas and the low performance group consisted also of 150 Upazilas. By using random number table 64 Upazilas were selected (randomly) from high performance group and 64 Upazilas were selected from low performance group. Thus, the total number of Upazilas in the sample was 128.

#### *1. 7. SELECTION OF UNIONS*

In all, 128 unions were required in order to get a sample of 384 family welfare assistants. Since we considered two groups of Upazilas, the high performance and low performance, both having the same number, it was decided to take an equal number of unions, that is 64, from each of the above two groups. Accordingly, one union was selected randomly from each of the selected Upazilas.

## *1. 8 THE SURVEY OF FAMILY PLANNING OFFICERS/WORKERS AT UPAZILA LEVEL*

In each Upazila, there is one Upazila Health Administrator (UHA), one Upazila Medical Officer (UMO), one Upazila Health and Family Planning Officer (UHFPO), one Family Welfare Visitor (FWV). All such personnel of the 127 selected Upazilas constitute the sample. The total number of Workers at the union level is 127x4=508. The survey covered 438 workers at the union level. The number of persons not covered in the survey were due to their absence at their place of work and in some instances positions were vacant for a long time.

## *1. 9 THE SURVEY OF COMMUNITY LEADERS*

As mentioned before, we have a random sample of 127 unions for the whole of Bangladesh. It was decided to cover 5 leaders in each union from among the following categories.

All union council members including the chairman of the union, school teachers, religious leaders, local doctors and Imams.

After the survey, it was found that a total of 630 community leaders were covered. Among them 310 were from low performance group and 320 from high performance group.

## *1. 10 THE SURVEY OF THE COMMUNITY CHARACTERISTICS*

The aim of this survey was to get the basic characteristics of the selected unions as well as of the villages selected on literacy rates, number of educational institutions, transportation facility, communication facility, electricity facility, employment opportunity, number of clubs, market place and other relevant facilities.

In each union, one highly trained Research Assistant collected these statistics by using available official data as well as by observation and interview methods.

## *1. 11 THE SURVEY OF CURRENTLY MARRIED WOMEN*

In the family planning program each union is divided into three wards and one Family Welfare Assistant appointed for each ward, For each ward,

a list of villages was prepared. A Village, from each ward was selected randomly. After selection of the village, a list of all currently married women aged less than 50 years, was prepared. A random sample of 20 women from each selected village constituted the sample. The total sample size for each union was 60. Thus the total number of currently married women in the sample was  $127 \times 60 = 7620$  of which one was a non-response case. The sampling design used is known as the four stage sampling design.

The formula for estimators and for their variance functions are given in all standard text books on sampling techniques (Kish, 1965 ; Hansen, 1953; Cochran, 1953). In the actual survey, two unions in low performance group in the district of Chittagong Hill Tracts could not be covered due to some unavoidable reasons. The survey team was then instructed to cover neighbouring unions. The team covered only one union which was later found to be in the high performance group. As a result, the total number of unions covered came out to be 65 in case of high performance group and 62 in case of low performance group. The distribution of unions, actually covered in the survey is given in Table 1.3.

#### *1.12 INSTRUMENT OF DATA COLLECTION*

The interview schedule has been used as the instrument of data collection. The following interview schedules, one for each category of respondents, were developed.

- i. The interview schedule for family planning workers
- ii. The interview schedule for family planning officers
- iii. The interview schedule for local community leaders
- iv. The structured schedule for community characteristics
- v. the questionnaires for eligible couples.

All the above schedules (questionnaires) were developed, keeping in mind the objectives of the study. In order to make the study results comparable, the questionnaires of other surveys like CPS, WFS were given due considerations.

#### *1.13 PRE-TEST AND THE FINALIZATION OF INTERVIEW SCHEDULES*

Once the schedules were developed, these were pre-tested. After the pretest, the research team and the representatives of the USAID met several times

with a view to finalizing the questionnaires. The discussion meetings made significant contributions towards finalizing the questionnaires.

#### *1.14 TRAINING OF THE FIELD STAFF*

The interviewers, selected for the task of data collection, were given extensive training on field problems, data collection procedure, editing and coding of questionnaire / schedules. Population experts from the different organizations gave lectures, tested and evaluated the candidates' performance. A total of 60 candidates completed the training course, out of which 40 were selected for the main field work.

#### *1.15 FIELD WORK*

Field work for the main survey started in May, 1983. It required nearly three months to complete the field work. A high level supervision was maintained by the research team, who either checked the completed documents or visited interview teams while still in the field.

The completed questionnaires had to be thoroughly checked by the interviewer before being submitted to the field supervisors who examined their completeness and consistency. Field supervisors held discussions with the interviewers in order to solve problems. The supervisors had to make a number of checks after the completed questionnaires were field edited. These included spot checks, on a sample basis, that the household interviewed belonged to the sample and that eligible women were correctly identified.

#### *1.16 DATA PROCESSING*

Filled-in data received were registered and their completeness were checked against the sample list for each cluster. At the same time responses to the open ended questions were tallied for the purpose of developing the code. Detailed manuals for editing and coding were prepared. As soon as questionnaires of the individual schedule were edited and coded, the documents were sent to the computer of BUET (Bangladesh) for tabulation. Besides computer analysis, hand tabulations were also done for a subset of samples. Because of the problem with the computer, the writing of the report has been delayed and has taken a longer period than anticipated.

**Table 1. 3. Number of Unions, Number of Family Planning (Union Level) Workers in the Sample by High-Low Groups and by Districts.**

District	Number of unions			Family planning workers at union level		
	Low	High	Total	Low	High	Total
Dinajpur	1	3	4	4	12	16
Rangpur	4	5	9	16	20	36
Bogra	2	1	3	8	4	12
Rajshahi	5	6	11	20	24	44
Fabna	7	2	9	28	8	36
Kushtia	4	5	9	16	20	36
Jessore	1	5	6	4	20	24
Khulna	2	—	2	8	—	8
Patuakhali	1	4	5	4	16	20
Barisal	5	1	6	20	4	24
Faridpur	6	1	7	24	4	28
Dhaka	7	4	11	28	16	44
Tangail	—	2	2	—	8	8
Mymensingh	2	4	6	8	16	24
Jamalpur	—	2	2	—	8	8
Sylhet	5	4	9	20	16	36
Comilla	2	4	6	8	16	24
Noakhali	—	4	4	—	16	16
Chittagong	5	3	8	20	12	32
Chittagong Hill Tracts	3	5	8	16	20	36
Bangladesh	62	65	127	252	260	512

## CHAPTER TWO

### *2.0 DESCRIPTIVE ANALYSIS OF VARIOUS CATEGORIES OF SAMPLES*

#### *2.1 INTRODUCTION*

In order to identify the causes of variation between the two areas data were obtained from different types of respondents.

Section 2.2 through Section 2.6 present the descriptive analysis of these respondents. Section 2.2 gives the characteristics of the community. This section included questions on transportation, communication network, general services and literacy rate.

Section 2.3 gives the characteristics of the community leaders. This section included questions on the awareness and involvement of community leaders in family planning program, their perceptions and opinions about development programs, their opinion about the activities required to promote family planning programs.

Section 2.4 presents analysis of field level workers. This section included the worker's background characteristics, length of service, their training and duration of training received, type of activities on which training received, frequency of visits to the clients, their interactions with community leaders, job satisfaction, their opinion and suggestions for the improvement of family planning program,

Section 2.5 gives the characteristics of Upazila level officers. This section includes the length of service, their training and duration of training received, utilization of training in implementing the program, their opinion and satisfaction on the clinical and non-clinical services, their interaction with community leaders, problems faced in implementing the family planning program, problems due to integration of health and family planning, job satisfaction and their opinion and suggestions for the improvement of family planning program.

Section 2.6 gives the socio-economic and demographic characteristics of the individual woman. This section includes information on age at first

marriage, their educational background, their occupations, their religious background, current pregnancy status, current fertility level and cumulated fertility, infant and child mortality experienced by them, direct and indirect estimates of infant mortality, knowledge and use of contraception, reasons for not using contraception currently, pattern of visits to them by the workers, their opinion about the role of community leaders ( both formal and informal leaders ) in promoting family planning program in their locality.

## *2. 2 CHARACTERISTICS OF THE COMMUNITY*

### *2. 2. 1 INTRODUCTION*

In the methodology section we discussed the selection procedure of the sample areas. From all over the country, a sample of 127 areas had been selected. Among them, 62 areas belong to the low performance area and 65 areas belong to the high performance area.

One of the main objectives of the study was to determine the extent to which the community characteristics such as literacy rate, level of development, communication and transportation facility, among others, influence the variation in the performance. In view of this, we developed the structured schedule for the community characteristics. The field investigators were instructed to use different ways of collecting information like interviewing key persons, personal visits and their observations, to fill in the schedule. In this section the information collected from the community schedule will be used to examine whether the average level of each community characteristic under study is different for the two areas viz. low performance and high performance areas.

### *2. 2. 2 DISTANCE OF THE LOCALITY FROM THE UPAZILA HEADQUARTER*

The level of development and availability of facilities of a locality are considered to be dependent on its distance from the nearest urban centre. In this study, the distance between the Upazila headquarter and the study union was recorded and the distribution of unions by distance for high and low areas is shown in Table 2.2.1 . A close look at the table indicates that relatively more unions of high performance area are nearer to the centre,

**Table 2.2.1 Distribution of Unions by Distance for High and low performance Areas.**

Area	Number of unions by distance (in mile)						all unions
	Upto 1	1-3	3-5	5-7	7-9	9 and above	
Low Performance	3 (17.3)	9 (17.3)	10 (19.2)	9 (17.3)	5 (9.6)	10 (17.3)	52 (100.0)
High Performance	9 (14.5)	16 (25.8)	17 (27.5)	10 (16.1)	3 (4.8)	7 (11.3)	62 (100.0)
All	18 (15.8)	25 (21.9)	27 (23.7)	19 (16.7)	8 (7.8)	17 (14.9)	114 (100.0)

Figures in parentheses represent the row total (the total nonresponse cases are 13 of which 10 are from low performance and 3 from high performance areas).

For example, nearly 54 percent union of low performance area were at a distance of less than 5 miles from the centre while nearly 64 percent unions of high performance area were at a distance of less than 5 miles from Upazila headquarter. The average distance and the standard deviation of distance for two areas are :

<i>Area</i>	<i>Average distance (in miles)</i>	<i>Standard deviation of distance</i>
Low	4.93	3.33
High	4.17	2.88
Both	4.52	3.11

The average distance as well as the standard deviation of the distance higher for the low performance area compared to those of the high performance area. The high standard deviation in the distance in the low area suggests a high variability in the distance from unions to Upazilas. Average distances of the two categories are not significantly different (the calculated t is 1.3).

### 2.2.3 TRANSPORT SYSTEM

Variations in the transport facilities might have an indirect effect on the performance. With a view to investigating the presence of such an effect, if any, Information on the transportation facility of the sample localities with the corresponding Upazila centre were collected for winter and rainy seasons. In order to develop a composite index, each of the following transport facilities, if available, was assigned the score mentioned against it or was assigned zero in case of its unavailability.

i. On foot	0
ii. By boat	1
iii. By launch	2
iv. Rickshaw	4
v. Bus	8
vi. Baby taxi	16
vii. Motor cycle	32

Each area was given score twice : one for winter and one for rainy season. The lower the composite index, the worse is the transportation facility of the locality with the Upazila centre. Although the above composite index is more or less a subjective information, it is expected that it would provide rationale to distinguish between good and bad communication network from unions to Upazilas.

Table 2.2.2 provides the distribution of unions by the level of composite index, separately for low and high performance areas. Both low performance and high performance areas contain unions having better transportation facility as well as poorer transportation facility. The average of the index value for the low performance area is 16.58 with a standard deviation 15.5, while for the high performance area the average index is 17.7 with a standard deviation 17.8. On the basis of the above statistics it cannot be inferred that the better performance area included unions having better transportation facilities with the Upazila headquarters.

**Table 2.2.2. Distribution of Unions by Composite Index Reflecting the Level of Transportation Facility.**

Index	Low performance area	High performance area	All areas
0	2 (3.7)	4 (6.4)	6 (5.2)
0-9	14 (26.4)	8 (12.9)	22 (19.1)
10-19	8 (15.1)	23 (37.0)	31 (27.0)
20-29	10 (18.9)	5 (8.0)	15 (13.0)
30-39	14 (26.4)	11 (17.7)	25 (21.7)
40 and above	5 (9.4)	11 (17.7)	16 (13.9)
All	53 (100.0)	62 (100.0)	115 (100.0)

Figures in parentheses represent percentages of the column totals.

#### 2.2.4 COMMUNICATION SYSTEM

Presence of communication facilities such as post office, telegram and telephone, is being considered as an attribute having direct contribution to the performance. It is, therefore expected that the high performance areas have higher communication facilities compared to low performance areas. Table 2.2.3 presents the distribution of unions by the category of facilities available in the unions.

The table shows that nearly 15 per cent of the sample unions do not have any of the communication facilities considered in the study. The situation of "no facility" is not much different between high and low performance areas. For example, 13.5 per cent unions belonging to low area do not have any facility while the percentage of unions in high category, devoid of any facility, is 16.1. The table also shows that the most commonly available facility is the post office. Among 114 study unions, 96 (84 percent) unions.

11

have post office. The percentages of unions for low and high categories having post office are respectively 85 and 84.

About 23 per cent of all sample unions have all the communication facilities. An areawise distribution shows that the high performance area has 26 per cent unions having all the facilities, while the low performance area has only 19 per cent unions having all the communication facilities. The difference suggests, that the presence of postal service, telegraph, telephone in rural areas may have some influence on the performance of the workers.

*Table 2.2.3* Distribution of Unions by Communication Facilities

Facility available	Score	Low area	High area	All area
No facility	0	7 (13.5)	10 (16.1)	17 (14.9)
Post office	4	24 (46.2)	28 (45.2)	52 (45.6)
Telegraph	7	0 (0.0)	0 (0.0)	0 (0.0)
Telephone	10	1 (1.9)	0 (0.0)	1 (0.8)
Post office + telegraph	11	2 (3.8)	2 (3.2)	4 (3.8)
Post office + telephone	14	8 (15.4)	6 (9.7)	14 (12.3)
Telephone + telegraph	17	0 (0.0)	0 (0.0)	0 (0.0)
All facilities	21	10 (19.2)	16 (25.8)	26 (22.8)
Total		52 (100.0)	62 (100.0)	114 (100.0)

Figures in parentheses represent percentages of total.

### 2.2.5 GENERAL SERVICES

The general services include mosque, bank, youth club, mother's club and community centre. It is expected that the presence of the general services

facilities in a village might have an influence on the performance. The information on mosque shows that every village has a mosque, irrespective of whether it belongs to high or low performance area. Table 2.2.4 presents the distribution of the study areas by categories of general services.

*Table 2.2.4* Distribution of villages by General service Facility, High and Low Performance Area.

Category	Number of villages in		
	Low area	High area	All areas
Absence of youth club, bank, community centre	16 (31)	17 (27)	33 (29)
Performance of all the facilities	8 (15)	9 (15)	17 (15)
Presence of at least one facility (bank, community centre, youth club)	28 (54)	36 (58)	64 (56)
Total	52	62	114

Figures in parentheses indicate percentages of the column totals.

Out of 114 villages, 33 (29 per cent) villages do not have any general service facility. In low performance area this percentage is 31 while in high performance area it is 27. All the three facilities (bank, community centre, youth club) are available only in 15 per cent villages, and there is no difference between high and low performance areas. Presence of at least one general service is relatively higher in high performance area. The percentages are 54, 58, 56 respectively for low, high and all areas.

#### 2.2.6. INSTITUTIONAL FACILITY

The institutional facilities included in the study are Upazila Irrigation Project (UIP), Irrigation Scheme, Co-operative, Female Co-operative, Fisherman Co-operative, Collective Farm, etc. Table 2.2.5 shows the distribution of unions by level of facility.

**Table 2.2.5. Distribution of Sample Study Units by Level of Facility, High and Low Areas.**

Level of the facility	Number of sample units		
	Low	High	All areas
No facility	1 (2)	2 (3)	3 (3)
One facility	5 (10)	14 (23)	19 (17)
Two facilities	10 (19)	9 (15)	19 (17)
Three facilities	13 (25)	15 (24)	28 (25)
More than three facilities	23 (44)	22 (35)	45 (39)
Total	52	62	114

Figures in parentheses represent per cent of column total.

The distribution of the sample units shows that almost all villages have atleast one institutional facility. The distribution also shows that the unions in the low performance category have relatively better institutional facility than unions in the high performance category.

### 2.2.7 IRRIGATION

Availability of irrigation facilities in a village may have influence on the performance. The survey collected information on the availability of low lift, shallow and deep tubewells in the areas. It has been observed that most villages have no pumps at all, while some others have many in numbers. A composite index has been developed to describe and compare the irrigation facilities in the two areas. The following scores have been used to derive the composite index.

No mechanical pumps	= 0
Low Lift pump	= 3
Shallow	= 5
Deep tubewell	= 7

If a village has one low lift, one shallow and one deep tube well, the composite score will be 15. The composite index will be 30 if the village has two of each category. The higher the score, it is assumed that the more areas of the village have been brought under the irrigation system. The distribution of the villages according to the composite score is given in Table 2.2.6.

*Table 2.2.6. Distribution of Villages by Composite Score, High and Low Performance Area.*

Score	Low area	High area
	Number of villages	Number of villages
0	5 (9)	8 (13)
0-8	1 (2)	3 (5)
9-16	12 (22)	12 (20)
17-28	11 (20)	13 (21)
29-44	13 (24)	10 (16)
45 and above	12 (22)	15 (25)
Total	54 (100)	61 (100)

Figures in parentheses represent percentages of total.

As evident from the table, both low and high performance areas have villages with different levels of irrigation facilities. Clearly, the data do not support the contention that high performance areas have better irrigation facilities than the low performance areas.

### *2.2.8. EDUCATIONAL INSTITUTIONS*

It is expected that the presence of higher level educational institutions as well as their number have direct bearing on the level of performance.

High performance unions are expected to have more educational institutions compared to low performance unions. In case of educational institutions we also developed composite index for each study unit. The scores assigned to different categories of institutions are as follows :

- a. No institution = 0
- b. Maktab and Madrasha = 3
- c. Primary = 5
- d. Secondary = 10
- e. College = 25

The distribution of the unions by composite index score is shown in Table 2.2.7.

*Table 2.2.7. Distribution of the Unions by Composite Score, Low and High Performance Areas.*

Composite score	Low performance area	High performance area
	Number of unions	Number of unions
0	0 (0)	0 (0)
1-21	3 (6)	0 (0)
21-40	5 (9)	3 (5)
41-60	14 (26)	10 (17)
61-80	8 (15)	16 (27)
81-100	10 (19)	9 (15)
101-120	7 (13)	7 (12)
121 and above	6 (11)	15 (25)
Total	53	60

Figures in parentheses represent percentage of column total.

The distribution shows that there is no union without an educational institution. The number of institutions in high performance area is relatively more than that in low performance area. The average composite index derived is 73 for low performance area, while it is 87 for high performance area. This big difference leads us to conclude that the performance level may have been positively associated with the extent of educational facilities.

### 2.2.9. HEALTH AND CLINICAL FACILITY

Health and clinical facilities considered in this study include pharmacy, clinics, family planning clinic, M. B. B. S. doctors, other doctors, nurse, Dais, Kabiraj and paramedics. It is assumed that the greater the number of each category of the above facilities in the union, the better is the performance of the workers of the union. To facilitate our discussion we developed a composite index for health and clinical facility by assigning a score to each facility. The scores assigned are as follows :

For each pharmacy	= 5
For each health clinic	= 10
For each family planning clinic	= 5
For each M. B. B. S. doctor	= 25
For each doctor (other than M. B. B. S.)	= 10
For each nurse	= 5
For each kabiraj or each paramedic	= 5
For each dai	= 2

Using the above scores, a composite score for each union under study was calculated. The distribution of unions by score is given in Table 2.2.8.

In Both areas—high and low—there are unions having inadequate health and clinical facilities. The number of unions with better health facility is relatively more in high performance area. For example, in the low performance area the number of unions score above 250 is only 17 (32 per cent), while in high performance area the corresponding number is 30 (49 per cent). The average scores calculated for the two areas from Table 2.2.8 are respectively 178 and 192 with a difference of 14 which is statistically significant. This leads us to conclude that areas with better health and clinical facilities might have an influence on better performance of the workers.

*Table 2.2.8. Distribution of Unions by Composite Health and Clinical Facility Score, Low and High Performance Areas*

Composite score	Low performance area	High performance area
	Number of unions	Number of unions
Below 50	6	5
50-99	5	10
100-149	11	8
150-199	6	4
200-249	8	4
250 and above	17	30
Total	53	61

### *2.10 NEWSPAPER READERS AND RADIO SETS*

During the survey, the investigators also collected information on the number of newspaper readers and the number of radio sets available in the locality. The investigators reported that various sources provide significantly different statistics on the same variable. It was not possible to single out one as the most reliable. As such, we do not provide any analysis in this section.

### *2.11 LITERACY RATE*

The literacy rate of an area is generally used as an indicator of the overall level of development attained in the area. For each study village information on the literacy rate was also collected. The distribution of sample study villages by literacy rate is given in Table 2.2.9.

The distribution of the sample villages covered in the study shows marked difference in the literacy rates ranging from below 10 per cent to as high as 45 per cent. Both high and low areas have this characteristic. The high areas have relatively more unions with higher literacy rates. For example, there are 56 per cent villages with literacy rate less than 20 per cent in the low area while 44 per cent villages of high areas have literacy rate below 20 per cent. However, the difference in the distribution between the two areas is not sharp and as such we cannot say that there is a positive association between performance and literacy rate.

**Table 2.2.9. Distribution of the Sample Villages by Literacy Rates, Low and High Performance Areas**

Area	The number of villages with literacy rate									Total
	Below 10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45 and above	
Low	9 (17)	7 (13)	14 (26)	6 (11)	3 (6)	4 (7)	1 (1)	3 (6)	6 (11)	53
High	4 (7)	12 (20)	10 (17)	10 (17)	7 (12)	6 (10)	0 (0)	6 (10)	5 (8)	60
Both	13 (13)	19 (18)	24 (23)	16 (15)	10 (10)	10 (10)	1 (1)	9 (9)	11 (11)	103

Figures in parentheses represent percentages of the row totals.

### *2.2.12 CONCLUSIONS*

The foregoing analysis suggests that there are some community characteristics which might have influenced the level of performance of the workers. These are closeness from the upazila headquarter, communication facility, educational facility and health and clinical facilities. Whether the other characteristics such as transportation facility, general service facility, institutional facility, irrigation facility and literacy rate has any impact on the performance of workers is difficult to establish.

### *2.3 CHARACTERISTICS OF THE COMMUNITY LEADERS*

The aim of this section is to investigate the socio-economic characteristics of the community leaders and their role in promoting family planning programs in Bangladesh. One of the primary objectives of this study is to see the extent to which the involvement of the local leaders (both formal and informal) could influence the attitude towards the family planning program.

The Bangladesh population policy has moved through a succession of transformations. The present national population policy incorporates past experiences both in terms of government organizational approach and the dynamics and mechanics of the informational, educational, motivational and delivery aspects at the rural level environments where more than 90 per cent of the eligible population reside. The present government population program is a MCH based multi-sectoral program through community participation. In addition to the government program, there are at least 178 non-government organizations also active in the field of family planning (FPSTC, 1982).

#### *2.2.1 DATA SOURCE*

Data were collected from 65 high performing Upazilas and 62 low performing Upazilas. The data for the community leaders were derived from interviews with formal and informal leaders. About 5 community leaders were interviewed from each of 127 Upazilas with the resultant sample sizes of 325 leaders from the high area and 310 from the low area. The community questionnaire was administered by the field supervisors at

the time of listing the households of each selected union. The respondents, in case of leaders subset of sample, were the elected members of the union council, village school teachers, village doctors, religious leaders and other influential persons in the village.

### *2.3.2 SOCIO-ECONOMIC CHARACTERISTICS OF THE LEADERS*

It has been recognized that the success of the local development programs including family planning program, in villages of Bangladesh is largely dependent on the involvement of local leaders at the grass-root levels. In the following sections we describe the socio economic characteristics of the leaders and their role and opinion about future prospects of the program.

### *2.3.3 AGE DISTRIBUTION*

Table 2.3.1 shows the percentage distribution of local leaders by their current age and by area. It is evident from the table that about 60 per cent of the leaders are aged below 45 years. The median age of the leaders in each of the two areas is about 39 years.

### *2.3.4 LEVEL OF EDUCATION*

Educational level of the leaders is one of the important characteristics of the leadership quality. Table 2.3.2 shows the per cent distribution of the leaders by their level of education. The pattern of distribution of the two areas according to the level of education is more or less similar. The distribution of leaders by their educational attainment suggests that almost all are literate. More than 37 per cent of the respondents in the high area and about 33 per cent of those in the low area have secondary and above education. About 19 per cent in the high area and 16 per cent in the low area have been exposed to degree or higher level of education.

### *2.3.5 OCCUPATIONAL PATTERN*

Usually it is expected that there will be a relationship between occupational pattern and economic structure of the respondents. Table 2.3.2 shows

the percentage distribution of leaders by their occupations. It appears *agriculture* category dominates the occupation of the local leaders since about half of the leaders belong to this occupation. *Agriculture* is followed by *services* that constitute the next major occupation of the leaders. Although the information provided here suggests that *agriculture* occupation occupies the largest share of the rural power structure, it appears that other occupational groups such as service and business, are also dominant.

### 2.3.6 LANDOWNERSHIP

In a country like Bangladesh economic status, as measured by the possession of landholding, is one of the important characteristics of the rural power structure. Table 2.3.2 gives the percentage distribution of leaders by landownership. This table shows that about 6 per cent of the sample leaders belonging to the high area were landless at the time of the survey. The corresponding figure in the low area was 8 per cent. About one fifth of the sample leaders from each of the two areas owned land between 301-500 decimals. The median landholding size was higher for the leaders from the low areas ; 353 decimals as against 331 decimals.

### 2.3.7 INCOME PATTERN

Economic status as measured by monthly income is also an important determinant of leadership quality. Roughly, an equal proportion of the leaders ( about 35 per cent ) from both the areas had monthly income less than Taka 1500.00. The median income of the leaders from the high area was about Taka 1587.00. The corresponding figure in the low area was Taka 1543.00.

### 2.3.8 USE OF FAMILY PLANNING METHODS BY THE LEADERS

The level of contraceptive use in a given society depends on the knowledge of family planning methods, the demand for modern methods, the awareness of service outlets, and the accessibility to and effectiveness of the services. Information on current use of family planning suggests that about 50 per cent of the respondents in each of the two areas were current users at the time of interview. More than 90 per cent of the current users from

the low area were users of modern methods compared to 82 per cent of those in the high area ( Table 2.3.3 ). The use of traditional methods of contraception as reported by the leaders of the high area was almost three times that of the low area.

### *2.3.9 AWARENESS AND INVOLVEMENT OF COMMUNITY LEADERS IN FAMILY PLANNING PROGRAM*

In recent years the government has been emphasizing the greater involvement of community leaders for effective implementation of the family planning program. In order to make family planning program successful and acceptable to the community, the participation of leaders is considered to be important. The involvement of leaders in the program depends on their awareness, knowledge and linkage with family planning activities. This section is intended to provide information on these aspects.

As evident from Table 2.3.4, an equal percentage of leaders from both the areas were aware about the family welfare centres in their areas. When asked whether family planning workers visited them during the three months preceding the survey, we see that about 63 per cent of the sample leaders in the high area and about 59 per cent in the low area reported that they were visited by the family planning workers. About half of the leaders, who reported that they were visited by the family planning workers, discussed about family planning program with the workers. In response to a question as to whether they support family planning program, we find that over 90 per cent of the leaders from each of the two areas stated that they support the family planning program. When asked whether community people accept their advice, it is found that over 45 per cent of the leaders from each of the high and low areas mentioned that community people accept their advice.

The community leaders were also asked to express their opinion as to whether people from their areas benefited from the family planning program. In response to this question, a large majority of the leaders ( over 80 per cent ) stated that people from their areas have benefited from the family planning program.

### *2.3.10 PERCEPTIONS AND OPINIONS OF COMMUNITY LEADERS ABOUT DEVELOPMENT PROGRAMS*

The information provided in this section gives some insight into the leaders' perception about the program as well as types of development strategies required to promote family planning program.

The local leaders were asked to give their opinion about various types of services of family planning programs. It seems that leaders have different opinions about service facilities. Less than a half of the leaders expressed that the services such as advice on family planning, delivery of family planning methods and clinical facilities of sterilization, were good while services such as delivery of babies and maternal and child health services, were bad. A comparison of high and low areas suggests that the services are slightly better in the high areas than those of the low areas as reported by the leaders ( Table 2.3.5 ).

While investigating the leaders' perception about the types programs to be introduced to make the family planning program more effective, we see that more than 90 per cent leaders in each of the areas prioritized education followed by agricultural development ( about 30 per cent ). Also, programs are required for overall development of the areas ( Table 2.3.6 ).

### *2.3.11. OPINION OF THE LEADERS ABOUT THE NUMBER OF CHILDREN A FAMILY SHOULD HAVE*

In the survey, all leaders were asked about the number of children a family should have. The distribution of leaders by this number of children is given in Table 2.3.7. According to the opinion of about a half of the respondents a family should have two children. The pattern is more or less the same in both the areas. The average number of children a family should have according to their opinion, was less than three. Although there is a gap between the actual family size and the desired family size, it is encouraging to note that there is a trend towards a smaller family size as perceived by the leaders.

*2.3.12. OPINION OF THE LEADERS ABOUT THE ACTIVITIES  
REQUIRED TO PROMOTE FAMILY PLANNING PROGRAMS*

The local leaders were asked to provide opinions and suggestions about the activities required for the promotion of family planning program in their areas. Since community members are more perceptive to the ideas generated by the local leaders, the awareness of the family planning implementation problems, by the leaders, is important. Leaders' perception an awareness about the activities may influence the program. Leaders from both the areas suggested a number of activities which, according to them will promote family planning program in their areas. These include more, publicity of the family planning program and providing educational facility, formulation of law of two children family, establishment of family welfare centres in each union, increase of supervision of the field workers, making drugs, equipments and quality medicine to remove side effects, available, making local leaders involved, and providing more training to the workers ( Table 2.3.8 )

*Table 2.3.1. Per Cent Distribution of Local Leaders by Current Age and by (High and low) Area.*

Age group	High area	Low area.
below 25	1	1
25-29	8	8
30-34	18	17
35-39	19	18
40-44	14	17
45-49	14	15
50-54	8	8
55-59	9	6
60+	9	10
N	320	310
Median age	39.0 years	39.3 years

*Table 2.3.2. Socio-Economic Characteristics of the community Leaders by (High and Low) Areas.*

Socio-economic characteristics	High area	Low area
<i>Education</i>		
Illiterate	0.3	0.3
Primary	12.5	15.5
Lower secondary	21.6	23.9
Secondary	28.4	27.1
Higher secondary	18.4	17.7
Degree and above	18.9	15.5
N	320	310
<i>Landholding (in Decimals)</i>		
Landless	6	8
1--100 decimals	6	10
101--300 decimals	25	19
301--500 decimals	20	17
501--700 decimals	7	11
701+ decimals	36	35
N	320	310
Median landholding (in decimals)	330.5	353.4
<i>Income (in Taka)</i>		
below 750	7	6
750 - 1500	28	30
1501--3000	37	38
3001--5000	17	15
5001--9500	6	7
9500+	5	4
N	320	310
Median income (in Taka)	1586.5	1542.5
<i>Occupation</i>		
Agriculture	46.0	47.1
Service	26.9	27.1
Business	26.1	24.8
Others	1.0	1.0

**Table 2.3.3. Percent Distribution of Leaders by their Current Use of Family Planning Methods by Areas.**

<b>Methods</b>	<b>High area</b>	<b>Low area</b>
<b>Pill</b>	<b>40.1</b>	<b>48.8</b>
<b>Condom</b>	<b>22.8</b>	<b>25.9</b>
<b>Sterilization</b>	<b>13.1</b>	<b>8.3</b>
<b>IUD</b>	<b>6.0</b>	<b>10.0</b>
<b>Traditional methods</b>	<b>17.9</b>	<b>6.9</b>
<b>N</b>	<b>320</b>	<b>310</b>
<b>All methods</b>	<b>49.8</b>	<b>50.1</b>

**Table 2.3.4. Awareness and involvement of Leaders in Family planning programs by Areas.**

	High area	Low area
<i>Awareness about family welfare centre</i>		
Yes	76.8	77.9
No	23.2	22.1
N	320	310
<i>Whether support family Planning program</i>		
Yes	94.3	95.4
No	5.7	4.6
N	320	310
<i>Whether FWAs visited them in last three months</i>		
Yes	62.9	59.1
No	37.1	40.9
N	320	310
<i>Whether FWAs discussed about family planning program</i>		
Yes	49.1	50.9
No	50.9	49.1
N	320	310
<i>Whether community people benefited from the family planning program</i>		
Yes	85.0	83.0
No	15.0	17.0
N	320	310
<i>Whether community people accept their advice</i>		
None	42.5	34.8
Completey	46.5	48.7
Partly	10.6	15.5
Sometimes	0.4	1.0
N	320	310

*Table 2.3.5. Distribution of Leaders According to Their Opinions About the Quality of Services by Areas.*

Type of services	Quality of services					
	High area			Low area		
	Good	Somehow	Bad	Good	Somehow	Bad
Advice on family planning	42.2	41.7	16.1	49.1	37.9	12.9
Distribution of family planning materials	39.6	40.9	19.5	39.0	44.3	16.7
Operation of sterilization	44.1	41.4	14.5	36.0	39.9	24.1
Delivery of babies	14.0	34.2	51.8	12.7	29.1	58.2
MCH services of newly born mothers	10.8	27.0	62.2	8.7	8.3	72.9
Nutrition program for the Newly born mothers	1.7	7.3	91.0	1.0	4.9	94.1

*Table 2.3.6. Distribution of Leaders According to the Type of programs Required for the Overall Development of Government Family Planning Programs in Their Areas.*

Type of programs	High area	Low area
Education	55.3	50.3
Health	1.6	3.9
Agriculture development	27.8	31.3
Family planning	6.9	6.1
Cottage industry	1.2	7.4
Others	1.2	1.0
<b>N</b>	<b>320</b>	<b>310</b>

*Table 2.3.7. Per Cent Distribution of Leaders by Their Opinion About the Number of Children a Family Should Have, by Areas.*

Number of children	High area	Low area
1	3.1	1.9
2	51.7	48.8
3	36.1	37.1
4	8.5	9.2
5+	0.7	2.9
N	320	310
Mean number of children	2.53	2.66

## 2.4 CHARACTERISTICS OF FIELD LEVEL WORKERS

### 2.4.1 INTRODUCTION

Although Contraceptive prevalence Rate has increased since 1975, it falls short of the target set in the population policy program. Many studies conducted in the past suggested that accessibility to and availability of contraception would increase the prevalence rate. In recognition to this, the government recruited grassroot level workers to increase the current use rate of contraception. The main purpose was to make the family planning services available at the doorsteps of the eligible couples. At the grassroot level, the family planning program has two types of permanent workers. One type (field level workers) is mainly responsible for motivating couples towards accepting clinical and non-clinical family planning methods. This type consists of two categories of field level workers, namely, family planning assistants (FPAs) and Family Welfare Assistants (FWAs).

FPAs who are males (one in each administrative union) and are responsible for supervising the work of FWAs. In addition to this, they are also supposed to do independent motivation work by organizing group meetings and through home visits. On the other hand, FWAs are females (one in each ward-in a union there are three wards) and they are mainly responsible for motivation and supply of contraceptives including counselling, guidance and follow up services within her specified area.

**Table 2.3.8. Opinions of the Leaders According to the Type of Activities that Should be Performed to make Government Family Planning Program Successful.**

Activities	High area	Low area
Responsibility should be given to all government employees and to the union parishad	5.6	2.5
Provide rationing to the clients and should help in the field of health and education	9.0	9.1
Promotion of family planning program through training of local leaders and religious ; the family planning workers should discuss about the family planning activities with local leaders and the religious leaders	6.9	11.5
Eradication of religious superstition and prohibition of early marriage	4.6	8.6
Family planning program activities should reach the public through publicity and population education	20.2	21.2
The field workers should be more responsible ; the field workers need more training and family planning activities should be increased	16.0	11.8
Two children family should be made compulsory through promulgation of law	4.9	4.9
Each union should have a family welfare center and each center should have female doctors	9.5	9.7
Necessary to increase the supervision of field workers and their activities should be verified by the local leaders	8.2	6.4
Necessary to ensure essential drugs, equipments and quality family planning materials	9.4	9.2
All government employees should adopt family planning and it should be compulsory for all	1.3	0.2
Supply of quality medicine in order to remove the side effects	1.6	2.7
Do not support family planning program	2.8	2.2
Total	756	671

The other type is mainly concerned with clinical activities of the program and is posted only in the places where there are clinics. The clinics are generally situated at the Upazila level and in some instances, at the union level. This type of field workers are known as Family Welfare Visitors (FWVs). As a part of their clinical responsibilities the FWVs are supposed to perform the MCH (Maternal and Child Health) services.

Potential manpower support for family planning has significantly increased as a result of the integration of the program. The level and composition of field workers by the end of the Second Five Year Plan (SFYP) period, is expected to increase considerably comprising of 18,000 male Family Welfare Workers (FWW), 4500 male Family Planning Assistants (FPA), 135,000 Dais and Traditional birth attendants. The SFYP also proposes the staffing of Upazila Health Centre (UHC) by five Medical Officers. The Family Welfare Center (FWC) at the union level is to be staffed by a Medical Assistant, and a Family Welfare Visitor (FWV). At present there are about 4392 FPAs, 12,337 FWAs, 2722 FWVs, 13,500 FWWs and 8,000 Dais are assigned to work for the family planning program at the field level.

Some form of basic training is available at every level of the program. The program depends largely on the field workers (FPAs, FWAs, FWVs and Dais and now perhaps the FWWs) who are required to contact eligible couples in their households to provide contraceptive supplies, referral and follow up services. The role of these field workers is crucial for the success of the program. No systematic investigation was done to evaluate the differential performances of the workers at Upazila levels and at lower levels.

Very few of the studies attempted to test any particular hypothesis or a set of hypothesis. These tests, however, certainly useful for developing an empirical investigation. An attempt is made here to describe the characteristics of the field level workers, to investigate the pattern of field supervision and related problems and to identify the factors responsible for differential performance in family planning program.

The objective of family planning field supervisors, in general, is to motivate field workers to carry out program activities and to mobilize resources to accomplish program goals. In terms of goal definition, measures of field workers' performance in relation to set annual targets become measures of supervisory effectiveness. In terms of the role definition, perhaps field

workers, both job performance and job satisfaction can be identified as effectiveness indicators. However, influences of individual, social, organizational and environmental factors on performance, and satisfaction are important determinants of differential program performance. Supervision of the outreach program is generally difficult in the sense that the workers are scattered over a wide geographic area making it impossible even to just contact all workers everyday or at every week. House to house visits everyday is the major means by which family planning information and services are delivered at the doorsteps of potential acceptors. The nature of the supervisory task in the outreach program thus involves making random field visits in order to spotcheck the activities of the field workers as per their program, follow up family planning acceptors, participate in group meetings, and discussions with local leaders, review progress report and ascertain their accuracy, check the stock of contraceptives, provide on the spot counselling on problems and difficulties faced by the field workers, and provide inservice training.

The client referral function performed by the outreach workers establishes a causal link between the performance of the outreach program and clinics. The quality of services provided in the clinics and then feedback on the performance of the outreach workers by shaping the attitude of both actual and potential clients towards the services delivery system in their area.

The number of acceptors is most often used for assessing workers' performance. This oversimplifies a very complex process. A man or a woman's decision to become an acceptor is determined by many social and individual pulls and pressures most of which are outside the province of influence of the field workers. This point should be taken into consideration while assessing the worker's performance.

Our aim is to investigate the factors causing differential performances of family planning workers at Upazila levels. This requires a comprehensive analysis covering the basic policy assumptions underlying the structural design of the existing system, the supervisory pattern itself, the process of supervision, and the way these interact with individual and environmental characteristics.

#### *2.4.2 CHARACTERISTICS OF FIELD AND CLINIC LEVEL WORKERS*

The specific variables studied include age, sex, education, religion, marital status, number of children ever born, number of living children, socio-economic

status, job experience, knowledge on the job, training received and attitude and commitment towards the job and the program. These factors probably determine the effectiveness of program performance by influencing the ability, job satisfaction and motivation of field personnel.

### *2.4.3 AGE DISTRIBUTION*

Table 2.4.1 shows a descriptive analysis of the socio-demographic characteristics, socio-economic status, commitment to population work, attitude towards family planning and of some job specific characteristics of field workers in the two areas: Among the family planning field personnel the oldest were the FPAs followed by FWVs. The FWAs were found to be much younger than the others. In all the instances, the average age of the workers belonging to the high areas was slightly higher than that of the workers belonging to the low areas; but the difference is too small to be taken into consideration.

### *2.4.4 MARITAL STATUS AND AGE AT MARRIAGE*

Most of the workers (more than 87 per cent) in both the areas were married except the FPAs. The FPAs who are males married less frequently in the low performing (LP) Upazilas. The marital status is of course related to age. The incidence of marriage as well as dissolution of marriage through divorce and death of husband was higher in the high performance (HP) Upazilas. The average age at first marriage of the workers suggests that there is no difference in the average age between the workers of the two types of Upazilas. The average age at marriage of the FWVs in both the areas was higher by two years than the FWAs in both the areas (Table 2.4.1).

### *2.4.5 NUMBER OF CHILDREN EVERBORN AND NUMBER OF CHILDREN LIVING*

Differences in age at marriage and marital experience are also reflected in the average number of children everborn to workers in the two areas. Table 2.4.1 gives the percentage distribution of workers in both the areas by the number of children everborn. Between the FWVs in the high and low perfor-

mance Upazilas there was no significant difference (2.0 as against 1.9 children, on an average) in the average number of children everborn although incidence of childlessness was high in the HP Upazilas. Between the FWAs in the two areas, there appears to be a difference in the average number of children everborn. The FWAs belonging to the Hp Upazilas had, on an average, 2.6 children compared to 2.4 children in LP Upazilas. This difference is statistically significant. The FWAs in Both the areas seem to have experienced infant and child mortality as, indicated by the difference between the number of children everborn and the number of living children. In the LP upazilas, the average number of children everborn and living were 2.4 and 2.2 while in the HP Upazilas these averages were 2.6 and 2.4 respectively. Between the FWVs, the experiences of infant and child mortality are significant. This is probably due to the fact that FWVs are clinical workers and are thus aware of the basic hygiene and have exposure to and knowledge on primary health care.

It follows that FWVs had low average number of children everborn and had high average number of living children than the FWAs. It also suggests that infant and child mortality experience among the FWVs is very low. This may be explained by the differential access of these workers to health services which in turn may be related to their socio-economic status differentials.

#### 2.4.6 RELIGION

Religious composition of the workers suggests that a large majority of them belong to Islam religion. However, a good proportion of workers ( both FWAs and FWVs ) in both the areas were Hindus and others.

#### 2.4.7 EDUCATION

Educational attainment of the workers are also shown in Table 2.4.1. The level of education among the workers in both the areas does not show any difference. As expected, the level of education of the FPAs was higher than that of the other workers, with a vast majority of the former having at least 12 years of education. About 40 per cent of the FPAs in the LP Upazilas and 30 per cent of the FPAs in the HP Upazilas had bachelor's degree and above education. A large majority of FWAs

in both the areas had 8 to 10 years of schooling while the level of education of the FWVs was higher since a little over 35 per cent of the FWVs from each of the two areas had 12 years of schooling compared to 8 per cent of the FWAs in the high area and 18 per cent in the low areas. The difference in the level of education between the areas was small.

#### *2.4.8 LANDHOLDING STATUS*

In Bangladesh the determination of socio-economic status is a difficult task mainly because of definitional ambiguities. The situation in landholding probably gives a much closer approximation of the socio-economic status than any other occupational or income indicators. Among the workers, FWVs had higher median landholding with more than 165 decimals in each area. In all the instances, workers belonging to HP area had higher landholding than their counterparts in LP area. FPAs in the LP area had the lowest landholding compared to other workers. The median landholding was only 103 decimals as against 118.0 decimals for FWAs and 167.5 for the FWVs both in the LP area. Landless workers varied from 7.4 percent ( FPAs ) to as high as 21.2 percent ( FWAs ).

The general pattern that emerges from this is that the workers from the HP areas are economically more solvent than the workers of the LP areas. The difference in the median landholdings between workers of the two areas were significant. Among the three types of workers, it seems that the FWVs had the highest landholding followed by FWAs and FPAs in that order.

#### *2.4.9 EVER USE OF FAMILY PLANNING*

Table 2.4.2 shows the distribution of workers by their ever-use of family planning methods. Evidence from the survey clearly indicates that the level of contraceptive use is high among the workers. In all the instances ever use was higher among the workers belonging to the LP Upazilas than those belonging to the HP Upazilas. Most of the ever-users had tried some efficient method, with the pill as the most widely used method. IUD is also most frequently used by the workers.

A little over 20 per cent of the FWVs belonging to LP areas were ever-users of IUD. This compared with 10 per cent and 14 per cent for the

FPAs and the FWAs. Proportion of ever-users who ever-used traditional methods were also considerably higher for the FWAs. For instance, traditional methods had an equal share of percentage distribution of ever-users (about 25 per cent) for the FWAs in both the areas. This compared with 18 per cent for the FPAs and the FWVs.

#### *2.4.10 CURRENT USE OF FAMILY PLANNING*

The different types of contraceptives used currently by family planning personnel are shown in Table 2.4.3. The overall current use of contraception is very high, ranging from 80.5 per cent by the FPAs in the LP area to 70.3 per cent by the FWAs also in the same area. Among the users, the proportions of IUD acceptors are the highest varying from 15.2 per cent for the FPAs in the low area to as high as 36.1 per cent for the FWVs in the high area. Next to IUD, female sterilization was also adopted by the workers. Of the users, more than a half of the FPAs and FWAs from both areas are temporary modern methods users. The use of modern methods by the FWVs from both areas is surprisingly low. A good proportion of FWVs from both areas stated that they were using traditional methods.

#### *2.4.11 LENGTH OF SERVICE*

The job related characteristics are also important in order to describe the differential performance of the workers. The specific variables studied in this regard included length of service, basic training, types of activities on which training was received, job satisfaction, training, salary, designation and working hour, work load and working condition.

The experience of workers in family planning work is given in Table 2.4.4. It appears that there is no difference in the job experiences between the workers. The information provided here also suggests that compared to FWAs and FWVs in each area, job experience of FPAs was higher. On an average, the FPAs in both the areas had 8 years of job experience while the FWAs and the FWVs had, on an average, 6 years of job experience.

#### *2.4.12 BASIC TRAINING*

When asked whether they received basic training, we found that over 90 per cent of the workers in both the areas answered in the affirmative (Table

2.4.5). It seems that about 15 per cent FWVs from the LP Upazilas did not receive any basic training. This compared to 6 per cent in the HP Upazilas.

#### *2.4.13 TYPES OF ACTIVITIES ON WHICH TRAINING RECEIVED AND DURATION OF TRAINING*

Different types of workers recruited to deliver family planning services at the doorsteps of couples were provided with basic training. The topics covered in the training program included geographical location and mapping, population education and population problem, motivation, follow up services, MCH care, community development work, supervision and knowledge of use of different methods of contraceptives, duties, responsibilities, and field visit reporting.

Table 2.4.6 provides distribution of workers by types of training received. The training provided to FWAs and FPAs is different from that given to FWVs in terms of duration and place of training. On an average FPAs, were given training for more than 4 weeks. The duration of training received by the FWAs was longer than that of the FPAs. On an average, FWAs from the LP Upazilas received training of longer duration (5.7 weeks) than the FWAs from the HP Upazilas (4.6 weeks.) Because of the nature and type of work, the FWVs from both the areas received training of longer duration (about 37 weeks) than the other two categories of workers. From this it follows that relative to the duration of training the topics covered in training were too many. To ascertain whether they received further training related to their job, we see that more than 80 per cent workers in all the areas reported that they had received further training (Table 2.4.8). The information also suggested that a higher proportion of workers from the HP Upazilas did not receive further training compared to those from the LP Upazilas. Table 2.4.9 shows the types of activities on which further training was provided. The average duration of training received was about 5 weeks. There is a considerable difference between the workers in respect of the average duration of training received. Workers belonging to LP Upazilas received training of higher duration than their counterparts belonging to HP Upazilas (Table 2.4.10).

**Table 2.4.1 Socio-Demographic Characteristics of Family Planning Field Personnel.**

Characteristics	F.P.A.		F.W.A.		F.W.V.	
	Low	High	Low	High	Low	High
<i>Age</i>						
< 25	6.9	—	26.0	26.7	18.3	8.2
25—29	15.5	24.2	55.5	48.3	36.6	51.8
30—34	69.0	53.2	15.8	17.4	36.6	27.1
35+	8.6	22.6	2.7	7.6	8.5	12.9
Total	100.0	100.0	100.0	100.0	100.0	100.0
Median age (in year)	29.0	29.9	24.7	24.9	26.9	26.6
N	58	62	146	172	82	85
<i>Marital status</i>						
Single	27.6	11.3	7.5	7.0	11.0	5.9
Married	70.7	88.7	87.7	86.6	87.8	91.8
Others	—	—	4.8	6.4	1.2	2.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
N	58	62	146	172	82	85
<i>Religion</i>						
Muslim	86.2	83.5	76.7	70.3	78.0	84.7
Hindu and others	13.8	16.1	23.3	29.7	22.0	15.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
N	58	62	146	172	82	85
<i>Education</i>						
5 to 7 years	—	—	6.8	11.6	—	—
8 to 10 years	—	—	85.6	80.8	64.6	63.5
12 years	60.0	70.0	17.6	7.6	35.4	36.5
Graduate and above	40.0	30.0	—	—	—	—
Total	100.0	100.0	100.0	100.0	100.0	100.0
N	58	62	146	172	82	85

Table 2.4.1 (Continued)

Characteristics	F.P.A.		F.W.A.		F.W.V.	
	Low	High	Low	High	Low	High
<i>Number of children ever born</i>						
0	--	--	8.1	3.1	14.6	16.5
1	--	--	17.8	17.5	26.8	18.2
2	--	--	27.4	31.3	24.4	25.9
3	--	--	29.6	27.5	28.0	22.4
4	--	--	11.1	11.9	4.9	4.7
5+	--	--	5.9	8.8	1.2	2.4
Total	--	--	100.0	100.0	100.0	100.0
Mean	--	--	2.4	2.6	2.0	1.9
N	--	--	135	160	82	85
<i>Number of children living</i>						
0	--	--	8.9	3.8	14.6	17.6
1	--	--	19.3	18.7	26.8	27.1
2	--	--	32.6	35.0	25.6	28.2
3	--	--	25.9	25.0	26.8	22.3
4	--	--	8.9	10.6	4.9	3.5
5+	--	--	4.4	6.9	1.2	1.2
Total	--	--	100.0	100.0	100.0	100.0
Mean	--	--	2.2	2.4	2.0	1.8
N	--	--	135	160	82	85
<i>Landholding status (in decimals)</i>						
Landless	16.5	7.4	20.2	21.2	18.3	14.8
1-100	23.1	20.4	15.2	17.4	18.3	3.9
101-300	29.7	31.5	32.6	22.8	17.4	39.8
301-500	4.4	21.3	12.4	14.1	16.5	14.1
501+	26.4	19.4	19.7	24.5	29.4	27.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Median	103.0	155.5	118.0	125.0	167.5	169.0
N	93	110	178	241	109	128

Table 2.4.1 (continued)

Characteristics	F.P.A.		F.W.A.		F.W.V.	
	Low	High	Low	High	Low	High
<i>Age at marriage</i>						
14	—	—	21.5	23.1	8.3	13.8
15	—	—	13.3	8.1	8.3	7.5
16	—	—	18.5	21.9	11.1	13.8
17	—	—	14.8	15.6	8.3	8.7
18	—	—	7.4	7.5	15.3	8.7
19	—	—	9.6	8.8	2.8	8.7
20+	—	—	14.8	15.0	45.8	38.8
Total	—	—	100.0	100.0	100.0	100.0
Mean age at marriage	—	—	16.5	16.5	18.6	18.5
N	—	—	135	160	72	80

*Table 2.4.2 : Distribution of Family Planning Personnel by Their Ever-Use of Family Planning methods and by Socio-Demographic Characteristics.*

Methods	F.P.A.		F.W.A.		F.W.V.	
	Low	High	Low	High	Low	High
Temporary modern methods	67.0	61.8	56.7	53.8	56.0	55.5
Sterilization	2.2	0.9	2.3	3.2	1.8	3.9
IUD	9.9	13.7	14.0	14.4	20.2	18.0
Injection	1.1	1.8	1.4	3.2	1.8	1.6
MR	2.2	3.6	0.9	--	1.8	2.3
Traditional methods	17.6	18.2	24.7	25.3	18.3	18.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
N	91	110	215	277	109	128
<i>Characteristics</i>						
<i>Education</i>						
5 to 9 years	--	--	58.6	66.7	--	--
10 years	--	--	62.3	66.7	62.7	62.2
12 years	48.6	73.9	81.8	84.6	72.4	67.7
Graduate and above	71.4	81.3	--	--	--	--
Total	56.9	75.8	62.3	68.0	67.1	71.8
<i>Living children</i>						
0	--	--	8.3	33.3	--	6.7
1	--	--	42.3	63.3	72.7	69.6
2	--	--	70.5	75.0	61.9	91.7
3	--	--	91.4	75.0	100.0	89.5
4+	--	--	88.9	85.7	80.0	80.0
Total	--	--	62.3	68.0	67.1	71.8

*Table 2.4.3 : Distribution of Family Planning Personnel by Their Current Use of Family Planning Methods.*

Methods	F.P.A.		F.W.A.		F.W.V.	
	Low	High	Low	High	Low	High
Temporary modern methods	69.7	57.4	57.8	52.1	41.8	41.0
Sterilization	6.1	2.1	5.6	6.8	3.6	8.2
IUD	15.2	25.5	31.1	27.4	29.1	36.1
Injection	3.0	6.4	2.0	2.6	—	—
MR	—	—	—	—	—	—
Traditional methods	6.1	8.5	3.3	11.1	25.5	14.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
Current users	80.5	75.8	70.3	78.5	76.4	78.2

*Table 2.4.4 : Distribution of Family Planning Personnel by Their Length of Services,*

Length of services (in year)	F.P.A.		F.W.A.		F.W.V.	
	Low	High	Low	High	Low	High
0	1.7	1.6	1.4	4.1	—	—
1	8.6	3.2	7.5	6.4	1.2	4.7
2	—	—	1.4	0.6	8.6	10.6
3	—	—	1.4	5.2	7.4	3.5
4	—	1.6	2.1	5.8	17.3	11.8
5	—	—	—	2.3	7.4	10.6
6	3.4	6.5	15.8	16.3	12.3	10.6
7	41.4	34.7	40.4	37.8	13.6	18.8
8	39.7	40.3	27.4	18.0	7.4	9.4
9+	5.2	8.1	2.7	3.5	24.7	20.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
N	58	62	146	172	81	85
Mean	7.9	8.0	6.5	6.0	6.0	6.0

*Table 2.4.5. Distribution of Family Planning Personnel by Their Basic Training on Family Planning Methods.*

Basic training on FP methods	F.P.A.		F.W.A.		F.W.V.	
	Low	High	Low	High	Low	High
Yes	93.0	93.5	94.5	90.7	85.2	94.1
No	7.0	6.5	5.5	9.3	14.8	5.9
Total	100.0	100.0	100.0	100.0	100.0	100.0
N	58	62	146	172	81	85

*Table 2.4.6. Distribution of Family Planning Personnel by Types of Training.*

Types of training	F.P.A.		F.W.A.		F.W.V.	
	Low	High	Low	High	Low	High
Training on geographical location and mapping	9.2	10.1	6.2	5.6	8.6	9.6
Education and population problem	10.7	11.2	9.3	10.1	10.4	10.4
Health, education and motivation training	13.6	11.9	11.1	10.5	11.8	10.1
Knowledge and use of FP methods	13.6	13.0	11.4	11.3	11.4	10.0
Preparation of advanced plan	9.0	9.2	7.8	8.1	9.3	9.4
Maintaining records and registers	10.4	11.4	11.2	11.2	9.3	8.2
Evaluation and follow up	11.6	11.4	6.7	6.9	9.9	9.9
Training on maternal and child health care	12.1	11.2	7.0	6.8	8.5	9.2
Community development work	8.4	7.8	8.4	8.4	7.7	8.9
Others	1.7	2.7	20.8	21.0	13.0	14.3
N.R.	0.3	—	—	—	—	—
Total	100.0	100.0	100.0	100.0	100.0	100.0
N	346	437	1174	1341	577	744

**Table 2.4.7** Distribution of Family Planning Personnel by Their Duration of Training in Weeks,

Duration of training in weeks	F.P.A.		F.W.A.		F.W.V.	
	Low	High	Low	High	Low	High
0	—	2.3	—	—	0.4	7.8
<1	13.9	7.1	3.1	4.7	0.5	—
1-7	75.4	88.1	69.3	83.7	20.1	11.3
8-14	10.7	2.5	27.6	10.6	5.3	2.1
15-21	—	—	—	—	0.4	14.2
22+	—	—	—	0.9	73.3	64.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
Median	4.3	4.3	5.7	4.6	38.2	36.0
N	346	437	1174	1341	577	744

**Table 2.4.8.** Distribution of Family Planning Personnel by whether they Received Other Training.

Other training	F.P.A.		F.W.A.		F.W.V.	
	Low	High	Low	High	Low	High
Yes	84.5	80.6	86.3	86.0	82.7	78.8
No	15.5	19.4	13.7	14.0	17.3	21.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
N	58	62	146	172	81	85

**Table 2.4.9. Distribution of Family Planning Personnel by Their Types of Receiving Other Training.**

Types of other training	F.P.A.		F.W.A.		F.W.V.	
	Low	High	Low	High	Low	High
Training on geographical location and mapping	9.3	10.1	6.2	6.0	7.5	8.3
Education and population problem	10.7	11.2	9.1	9.3	9.0	9.3
Health, educational and motivation training	13.6	11.9	9.7	9.6	12.9	11.5
Knowledge and use of family planning method	13.6	13.0	10.1	10.4	11.8	10.5
Maintain records and registers	10.4	11.4	10.5	10.5	7.0	7.7
Preparation of advanced plan	9.0	9.2	8.2	8.5	9.3	8.0
Evaluation and follow up	11.6	11.4	9.7	9.4	9.0	8.6
Training on maternal and child health care	12.2	11.2	7.8	6.9	8.6	7.7
Community development work	8.4	7.8	8.8	9.1	9.3	7.7
Others	1.2	2.7	20.0	20.4	15.6	20.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
N	356	377	1134	1267	442	313

*Table 2.4.10 Distribution of Family Planning Personnel by their Duration of Receiving Other Training.*

Duration of other Training (in weeks)	F.P.A.		F.W.A.		F.W.V.	
	Low	High	Low	High	Low	High
<1	16.9	17.0	3.9	4.7	8.6	19.2
1-7	64.0	77.5	69.3	13.7	59.3	60.7
8-14	17.1	5.0	27.6	10.6	14.9	8.9
15-21	1.7	0.3	—	—	—	1.6
+	0.3	0.3	—	0.9	17.2	9.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>800.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Median</b>	<b>4.6</b>	<b>4.0</b>	<b>5.7</b>	<b>4.8</b>	<b>5.9</b>	<b>4.6</b>
<b>N</b>	<b>356</b>	<b>377</b>	<b>1134</b>	<b>1267</b>	<b>442</b>	<b>313</b>

#### *2.4.14 FREQUENCY OF VISIT TO THEIR SUPERVISORS*

Specific questions were designed to investigate the pattern of visits and frequency of visits by the family planning personnel to their supervisors. Table 2.4.11 and 2.4.12 shows the distribution of workers according to interval of visit to their supervisors and frequency of visits they made during the last month. An examination of these two tables reveal inconsistent reporting by the workers. For instance, with the exception of FWVs, a high proportion of FPAs (over 60 per cent in each area) and FWVs (over 70 per cent in each area) reported that they were visited by their supervisors once in a week. The proportion of FWVs who reported that they had been visited by their supervisors was considerably low (over 40 per cent) compared to FPAs and FWAs in each area. When this information is compared with the frequency of visits as reported by the workers we find no consistency in their responses. For instance, only 7 per cent workers of each category reported that they had visited their supervisors during the last month, while over 60 per cent workers reported that they had visited their supervisors once

in a week. A good proportion of workers in each area mentioned that they visited their supervisors 5 times or more during the last month. In all instances the frequency of visits by the FPAs is less than that by the FWAs and FWVs.

#### *2.4.15 AWARENESS OF THE WORKERS ABOUT THE CONSTRAINTS OF THE FAMILY PLANNING METHODS*

Knowledge of problems and constraints of the use of family planning methods is essential for the workers. Unless they are aware of the constraints of the various methods it would be difficult to motivate couples to accept family planning. Table 2.4.13 shows the distribution of two types of workers-FWAs and FWVs-who reported constraints by methods. This gives some indication about the awareness of the workers regarding constraints of family planning methods. Knowledge of constraints, to some extent, depends on the training received and long field experiences. About 23 per cent FWAs from the low areas and 14 per cent from the high areas did not know the constraints of the methods. The corresponding figures for the FWVs in both the areas are 8 and 3 per cent respectively. As expected, the knowledge of constraints of the FWVs was higher than that of the FWAs. The FWVs are clinical workers and are associated with the doctors and their involvement with the doctors probably helped them to acquire knowledge about constraints of family planning methods. The most serious constraints of the pill users as reported by the workers were headache, vomiting and irregular menstruation while the most serious constraints of the sterilization were vaginal infection, waistache, abdominal pain, and irregular menstruation.

A good proportion of workers also reported constraints about the methods-IUD and condom. For the method IUD, the complications were heavy bleeding, waistache, abdominal pain, and irregular menstruation and for the method condom, the associated problems are vaginal infections and uncomfatability in its use. The pattern of reporting by the FWVs was more or less the same as that reported by the FWAs.

Information were also collected to ascertain the job satisfaction, training, salary and the working conditions. In terms of satisfaction on training we observe that about two thirds of the FPAs reported that they were not satisfied with the present training and about the same proportion of FWAs reported

that they were satisfied with present training. About 50 per cent of FWVs reported that they were satisfied with the present training (Table 2.4.14). When asked whether they are satisfied with their present salary, we find that a vast majority of the workers answered in the negative. It seems that a large majority of the FPAs were not satisfied with their present designation while more than 55 per cent of the FWAs and the FPAs reported that they were satisfied. Surprisingly, a high proportion of the workers mentioned that they were satisfied with the present working hours. A large number of workers are not satisfied with the present training and salary structure. This might have caused unhappiness among the field workers and might have affected program performance. To what extent dissatisfaction on training and salary affected job performance cannot be determined immediately.

#### *2.4.16 PROBLEMS FACED IN WORK FOR THE CHILDREN AGED LESS THAN FIVE YEARS*

Table 2.4.15 presents the distribution of workers who reported problems faced in their work for the children aged less than five years. It seems that FWAs and FWVs faced a number of problems in performing their work. About one fourth of the workers reported that because of their children they go to work late and come back early. About 40 per cent in each area reported that they go on leave during the period of their child illness. This factor certainly affected their job performance.

#### *2.4.17 TYPE OF ACTIVITIES SUPERVISED AND TYPE OF ACTIVITIES REPORTED TO THE SUPERVISOR*

Tables 2.4.16 and 2.4.17 give the percentage distributions of workers according to the type of activities supervised by their supervisors and type of activities they report to their supervisors. The activities they supervise include verification of distributed family planning materials, whether clients received the materials, the monthly report and whether follow up services were provided. A detailed analysis of the three type of workers by areas does not suggest any significant difference as reported by the workers (Table 2.4.16). Similar responses were found in case of activities reported to their supervisors. The only difference found was in case of supply of family

planning materials since a very low proportion of workers of both FWAs and FWVs reported that the supply of family planning methods were irregular in their place work. This irregular supply of family planning devices as reported by the FWAs and the FWVs might have affected their performances in family planning activities.

*Table 2.4.11* Distribution of Family Planning Personnel by their Frequency of Visits to the Supervisors.

Interval of visits to the supervisors	FPA		FWA		FVA	
	Low	High	Low	High	Low	High
Once in a week	63.1	61.3	74.0	70.3	40.7	85.9
Once in two weeks	13.8	17.7	8.2	15.1	21.0	12.9
Once in a month	19.0	17.7	6.2	4.1	13.6	12.9
Once in three months	—	11.6	0.7	—	—	—
Others	3.4	1.6	11.0	10.5	24.7	21.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
N	58	62	146	172	81	85

*Table 2.4.12* Distribution of Family Planning Personnel by Frequency of Visits to their Supervisors During the Last Month.

Frequency of visit to the supervisors	FPA		FWA		FWV	
	Low	High	Low	High	Low	High
Once	6.9	6.5	1.4	7.6	11.1	5.9
Twice	19.3	12.4	6.8	9.9	11.1	18.8
Thrice	19.0	11.3	16.4	9.9	9.9	12.9
4 times	25.9	29.0	29.5	32.0	22.2	23.5
5 times or more	27.6	32.3	45.2	38.4	39.5	37.6
Not at all	1.7	1.6	0.7	2.3	1.2	1.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
N	58	62	146	172	81	85

*Table 2.4.13* Distribution of Family Planning Personnel by their knowledge of Side Effects of Various Methods.

Types of side effects	FWV													
	Low							High						
	Pill	Condom	IUD	Inject- ion	Tubec- omy	MR	Others	Pill	Condom	IUD	Inject- ion	Tubec- omy	MR	Others
No side effects	0.5	6.0	0.8	2.9	7.0	7.2	—	5.2	6.3	1.4	2.9	11.2	4.3	—
Don't know	—	7.1	1.5	7.2	11.6	12.0	75.0	—	2.5	1.5	1.9	6.1	14.3	—
Headache	36.8	—	0.8	10.9	2.3	—	—	35.1	—	—	13.5	2.0	—	—
Vomiting	32.3	—	0.8	4.3	1.2	—	—	27.5	—	—	4.8	—	—	—
Makes uncomfortable	—	70.2	—	—	—	—	—	—	72.2	—	1.0	—	—	—
Vaginal infection	—	8.3	5.3	—	17.4	10.8	—	—	3.8	4.3	—	6.1	8.6	33.3
Waistache and abdominal pain	1.5	—	26.3	1.4	23.3	14.5	4.2	0.5	1.3	29.5	—	35.7	20.0	—
Heavy bleeding	3.5	—	39.1	21.7	3.5	36.1	8.3	6.2	—	39.6	19.2	11.2	28.6	—
Irregularity in menstruation	13.4	—	12.8	4.3	11.6	7.2	—	18.5	—	15.8	44.2	11.2	12.9	33.3
Others	11.9	8.3	12.8	8.7	22.1	12.0	12.5	7.1	13.9	7.9	0.1	16.3	11.4	33.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
N	201	84	133	69	86	83	24	211	79	139	104	98	70	3

Table 2.4.13 (Continued)

Types of side effects	FWV													
	Low							High						
	Pill	Con- dom	IUD	Injec- tion	Tubec- tomy	MR	Others	Pill	Condom	IUD	Injec- tion	Tubec- tomy	MR	Others
No side effects	0.9	5.9	2.1	1.4	3.6	—	—	—	3.9	0.4	1.0	6.2	—	—
Don't know	0.5	20.9	8.2	44.2	22.5	—	—	0.5	23.5	8.0	33.8	20.0	—	—
Headache	3.2	—	1.5	8.2	1.2	—	—	32.6	—	2.0	8.7	2.1	—	—
Vomiting	42.3	—	—	4.1	—	—	—	26.2	—	1.2	6.8	0.5	—	—
Makes uncomfortable	—	54.2	—	—	—	—	—	—	43.6	—	—	—	—	—
Vaginal infection	—	5.9	1.5	—	7.1	—	—	—	3.4	0.4	0.5	3.1	—	—
Waistache and adominal pain	2.3	0.7	26.2	—	12.4	—	—	1.9	0.5	25.2	2.9	20.2	—	—
Heavy bleeding	13.2	—	26.2	10.9	2.4	—	—	7.8	1.1	30.4	7.7	2.6	—	—
Irregularity in menstruation	21.8	—	13.3	11.6	5.9	—	—	15.1	—	9.2	19.8	3.1	—	—
Others	15.9	12.4	21.0	19.7	45.0	—	100.0	15.8	24.0	23.2	18.8	42.0	—	100.0
Total	100.0	100.0	100.0	100.0	100.0	—	100.0	100.0	100.0	100.0	100.0	100.0	—	100.0
N	220	153	195	147	169	—	2	423	179	250	207	143	—	50

-85-

**Table 2.4.14** Distribution of Family Planning Personnel by their Satisfaction on Training, Salary Designation and Working Hour.

Satisfaction	FPA		FWA		FWV	
	Low	High	Low	High	Low	High
<i>Training</i>						
Yes	31.0	35.5	63.0	61.6	50.6	45.9
no	69.0	64.5	37.0	38.4	49.4	54.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
N	58	62	146	172	81	85
<i>Salary</i>						
Yes	8.6	6.5	26.0	30.2	16.0	21.2
No	91.4	93.5	74.0	69.8	84.0	78.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
N	58	62	146	172	81	85
<i>Designation</i>						
Yes	34.5	25.8	59.6	63.4	51.9	58.8
No	65.5	74.2	40.4	36.6	48.1	41.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
N	58	62	146	172	81	85
<i>Number of working hours</i>						
Yes	81.0	77.4	76.7	68.0	80.2	81.2
No	19.0	22.6	23.3	32.0	19.8	18.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
N	58	62	146	172	81	85

**Table 2.4.15** Distribution of Family Planning Personnel by Types of Problems Faced in their Work for the Children Aged Less Than Five Years.

Types of problems	FPA		FWA		FWV	
	Low	High	Low	High	Low	High
Go to work late and back early	—	—	21.4	23.9	22.2	17.4
Cannot pay full attention to work	—	—	19.8	24.4	24.4	23.9
Cannot always go out on emergency call	—	—	15.1	13.3	15.6	15.2
Remains on leave during child illness	—	—	43.7	38.3	35.6	43.5
Total	—	—	100.0	100.0	100.0	100.0
N	—	—	126	180	45	46

**Table 2.4.16** Distribution of Family Planning Personnel by their Types of Activities Supervised.

Activities supervised	F.P.A.		F.W.A.		F.W.V	
	Low	High	Low	High	Low	High
Verify the distributed materials	23.1	19.8	24.1	22.9	23.5	23.9
Whether clients received the distributed materials	24.1	23.4	24.9	25.0	23.8	23.9
Verify the monthly report	24.1	24.6	25.4	26.9	24.2	25.8
Whether follow up services are provided	25.5	23.8	23.2	23.7	24.5	23.6
Others	3.2	8.3	2.4	1.6	4.0	2.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
N	216	252	551	633	302	322

*Table 2.4.17* Distribution of Family Planning Personnel by Their Activities Reported to Their Supervisors.

Activities reported	FPA		FWA		FWV	
	Low	High	Low	High	Low	High
Whether followed the work schedule	21.6	20.5	26.7	27.0	25.5	26.4
Whether supervised the work of FWA	20.0	19.5	25.0	23.3	20.7	23.5
Whether followed up the permanent method acceptors	18.0	17.9	25.5	26.2	24.7	21.2
Verify the monthly report of FWA	20.0	18.9	21.4	21.0	21.8	20.6
Whether family planning devices are supplied regularly at the locality	18.4	18.5	1.5	2.5	7.4	8.4
Others	2.0	2.6	—	—	—	—
N.R.	—	2.0	—	—	—	—
Total	100.0	100.0	100.0	100.0	100.0	100.0
N	255	302	529	600	271	311

#### *2.4.18 ACTIVITIES REPORTED TO UFPO BY FPAs*

The activities which the FPAs do report to their supervisors include progress report, account of the family planning materials, account of births and deaths of their areas, among others. Although the percentages reported from the low areas are slightly higher than those from the high areas, the difference is not significant (Table 2.4.18).

#### *2.4.19 AVERAGE FWAs PER FPA*

According to the government program and strategy, each union has one FPA and three FWAs. Table 2.4.19 shows that only 62 percent FPAs in the low

areas and 82 percent FPAs from the high areas reported two FWAs in their areas. The average number of FWAs per union was 2.5 and 2.7 in the low and high areas respectively suggesting that the number of FWAs per union in the low areas was lower than that in the high areas. This difference in the average number of FWAs per union might have affected the family planning performance in their areas.

#### *2.4.20 ACTIVITIES PERFORMED BY THE FPAs FOR ACCEPTANCE OF FAMILY PLANNING*

Specific questions were asked about what they do for motivating the eligible couples towards accepting family planning. Usually, visit to client households are necessary for motivational and supply functions. For information, education purposes, a more efficient method is to organize small group meetings, discussion sessions with local influentials, film shows etc. FPAs of both the areas stated that they arrange discussion meeting, visit households and advise them and arrange meetings with local leaders. There is little difference in terms of the emphasis on these functions by the FPAs of the two areas (Table 2.4.20). In both the HP and LP Upazilas these methods do not seem to have been well attempted. The FPAs from the LP areas appear to be slightly more active in organizing meetings than those from the HP areas.

#### *2.4.21 VIEWS OF FPAs ON THE NATURE PROBLEMS*

The perceptions and Knowledge of the FPAs about the constraints in implementing the family planning program is crucial for its overall success. In order to assess this perception and knowledge we designed a question. Table 2.4.21 gives the distribution of FPAs according to the number of constraint in the fields. It appears from the table that the most frequent constraint in implementing the family planning was religious superstition, since over 33 percent from both areas reported about it. Lack of communication and problem of transportation were also important constraints in performing their tasks. The other constraints included lack of education, lack of quality medicine and fear of side effects. Surprisingly, about 12 percent from the LP areas and 7 percent from the HP areas stated "no difficulty" in their areas.

## **PROBLEMS AS STATED BY THE FWAs**

### *2.4.22 NUMBER OF FAMILIES VISITED LAST WEEK*

Table 2.4.22 shows the distribution of FWAs by number of families visited last week. The responses by the FWAs appear to be consistent since the average number of families visited by them is almost the same. It seems that on an average, each FWA from the LP areas visited 92 families last week. The corresponding figure from the HP areas was 93.

### *2.4.23 TYPE OF ADVICE PROVIDED LAST WEEK*

Table 2.4.23 gives the distribution of FWAs according to the number of women advised for MCH and family planning services during the last week. The information provided in Table 2.4.23 suggests that there is no difference between the two areas in respect of advice provided last week by the FWAs,

### *2.4.24 NUMBER OF CLIENTS REFERRED TO THE CLINICS*

Table 2.4.24 is provided to show the number of clients referred to the clinics for various clinical methods. The average numbers of clients referred to the clinics by the FWAs of both areas are the same. The average numbers of clients per FWA for various clinical methods are astonishingly the same for both the areas. This figure is almost double the official figure of 3 clients per worker per month. The consistency in the responses by the FWAs of both areas leads us to believe that, on an average, FWAs usually refer 6 clients to the clinics for various clinical methods.

### *2.4.25 FREQUENCY OF VISIT TO THE OLD CLIENTS*

The field level workers are required to visit their old clients in addition to visiting new households for motivating couples to accept family planning. It is assumed that the higher the frequency of visit the higher would be the program performance. Table 2.4.25 presents the distribution of FWAs by frequency of visits to the old clients. It seems that more than 55 per cent of the FWAs visited their old clients once in a month. There is no uniform pattern of visits by the FWAs. A good proportion of workers varying from 9 per cent to 12 per cent stated that they occasionally visit their old clients.

#### *2.4.26 PROBLEMS IN RECEIVING FAMILY PLANNING MATERIALS*

The field level workers (FWAs) were asked whether they faced any problem in receiving family planning materials. In response to this we observe that about 32 per cent FWAs from the LP areas as against 29 per cent from HP areas reported that they had faced difficulty in receiving family planning materials. Availability of family planning materials in proper time is certainly an important factor in delivery services. The program performance might have been affected by the non-availability of family planning materials at the appropriate time. Table (2.4.27)

#### *2.4.27 CO-OPERATION OF LOCAL, FORMAL AND INFORMAL LEADERS IN PROMOTING THE FAMILY PLANNING.*

The Government of Bangladesh has emphasized the greater involvement of local leaders for effective implementation of the family planning program. In order to make the family planning program successful and acceptable to the community, the co-operation of community leaders and their role are crucial. In Table 2.4.27 we have assessed the co-operation of local, formal and informal leaders with the grass-root level workers. While examining the co-operation of various types of local leaders with the FWAs, we observe that religious superstition is still a dominant reason for the failure of family planning program since 71 per cent and 73 per cent of the workers belonging to LP and HP areas respectively stated that they didn't get co-operation from the local religious leaders in promoting the parishad chairman/members, school teacher/local elite/and local leaders ranged from as low as 17 per cent to as high as 30 per cent. The figures presented in Table 2.4.28 reveal that, in general, a high proportion of leaders belonging to various categories co-operate with the FWAs in promoting family planning activities.

#### *2.4.28 DEGREE OF SATISFACTION OF LOCAL PEOPLE ON FWAs ACTIVITIES*

Family planning to be effective must be adaptable to an individual community's social and religious values system and life style. Acceptability of family planning workers by local people is a must before the program can get through.

In order to assess the degree of satisfaction of the local people are satisfied with the activities of FWAs, we observed that about 56 per cent in the LP areas and 62 per cent in the HP areas expressed their satisfaction with the activities of FWAs. A good proportion of FWAs ranging from 32 per cent in the high areas to 38 per cent in the low areas ( Table 2.5.29 ) reported that local leaders were not satisfied with their activities. This suggests that involvement of community leaders in the program is essential for the implementation of the program in rural communities.

*Table 2.4.18* Distribution of FPAs by Their Activities Reported to UFPO.

Activities reported	Low	High
To give the progress report	32.5	32.1
To give an account on the family planning materials	32.5	28.3
To give an account of births and deaths	25.6	19.8
Others	9.4	19.8
Total	100.0	100.0
N	160	137

*Table 2.4.19* Distribution of FPAs by Number of FWAs.

Number of Family Welfare Assistants	Low	High
0	1.7	1.6
1	5.2	4.8
2	31.0	11.3
3	62.1	82.3
Total	100.0	100.0
N	58	62
Mean	2.5	2.7

**Table 2.4.25. Distribution of FPAs by Their Activities for Motivation of Villagers Towards Accepting Family Planning.**

<b>Activities</b>	<b>Low</b>	<b>High</b>
To arrange discussion meetings	27.7	28.3
To visit households and advise them	32.5	30.6
To arrange meeting with local leaders	33.7	30.6
Others	6.0	10.4
<b>Total</b>	<b>100.0</b>	<b>100.0</b>
<b>N</b>	<b>166</b>	<b>173</b>

**Table 2.4.21 Distribution of FPAs According to the Number of Constraints in the Field.**

<b>Problems</b>	<b>Low</b>	<b>High</b>
No difficulty	11.9	7.2
Lack of communication and problem of transportation	19.8	26.1
Lack of quality medicine	5.9	10.8
Religious superstition	37.6	33.3
Absence of family members	1.0	2.7
Lack of education	11.9	7.2
Fear of side effects	2.0	1.8
Others	9.9	10.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>
<b>N</b>	<b>101</b>	<b>111</b>

*Table 2.4.22* Distribution of FWAs by Number of Families Visited Last Week.

Number of families visited	Per cent			
	Low	High	Low	High
0	—	3	—	1.7
1–10	5	8	3.4	4.7
11–20	10	12	6.9	7.0
21–30	8	7	5.5	4.1
31–40	3	12	2.1	7.0
41–50	10	9	6.9	5.2
51–60	12	10	8.3	5.8
61–70	5	6	3.4	3.5
71–80	10	9	6.9	5.2
81–90	8	2	5.5	1.2
91–100	24	42	16.6	24.4
101+	50	52	34.5	30.2
Total	145	172	100.0	100.0
N			145	172
Median			91.6	92.9

*Table 2.4.23* Distribution of FWAs According to the Number of Women Advised for MCH and Family Planning services Last Week.

Types of advice	Per cent			
	Low	High	Low	High
Maternal Health and Child (MCH)	145	172	50.0	50.0
Family planning	145	172	50.0	50.0
Total	290	344	100.0	100.0
N			290	344

**Table 2.4.24** Distribution of FWAs by Number of Clients Referred to the Clinic for Various Clinical Methods During the Last month.

Clinical method	Number of FWA		mean number of clients	
	Low	High	Low	High
<i>IUD</i>				
1-10	70	81	5.6	5.6
11-20	1	1		
<i>Injection</i>				
1-10	6	13	5.5	5.5
<i>Vasectomy</i>				
1-10	23	25	5.5	5.5
<i>Tubectomy</i>				
1-10	98	115	5.9	5.9
11-20	3	1		
21+	1	—		
<b>Total</b>	<b>202</b>	<b>236</b>		

*Table 2.4.25* Distribution of FWAs by Frequency of Visits to the Old clients.

Frequency of visit	Number of FWA		Per cent	
	Low	High	Low	High
Once in a month	87	95	59.6	56.2
Once in two months	18	15	12.3	5.9
Once in three months	27	36	18.5	21.3
Once in four months	1	1	0.7	0.6
Some times	13	20	8.9	11.8
Never	--	2	—	1.2
Total	146	169	100.0	100.0
N			146	169

*Table 2.4.26* Distribution of FWAs By Whether They Face any Problem In Receiving Family Planning Methods.

	Number of FWA		Per cent	
	Low	High	Low	High
Yes	46	49	31.5	28.7
No	100	122	68.5	71.3
Total	146	171	100.0	100.0
N			146	171

**Table 2.4.27 : Distribution of FWAs BY Whether They Receive Co-operation from the Local, Formal and Informal Leaders.**

Types of leaders	Low	High	Per cent	
			Low	High
<i>U.P. Chairman/member</i>				
Yes	177	142	80.1	83.0
No	29	29	19.9	17.0
Total	146	171	100.0	100.0
N			146	171
<i>School teacher/local elite</i>				
Yes	121	138	82.9	80.7
No	25	33	17.1	19.3
Total	146	171	100.0	100.0
N			146	171
<i>Mosque Imam/religious leader</i>				
Yes	43	47	29.5	27.5
No	103	124	70.5	72.5
Total	146	171	100.0	100.0
N			146	171
<i>Local Matthabbar/local leaders</i>				
Yes	106	128	72.6	74.9
No	40	43	27.4	25.1
Total	146	171	100.0	100.0
N			146	171
Grand Total	1168	1368		

*Table 2.4.28* Distribution of FWAs According to Whether Local People Are Satisfied with their (FWAs) Activities.

Degree of satisfaction	Number of FWA		Per cent	
	Low	High	Low	High
Very satisfied	82	106	56.2	62.4
Not satisfied	56	55	38.4	32.4
Not at all	1	3	0.7	1.8
Do not know	7	6	4.8	3.5
Total	146	170	100.0	100.0
N			146	170

#### *2.4.29 FAMILY WELFARE VISITOR AND THEIR SUPERVISORS*

The Family Welfare Visitors who usually work in clinics with the medical doctors are responsible for their activities to a number of officers. Table 2.4.29 shows the distribution for FWVs according to the type of supervisors they (FWVs) are responsible to. More than one third of the FWVs from each area reported that they are accountable to the upazila family planning officers for their work. They are also equally supervised by the upazila medical officers as well as upazila health and family planning officers. But a high porportion of FWVs reported that they are more responsidle to UMO than to the UHFPO. About 12 per cent FWVs from the LP areas and a little over 7 per cent FWVs from the HP areas also mentioned that they are also accountable to the Upazila Nirbahi officers (UNO).

#### *2.4.30 FIELD VISIT*

The Family Welfare Visitors generally work in the clinics and assist medical officers in performing clinical activites in respect of family planning methods such as sterilization, IUD, Injection and MR. Although frequent field visits are not needed by the FWVs, occasional visits are needed for follow up services. Table 2.4.30 suggests that about 98 per cent of the respondents reported that the FWVs do in fact, make the required visits.

#### *2.4.31 TYPE OF ACTIVITIES PERFORMED IN THE FIELD*

As per the job description of the FWVs, The FWVs, in addition to clinical activities at the centres, need to visit the field. While visiting the field, the FWVs perform a number of activities. These include following up the clients who get clinical methods, providing treatment to the patients, attending meetings, accompanying family planning officers ( FPO ), and attending delivery cases. Of the FWVs, about an equal proportion—24 per cent—from both areas stated that they had visited the clients for follow up purposes ( Table 2.4.31 ). The other activities of the FWVs are more or less the same in both the areas.

#### *2.4.32 NUMBER OF CLIENTS VISITED LAST WEEK*

Table 2.4.32 gives the percentage distribution of FWVs according to the number of clients visited last week. From this table we observe that about 31 per cent of the FWVs from the LP areas and 28 per cent from the HP areas reported that they had visited between 1-10 clients last week. The average number of clients visited in the LP areas was about 20. The corresponding figure in the HP areas was 25. This suggests a significant difference in the activities performed by the FWVs.

#### *2.4.33 NUMBER OF NEW CLIENTS VISITED BY METHODS*

Table 2.4.33 provides the distribution of FWVs according to number of clients who visited the clinic to accept different family planning methods during the last week. There is a remarkable consistency in reporting by the FWVs about the average number of clients visited during the last week prior to the interview. The average number of clients who accepted different methods during the last week was about 10 per FWV in both the areas.

#### *2.4.34 NUMBER OF OLD CLIENTS WHO VISITED THE CLINIC LAST WEEK*

Table 2.4.34 presents the distribution FWVs by their old clients who visited the clinics during the last week prior to the date of interview.

It seems that there is a considerable difference between the responses of the FWVs in the two areas. For instance, the average number of permanent methods acceptors who visited the clinic last week was about 4.4 per FWVs in the LP areas as compared to 3.0 per FWV in the HP areas. Similarly, the average number of clients who visited for general advice was 3.7 per FWV in the LP areas as against 2.4 in the HP areas. However, the overall average was high in the HP areas than in the LP areas.

#### 2.4.35 TYPE OF ADVICE PROVIDED CLIENTS WHO VISITED THE CLINICS

Table 2.4.35 displays the distribution of FWVs by type of advice given to the clients who generally come to the clinic. Usually the advice is given about the permanent methods, the merits and demerits of different methods, during the pregnancy period, health and food for child, birth control after the birth of a child, treatment of side effects and for general medical treatment. It is evident from Table 2.4.35 that there is no difference in these services as stated by the FWVs between the two areas.

Table 2.4.29. Distribution of FWVs by Their Supervisors.

Visitors	Number of FWV		Per cent	
	Low	High	Low	High
UMO	54	65	27.4	34.0
UFPO	72	67	36.5	35.1
UHFPO	42	37	21.3	19.4
UNO	23	14	11.7	7.3
Others	5	8	2.5	4.2
N.R.	1	--	0.5	—
Total	197	191	100.0	100.0
N			197	191

73

*Table 2.4.30* Distribution of FWVs by Whether They Visit to the Field.

Response	Number of FWV		Per cent	
	Low	High	Low	High
Yes	79	84	97.5	98.8
No	2	1	2.5	1.2
Total	81	85	100.0	100.0
N			81	85

*Table 2.4.31* Distribution of FWVs by Their Types of Activities They Performed in the Field,

Types of activities	Number of FWV		Per cent	
	Low	High	Low	High
To follow up the clients who got clinical methods	76	77	23.8	24.1
To provide treatment to the patients	66	66	20.7	20.6
To attend meeting	43	43	13.5	13.4
To accompany Family Planning Officers (FPO)	61	61	19.1	19.1
To attend delivery cases	73	73	22.9	22.8
Total	319	320	100.0	100.0
N			319	320

**Table 2.4.32** Distribution of FWVs by Number of Clients Visited During Last Week.

Number of clients Visited	Number of FWVs		per cent	
	Low	High	Low	High
1-10	25	24	30.9	28.2
11-20	18	14	22.2	16.5
21-30	14	11	17.3	12.9
31-40	8	5	9.9	5.9
41-50	7	2	8.6	2.5
51-60	1	4	1.2	4.7
61-70	3	5	3.7	5.9
71-80	2	5	2.5	5.9
81+	3	15	3.7	17.7
<b>Total</b>	<b>81</b>	<b>85</b>	<b>100.0</b>	<b>100.0</b>
<b>N</b>			<b>81</b>	<b>85</b>
<b>Median</b>			<b>19.6</b>	<b>25.1</b>

**Table 2.4.33** Distribution of FWVs by Their Number of Clients who Visited the Clinic for Accepting Family Planning Methods During the Last week.

Number of new clients	Low					High			
	Permanent method	Temporary method	General advice	N.R.	Total	Permanent method	Temporary method	General advice	Total
0	9	3	8	—	20	8	2	6	16
1–5	18	14	11	—	43	13	19	18	50
6–10	13	22	17	—	52	14	22	13	49
11–20	12	21	9	—	42	16	19	14	49
21–30	1	12	9	—	22	2	5	7	14
31–40	5	1	2	—	8	3	8	1	12
41–50	—	2	3	—	5	1	—	1	2
51+	3	2	3	—	8	4	2	7	13
N·R	—	—	—	2	2	10	2	6	25
<b>Total</b>	<b>61</b>	<b>77</b>	<b>62</b>	<b>2</b>	<b>202</b>	<b>71</b>	<b>79</b>	<b>73</b>	<b>230</b>
<b>Average number of clients visited</b>	<b>7.3</b>	<b>10.9</b>	<b>9.5</b>		<b>9.5</b>	<b>9.4</b>	<b>10.0</b>	<b>9.7</b>	<b>9.7</b>

**Table 2.4.34** Distribution of FWVs by their Number of old Clients Who Visited the Clinic During the Last Week.

Number of old clients	Low					High				
	Permanent method	Temporary method	General advice	N.R.	Total	Permanent method	Temporary method	General advice	N.R.	Total
0	18	17	12	—	47	13	6	13	—	32
1–5	8	16	11	—	35	10	26	8	—	44
6–10	5	17	3	—	25	8	23	7	—	38
11–20	4	8	2	—	14	3	10	7	—	20
21–30	—	8	3	—	11	—	4	7	—	7
31–40	—	—	1	—	1	—	—	1	—	1
41–50	—	—	3	—	3	—	—	1	—	1
51+	—	—	—	9	9	22	2	4	15	43
<b>Total</b>	<b>35</b>	<b>67</b>	<b>36</b>	<b>9</b>	<b>147</b>	<b>57</b>	<b>71</b>	<b>45</b>	<b>15</b>	<b>188</b>
<b>Median clients</b>	<b>4.4</b>	<b>6.1</b>	<b>3.7</b>	<b>—</b>	<b>4.1</b>	<b>3.0</b>	<b>6.5</b>	<b>2.4</b>	<b>—</b>	<b>5.6</b>

*Table 2.4.35. Distribution of FWVs by Type of Advice Given to the clients Who Generally Came to the Clinic.*

Type of advice	Number of FWV		Per cent	
	Low	High	Low	High
To know about the permanent method	73	82	14.8	14.8
To know about the merits and demerits of different methods	74	83	15.0	15.0
To know about the duties during the pregnancy period	75	81	15.2	14.6
To take advice about health and food of child	74	77	14.9	13.9
General medical treatment	64	81	12.9	14.6
To know about birth control after the birth of a child	71	76	14.3	13.7
For treatment of side effects	60	67	12.1	12.1
Others	4	7	0.8	1.3
Total	495	554	100.0	100.0
N			495	554

#### *2.4.36 PROBLEMS OF INTEGRATION OF HEALTH AND FAMILY PLANNING PROGRAM*

Since 1980, the government integrated family planning department with the health department in order to make family planning services more effective. It has been observed that the integration of the two departments has created some problem among the personnel of the two departments. Specific questions were designed to assess how far the integration has caused problems. Table 2.4.36 shows the distribution of family planning personnel by type of problems. About one third of the FPAs, stated that integration had caused no problem. This compares with over 65 per cent of

the FWAs and a similar percentage of the FWVs. Among the problems included are, problems in administration due to integration of the two departments, lack of Co-ordination between the workers of the two departments, lack of motivational work by the health workers at field level and difference in opinion between the high officials of the two departments about the implementation of the program that affects family planning activities.

#### *2.4.37 SUGGESTIONS FOR IMPROVING THE FAMILY PLANNING SERVICES*

The delivery of family planning service by the workers may be influenced by a number factors. No family planning network can possibly provide service for all potential users immediately. Several years may be required to fully implement the program. The information provided here gives some insight into the workers' perception about the program, and type of activities required to promote the family planning program.

The workers were asked to give suggestions for the success of the family planning program in their areas. Since field workers are more receptive of the ideas generated by their experiences, their awareness of the population problem and family planning services is important. The family planning workers by virtue of their associations with the community people, can be more effective to pursue the program more successfully. The family planning workers' familiarity with the type of activities may influence the development of the program. The workers were asked of their suggestions to make the government family planning program more effective. Table 2.4.37 shows the distribution of workers by type of suggestions. It appears from the information that more training, increase in the number of field workers, training on family planning to local leaders, facilities for education, eradication of religious superstition about family planning, increases in the number of family welfare centres, improving the quality of medicine and co-ordination of health and family planning departments are the important considerations to be taken into account for the improvement of the family planning services.

**Table 2.4.37. Percentage Distribution of Respondents by Their Opinion About Problems of Integration.**

Problems	FPA		FWA		FWV	
	Low	High	Low	High	Low	High
No problem	36.67	33.33	65.31	69.03	66.67	70.00
Problems in family planning and in administration due to integration of two departments	28.33	11.11	8.84	13.55	15.48	15.56
Lack of coordination	15.00	25.00	1.36	1.29	7.14	5.56
Can not reach target since health workers influence the clients by money	5.00	4.17	2.72	1.94	—	—
No motivational work by health workers at field level	10.00	19.44	6.80	3.23	—	—
Integration has helped the progress of family planning	—	—	0.68	1.94	—	—
High officials of two departments have different opinion and as a result family planning activities are affected	3.33	4.17	—	—	—	—
Others	1.67	2.78	14.29	9.03	10.71	8.88
Total	100.00	100.00	100.00	100.00	100.00	100.00
N	60	72	147	155	84	90

**Table 2.4.37. Percentage Distribution of Respondents by Their Suggestions for Improving the Family Planning Services.**

Suggestions	FPA		FWA		FWV	
	Low	High	Low	High	Low	High
More training and increase of salary and increasing the number of field workers	16.26	20.00	13.10	15.86	25.91	21.39
Training on family planning to local leaders, school teachers, local clients and religious leaders	22.75	21.43	25.86	22.00	20.00	21.89
Facilities for education and eradication of religious superstition about family planning	12.20	14.29	—	—	5.00	1.49
Two children family law should be formulated	8.13	6.43	5.52	3.58	—	—
Permanent method acceptors should get higher remuneration and they should be provided with the rationing	6.34	8.57	4.14	3.84	—	—
Increasing family welfare centres and each centre should have a MBBS doctor	6.34	7.86	4.83	9.46	—	—
Improved quality of medicine should be distributed	12.20	6.43	12.41	15.60	18.64	17.41
Two children families should be rewarded	1.13	2.14	—	—	—	—
Co-ordination of health and family planning departments and eradication of corruption	1.63	3.57	—	—	6.36	2.49
Others	13.01	9.29	34.14	29.67	24.09	35.32
<b>Total</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>
<b>N</b>	<b>123</b>	<b>140</b>	<b>290</b>	<b>391</b>	<b>220</b>	<b>201</b>

81

## 2.5 CHARACTERISTICS OF UPAZILA LEVEL OFFICERS

The Upazila level officers who are connected with the health and family planning officers were interviewed to have some information which might account for low and high performance of the workers. The Upazila level officers thus interviewed are—Upazila Health and Family Planning Officer (UHFPO); Upazila Medical Officer (UMO) and Upazila Family Planning Officer (UFPO). Since our study Upazilas number 127, the sample of UHFPOs, UMOs and UFPOs should have been 127 in each case but some of these Upazila level officers were either out of station on official duty or on leave and thus could not be interviewed. The number of successfully interviewed upazila level officers are as follows :

Category of officer	High performance area	Low performance area
UHFPO	51	50
UMO	54	48
UFPO	50	40
All	155	147

We shall here describe the Upazila level officers in terms of their age, length of service, training, their perception about the problems of integration of health and family planning, their satisfaction on various non-clinical services and suggestions to improve the family planning program.

### 2.5.1. AGE

The mean ages distribution of Upazila level officers by low and high performance areas are presented in Table 2.5.1. These ages were found to vary between 29.1 years 40.6 years. For each category of officer, the mean age was relatively higher for the officers of the high performance areas compared to that for the officers of the low performance areas. The age, however, ranged from 25 years to 54 years.

**Table 2.5.1. mean Ages of Upazila Level Officers in the Low and High Areas.**

Category of officers	Mean age (years)	
	High	Low
UHFPO	38.4	35.7
UMO	29.2	29.1
UFPO	40.6	40.5

### **2.5.2 LENGTH SERVICE**

The mean lengths of service of the different categories of Upazila level officers are shown in table 2.5.2. The length of service of the UFPOs is estimated to be much higher than those of the UHFPOs and UMOs. The length of service of the officers in the high performance areas are found to be higher to some extent compared to that in the low performing areas (with the exception of the UMOs). The number of officers having less than one year of service experience was higher in low areas than that in high areas.

**Table 2.5.2 Mean Length of Service of Upazila Level Officers in the Low and High Areas.**

Category of officers	Meanlength of service (years)	
	High area	Low area
UHFPO	3.4	2.8
UMO	2.1	2.7
UFPO	7.8	7.7

### **2.5.3 Training**

Among the Upazila level officers 102 in the low area and 105 in the high areas were found to have received basic training. Considering the different

categories of officers it was found that, in general, more officers in the high performance area had the basic training with the exception of UHFPO (table 2.5.3).

*Table 2.5.3* Distribution of Upazila Officers UHFPO / UFPO / UMO by Their Basic Training.

Designation	High area			Low area		
	Yes	No	Total	Yes	No	Total
UHFPO	25 (49.0)	26 (51.0)	51 (100.0)	34 (68.0)	16 (32.0)	50 (100.0)
UFPO	45 (90.0)	5 (10.0)	50 (100.0)	43 (87.8)	6 (12.2)	49 (100.0)
UMO	35 (64.8)	16 (35.2)	54 (100.0)	25 (52.1)	23 (47.9)	48 (100.0)

Figures in parentheses indicate percentages.

#### 2.5.4 DURATION OF TRAINING

Distribution of mean duration of training at Upazila level officers are presented in table 2.5.4. The mean duration of training in the low areas ranges from 1.4 months to 3.5 months and in the High area the range is from 1.5 months to 6.2 months. In the low area the UHFPOs were found to have the highest (3.5 months) mean duration and in the high area the UMOs are found to have the highest (6.2 months) mean duration of training.

*Table 2.5.4.* Upazila Level Officers by their Mean Duration (in months) of Training.

Upazila officers	High	Low
UHFPO	1.5	3.5
UMO	6.2	1.4
UFPO	1.5	1.4

### 2.5.5 USE OF TRAINING

The officers were asked about the usefulness of their training. Most of the officers both in the high performing area and low performing areas reported that their training was useful in discharging their duties (Table 2.5.5). A significant proportion in both the areas mentioned that their acquired training knowledge was very helpful for them.

*Table 2.5.5.* Distribution of Upazila Level Officers by Degree of Usefulness of the Training received.

Degree of usefulness	UFPO		UMO			UHFPO	
	High	Low	High	Low	High	Low	
Very helpful	46.0	47.0	55.6	41.7	51.0	40.0	
Helpful	46.0	49.0	9.3	10.4	33.3	44.0	
Little helpful	—	—	—	—	2.0	2.0	
Not helpful	—	2.0	—	—	2.0	4.0	
No training	8.0	2.0	35.2	47.9	11.7	10.0	
N	50	49	54	48	51	50	

### 2.5.6. SATISFACTION OF UPAZILA OFFICERS ON THE CLINICAL AND NON-CLINICAL SERVICES

An attempt has been made to investigate the opinion of the Upazila level officers on various clinical and non-clinical services. The UHFPOs and UMOs were asked about the clinical service while the UFPOs were requested to give their opinion on the non-clinical services.

In general, among the UHFPOs, relatively higher proportion of responses were in favour of satisfactory services in the high performance areas compared to those of the low areas. The UMOs also gave a similar consistent opinion with an exception for the IUD service (Table 2.5.6).

### *2.5.7 ATTITUDE OF UPAZILA OFFICERS AND LOCAL LEADERS TOWARDS THE FAMILY PLANNING PROGRAM*

The perception of the UHFPOs, and UFPOs on the attitude of different Upazila level officers and the local leaders towards the family planning program were also investigated. The results thus obtained are presented in Tables 2.5.7, 2.5.8 and 2.5.9. The attitude was categorised as very good, good and bad. In the opinion of the UHFPOs, the attitude of the upazila level officers like UNO, UFPO and UMO were relatively more favourable compared to that of the local level leaders ( Table 2.5.8 ) and UFPO ( Table 2.5.9 ).

### *2.5.8 PROBLEMS OF FAMILY PLANNING PROGRAM*

The identification of problems in implementing the family Planning program is crucial for the success of the program. In the following section an attempt has been made to identify the problems of the family planning program both in the low areas and in the high areas. The problems, in general, were categorised as administrative and economic type, technical and clinical, and socio-cultural. Table 2.5.10 shows the opinion of the UHFPOs, UMOs and UFPOs, regarding the problems they face in their areas to implement the family planning program. Contrary to our expectation, no sharp difference between the responses in the high and the low areas was observed on various problems. In some cases the high areas have been reported to be facing the problems in a relatively greater extent compared to the low areas. For example, education in the two areas did not show any significant difference. The lack of experience of the FWAs was more prominently mentioned in the high performance area.

### *2.5.9 INTEGRATION OF HEALTH AND FAMILY PLANNING*

The question asked to the Upazila level officer, was that, whether due to the integration of health and family planning program in 1980, they face any problems in discharging their duties. About one third of the officers belonging to all the three categories (UHFPO/UMO/UFPO) of officers, in both the low and high areas, mentioned about some problem of integration (Table 2.5.11). About 60 percent Upazila family planning officers (UFPO) mentioned that integration of health and family planning has been causing difficulties in running the administration while this is less frequently mentioned by the

Upazila health and family planning officers (UHFPO) and Upazila medical officers (UMO). Over 50 per cent of the officers belonging to the UHFPOs and the UMOs stated that integration did not cause any difficulty.

The other problems of integration, as mentioned by the officers, were lack of confidence between the workers of the two departments and economic disparity between them.

#### *2.5.10 JOB SATISFACTION*

Job satisfaction of the personnel affects the program performance. Job satisfaction of the upazila level officers were investigated on four specific aspects, namely, training, designation and working hours. About 50 per cent of the UHFPOs both in the high and low areas were not be happy with their training (Table 2.5.12). Almost all the UHFPOs were reported not to be happy with their present salary. In case of designation about 50 per cent of them in both the areas mentioned to be unhappy. On the question of working hours, 25.5 per cent in the high area and 28 per cent in the low areas were not happy. More or less a similar trend was observed for the UMOs on the satisfaction for the aspects mentioned above. However, regarding satisfaction on present designation, about 63 per cent UMOs in low areas and about 59 per cent in the high areas were unhappy (Table 2.5.13). In case of UFPOs they reported that most of them were happy neither with their present salary nor with their present designation. This was consistently true for both the low and high areas (Table 2.5.14).

#### *2.5.11 SUGGESTION FOR IMPROVEMENT OF FAMILY PLANNING PROGRAM*

All the officers at the Upazila level were asked to suggest how to improve the family planning program in their areas. More than 50 per cent of the UHFPOs mentioned that socio-economic status of the workers should be enhanced (Table 2.5.15). This was followed by the suggestion that information, education and motivational activities should be strengthened. There were many other suggestions with relatively less emphasis. The first major suggestion by the UFPOs was to disintegrate the health and family planning and this was followed by their opinion that there should be scope for promotion with other incentives. The responses of UMOs were not prominent for any specific aspect.

Table 2.5.6. Satisfaction on Various Clinical Services (UHFPO/UMO/UFPO)

	UHFPO		UMO		UFPO	
	High N = 51	Low N = 50	High N = 54	Low N = 48	High N = 50	Low N = 51
<i>Sterilization</i>						
Saterilization	39.2	22.0	37.0	25.0	--	--
Partly satisfactory	35.3	50.0	44.4	50.0	--	--
Not satisfactory	25.5	22.0	16.7	22.9	--	--
No response	--	6.0	1.9	2.1		
<i>IUD</i>						
Satisfactory	58.8	52.0	42.6	60.0		
Partly satisfactory	25.5	32.0	33.3	27.1		
Not satisfactory	13.7	6.0	22.2	8.3		
No response	2.0	10.0		2.1		
<i>M.R</i>						
Satisfactory	45.1	44.0	33.3	35.4		
Partly satisfactory	25.5	32.0	38.9	41.7		
Not satisfactory	27.4	14.0	20.4	18.7		
No response	2.0	10.0	7.5	4.2		
<i>Injection</i>						
Satisiactory	29.4	14.0	31.5	25.0		
Partly satisfactory	21.6	20.0	24.1	12.5		
Not satisfactory	35.3	40.0	29.6	45.1		
No response	13.7	26.0	14.8	14.6		
<i>Condom</i>						
Satisfactory					92.0	73.4
Partly satisfactory					6.0	22.4
Not satisfactory					2.0	4.0
<i>Pill</i>						
Satisfactory					64.0	73.4
Partly satisfactory					10.0	22.4
Not satisfactory					6.0	4.0
<i>Foam / Jell / Emko</i>						
Satisfactory					48.0	42.8
Partly satisfactory					26.0	34.6
Not satisfactory					26.0	22.4

**Table 2.5.7. Attitude of Upazila Level Officers and Local Leaders Towards Family Planning Program ( UHFPO ).**

Designation	High				N	Low				N
	Very good	Good	Bad	No response		Very good	Good	Bad	No response	
UNO	41.2	49.0	7.8	2.0	51	34.0	66.0	—	—	50
UFPO	47.1	43.1	5.9	3.9	51	54.0	40.0	6.0	—	50
UMO	47.1	39.2	7.8	5.9	51	48.0	48.0	2.0	2.0	50
U.P. Chairman	7.8	56.9	31.4	3.0	51	16.0	70.0	14.0	—	50
U.P. Member	3.9	58.8	33.4	3.9	51	6.0	74.0	16.0	4.0	50
Local Doctor	5.9	56.9	33.3	3.9	51	10.0	64.0	22.0	4.0	50
Local Imam	35.3	60.8	3.9	—	51	—	18.0	72.0	10.0	50
Local school teacher	2.0	68.6	25.2	3.9	51	2.0	80.0	18.0	—	50
Others	7.8	—	92.2	—	51	—	4.0	96.0	—	50

*Table 2.5.8 Attitude of Various People Towards Family Planning Program (UMO).*

Designation	High					Low				
	Very good	Good	Bad	No response	N	Very good	Good	Bad	No response	N
UNO	29.6	59.2	5.6	5.6	54	29.2	62.5	2.1	6.2	48
UHFPO	48.1	44.4	1.9	5.6	54	43.7	52.1	—	4.2	48
UFPO	51.8	38.9	3.7	5.6	54	45.8	43.8	6.2	4.2	48
U.P. Chairman	7.4	75.9	9.3	7.4	54	6.3	50.0	35.4	8.3	48
U.P. Member	5.6	74.0	13.0	7.4	54	4.2	39.6	47.9	8.3	48
Local Doctor	13.0	61.1	18.5	7.4	54	8.3	56.2	29.2	6.3	48
Local Imam	—	25.9	66.7	7.4	54	—	20.8	66.7	12.5	48
Local school teacher	3.7	75.9	13.0	7.4	54	2.1	66.7	22.9	8.3	48
Others	—	5.6	—	94.4	54	—	6.3	—	93.7	48

*Table 2.5.9. Attitude of Various People Towards Family Planning Program (UFPO).*

Designation	High					Low				
	Very Good	Good	Bad	no response	N	Very good	Good	Bad	No response	N
UNO	48.0	42.0	6.3	4.0	50	26.6	67.3	4.1	2.1	49
UHFPO	40.0	42.0	8.0	8.0	50	34.7	65.3	2.1	2.1	49
UMO	50.0	32.0	6.0	12.0	50	30.6	65.3	2.1	2.1	49
U P. Chairman	14.0	66.0	18.0	2.0	50	8.2	79.5	8.2	4.2	49
U.P. Member	10.0	68.0	22.0	—	50	4.1	77.6	14.2	4.1	49
Local Doctor	10.0	66.0	16.0	6.0	50	2.0	65.3	20.4	8.2	49
Local Imam	—	24.0	62.0	14.0	50	2.0	28.6	61.2	8.2	49
Local school teacher	6.0	78.0	10.0	6.0	50	2.0	83.7	12.3	2.0	49
Others	4.0	16.0	—	80.0	50	—	4.1	2.0	93.9	49

Table 2.5.10 Problem of Family Planning Program (UHFPO / UMO / UFPO).

Types of problems	UHFPO		UMO		UFPO	
	High N=51	Low N=50	High N=54	Low N=48	High N=50	Low N=49
<i>Administrative and Economic types</i>						
Due to integration of health and family planning	56.9	54.0	55.6	47.9	92.0	91.8
Shortage of workers	47.1	52.0	40.7	47.9	56.0	71.4
Economic problem of the workers	78.4	74.0	74.1	68.8	78.0	79.5
Payment of clients	13.7	18.0	25.9	12.5	12.0	20.4
Communication	76.5	78.0	81.5	83.3	8.0	77.5
Others	11.8	6.0	3.7	4.2	16.0	12.2
<i>Technical and Clinical</i>						
Shortage of equipment	56.9	60.0	64.8	68.8	40.0	30.6
Shortage of medicine	51.0	58.0	59.2	60.4	56.0	46.9
Shortage of experienced doctor	39.2	26.0	9.3	20.8	34.0	38.7
Shortage of UHFWC	62.7	88.0	81.5	83.3	90.0	87.7
Lack of experience of FWAs	47.1	36.0	51.8	35.4	34.0	48.9
Others	13.7	2.0	7.4	4.2	10.0	10.5
<i>Socio-cultural</i>						
Religion	86.3	84.0	85.2	91.7	88.0	89.7
Lack of education	94.1	94.0	92.5	—	98.0	95.9
Social problem	39.0	26.0	72.2	89.6	78.0	79.5

*Table 2.5.11. Distribution of UHFPO / UMOs and UFPOs by Their problems of Integration on Health and Family Planning.*

Problems	UHFPO		UMO		UFPO	
	High N=51	Low N=50	High N=54	Low N=48	High N=50	Low N=49
Difficulties due to integration	25.5	20.0	33.3	22.9	42.0	36.7
Difficulties in administration	25.5	28.0	29.6	14.6	62.0	59.1
No difficulty	49.0	60.0	50.0	54.2	8.0	6.1
Lack of confidence between the workers of the two departments	2.0	4.0	---	8.3	10.0	8.1
Economic disparity between the workers of the two departments	11.8	2.0	2.0	---	26.0	22.4
Others	11.8	2.0	---	---	4.0	22.4

**Table 2.5.12. Satisfaction on the Training, Salary, Present Designation and Number of Working hours (UHFPO).**

Satisfaction on various aspects	High				Low			Total N=50
	Yes	No	Not applicable	Total	Yes	No	No response	
	N=51	N=51	N=51	N=51	N=50	N=50	N=50	
Training	49.0	47.1	3.9	100.0	40.0	54.0	6.0	100.0
Salary	5.9	94.1	—	100.0	4.0	22.0	4.0	100.0
Present designation	51.0	49.0	—	100.0	46.0	52.0	2.0	100.0
Working hours	74.5	25.5	—	100.0	70.0	28.0	2.0	100.0

**Table 2.5.13. Satisfaction on the Training, Salary, Present Designation and Number of working Hours (UMO).**

Satisfaction on various aspects	High			Low			
	Yes	No	Total	Yes	No	No response	Total
	N=54	N=54	N=54	N=48	N=48	N=48	N=48
Training	48.1	51.9	100.0	47.9	37.5	14.6	100.0
Salary	11.1	88.9	100.0	6.3	93.7	—	100.0
Present designation	40.7	59.3	100.0	37.5	62.5	—	100.0
Working hours	81.5	18.5	100.0	72.9	27.1	—	100.0

**Table 2.5.14 Satisfaction on the Training, Salary, Present Designation and Number of Working Hours (UFPO).**

Satisfaction on various aspects	High			Low			
	Yes	No	Total	Yes	No	Total	
	N=50	N=50	N=50	N=49	N=49	N=49	
Training	48.0	52.0	100.0	46.9	53.0	100.0	
Salary	4.0	96.0	100.0	8.2	91.8	100.0	
Present designation	6.0	94.0	100.0	8.2	91.8	100.0	
Working hours	92.0	8.0	100.0	85.7	14.3	100.0	

*Table 2.5.15* Distribution of UHFPO by Suggestion to Improve Family Planning Program.

Suggestions	High N = 51	Low N = 50
Integration should be streamlined from bottom to the top	21.6	18.0
Change of attitude of the religious leaders and local Matabbars	17.6	30.0
IEC activities should be strengthened	31.4	34.0
Sufficient compensation should be given to those sterilized clients whose children die after sterilization	2.0	...
The post of Deputy Director (UHFPO) should be abolished and UHFPO and UMO should be given the charge of family planning	13.7	8.0
Training should be arranged to increase the efficiency of health and family planning workers	17.6	12.0
The family planning program should be launched in the light of the experience of the workers	2.0	2.0
There should be one FWC and two FWVs in each of the union and they should be trained in MR and MCH	3.9	14.0
UMO should be assigned to the clinical responsibility upto the village level	5.8	6.0
Incentive to the workers and officers should be increased	7.8	16.0
MCH activities should be geared up to reduce the infant and child mortality	2.0	12.0
Health and family planning should be disintegrated and allowance of the clients should be increased	7.8	16.0
All side effects should be treated carefully	2.0	4.0
Socio-economic status of the workers should be enhanced	56.0	58.0
Total	98	115

**Table 2.5.16 .Suggestion of UFPO/UMO to Improve Family Planning Programs.**

Suggestions	High		Low	
	UFPO N=53	UMO N=54	UFPO N=49	UMO N=48
Health and family planning should be disintegrated	58.0	24.0	40.8	31.2
There should be scope for promotion with other incentives	46.0	5.6	40.8	8.3
Family planning program should be geared up with education	20.0	25.9	26.5	20.0
Religious and local community leaders should be involved in the program through proper training	16.0	24.0	30.6	31.2
Facilities for both the clients and field workers should be increased	24.0	24.0	30.6	18.7
FWCs should be established in each union and number of field workers should be increased	28.0	22.2	26.5	14.5
Local committees should be constituted to see that the family planning program is integrated with development activities	6.0	3.7	4.1	2.0
Laws should be framed to restrict early marriage and families with relatively fewer children should be given incentives	20.0	5.5	14.3	14.5
FPA's and Upazila Officers should be taken as nominated members of the union councils and Upazila parishad respectively to increase mass communication	18.0	7.4	10.2	4.2
There should be scope for higher training of officers and their salaries should be increased	8.0	11.1	6.1	6.2
Doctors should be sanctioned money to organize camps	—	11.1	2.0	10.4
Others	50.0	38.8	55.1	16.7

## *2.6 CHARACTERISTICS OF THE SAMPLE WOMEN*

A total of 7619 currently married women were interviewed in the survey ; 3899 women-51 per cent of the sample-were from high areas while 3720 women were from low areas.

### *2.6.1 CURRENT AGE*

To obtain information on age, all respondents were asked about their current age. Table 2.6.1 shows that more than 32 per cent of the women interviewed in the high areas were less than 25 years old as against 30 per cent in the low area. The median age of the respondents in both the areas was about 26 years.

### *2.6.2 SOCIO-ECONOMIC CHARACTERISTICS OF THE RESPONDENTS*

Information on some basic socio-economic characteristics of the respondents were also collected in order to describe characteristics of the users. Table 2.6.2 shows the distribution of respondents by some selected socio-economic characteristics. The educational level of respondents is shown in Table 2.6.2. Overall, two thirds of the respondents had no formal education. There appears to be no significant difference in the educational attainment between the two areas. About 13.3 per cent of the women in the high areas had 4-5 years of schooling, while 1.3 percent had education of 11 years, while less than one per cent had completed, 11 years and above education. An investigation of the occupation structure of the respondents suggests that about 97 per cent of the respondents in both the areas were housewives and about one per cent belonged to service group. Detailed classification of the occupational composition of the respondents, husbands shows that most husbands were working in agriculture and agriculture related activities followed by business and services. Slightly more than one per cent in the low area reported that their husbands were fishermen. Religious composition of the respondents suggests that a vast majority of the respondents are Muslims. The percentage of women belonging to Hindu religion in the low area is higher than that in the high areas.

### *2.6.3 FERTILITY*

From demographic point of view difference in age at first marriage is often an important factor in explaining differentials in completed fertility. Table 2.6.3 shows the distribution of respondents by age at first marriage. It is evident from the table that about a half of the respondents in both areas were married before they were 15 years old. The mean age at first marriage is about 15.5 years for both areas. While there appears to be some trend towards higher age at marriage, there has been no changes in marriage patterns, substantial enough to affect fertility.

### *2.6.4 LEVELS OF CURRENT PREGNANCY*

The proportion currently pregnant women can be used as an indicator of current fertility levels. It is highly likely that the proportion will underestimate the level of current pregnancy because many women in the first and second month of pregnancy will not realise that they are pregnant. Table 2.6.4 shows that the percentage of currently married women who were pregnant at the time of interview was about 10 per cent in both areas.

### *2.6.5 AGE SPECIFIC MARITAL FERTILITY RATES*

In order to measure the current level of fertility in the high as well as in the low areas, age specific marital fertility rates among currently married women were derived. The rates were obtained from the information on live births occurring in the twelve-month period preceding the survey. In both areas, women aged below 35 years have higher fertility rates than women aged above 35 years. In both areas women in the age group of 20-24 years have the highest fertility rates. The total marital fertility is the highest in the low areas than in the high areas.

### *2.6.6 AVERAGE CHILDREN EVERBORN BY DURATION OF MARRIAGE*

The relationship between the duration of marriage and the number of children everborn is considered in Table 2.6.6. Age at marriage and therefore the duration of marriage is one of the most important determinants

of family size, particularly in societies where use of contraception is limited, Women who marry early generally complete their childbearing with more births than women who marry late. Table 2.6.6 suggests that average number of children increases with the increase in duration of marriage. From a duration of 15 years and above the average number of children born per woman is consistently high in the low areas. Overall the average number of children everborn and of living children are the same in both the areas.

#### *2.6.7 CUMULATED FERTILITY*

The mean number of children everborn (CEB) and the mean number of living children (LC) by age and areas are presented in table 2.6.7. Overall, the mean number of children everborn to all women aged 15-49 years is the same in both areas. As expected, the mean number of children everborn as well as the mean number of living children increase with increasing age. The mean number of children everborn for women aged 45-49 years sometimes is used as an estimate of completed family size. Based on this, the completed fertility is the same in both areas, women aged 45-49 years have, on the average, 7 children at the time they complete their childbearing.

#### *2.6.8 INFANT AND CHILD MORTALITY*

Table 2.6.8 shows the direct estimates of infant mortality by age of women. Although the number of events is small to infer about the level of infant mortality prevailing in the study area, it certainly provides an indication regarding the trend of infant mortality in the population under study. The levels of infant mortality in the two areas suggest that infant mortality is high in the high area compared to that in the low area. The infant mortality in the high area was 74 per thousand live births as against 63 per thousand live births in the low area. Table 2.6.8 also suggests that both neonatal and post-neonatal mortality increase with the increase in age of mothers, Neonatal deaths account for about one third of the total infant deaths.

#### *2.6.9 INDIRECT ESTIMATES OF INFANT MORTALITY*

Although the survey questionnaire was not designed with the objective of collecting information on the number of live births a woman has had and the

number of children still living, the proportion dead among children everborn, classified by age group of mothers, can be interpreted as probabilities of dying from birth to exact age of childhood with the help of techniques. Here, Trussell technique (Trussell, 1975) was applied to obtain the infant and child mortality rates. The resulting infant and child mortality rates by areas are shown in Table 2.6.9. Both the infant and child mortality rates are higher in the high areas than in the low areas. The average infant mortality, as implied by the west model life table, was 107 deaths per 1000 births in the high area. The comparable figure in the low area was 95 per thousand births. These indirect estimates are higher than the estimates derived from the direct information.

*Table 2.6.1. Age Distribution of Sample Women by Areas.*

Current age	High area		Low area	
	Number	Percent	Number	percent
<15	3	0.1	6	0.2
15-19	388	10.0	307	8.3
20-24	900	23.1	801	21.5
25-29	968	24.9	1068	28.7
30-34	714	18.4	681	18.3
35-49	541	13.9	538	14.5
40-44	237	6.1	219	5.9
45-49	137	3.5	99	2.7
Median age	26.1 years		26.1 years	

*Table 2.6.2. Socio-Economic Characteristics of the Respondents by Areas.*

Characteristics	High area		Low area	
	Number	Percent	Number	Percent
<i>Education</i>				
No education	2589	66.4	2565	69.0
1-3years	299	7.7	245	6.6
4-5years	518	13.3	500	13.4
6-8years	255	6.5	227	6.1
9-10years	188	4.8	154	4.1
11 years and above	40	1.3	28	0.8
<i>Occupation of the respondents</i>				
Housewife	3770	96.7	3600	96.7
Service	36	0.9	37	1.0
Non-agricultural labour	68	1.7	70	1.9
Others	25	0.6	12	0.4
<i>Occupation of the husbands</i>				
Services	684	17.5	587	15.8
Agriculture	1271	32.6	977	26.3
Agricultural labour	602	15.4	653	17.6
Non-agricultural labour	539	13.8	537	14.4
Business	689	17.7	864	23.2
Fisherman	66	1.7	79	2.1
Others	48	1.2	23	0.6
<i>Religion</i>				
Muslim	3228	82.8	3018	81.1
Hindu	542	13.9	595	16.0
Others	129	3.3	107	2.9

**Table 2.6.3. Percentage Distribution of Respondents by Age at First marriage and by Areas.**

Age at first marriage	High area	Low area
14	49.8	45.1
15	15.1	16.7
16	12.5	12.4
17	7.1	8.3
18	6.7	9.1
19	2.4	2.2
20+	6.4	6.2
<b>Mean age at first marriage</b>	<b>15.5</b>	<b>15.6</b>

**Table 2.6.4. Percentage Distribution of Currently Married Women by Pregnancy Status and by Areas.**

Age	High area		Low area	
	Number of women	Percent currently pregnant	Number of women	Percent currently pregnant
15—19	374	17.9	306	17.6
20—24	891	13.1	797	14.7
25—29	964	11.3	1067	11.0
30—34	713	6.5	680	6.3
35—39	540	5.7	538	5.0
40—44	237	4.2	219	4.1
45—49	180	2.8	113	1.8
All	3899	9.9	3720	9.9

*Table 2.6.5. Age Specific Marital Fertility Rates (Per 100 Women) by areas.*

Age	High area		Low area	
	Number of women	ASMFR	Number of women	ASMFR
15-19	388	278	307	300
20-24	900	309	801	341
25-29	968	286	1068	304
30-34	714	252	681	267
35-39	541	192	538	210
40-44	237	89	219	164
45-49	137	58	99	91
GMFR		251		277
TMFR		7320		8385

*Table 2.6.6 Average Number of Children Everborn (CEB) and Living Children (LC) Per Currently Married Women by Duration of Marriage and by Areas.*

Duration of marriage	High are		Low area	
	CEB	LC	CEB	LC
0-4	0.87	0.82	0.87	0.78
5-9	2.15	1.85	2.20	1.90
10-14	3.54	2.99	3.52	3.00
15-19	4.78	3.99	4.86	4.07
20-24	5.88	4.90	5.89	4.97
25+	6.72	5.60	6.80	5.67
All	3.76	3.17	3.76	3.18

2.6.7. Average Number of Children Everborn (CEB) and Living Children (LC) Per Currently Married Woman by Age and Areas.

Age	High area		Low area	
	CEB	LC	CEB	LC
15-19	0.82	0.72	0.79	0.71
20-24	2.09	1.79	1.95	1.67
25-29	3.39	2.87	3.34	2.84
30-34	4.74	3.91	4.89	4.09
35-39	5.90	4.79	5.76	4.90
40-44	6.68	5.50	6.58	5.64
45-49	6.94	6.07	6.93	5.57
All	3.76	3.17	3.76	3.17

Table 2.6.8. Infant Mortality Rates Derived from the Direct Information by Areas.

Age of women	High area				Low area			
	Number of births	Neonatal mortality	Post-neonatal mortality	Infant mortality	Number of births	Neonatal mortality	Post-neonatal mortality	Infant mortality
15-19	108	27.8	46.3	74.1	92	21.7	54.3	76.1
20-24	278	18.0	43.2	61.2	273	29.3	43.9	73.2
25-29	277	25.3	46.9	72.2	325	36.9	30.8	67.7
30-34	180	27.8	50.0	77.8	182	22.0	44.0	66.0
35+	133	45.1	52.6	77.7	158	6.3	19.0	25.3
All	976	26.6	47.1	73.8	1030	26.2	36.9	63.1

*Table 2.6.9. Infant and Child Mortality Rates Estimated from Data on the Proportion Dead Among Children Everborn by Areas.*

Estimated child mortality	High area		Low area	
	qx	Implied infant mortality in the west model life table	qx	Implied infant mortality in the west model life Table
Q2	.127	.101	.089	.073
Q3	.146	.105	.139	.104
Q5	.175	.114	.153	.108
Average		.107		.095

#### *2.6.10 KNOWDGE OF FAMILY PLANNIG METHODS*

Knowledge of family planning methods may amply be thought as a pre-requisite for the success of any family planning program. In its simplest form, it indicates whether a respondent had heard or known what a family planning method and its underlying purpose is. The survey investigated the knowledge of family planning methods among currently married women of 15-49 years in the sample. This section presents the levels and differentials in contraceptive knowledge by some selected characteristics of the respondents for the two areas.

Table 2.6.10 shows the percentage distribution of currently married women by age and whether they are aware of the family planning methods, for both the high and low areas. Overall, women in the two areas differed insignificantly in their contraceptive knowledge. 96.3 per cent of the currently married women in the high areas compared to 95.1 per cent in the low areas have answered affirmatively to the question of whether they have any knowledge in contraceptive methods. Clearly the knowledge is almost universal and this is true for all the age groups except for women aged less than fifteen years

in high areas where the percentage of women with knowledge in family planning is 75. However, caution must be taken before inferring from this age group since the number of respondents here is only 4. In the same age group of the low areas, 3 respondents claimed to have knowledge in family planning. Again the problem of inferring for this age group is the small number of respondents. Among all other age groups in both high and low areas, the lowest percentage of women with knowledge of family planning is 92.1 and this occurs in the age group 45-49 in the low areas. The greatest differential in the percentage of knowledgeable women is 2.1, and this can be found in the two age groups—25-29 (97 per cent in high areas versus 94.9 per cent in low areas), and 45-49 (94.2 per cent in high areas versus 92.1 per cent in low areas). The overall level of knowledge found in the present survey is lower by three percentage points than that of the 1983 CPS (Mitra and Associates, 1984).

Table 2.6.11 shows the percentage distribution of currently married women having knowledge of at least one method; knowledge of at least one modern method and knowledge of at least one traditional method. The information provided in table 2.6.11. indicates a high awareness of family planning methods. The table suggests that over 90 per cent of the currently married women interviewed in both areas have knowledge of at least one method and at least one modern method. Compared to modern methods, knowledge of traditional methods was surprisingly low.

### *2.6.11 KNOWLEDGE OF SPECIFIC METHODS*

Percentages of currently married women in different age groups having knowledge of specific methods of family planning are presented in Tables 2.6.12 and 2.6.13 for both high and low areas. Except in the youngest age group in which the smallness of the number of respondents (3 in low areas and 4 in high areas) makes it unlikely to draw valid inferences about this group, in all other age groups, the knowledge of oral pill is almost universal with consequent small variations in the knowledge among the age groups within each area. For example, in the low areas, the largest percentage of women (90.8 per cent) with knowledge about oral pill belongs to the age group 25-29, while the smallest percentage (79.2 per cent) belongs to the group 45-49 (excluding, of course the youngest age group). The percentage increases from

the age group 15-19, reaches the peak at ages 25-29 and then gradually declines. The older women are less likely to have been familiar with oral pill—a modern method of contraception, while to the younger women, because of their being in the earlier phase of conjugal life cycle, the need of contraception is less keenly felt. In this case the drive for knowledge is less intensive and this might have caused the smaller percentages among the younger women. A similar pattern is observed in the high areas. It is interesting to note that the percentage of women having knowledge of oral pill in the high areas is smaller than that in the low areas for every age group for all women, indicating that in the absence of other factors, knowledge of modern methods, in no ways, is a guarantee of better performance. 59 per cent in the low areas and 52.6 per cent in the high areas have knowledge of condom. The highest percentage in high areas is 57.1 in the age group 20-24 and the lowest percentage is 32.8 in the oldest age group 45-49. In the low areas, the highest and the lowest percentages are 63.2 and 44.6 and these occur in the age groups 15-19 and 45-49 respectively. Tubectomy is the second most widely known method in the high areas followed by condom, while this is opposite in the low areas. The highest percentage of women in the high areas having knowledge of Tubectomy is 59.6 and is in the age group 30-34 with the lowest—47.4—in the oldest age group. The corresponding figures for the low areas are 57 and 47.2 and these occur in the age groups 35-39 and 40-44 respectively. The next most widely known method is Vasectomy; 29 per cent in the low areas compared to 28.7 per cent in the high areas are aware of this method. This method is followed by IUD—20.2 per cent in the high areas and 20.8 per cent in the low areas have knowledge of this methods. The other methods—Foam / Jelly, Injection, MR etc.—are less widely but, more or less, to a similar extent, known to the sample women. The general pattern of the relationship between age and percentage of women having knowledge of specific methods is that the percentage increases with age for the first two or three age groups and then gradually declines. In most of the cases, the percentage is the smallest in the oldest age group.

#### *2.6.12 EVER-USE OF FAMILY PLANNING METHODS*

If a family planning method has been used any time before the interview date, the respondent is usually categorized as an ever-user. Thus, this definition

includes both the past and the present users. Also, more than one method may have been used by an ever-user,

### *2.6.13 AGE DIFFERENTIALS*

Table 2.6.14 presents the percentage distribution in every age group of women who have and have not ever-used contraception for both areas-high and low. A larger percentage of women in the high areas (39.4 per cent) have ever-used contraception than in the low areas (35.5 per cent) and this is true for every age group except the first age group. The highest ever-use rate (46.4 per cent) in the high areas occurs in the age group 25-29 but in the low areas this (43.6 per cent) occurs in the age group 35-39. The lowest percentage is 17.6 for both the areas and occurs at the youngest age group. This may be because younger women are unlikely to have achieved the desired family size and hence less prone to ever-use contraception. Overall, with age, the percentage of ever-users increases upto the age group 35-39, reaches a peak, and then falls sharply.

### *2.6.14 NUMBER OF METHODS EVER-USED*

Table 2.6.15 shows the percentage distribution of women by different age groups and number of methods ever-used among different age groups, for both the high and low areas. The average number of methods tried in both the areas are almost the same (1.3 in high areas and 1.2 in low areas). Also the mean number of methods ever-used by women in a certain age group in one area is almost the same as that in the corresponding age group in the other area. The mean number of methods ever-used by the women in different age groups in the high area ranges from 1.1 to 1.3 while that in the low area ranges from 1.2 to 1.3. All of the respondents in the low areas and 91 per cent in the high areas who have ever-used more than three methods belong to the age groups 25-29, 30-34 and 35-39.

### *2.6.15 METHODS SPECIFIC EVER-USE*

In table 2.6.16 and 2.6.17 percentage of women who have ever-used specific methods of contraception are presented for different age groups for both low

and high areas. Clearly, oral pill is the most widely ever-used method of contraception—45.3 per cent for low areas and 41.4 per cent for high areas. Tubectomy ranks second (22.6 for high areas and 23.4 for low areas) followed by condom (13.3 for high areas while 12.7 for low areas). Evidently, the high-low differentials in both cases are insignificant. The ever-use rates for all other methods are quite small; among them, the IUD is the most widely used method (8.4 per cent) for high areas and 8.6 per cent for low areas. With age, the relationship of ever-use rate does not follow any regular pattern (for every method). For the oral pill in high areas, with the increase in age, the ever-use rate decreases with only one exception—the oldest age group—when the ever-use rate has increased to 38.3 per cent from 31.4 per cent in the previous age group. For the low areas, the ever-use rate first increases with age, then decreases and begins to increase again at ages 35-39. This is followed by another decrease at the ages 45-49.

For Tubectomy, the pattern is less irregular compared to that of oral pill. For the low areas, the ever-use rate increases from 6.3 per cent to 30.5 per cent (age group 30-34) and then consistently decreases until the oldest age group is reached. For the high areas, the ever-use rate of tubectomy shows an increasing trend with the whole range of age groups with exception of the oldest one. The increase is from 7.5 per cent in the youngest age group to 30.0 per cent for the age group 40-44. The ever-use rate for the group 45-49 is 23.2 per cent. For condom, in the high areas—the ever-use rates follow the oral pill pattern—first decrease and then increase. For the low areas the pattern is the same, although, the ever-use rates of which are considerably low compared with the methods discussed above, both regular patterns of relationships are observed.

#### *2.6.16 EVERE-USE BY NUMBER OF CHILDREN EVERBORN*

Number of children everborn and number of living children have been found in the recent researches to influence the use of contraception by the couples. In Tables 2.6.18 and 2.6.19 are given the percentage distributions of ever-users according to the number of children everborn to them for both low and high areas. Tables 2.6.20 and 2.6.21 are analogous to table 2.6.18 with the number of children everborn replaced by the number of living children. From Tables 2.6.18 and 2.6.19 evidently, a very small percentage (1.8 for high

area and 1.6 for low area) of ever users had no children born to them. In both areas, this percentage increases with number of children everborn, upto 3 children for low areas (17.8 per cent) and upto 2 children for high areas (18.8 per cent) and thereafter, decreases with the increase in the number of children everborn. The percentage again increases at the end with 7 or more number of children everborn (14.8 for high areas and 17.9 for low areas). The mean number of children everborn to the ever-users are 3.9 and 4.0 for high and low areas respectively.

#### *2.6.17 EVER-USE BY NUMBER OF LIVING CHILDREN*

Tables 2.6.20 and 2.6.21 show almost a similar trend. A very small percentage of ever-users had no living children. As the number of living children increases, the percentage of ever-users also increases and this continues upto 2 living children in the high areas (21.5 per cent) and 3 living children in the low areas (19.8 per cent). Then a declining trend in the percentages with the increase in the number of living children is observed with the exception of 7 or more living children in the low areas where the percentage has increased by 1.2 points from the percentage corresponding to 6 living children. The average number of living children of the ever-users is the same in both the areas.

A comparison of high and low areas in tables 2.6.18 and shows that the percentage of ever-users according to the number of children everborn in the low areas are not substantially different from the corresponding percentage in the high areas. The largest difference (3.1 ; 17.9 versus 14.8) is for 7 or more children everborn. For tables 2.6.20 and 2.6.21 the differences are also not substantial. The highest difference, again for 7 or more children everborn, is 3.2.

An interesting result emerges from the comparison of Table 2.6.20 and Table 2.6.21 within each area. We notice that the percentage of ever-users corresponding to living children are higher than the percentages corresponding to the same number of children everborn, beginning from zero. For example, in the low areas, the percentage of ever-users with one living children 9.3 as against 16.0 for 2 children everborn and so on. The trend continues until the fourth child in low areas and the fifth child in high areas and reverses thereafter. These results signify that it is the number of living children

that motivates couples more to ever-use contraception than the number of children everborn. The greater the number of living children, the less need the couples feel to produce more and hence the ever-use rate increases.

#### *2.6.18 SOCIO-ECONOMIC DIFFERENTIALS*

In the following section ever-use of family planning by some selected socio-economic characteristics are discussed.

#### *2.6.19 DIFFERENTIALS BY EDUCATION*

Education has a tendency to be positively associated with the use of contraception. Table 2.6.22 presents the percentage distribution of ever-users according to their level of education, for both areas—high and low. As expected, the lower percentage of ever-users for both areas are in the no schooling group. In other educational groups, the percentage of ever-users are higher in the high areas. It appears from the table that, in general, ever-users have, on an average, more education, in these areas.

#### *2.6.20 DIFFERENTIALS BY RELIGION*

Table 2.6.22 shows that in the high areas, non-Muslim currently married women have higher ever-use rates than Muslim women. 43.4 per cent Hindu currently married women and 46 per cent currently married women of religions other than Islam and Hindu, have ever-used contraception compared to 38.3 per cent Muslim currently married women. In the low areas, the trend is different. 36 per cent currently married Muslim women compared to 33 per cent Hindu women and 36 per cent women of other religions, have ever-used contraception.

#### *2.6.21 DIFFERENTIALS BY RESPONDENT'S OCCUPATION*

Occupation has also been known to influence the ever-use rate. Table deals with this aspect of the respondents. From this table it is clear that, in both areas—high and low—a much higher percentage of service holders are ever-users of contraception than respondents of any other category of occupation. For example, in the high areas, 81 per cent of the service holders are ever-users.

This compares to 39 per cent of the household workers and 32 per cent each of the non-agricultural labourers and others (5.7 and 14.3 respectively) in the low areas are ever-users of contraception than those in the high areas (32.4 per cent and 31.8 per cent). The differences in other percentage of occupations-household work and service—for the two areas are not substantial.

*Table 2.6.10* Percentage of Currently Married Women Under 50 Years of Age Having Knowledge of Family Planning Methods by Age and by areas.

Age	High area			Low area		
	Number of women	Yes	No	Number of women	Yes	No
<15	4	75.0	25.0	3	100.0	—
15–19	393	96.2	3.8	307	95.4	4.6
20–24	899	97.4	2.6	802	95.4	4.6
25–29	974	97.0	3.0	1067	94.9	5.1
30–34	712	94.9	5.1	683	94.9	5.1
35–39	542	96.3	3.7	539	95.5	4.5
40–44	238	94.1	5.9	218	95.9	4.1
45–49	137	94.2	5.8	101	92.1	7.9
<b>Total</b>	<b>3899</b>	<b>96.3</b>	<b>3.7</b>	<b>3720</b>	<b>95.1</b>	<b>4.9</b>

*Table 2.6.11* Percentage of Currently Married Women Under 50 Years of Age Having Knowledge of at Least One Method, at Least One Modern Method, and at Least One Traditional Method.

Having knowledge	High area	Low area
At least one method	90.4	91.0
At least one modern method	90.4	91.0
At least one traditional method	1.9	1.8

*Table 2.6.12* Percentage of Currently Married Women Under 50 Years of Age Having Knowledge of Specific Methods by Age (High Area).

Age	Number of women	Oral pill	Condom	Foam/Jelly/Cream	Vasectomy	Tubectomy	IUD	Injection	M.R	Safe period	Withdrawal	Abstinence	Others
<15	4	50.0	50.0	25.0	25.0	25.0	—	—	—	—	—	—	—
15-19	393	82.4	51.7	6.9	24.2	52.2	16.8	9.2	2.8	2.8	0.3	0.3	—
20-24	899	85.4	57.1	12.9	27.8	59.4	24.9	14.3	3.9	1.4	0.7	0.7	0.1
25-29	974	85.6	55.6	11.3	30.9	57.5	20.8	12.6	3.7	2.3	1.0	0.6	—
30-34	712	83.3	52.2	11.9	28.5	59.6	19.4	13.2	3.5	2.1	0.8	0.3	0.7
35-39	542	83.9	51.3	4.4	24.9	56.5	19.9	12.0	2.2	1.8	1.1	1.3	0.4
40-44	238	75.2	39.9	7.1	31.9	52.9	15.1	13.4	2.9	2.5	0.4	0.8	0.4
45-49	137	73.7	32.8	5.1	29.2	47.4	8.8	10.2	4.4	3.6	1.5	0.7	—
Total	3899	83.5	52.6	9.9	28.2	57.0	20.2	12.7	3.4	2.1	0.8	0.6	0.2

111

Table 2.6.13 Percentage of Currently Married Women Under 50 Years of Age Having knowiddge of Specific Methods by Age (Low Area).

Age	Number of women	Oral Pill	Condom	Foam/Jelly Cream	Vasectomy	Tube-tomy	IUD	Injection	M.R	Safe period	With-drawal	Absti-nence	Others
<15	3	100.0	100.0	66.7	33.3	100.0	66.7	—	—	—	—	—	—
15-19	307	88.3	63.2	9.1	28.7	52.4	16.0	12.7	2.9	1.3	0.3	0.3	—
20-24	802	88.9	59.6	12.0	29.2	55.7	22.4	12.1	2.6	2.1	0.8	0.5	0.1
25-29	1067	90.8	62.4	12.4	31.1	54.0	23.4	15.3	13.2	1.9	1.3	0.7	0.2
30-34	683	89.0	57.0	8.7	28.1	55.5	20.6	12.1	2.6	1.6	0.9	0.6	0.3
35-39	539	89.1	55.7	8.3	28.0	57.0	20.8	10.6	2.8	1.7	0.9	1.1	0.5
40-44	218	84.9	53.2	6.4	21.1	47.2	11.5	7.3	2.3	1.3	0.4	—	—
45-49	101	79.2	44.6	5.9	28.7	48.5	14.9	10.9	—	2.0	—	0.1	0.1
Total	3720	89.0	59.0	10.3	29.0	54.4	20.8	12.1	2.7	1.8	0.9	0.6	0.2

115

**Table 2.6.14. Percentage of Currently Married Women Under 50 Years of Age Having Ever-Used Family Planning methods by Age and by areas.**

Age	High area			Low area		
	Number of women	Yes	No	Number of women	Yes	No
<15	4	—	100.0	3	33.3	66.7
15–19	393	17.6	82.4	307	17.6	82.4
20–24	899	36.7	63.3	802	27.1	72.9
25–29	974	48.4	53.6	1067	40.2	59.8
30–34	712	45.9	54.1	683	43.1	56.9
35–39	542	45.2	54.8	539	43.6	56.4
40–44	238	32.8	67.2	218	31.2	68.8
45–49	137	25.5	74.5	101	21.8	78.2
<b>Total</b>	<b>3899</b>	<b>39.4</b>	<b>60.6</b>	<b>3720</b>	<b>35.5</b>	<b>64.5</b>

*Table 2.6.15* Percentage of Currently Married Women Under 50 Years of Age Having Ever-Used Family Planning Methods and Number of Methods Ever Used by Age and by Areas.

Age	High area						Low area						
	Number of methods used					Mean	Number of methods used					Mean	
	1	2	3	4	5+		1	2	3	4	5+		
<15	—	—	—	—	—	—	0.1	—	—	—	—	—	—
15—19	4.8	4.0	—	—	—	1.1	4.2	4.2	—	—	—	—	1.2
20—24	21.6	23.6	13.2	—	—	1.2	17.4	12.3	18.0	—	—	—	1.2
25—29	29.1	30.4	34.0	27.3	—	1.3	32.3	32.9	33.3	40.0	100.0	—	1.2
30—34	21.1	22.0	20.8	27.3	—	1.3	22.1	23.2	20.5	4.0	—	—	1.3
35—39	16.2	12.8	20.7	36.3	50.0	1.3	17.3	19.8	20.5	20.0	—	—	1.3
40—44	5.1	4.0	7.5	9.1	50.0	1.3	5.0	5.5	7.7	—	—	—	1.3
45—49	2.1	3.2	3.8	—	—	1.2	1.6	2.1	—	—	—	—	1.2
Total	100.0	100.0	100.0	100.0	100.0		100.0	100.0	100.0	100.0	100.0	100.0	
N	1220	250	53	11	2	1.3	1038	237	39	5	1	1.2	

*Table 2.6.16* Percentage of Currently Married Women Under 50 Years of Age Having Ever-Used Specific Family Planning Methods by Age (High Area).

Age	Number of women	Oral Pill	Condom	Foam/Jelly/Cream	Vasectomy	Tubectomy	IUD	injection	M.R	Safe period	Withdrawal	Abstinence	Others
15-19	80	50.0	23.8	1.2	2.5	7.5	8.8	—	—	5.0	—	1.2	—
20-24	403	44.7	15.9	2.5	1.3	15.6	9.2	2.7	0.3	5.7	—	1.2	0.9
25-29	573	43.5	13.8	1.2	2.6	20.9	9.9	1.9	0.2	3.8	0.4	0.9	0.9
30-34	414	40.3	10.9	1.7	3.8	27.8	6.3	1.7	—	4.1	0.5	1.4	1.5
35-39	314	36.3	9.9	2.6	4.1	28.7	8.3	1.6	0.9	5.1	0.3	0.6	1.6
40-44	102	31.4	11.8	3.9	3.9	30.4	4.9	2.0	—	7.8	0.9	—	2.9
45-49	47	38.3	17.0	4.3	—	23.4	8.5	2.1	—	4.3	—	2.1	—
<b>Total</b>	<b>1933</b>	<b>41.4</b>	<b>13.3</b>	<b>1.9</b>	<b>2.9</b>	<b>22.6</b>	<b>8.4</b>	<b>1.9</b>	<b>0.3</b>	<b>4.8</b>	<b>0.3</b>	<b>1.0</b>	<b>1.2</b>

*Table 2 6.17* Percentage of Currently Married Women Under 50 Years of Age Having Ever-Used Specific Family Planning Methods by Age (Low Area).

Age	Number of women	Oral Pill	Condom	Foam/Jelly/Cream	Vasectomy	Tubectomy	IUD	Injection	M.R	Safe period	Withdrawal	Abstinence	Others
<15	1	—	—	—	—	—	—	—	—	—	—	—	—
15—19	64	39.1	35.9	3.1	3.1	6.3	3.1	3.1	—	3.1	—	—	3.1
20—24	260	51.2	18.9	1.9	0.4	15.0	7.3	1.5	—	2.7	—	1.2	—
25—29	545	48.1	13.2	1.5	1.1	21.3	9.4	2.6	0.6	1.8	0.2	0.6	1.7
30—34	371	41.5	9.2	2.2	1.3	30.5	10.2	1.3	0.3	2.2	—	1.3	—
35—39	301	44.9	8.0	2.3	4.0	28.9	7.3	1.3	0.3	1.7	—	—	1.3
40—44	87	44.8	6.9	1.2	3.4	25.3	5.7	2.3	1.2	4.6	—	1.2	3.4
45—49	27	40.7	7.4	—	—	22.2	22.2	—	—	3.7	—	—	3.7
Total	1656	45.3	12.7	1.9	1.7	23.4	8.6	1.9	0.4	2.2	0.1	0.7	1.1

*Table 2.6.18* Distribution of Currently Married Women Under 50 Years of Age Who Ever-Used Family Planning Methods by Number of Children Everborn and by Age (High Area).

Age	Number of currently married women	Children everborn								Total	Mean
		0	1	2	3	4	5	6	7+		
< 15	4	—	—	—	—	—	—	—	—	—	—
15-19	393	15	34	16	3	11	—	—	—	69	1.1
20-24	899	10	67	126	78	33	8	4	4	330	2.4
25-29	974	3	35	99	122	87	51	31	24	452	3.4
30-34	712	—	7	32	41	76	76	51	44	327	4.6
35-39	542	—	4	10	17	23	49	49	93	245	5.5
40-44	238	—	—	5	7	5	9	12	40	78	5.7
45-49	137	—	—	—	2	1	5	4	23	35	6.3
<b>Total</b>	<b>3899</b>	<b>28</b>	<b>147</b>	<b>288</b>	<b>270</b>	<b>226</b>	<b>198</b>	<b>151</b>	<b>228</b>	<b>1536</b>	<b>3.9</b>
		(1.8)	(9.6)	(18.8)	(17.6)	(14.7)	(12.9)	(9.8)	(14.8)		

120

Table 2.6.19 Distribution of Currently Married Women Under 50 Years of Age Who Ever Used Family Planning Methods by Number of Children Everborn and by Age (High Area).

Age	Number of currently married women	Children everborn								Total	Mean
		0	1	2	3	4	5	6	7+		
< 15	3	1	—	—	—	—	—	—	—	1	—
15-19	307	13	23	14	1	2	—	1	—	54	1.3
20-24	802	6	55	74	55	17	8	1	1	217	2.2
25-29	1067	1	30	91	110	78	65	31	23	429	3.6
30-34	683	—	5	22	35	66	47	48	71	275	4.9
35-39	539	—	2	8	27	34	42	26	96	235	5.4
40-44	218	—	—	1	6	7	15	6	33	68	5.7
45-49	101	—	—	1	1	—	3	5	12	22	6.1
Grand Total	3720	21 (1.6)	115 (8.7)	211 (16.0)	235 (17.8)	204 (15.5)	180 (13.6)	118 (8.9)	236 (17.9)	1320	4.0

121

*Table 2.6.20* Distribution of Currently Married Women Under 50 Years of Age Who Ever-Used Family Planning Methods by Number of Living Children and by Age ( High Area ).

Age	Number of currently married women	Living children								Total	Mean
		0	1	2	3	4	5	6	7+		
15-19	393	17	36	14	2	—	—	—	—	69	1.0
20-24	899	12	85	129	72	23	6	1	2	330	2.1
25-29	974	6	44	125	131	84	40	10	7	452	3.0
30-34	712	1	9	41	74	85	76	27	14	327	4.0
35-39	542	—	7	18	27	46	55	50	42	245	4.8
40-44	238	—	2	4	7	12	18	17	18	78	5.1
45-49	137	—	—	—	4	6	5	7	13	35	5.9
Grand Total	3899	36	183	331	317	261	200	112	96	1535	3.4
		(2.3)	(11.9)	(21.5)	(20.6)	(17.0)	(13.0)	(7.3)	(6.3)		

221

*Table 2.6.21* Distribution of Currently Married Women under 50 Years of Age Who Ever-Used Family Planning Methods by Number of Living Children and by Age (Low Area).

Age	Number of currently married women	Living children								Total	Mean
		0	1	2	3	4	5	6	7+		
< 15	3	1	—	—	—	—	—	—	—	1	—
15-19	307	13	27	10	1	2	1	—	—	54	1.2
20-24	802	9	62	83	49	11	1	1	1	217	2.0
25-29	1067	2	39	114	117	90	37	20	10	429	3.2
30-34	683	2	7	31	51	74	61	37	31	294	4.3
35-39	539	—	2	15	34	43	47	37	57	235	4.9
40-44	218	—	—	2	8	13	15	9	21	68	5.2
45-49	101	1	1	—	2	4	3	5	6	22	5.0
Grand Total	3720	28	138	255	262	237	165	109	126	1320	3.4
		(2.1)	(10.5)	(19.3)	(19.8)	(18.0)	(12.5)	(8.3)	(9.5)		

### *2.6.22 DIFFERENTIALS BY OCCUPATION OF THE RESPONDENT'S HUSBANDS*

Table 2.6.22 also shows the distribution of the respondents according to the occupations of their husbands. The table shows that in the high areas, 54 per cent of the respondents, whose husbands are service holders are ever-users compared to 48 per cent in the low areas. In the high areas, 35 percent of respondents whose husbands are fishermen, compared with 42 per cent in the low areas, have ever-used contraception. Ever-use rates for respondents with husbands having occupations, in agriculture or as agricultural labourers, are more or less similar for high and low areas—the rates ranging from 31 percent in the low areas for agriculture to 35.5 per cent for high areas for the category agricultural labourers. High-low differentials for categories businessman, non-agricultural labourers, doctors and others are moderate, ranging from 4 percentage points for businessman category (43.8 per cent for high and 39.8 per cent for low areas), to 7.4 percentage points for non-agricultural labour category (31.2 per cent for high and 23.8 per cent for low).

### *2.6.23 CURRENT USE OF FAMILY PLANNING METHODS*

A respondent is defined as a current user of contraception if she or her husband uses any family planning method at the time of interview. Tables 2.6.24 and 2.6.25 show the percentage distribution in every age group of women currently using contraception in both high and low areas. Clearly, a greater percentage of currently married women in the high areas are currently using contraception (35.7 versus 30.1). Because of very small number of respondents (3 and 4) in the youngest age group, it will be excluded from the ensuing discussion. In the age group of highest fertility (20-24, 25-29 and 30-34), the percentage of current users of contraception are higher in the high areas.

### *2.6.24 CURRENT USE BY SPECIFIC METHODS*

Table 2.6.24 and 2.6.25 shows the current use of contraception among currently married women by methods, for both the high and low areas. Overall, 70 percent of the women in the low areas do not use any method compared to 66 percent in the high areas. Also a greater percentage (31.

per cent) of them in the high areas are currently using modern methods which are more effective. The corresponding percentage in the low areas is 28.0. Among the modern methods, oral pill and tubectomy are the most preferred methods in both the areas. Condom and IUD/coil rank next. Among the traditional method users, the safe period is more popular than the others. Only 1.8 per cent in the high areas and 0.7 percent in the low areas use this method.

#### *2.6.25 CURRENT USE BY SPECIFIC METHODS AND CURRENT AGE*

Table 2.6.26 shows the percentage distribution of current users by different methods within each age group, for both high and low areas. In the low areas, pill is mostly preferred by women of age group 20-24 (45.6 per cent) followed by women aged 15-19 (39.5 per cent). In the high areas, young women of age group 15-19 prefer pill most (42.6 per cent) followed by those in the next higher age group (37.1 per cent). The lowest use rate of pill is in the age group 40-44 in the high areas (19.7 per cent) and in the oldest age group in the low areas (20 per cent). In general, pill is a very popular method among the current users. Tubectomy is also very popular in both areas. In the high areas, the largest percentage of tubectomy users, 26.9, among the current users are in the age group 40-44. In the low areas, the percentage in the same age group is 39.3. In these areas, the 35-39 year olds do prefer this method most (43.9 per cent). Condom is also very popular among younger women. 30.2 percent women in the age group 15-19 in the low areas and 24.1 per cent in the same age group in the high areas use this method. The popularity of IUD is moderate on the average, in both areas. The only exception is the 45-49 year olds in the low areas who are disproportionately interested in the IUD-25 per cent, corresponding to only 6.7 per cent of the women in the same age group in the high areas, prefer IUD.

The usual assumption about the relationship between contraceptive knowledge and use of contraception is that the former positively influences the later. The percentages of currently married women who are currently using specific methods of contraception by the number of methods known are presented in Table 2.6.27 for both high and low areas. The percentages of non-users are higher in the high areas for any number of methods known (0 to 6+) than those in the low areas. For example, in the high areas, 24 per cent of the women having knowledge of one method compared to only 14 per cent in the

low areas, are current users. The high--low differentials for other number of methods known are not as large as this. There is a clear relationship between the number of methods known and the current use of contraception. The higher the number of methods known to a respondent, the higher is the likelihood that she will be using contraception.

#### *2.6.26 CURRENT USE BY NUMBER OF LIVING CHILDREN*

The number of living children a woman has will influence her decision to use contraception. Table 2.6.29 shows that in general, the current use of contraception increases with the increase in the number of living children upto four and then declines. There is a tendency that women from the low areas will have a higher use of contraception in the highest parity group ( i.e. the more living children a woman has, the greater will be her tendency to use contraception to postpone or to prevent future births ).

#### *2.6.27 CURRENT USE BY EDUCATION*

Educational attainment seems to be another important factor affecting the rate of contraceptive use among currently married women. As evident from Table 2.6.20, the rate of current use increases as the level of education rises. Currently married women with less than primary school education are less likely to practice family planning. The pattern is consistent in both areas-high and low. In the low areas, the current use rate is the lowest among women with no education, only 25 per cent.

The prevalence rate is consistently higher in the high areas for all educational levels.

#### *2.6.28 CURRENT USE BY OCCUPATION OF THE RESPONDENTS*

Analysis of current use by occupation of the respondents suggests that those women who were in service occupation were as likely to use contraception as those who were not ( Table 2.6.31 ) in that occupation. The difference in levels of current contraceptive use between housewives and service groups, were quite substantial, almost double in the high areas and more than double in the low areas.

### *2.6.29 CURRENT USE BY FAMILY'S ECONOMIC CONDITION*

It has been argued that the level of contraceptive use is highly associated with the socio-economic condition of the people. In the survey a specific question was designed to investigate respondents' awareness about their family's economic condition. Table 2.6.32 shows the current contraceptive use according to their opinion about family's economic conditions. There appears to be a relationship between current use and economic conditions of the respondents. There is a likelihood that the better the economic condition the higher will be the current use of contraception. Respondents who are poor are less likely to adopt birth control means. In both the areas respondents who reported that they were poor or very poor, were using contraception at a lower rate than those who reported that they were rich or very rich ( Table 2.6.32 ).

### *2.6.30 COUPLE REGISTRATION CARD*

All currently married women in the sample were asked whether they had couple registration card. In response to this, we see that over two thirds of the respondents in both areas high and low-mentioned that they did not receive the couple registration card. This suggests that the frequency of visits by the field workers and the motivational activities were not regular.

### *2.6.31 FREQUENCY OF VISITS BY THE WORKERS*

The family planning workers have been trained and motivated to conduct regular household visits that address the needs of rural women. Table 2.6.34 shows that less than one third of the respondents reported that they were visited by the workers once in a month and a similar proportion of women reported that they were never visited by the workers. The number of irregular visits by the workers was also considerable. The pattern is same in both areas.

### *2.6.32 RESPONDENTS OPINIONS ABOUT THEIR LOCAL LEADERS PARTICIPATION IN FAMILY PLANNING PROGRAM*

it has been recognized that for a traditional society like Bangladesh, the participation and involvement of local leaders in family planning program is impor-

tant for its success. In the survey all currently married women were asked to give their opinions whether local leaders are eager to motivate community people in family planning. It appears from the Table 2.6.35 that religious superstition still is an obstacle for promoting family planning program in rural Bangladesh. Less than a half of the respondents reported that other local leaders such as union parishad chairman, member, school teachers and local matabbar support the program.

### *2.6.33 REASONS FOR NON-USE*

A question often raised is why large majority of currently married women do not use some form of contraception. In the present survey, women who were not currently using any method were asked to state their reasons for choosing not to use contraceptives. Some of the reasons appear in Table 2.6.36. Less than a half of the respondents stated that they are not using any method because they want a child. About 12 per cent of all currently married women reported that they were not using any method on health grounds. About 5 per cent stated that they were breastfeeding. Two per cent replied that they thought they are subfecund (unable to bear child). Fear of side effects, unwillingness of husbands, religious grounds and non-availability of family planning methods were stated as the other reasons for non-use of contraception.

**Table 2.6.22 Percentage of Currently Married Women Under 50 Years of Age Having Ever-Used Family Planning Methods by Socio-Economic Characteristics by Areas.**

Characteristics	High area		Low area	
	Number	Per cent	Number	Per cent
<i>Education</i>				
No education	2589	33.2	2565	29.9
1-3 years	299	42.5	245	38.8
4-5 years	518	45.4	500	43.2
6-8 years	255	58.4	227	53.3
9-10 years	188	66.5	154	62.3
11+	40	85.0	28	78.6
<i>Wife's occupation</i>				
Household work	3770	39.0	3600	35.6
Service	36	80.6	37	78.4
Non agricultural labour	68	32.4	70	5.7
Others	22	31.8	14	14.3
<i>Husband's occupation</i>				
Service	667	54.1	574	46.7
Agriculture	1271	34.6	977	31.2
Fisherman	66	34.8	79	41.8
Agricultural labour	602	35.5	653	34.2
Businessman	689	43.8	864	39.8
Non-agricultural labour	539	31.2	537	23.8
Doctor	17	47.1	13	53.8
Others	45	28.9	24	33.3
<i>Religion</i>				
Islam	3228	38.3	3018	35.9
Hindu	542	43.4	595	32.8
Others	126	46.0	108	36.1

*Table 2.6.23. Percentage of Currently Married Women Under 50 Years of Age Who are Currently Using Specific Method by Areas.*

Contraceptive methods	High area		Low area	
	Number of women	Per cent	Number of women	Per cent
<i>Modern methods</i>	1209	31.0	1063	28.6
Oral Pill	403	10.3	389	10.4
Condom	142	3.6	104	2.8
Foam / Jelly / Emko	14	0.4	8	0.2
Vasectomy	57	1.5	29	0.8
Tubectomy	436	11.2	387	10.4
IUD	137	3.5	126	3.4
Injection	17	0.4	19	0.5
MR	3	0.1	1	0.03
<i>Traditional methods</i>	104	2.7	55	1.5
Safe period	68	1.8	28	0.7
Withdrawal	4	0.1	—	—
Abstinence	19	0.5	10	0.3
Others	13	0.3	17	0.5
Any method	1313	33.7	1118	30.1
No method	2586	66.3	2602	69.9
<b>Total</b>	<b>3899</b>	<b>100.0</b>	<b>3720</b>	<b>100.0</b>

Table 2 6.24 Percentage of Currently Married Women Under 50 Years of Age Who are Currently Using Specific Methods of Contraception by Age (High Area).

Age	Number of women	Pill	Condom	Foam/Jelly/Cream	Vasec-tomy	Tubec-tomy	IUD	Injec-tion	M R	Safe period	With-drawal	Absti-nence	Others
15-19	54	42.6	24.1	—	3.7	11.1	12.9	—	—	5.6	—	—	—
20-24	280	37.1	13.2	2.2	1.8	22.5	11.4	1.8	—	6.8	—	2.2	1.1
25-29	382	30.4	11.0	0.5	3.9	31.4	13.6	1.8	—	4.7	0.5	1.3	0.8
30-34	284	28.5	8.5	0.7	5.6	40.5	8.1	1.0	0.4	3.9	0.4	1.7	0.7
35-39	217	26.3	8.3	1.	3.0	41.5	8.3	—	0.5	5.1	—	0.9	1.8
40-44	66	19.7	9.1	1.5	6.1	46.9	4.6	1.5	1.5	6.1	1.5	—	1.5
45-49	30	30.0	6.7	—	2.6	36.7	6.7	3.3	—	6.7	—	3.3	—
Total	1313	30.7	10.8	1.1	4.3	33.2	10.4	1.3	0.2	5.2	0.3	1.5	1.0

Table 2.6.25 Percentage of Currently Married Women Under 50 Years of Age Who are Currently Using Specific Methods of Contraception by Age (Low Area).

Age	Number of women	Pill	Condom	Foam/ Jelly/ Cream	Vasec- tomy	Tubec- tomy	IUD	injec- tion	M.R	Safe period	With- drawal	Absti- nence	Others
15	1	100.0	—	—	—	—	—	—	—	—	—	—	—
15-19	43	39.5	30.2	—	4.7	9.3	4.7	4.7	—	2.3	—	—	4.7
20-24	180	45.6	15.6	1.1	0.6	21.7	10.0	1.7	—	2.2	—	1.7	—
25-29	361	37.4	9.9	0.3	1.7	32.1	11.9	2.2	—	1.7	—	0.6	2.2
30-34	259	30.1	4.2	1.2	1.9	43.6	12.4	1.9	—	3.1	—	1.5	—
35-39	198	28.3	5.1	1.0	6.1	43.9	10.6	—	0.6	2.5	—	—	2.0
40-44	56	28.6	3.6	—	5.4	39.3	8.9	1.8	—	7.1	—	1.8	3.6
45-49	20	20.0	—	—	—	30.0	25.0	—	—	—	—	—	5.0
Total	1118	34.8	9.3	0.7	2.6	34.6	11.3	1.7	0.1	2.5	—	0.9	1.5

122

*Table 2.6.26* Percentage of Currently Married Women Under 50 Years of Age Who are Currently Using a Method by Age and by Areas.

Age	High area		Low area	
	Number of women	Per cent users	Number of women	Per cent users
<15	4	—	3	33.3
15-19	393	13.7	307	14.0
20-24	899	31.1	802	22.4
25-29	974	39.2	1067	33.8
30-34	712	39.9	683	37.9
35-39	542	40.0	539	36.7
40-44	238	27.7	218	25.7
45-49	137	21.9	101	19.8
All	3899	33.7	3720	30.1

Table 2.6.27 Percentage of Currently married Women Under 50 Years of Age Who are Currently Using Specific Methods of contraception by Number of Methods Known (High Area).

Number of methods known	Number of women	Pill	Condom	Foam/Jelly/Cream	Vasectomy	Tubectomy	IUD	Injection	MR	Safe Period	Withdrawal	Abstinence	Others	Never users
0	373	2.7	0.8	--	0.3	3.5	--	--	--	0.5	--	--	0.5	91.7
1	495	8.9	1.4	--	2.0	7.9	3.0	--	0.2	0.2	0.4	0.4	--	75.6
2	890	8.8	1.8	0.2	1.5	11.5	1.8	0.4	--	1.3	--	0.2	0.9	71.6
3	842	8.8	3.0	--	1.3	13.8	3.9	0.3	--	2.4	--	0.6	0.2	65.7
4	682	13.6	5.7	0.3	2.3	12.5	3.4	0.3	0.3	1.5	0.1	0.3	0.2	59.4
5	315	14.9	5.1	1.6	1.2	15.9	7.3	--	3.2	--	1.9	--	47.6	--
6+	302	18.9	11.9	1.7	0.7	4.9	8.9	1.3	--	4.3	0.3	0.7	--	41.4
Total	3899	10.3	3.6	0.4	1.5	11.2	3.5	0.4	0.1	1.8	0.1	0.5	0.3	66.3
Mean	2.8	3.4	3.9	4.8	2.9	3.1	3.8	4.0	3.0	3.7	3.0	3.7	2.0	2.3

134

**Table 2.6.28 Percentage of Currently Married Women Under 50 Years of Age Who are Currently Using Specific Methods of Contraception by Number of Methods Known (Low Area).**

Number of methods known	Number of women	Pill	Condom	Foam/Jelly/Cream	Vasectomy	Tubectomy	IUD	Injection	M.R	Safe Period	Withdrawal	Abstinence	Other	Never users
0	335	0.6	—	—	0.3	1.8	0.6	—	—	—	—	0.6	—	96.1
1	504	4.4	0.6	—	0.6	6.5	1.0	—	—	0.4	—	0.2	0.2	86.1
2	899	11.7	2.0	0.3	0.9	9.0	2.1	0.2	0.1	0.3	—	0.6	0.7	72.1
3	828	10.0	3.4	0.1	0.8	12.7	4.5	0.4	—	0.9	—	0.1	0.4	66.7
4	595	13.1	3.2	0.3	1.2	13.3	4.7	1.3	—	1.0	—	—	0.7	61.2
5	318	16.7	4.1	0.3	0.6	14.1	5.3	1.6	—	1.3	—	0.3	0.6	55.1
6+	241	19.1	9.5	0.5	0.5	15.7	7.5	0.5	—	2.1	—	—	0.5	44.3
<b>Total</b>	<b>3720</b>	<b>10.5</b>	<b>2.8</b>	<b>0.2</b>	<b>0.8</b>	<b>10.4</b>	<b>3.4</b>	<b>0.5</b>	<b>.02</b>	<b>0.7</b>	<b>—</b>	<b>0.3</b>	<b>0.4</b>	<b>69.9</b>
<b>Mean</b>	<b>2.7</b>	<b>3.4</b>	<b>3.8</b>	<b>3.5</b>	<b>2.9</b>	<b>3.3</b>	<b>3.9</b>	<b>4.0</b>	<b>2.0</b>	<b>3.8</b>	<b>—</b>	<b>1.9</b>	<b>3.2</b>	<b>2.4</b>

135

*Table 2.6.29* Percentage of Currently Married Women Who are Currently Using Contraceptive Methods by Number of Living Children and by areas.

Number of living Children	High area		Low area	
	Number of women	Per cent users	Number of women	Per cent users
0	331	6.9	316	5.7
1	638	24.3	624	17.8
2	753	36.8	666	32.9
3	656	42.8	640	35.8
4	508	44.7	515	42.5
5	409	44.3	388	35.1
6	280	32.5	273	33.7
7+	321	24.3	299	31.4

*Table 2.6.30* Percentage of Currently Married Women Under 50 Years of Age Who are Currently Using Contraception by Educational Level and by Areas.

Educational level	High area		Low area	
	Number of women	Per cent	Number of women	Per cent
No education	2589	28.5	2565	25.0
1-3 years	299	35.8	245	31.4
4-5 years	518	37.3	500	36.2
6-8 years	255	48.6	227	44.1
9-10 years	188	53.2	154	51.9
11 years and above	40	80.0	28	71.4

**Table 2.6.31** Percentage of Currently Married Women Under 50 Years of Age Who are Currently Using Contraception by Educational Level and by Areas.

Occupation	High area		Low area	
	Number of women	Per cent	Number of women	Per cent
Household work	3770	32.9	3600	29.6
Service	36	63.9	37	70.3
Non-agricultural labour	68	30.9	70	5.7
Others	22	36.4	14	14.3

**Table 2.6.32** Percentage of Currently Married Women Who are Currently Using Contraceptive Methods by Family's Economic Condition and by Areas.

Economic condition	High area		Low area	
	Number of women	Per cent	Number of women	Per cent
Very rich	109	38.5	100	47.0
Rich	516	39.1	456	38.3
Solvent	1578	34.5	1481	29.0
Poor	1164	30.4	1195	26.5
Very poor	529	28.1	491	26.8

131 -

**Table 2.6.33 Percentage of Currently Married Women By Whether They Have Couple Registration Card by Areas.**

Whether couple registration card have	High area		Low area	
	Number of women	Per cent	Number of women	Per cent
Yes	1316	33.8	1125	30.3
No	2576	66.2	2591	69.7

**Table 2.6.34 Percentage of Currently Married women by Frequency of Visits by the Field Workers, by Areas.**

Frequency of visit	High area		Low area	
	Number	Per cent	Number	Per cent
Once in a month	1107	28.4	1039	28.0
Once in two months	323	8.3	238	6.4
Once in three months	346	8.9	223	6.0
Once in four months	117	3.0	101	2.7
Sometimes	1132	29.1	1171	31.6
Never	869	22.3	939	25.3
All	3894	100.0	3711	100.0

**Table 2.6.35 Percentage Distribution of Respondents According to Their Opinion As to Whether Local Leaders Participate in Family Planning Program.**

Type of leaders	High area		Low area	
	Number	Per cent	Number	Per cent
<i>Union Parishad Chairman / Member</i>				
Yes	1585	40.7	1427	38.4
No	970	24.	905	24.3
<i>School teacher</i>				
Yes	1499	38.5	1332	35.8
No	976	25.1	943	25.3
<i>Religious leader</i>				
Yes	418	10.7	362	9.7
No	2431	62.4	2045	55.0
<i>Local Mathabbar</i>				
Yes	1362	35.0	1158	31.1
No	1016	26.1	933	25.1

**Table 2.6.36 Percentage of Currently Married Women Who are Not Currently Using a Method by Stated Reasons.**

Reasons for not currently using any method	High area N = 2586	Low area N = 2602
Want a child	48.4	49.9
Husband unwilling	19.0	17.1
Health reason	12.1	12.2
Side effect	7.5	8.1
Religious grounds	0.52	16.5
Unable to bear child	2.2	1.5
Family planning methods are not available	2.0	2.6
Breastfeeding	4.9	5.3
Menopause	6.9	8.2
Others	1.7	2.1
Reasons unknown	7.4	8.2

## CHAPTER THREE

### 3.0 MULTIVARIATE ANALYSIS

#### 3.1 INTRODUCTION

Two multivariate statistical techniques—discriminant analysis and factor analysis—will be used in this study for analytical purpose. Discriminant analysis statistically distinguishes between two or more groups of cases. Factor analytic technique, on the other hand, enables us to see whether some underlying pattern of relationships exists such that the data may be reduced to a smaller set of factors that may be taken as source variables accounting for the observed interrelations in the data. The objective for using the two techniques separately is to examine the extent to which the discriminating variables as will be obtainable through the discriminant analysis are similar to the source variables as will be obtained through factor analysis. In this section, the discriminant analysis and the results obtained through its use will be discussed while the factor analysis will be taken up in the next section.

#### 3.2 DISCRIMINANT ANALYSIS

As has been mentioned, the purpose of the discriminant analysis is to distinguish between two or more groups of cases. The groups may be defined on an existing variable. The set of variables on which the groups are expected to differ are selected. These variables, called discriminating variables, are then weighted and linearly combined in such a way as to make the two groups as statistically distinct as possible.

The discriminant function is of the form (Rao)

$$Z = I_1 X_1 + I_2 X_2 + \dots + I_k X_k$$

where  $Z$  is the score on the discriminant function,  $I$ 's are the coefficients of the discriminant function or the weighting coefficients and  $x$ 's are the discriminating variables. The coefficients  $I_k$  are determined so as to maximize the quantity  $(\sum I_i \sigma_i)^2 - \sum \sum I_i I_j \sigma_{ij}$  where  $\sigma_i = \mu_{1i} - \mu_{2i}$ ,  $\mu_{1i}$  and  $\mu_{2i}$  being the mean

values of the  $i$ th variable under the two populations, and  $\sigma_{ij}$  is the covariance between  $X_i$  and  $X_j$  in both the populations under the assumption of equal dispersion matrix within each group. The discriminating variables are assumed to have the distribution given by

$$f(X, \Sigma) = \frac{1}{(2\pi)^{k/2} |\Sigma|^{1/2}} e^{-\frac{1}{2} (X - \mu)' \Sigma^{-1} (X - \mu)}$$

Where  $\mu$  is the mean vector of the vector of discriminating variables. In general the technique is very robust and it is not strictly necessary that the discriminating variables should have the above distribution or that the covariance matrices for the two groups be the same.

The estimation of the coefficients of the discriminant function requires the solution of the following equations

$$S L = D$$

where  $S$  is the pooled dispersion matrix,  $L = (l_1, \dots, l_k)$  is the vector of coefficients of the discriminant function and  $D = (d_1, \dots, d_k)$  is the vector of the differences between the mean values of the two groups in respect of the  $k$  characters.

In the present study, there are two groups that have been based on the variable "Performance of the family planning workers". The areas were classified into three groups, high performance, medium performance and low performance. The extreme groups i.e. the high and low performance groups constituted the two groups in this study.

The variables on which the two groups have been expected to differ are

- $X_1$  = average education of the community leaders
- $X_2$  = average land of the community leaders
- $X_3$  = Percentage of leaders visited by family planning workers
- $X_4$  = percentage of leaders who discussed with family planning workers
- $X_5$  = percentage of leaders who discussed on family planning with workers
- $X_6$  = percentage of leaders advised by the family planning workers
- $X_7$  = percentage of leaders who suggested for agricultural development for the improvement of family planning program
- $X_8$  = percentage of leaders who suggested for educational facility for the improvement of family planning program

- $X_9$  =institutional facility available in the community  
 $X_{10}$  =irrigation facility available in the community  
 $X_{11}$  =total number of medicine shops available in the community  
 $X_{12}$  =total number of paramedics in the community  
 $X_{13}$  =average distance of Upazila headquarter from the community  
 $X_{14}$  =transporation facility with Upazila center  
 $X_{15}$  =community facility (communication and general services)  
 $X_{16}$  =educational facility in the community  
 $X_{17}$  =clinical facility (health and family planning) available in the community  
 $X_{18}$  =total number of doctors providing service in the community  
 $X_{19}$  =average nature of services in family planning in the eyes of community leaders  
 $X_{20}$  =percentage of population literate in the community  
 $X_{21}$  =percentage of population who have newspaper and radio

The F statistic to be used is given by

$$F = \frac{n_1 n_2 (n_1 + n_2 - k - 1)}{k (n_1 + n_2) (n_1 + n_2 - 2)} D^2$$

with  $k$  and  $n_1 + n_2 - k - 1$  degrees of freedom

where

$n_1$  =sample size in the high performance areas

$n_2$  =sample size in the low performance areas

$D^2$  =Mahalanobis  $D^2$

$$= \sum L_k d_k$$

### 3.3 FINDINGS

Table 3.1 shows the standardized discriminant function coefficients. Thus, out of 21 variables, the stepwise procedure has picked up the set ( $X_6, X_7, X_8, X_{11}, X_{14}, X_{16}, X_{21}$ ) of seven variables as the best discriminating set based on the criterion of maximizing the Mahalanobis distance. In other words, this set consists of the variables that best discriminate the two groups—high performance areas and low performance areas. These variables are the percentage of leaders who were advised by the family planning workers ( $X_6$ ), percentage of leaders who suggested for the agricultural development as a means to improve family planning program ( $X_7$ ), percentage of leaders

who suggested for educational facility for the improvement of family planning program ( $X_8$ ), total number of medicine shops available in the community ( $X_{11}$ ), transportation facility with Upazila center ( $X_{14}$ ), educational facility in the community ( $X_{16}$ ), and percentage of population who have newspaper and radio ( $X_{21}$ ).

The fitted discriminant function turns out to be

$$Z = .33681X_6 - .54380X_7 + .44405X_8 - .58752X_{11} + .41611X_{14} + .89200X_{16} - .34168X_{21}$$

The above function indicates that the higher the percentage of leaders advised by the family planning workers for accepting family planning, the higher the percentage of leaders who suggested for educational facility for the improvement of family planning program, the better the transportation facility with the Upazila center and the more the educational facility in community, the higher is the discriminant score. The function also reveals that a smaller percentage of leaders who suggested for agricultural development for the improvement of family planning program, a smaller number of medicine shops available in the community and a smaller percentage of population having newspaper and radio, would contribute to high values of Z.

The value of Mahalanobis  $D^2$  is .81 and its corresponding F is 3.50 which is significant even at .01 level of probability. This means that the seven variables considered together were useful in discriminating the high and low performance groups.

In order to know the relative importance of these 7 variables and their power to discriminate between the two groups, their percentage contribution to the total distance measured has been calculated and is given in Table 3.1. It is evident from the table that among the seven discriminating variables, educational facility in the community is the single most important discriminating variable with 75 percent contribution to the total distance measured. The second highest contribution (6.6 per cent) in the discrimination is of the variable-transportation facility with Upazila center. The variables that rank third and fourth in their contributions are the percentage of leaders who are advised by the family planning workers (6.3 per cent) and the percentage of leaders who suggested for agricultural development as a measure of improvement of the family planning program (5 per cent). Other variables do not

contribute much in the discrimination. Out of the seven variables, only the variable  $X_{16}$  i.e. educational facility in the community has significant different means for the two groups. Means of the two groups for the other discriminating variables were statistically insignificant and as such the results obtained are not unreasonable.

*Table 3.1. Standardized Discriminant Function Coefficients as well as the Relative Contribution of the Individual Variables to the Total Distance Measured.*

Variables ( $X_k$ )	Discriminant function coefficients ( $L_k$ )	Mean difference ( $d_k$ )	$L_k D_k$	Per cent
$X_6$	.33681	-6.5375	2.2019	6.26
$X_7$	-.54380	+3.2531	1.7690	5.03
$X_8$	.44405	---1.6079	0.7140	2.03
$X_{11}$	-.58752	+2.0337	1.1949	3.40
$X_{14}$	.41611	--5.5509	2.3098	6.57
$X_{16}$	.89200	---29.4935	26.3082	74.79
$X_{21}$	.34168	+1.9788	0.6761	1.92

Thus practically, only the educational facility in the community, within the set of variables considered in this study, discriminates the two groups. If we can assume that the availability of educational facilities positively correlates with the proportion of people who are educated, not then probably it will not be unreasonable to infer that education, not only is positively related with the acceptance of family planning methods, as has been found in researches in many countries of the world, but also is positively related with the performance of the family planning workers. This may be because the workers might find it easier to perform their family planning related activities in areas with higher proportion of educated people, which in turn, is likely to build an incentive that accelerates the pace of their activities. The resultant is the better performance of the workers in these areas than in areas with lower proportion of educated people.

### 3.4 FACTOR ANALYSIS

Factor analysis is a statistical technique that attempts to represent relationships among sets of interrelated variables by a small set of relatively independent and interpretable, but not directly observable factors. By a relationship is meant a certain pattern of motion between two or more variables under examination. Such a pattern of motion is expressed in percentages which indicate to what extent the variances of the variable in question are influenced by certain general causal factors. The basic assumption of factor analysis is that there exist underlying dimensions or factors that can be used to explain complex phenomena. Observed correlations between variables result from their sharing these factors (Bennett and Bowers, 1976 ; Herman, 1976 ; Kim and Mueller, 1978, Kim and Kohout, 1975 and Schilderick, 1970).

In general, factor analysis does not begin with the original observations of the variables. It sets about normalizing them in a certain way in order to make a mutual comparison possible. Each of the normalized variables  $Z_i$  ( $i=1, 2, \dots, n$ ) is then related separately to the hypothetical variables or factors. These relations are linear and have the following analytic expression, with the general factors denoted by  $F_j$

$$Z_i = a_{i1} F_1 + G_{i2} F_2 + \dots + G_{im} F_m \quad (1)$$

Only one relationship of variables is derived from each separate factor  $F_j$ . The coefficient  $G_{ij}$  indicate to what extent and in which direction the normalized variables  $Z_i$  are related to factors  $F_j$ .

Factor analysis is based specifically on intercorrelations. It examines the effect of the general factors which are presented in more than one variable at the same time. The question is, whether the general factors have caused certain relationships between the variances of the normalized variables. To solve this problem, one must divide the total variance  $\sigma^2 Z_i$  of the normalized variable  $Z_i$  into three components :

- i. the common variance (or communality)  $h_i^2$ , which represents that part of total variance which associates with the variance of other variables or group of variables ;
- ii. the specific variance (uniqueness)  $S_i^2$ , that part of the total variance which shows no association with the variance of other variables ; and

iii. the part of the total variance which is due to errors in the observations and this is called disturbance term (or error)  $e_i^2$ . The total variance of the  $i$ th normalized variable which equals one—can thus be divided into components as follows :

$$\sigma_{zi}^2 = h_i^2 + S_i^2 + e_i^2 \quad (2)$$

Thus one general causal factor can affect several variables at the same time thereby producing one specific pattern of motion between the variables and conversely, several causal factors can also influence one variable. The components of  $h_i^2$  are equal to the squares of the  $a_{ij}$  coefficients to the corresponding general causal factors  $F_j$

$$h_i^2 = a_{i1}^2 + a_{i2}^2 + \dots + a_{ij}^2 + \dots + a_{im}^2 \quad (3)$$

The technical term for the  $a_{ij}$  coefficients from (1) is factor loading.

### 3.5 THE VARIABLES

The aim of this study is to examine the extent and way in which a number of variables cause variation in the family planning program performance between the areas. The variables used for factor analysis are :

$V_1$  = percentage of ever users

$V_2$  = percentage of current users

$V_3$  = average education of the community leaders

$V_4$  = average land (in decimals) of the community leaders

$V_5$  = percentage of leaders visited by the family planning workers

$V_6$  = percentage of leaders who discussed with family planning workers

$V_7$  = percentage of leaders who discussed on family planning with workers

$V_8$  = percentage of leaders advised by the family planning workers

$V_9$  = percentage of leaders who suggested for agricultural development for the improvement of family planning program

$V_{10}$  = percentage of leaders who suggested for educational facility for the improvement of family planning program

$V_{11}$  = total number of institutional facility available in the community

$V_{12}$  = irrigational facility available in the community

$V_{13}$  = total number of medicine shops available in the community

$V_{14}$  = total number of paramedics in the community

- $V_{15}$  = average distance of Upazila headquarter from the community  
 $V_{16}$  = transportation facility with Upazila headquarter  
 $V_{17}$  = community facility (communication and general services)  
 $V_{18}$  = educational facility in the community  
 $V_{19}$  = clinical facility available (health and family planning) in the community  
 $V_{20}$  = total number of doctors providing services in the community  
 $V_{21}$  = average nature of services in family planning in the eyes of community leaders  
 $V_{22}$  = percentage of population literate in the community  
 $V_{23}$  = percentage of population who have newspaper and radio.

### 3.6 FINDINGS

The rotated factor matrix for twenty three variables is shown in Table 3.2. Each row in the table can be treated as a regression equation in which the variable in the first column is regarded as dependent variable explained by eight general factors. Table 3.2 also shows the percentage of variance attributable to each factor. For instance, the linear combination formed by factor 1 has a variance of 3.57, which is 31.2 per cent of the total variance. The factors are arranged in descending order of variance explained. As evident from the table, that almost 80 per cent of the total variance is attributable to the first four factors. The remaining factors together account for only 20 per cent of the variance. Thus, a model with four factors may be adequate to explain the variation. Several procedures have been proposed for determining the number of factors to be used in a model. The eigen value greater than or equal to one criterion suggests that only factors that account for variance greater than one should be included. Thus, the four factors used to describe between variation is shown in Table 3.3 Each row of Table 3.3 contains the coefficients used to express a variable in terms of the factors. These coefficients are called factor loadings, since they indicate how much weight is assigned to each factor. Factors with large coefficients for variable are closely related to the variable. For example, Factor 1 is highly associated with the variable community facility (communication and general services) and educational facility available in the community. The matrix

of the factor loadings is called the factor pattern matrix. When the estimated factors are uncorrelated with each other, the factor loadings are also the correlations between the factors and the variables. Thus, the correlation between the variable-total number of paramedics in the community and Factor 1 is 0.549. Similarly there is a negligible correlation (.016) between the number of paramedics in the community and Factor 2. The matrix of correlation between variables and factors are called the factor structure matrix.

To judge how well the four factor model describes the original variables, we can compute the proportion of the variance of each variable explained by the four-factor model. Since the factors are uncorrelated, the total proportion of variance, explained is just the sum of the variance explained by each factor. For instance, the variable total number of paramedics in the community accounts for 30.1 percent of the variance for this variable in Factor 1. This is obtained by squaring the correlation coefficient for Factor 1 and the variable-total number of paramedics in the community (0.549). Similarly, Factor 4 explains less than a per cent (0.38) of the variance. The total percentage of variance in the variable-total number of paramedics in the community-accounted for by this four-factor model is therefore only 31 percent. The proportion of variance explained by the common factors is called the communality of the variable. The communalities for the variables are also shown in Table 3.3 together with the percentage of variance accounted for by each of the retained factors.

The factor model and the correlations between the factors and the variables can be used to estimate the correlations between the variables. It should be noted that one of the basic assumptions of factor analysis that observed correlation between variables is due to the sharing of common factors. In general, if factors are orthogonal, the estimated correlation coefficient for

$$\text{variable } i \text{ and } j \text{ is } r_{ij} = \sum_{f=1}^k r_{fi} r_{fj} = r_{1i}r_{1j} + r_{2i}r_{2j} + \dots + r_{ki}r_{kj}$$

where  $k$  is the number of common factors and  $r_f$  is the correlation between the  $f$ th factor and the  $i$ th variable.

For example, the estimated correlation coefficient between transportation facility with Upazila headquarter and clinical facility (health and family planning program), based on the four factor model, is

$$\begin{aligned}
 r_{18,18} &= (.518)(.789) + (-.164)(.053) + (.198)(.161) + (-.010)(.083) \\
 &= .409 - .009 + .032 - .001 \\
 &= .431
 \end{aligned}$$

The observed correlation coefficient between transportation facility with Upazila headquarter and clinical facility (health and family planning program) is .363, the difference between the observed correlation coefficient and that estimated from the model is about .068. This difference is called a residual.

The proportion of the total variance explained by each factor can be derived from the factor matrix. In order to identify the factors, it is necessary to group the variables that have large loadings for the same factors. The factor analysis was carried out in this study through the principal component method with orthogonal equimax rotation.

The variables – community facility (communication and general services), educational facility in the community, total number of medicine shops in the community and total number of doctors providing services in the community have high factor loadings (or correlation coefficients) with Factor 1. For instance, the high factor loading (.79) between the variable - educational facility in the community—and Factor 1 suggests that educational level is an important determinant of the variation in the family planning program performance between the two areas (i. e. high area and low area). The relationships between the variables and their underlying factors are expressed in terms of communality. Communality indicates the proportion of each variable involved in the factor patterns. For the variable—educational facility in the community—accounts for 9 percent of the variation in the factor patterns. Two variables, such as the total number of paramedics in the community and per cent literate have a modest relationship with Factor 1. More than 31 percent of the variance accounts for the Factor 1.

Factor 2 suggests that variables—percentage of leaders who discussed with family planning workers and the percentage of leaders visited by the family planning workers—are highly associated with Factor 2 indicating that these two variables are affecting variation in program performance between the two areas.

About 22 percent of the total variance is attributed to Factor 2. Although the broad dimensions as above are identifiable in the data set by factor analysis, certain variables which have bearing on more than one dimension

are evident from the size of factor loadings. The variables which have clustered in Factor 1 and Factor 2 are seen to have modest relationship with the family planning program variables in Factor 3. Only two variables have modest relationship with Factor 3 and these are average distance of Upazila headquarter from the community and percentage of leaders who discussed with family planning workers.

Factor 4 makes very little contribution in the variation. The variables which have high factor loading on Factor 4 are percentage of leaders who suggested for agricultural development for the improvement of family planning program and percentage of leaders who suggested for educational facility in the community to influence family planning program. These are the two variables which contribute to Factor 4 in influencing family planning program in the community and are causing variation between the two areas.

Since one of the goals of factor analysis is data reduction, it is often useful to estimate factor score coefficients for each variable. In order to construct the factor score coefficients, the variables were first standardized or expressed in terms of standard deviation; then the linear combinations of the weighted average of the standardized variables were obtained. The weights or factor score coefficients, are derived from the factor loading by applying least squares solution (Harman, 1967). The factor score coefficients thus obtained are subject to normal distribution with zero mean and unit standard deviation. Table 3.4 shows the factor score coefficients for the variables which are causing variation in program performance between the two areas.

The factor coefficients suggest that community characteristics such as educational facility, total number of medical shops, total number of doctors and community facility (communication and general services) have low weights while program variables such as discussion of family planning workers with leaders, frequency of visits by the workers and the distance of Upazila headquarter from the community have heavy weights.

Table 3.2. Equimax Rotated Factor Matrix.

Variables	Factors								Community $h_i^2$
	F <sub>1</sub>	F <sub>2</sub>	F <sub>3</sub>	F <sub>4</sub>	F <sub>5</sub>	F <sub>6</sub>	F <sub>7</sub>	F <sub>8</sub>	
V <sub>01</sub>	.209	.796	-.522	.070	.069	.171	.045	.635	.992
V <sub>02</sub>	.247	.735	-.510	.099	-.021	.053	.064	.117	.892
V <sub>03</sub>	.179	.286	.077	.215	.171	-.073	-.024	.032	.202
V <sub>04</sub>	-.078	.144	.118	-.105	.242	.022	.074	-.031	.117
V <sub>05</sub>	-.207	.662	.330	-.004	-.109	-.079	-.062	.074	.617
V <sub>06</sub>	-.269	.713	.489	-.154	-.162	-.025	-.163	.151	.939
V <sub>07</sub>	-.294	.405	.342	-.138	-.213	-.025	-.019	.053	.436
V <sub>08</sub>	.050	.110	-.154	.223	.181	.151	-.102	-.112	.166
V <sub>09</sub>	-.077	-.056	.286	.766	.209	.034	.040	.076	.687
V <sub>10</sub>	-.283	.038	.164	.649	.132	-.117	-.087	-.027	.569
V <sub>11</sub>	.090	.113	.380	-.031	.100	-.059	.197	.045	.221
V <sub>12</sub>	.252	.138	.007	-.046	.281	-.378	.143	-.010	.327
V <sub>13</sub>	.618	-.144	.096	-.105	.171	-.139	-.001	.021	.472
V <sub>14</sub>	.549	.016	-.058	-.062	.057	-.083	-.069	.086	.359
V <sub>15</sub>	-.072	.066	.508	-.244	.478	.411	.028	.082	.732
V <sub>16</sub>	.518	-.164	.161	-.010	-.243	-.023	-.242	.328	.547
V <sub>17</sub>	.723	-.105	.139	.063	-.034	-.042	.179	-.080	.588
V <sub>18</sub>	.789	.053	.198	.054	-.019	.007	.138	-.062	.690
V <sub>19</sub>	.344	-.038	.112	.083	-.339	.162	.253	-.032	.449
V <sub>20</sub>	.658	.098	.094	.020	-.037	.141	-.374	-.212	.659
V <sub>21</sub>	.263	-.028	.202	.144	-.249	.240	-.094	.216	.307
V <sub>22</sub>	.578	.192	.146	.006	-.039	.009	-.127	-.001	.410
V <sub>23</sub>	.106	.001	.013	-.066	-.012	0.31	.125	.236	.088
Eigen value	3.57	2.54	1.73	1.29	0.82	0.58	0.48	0.45	
Per cent variance	31.2	22.2	15.1	11.2	7.1	5.0	4.2	4.0	

Table 3.3 Equimax Rotated Factor Matrix.

Variables	Factors				Community $h^2_i$
	F <sub>1</sub>	F <sub>2</sub>	F <sub>3</sub>	F <sub>4</sub>	
V <sub>01</sub>	.209	.796	-.522	.070	.955
V <sub>02</sub>	.247	.735	-.510	.099	.853
V <sub>03</sub>	.179	.286	.077	.215	.178
V <sub>04</sub>	-.078	.144	.118	-.105	.072
V <sub>05</sub>	-.207	.662	.330	-.004	.590
V <sub>06</sub>	-.269	.713	.489	-.154	.844
V <sub>07</sub>	-.244	.405	.342	-.138	.386
V <sub>08</sub>	.050	.110	.154	.223	.088
V <sub>09</sub>	-.077	-.056	.286	.766	.678
V <sub>10</sub>	-.283	.038	.164	.649	.530
V <sub>11</sub>	.090	.113	.380	-.031	.166
V <sub>12</sub>	.252	.138	.007	-.046	.085
V <sub>13</sub>	.618	-.144	.096	-.105	.423
V <sub>14</sub>	.549	.016	-.058	-.062	.309
V <sub>15</sub>	-.072	.066	.508	-.244	.327
V <sub>16</sub>	.518	-.164	.161	-.010	.321
V <sub>27</sub>	.723	-.105	.139	.063	.557
V <sub>18</sub>	.789	.053	.198	.054	.667
V <sub>19</sub>	.344	-.038	.112	.083	.139
V <sub>20</sub>	.658	.098	.094	.020	.452
V <sub>21</sub>	.263	-.028	.202	.144	.131
V <sub>22</sub>	.578	.192	.146	.006	.392
V <sub>23</sub>	.106	.001	.013	-.066	.016
Eigen value	3.57	2.54	1.73	1.29	
Per cent	31.2	22.2	15.1	11.2	
Variance					
Cumulative	31.2	53.4	68.5	79.7	
variance					

*Table 3.4. Factor Score Coefficients.*

Variables	Factors			
	F <sub>1</sub>	F <sub>2</sub>	F <sub>3</sub>	F <sub>4</sub>
V <sub>01</sub>	1.145	-0.072	0.045	0.129
V <sub>02</sub>	-0.133	0.018	-0.120	-0.171
V <sub>03</sub>	0.026	0.020	0.053	-0.056
V <sub>04</sub>	-0.036	-0.015	-0.037	-0.027
V <sub>05</sub>	0.004	0.095	-0.162	-0.019
V <sub>06</sub>	-0.090	0.865	0.298	0.064
V <sub>07</sub>	-0.048	0.076	-0.053	0.018
V <sub>08</sub>	-0.010	-0.057	0.039	-0.002
V <sub>09</sub>	0.079	0.017	0.019	0.109
V <sub>10</sub>	0.007	-0.048	0.002	-0.100
V <sub>11</sub>	-0.042	-0.018	-0.079	0.030
V <sub>12</sub>	0.011	0.019	-0.057	-0.045
V <sub>13</sub>	0.017	-0.013	0.110	-0.019
V <sub>14</sub>	-0.011	-0.008	0.081	-0.090
V <sub>15</sub>	0.038	-0.133	0.048	-0.062
V <sub>16</sub>	-0.044	0.086	0.269	-0.175
V <sub>17</sub>	-0.038	-0.094	-0.078	0.251
V <sub>18</sub>	0.002	0.054	0.063	0.331
V <sub>19</sub>	-0.005	0.047	0.121	0.433
V <sub>20</sub>	0.001	-0.050	0.519	0.038
V <sub>21</sub>	0.026	0.050	0.004	0.085
V <sub>22</sub>	-0.017	0.018	0.126	-0.023
V <sub>23</sub>	0.018	0.063	0.008	-0.008

## CHAPTER FOUR

### 4.0 CONCLUSION AND POLICY RECOMMENDATION

#### 4.1 CONCLUSION

The objective of the study was to identify the causes of differential performance of the family planning workers in Upazilas. But due to the lack of availability of sufficient information, 'percentage of target achieved' was used as a substitute measure of the workers performance. On the basis of this measure "percentage of target achieved" Upazilas were classified as belonging to high performing and low performing areas. This measure has a methodological flaw since a group of field workers in a given Upazila may be highly productive but may still not be considered as high performing, if their target was set extremely high. Because of this methodological problem, the following results of this study should be taken with caution.

The findings of the study suggest that the two areas differ in respect of community characteristics such as average distance to the clinics, communication facility, general services and education facilities. These differences are likely to have contributed to the variation of the family planning program performance between the two areas. The results of the discriminant and factor analyses also support this view. Although the characteristics of the leaders did not substantially contribute to the variation in the family planning program performance between the two areas, leaders' interaction with the family planning workers and their (leaders) concern about the agricultural development and educational facilities were found to be important discriminators.

#### 4.2 POLICY RECOMMENDATION

- i. The upazila level offices and the field level workers are dissatisfied with their present salary, designation and training. This may have affected their job performance. Proper steps should therefore, be taken to improve the job satisfaction of the officers and workers.

- ii. There are evidences that the integration of health and family planning department has been affecting the program management. As such re-thinking on the integration of the two departments is needed.
- iii. Mis-understanding of the religious belief is still dominant among the rural communities. Arrangements should be made to remove these mis-understandings through proper training, motivation and communication.
- iv. It was revealed that the MCH and nutrition services are poor. Necessary steps should be taken to improve the quality of these services.
- v. A substantial proportion of the currently married women are not using any method of contraception due to fear of side effects. Workers should be well-trained to suggest proper measures for the side effects and the clients should be provided with followup services and advice as a part of the existing health and family planning program.
- vi. The current contraceptive prevalence may be increased if regular field visits and supervision are ensured.
- vii. The involvement of community leaders and their participation in the health and family planning program may help in successful implementation of the program.
- viii. The analysis has indicated that educational facilities have the greatest impact on the performance of the family planning workers. Also many researches have shown the positive impact of education on the use of contraception. Thus, increase in educational facilities might be significant pre-requisite for better performance of the family planning workers as well as for higher acceptance of the family planning methods. As such, considerable stress to increase the educational facilities should be given for the success of the family planning program as a whole.

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