

Maneke Book

8 2 2

B D 8 9

A BASELINE SURVEY ON WATER USE, SANITATION
AND PERSONAL HYGIENE AWARENESS IN SIX VILLAGES
OF GODAGARI AND SHERPUR UPAZILAS OF RAJSHAHI
AND BOGRA DISTRICTS

LIBRARY
INTERNATIONAL REFERENCE CENTRE
FOR COMMUNITY WATER SUPPLY AND
SANITATION (IRC)

Main Report

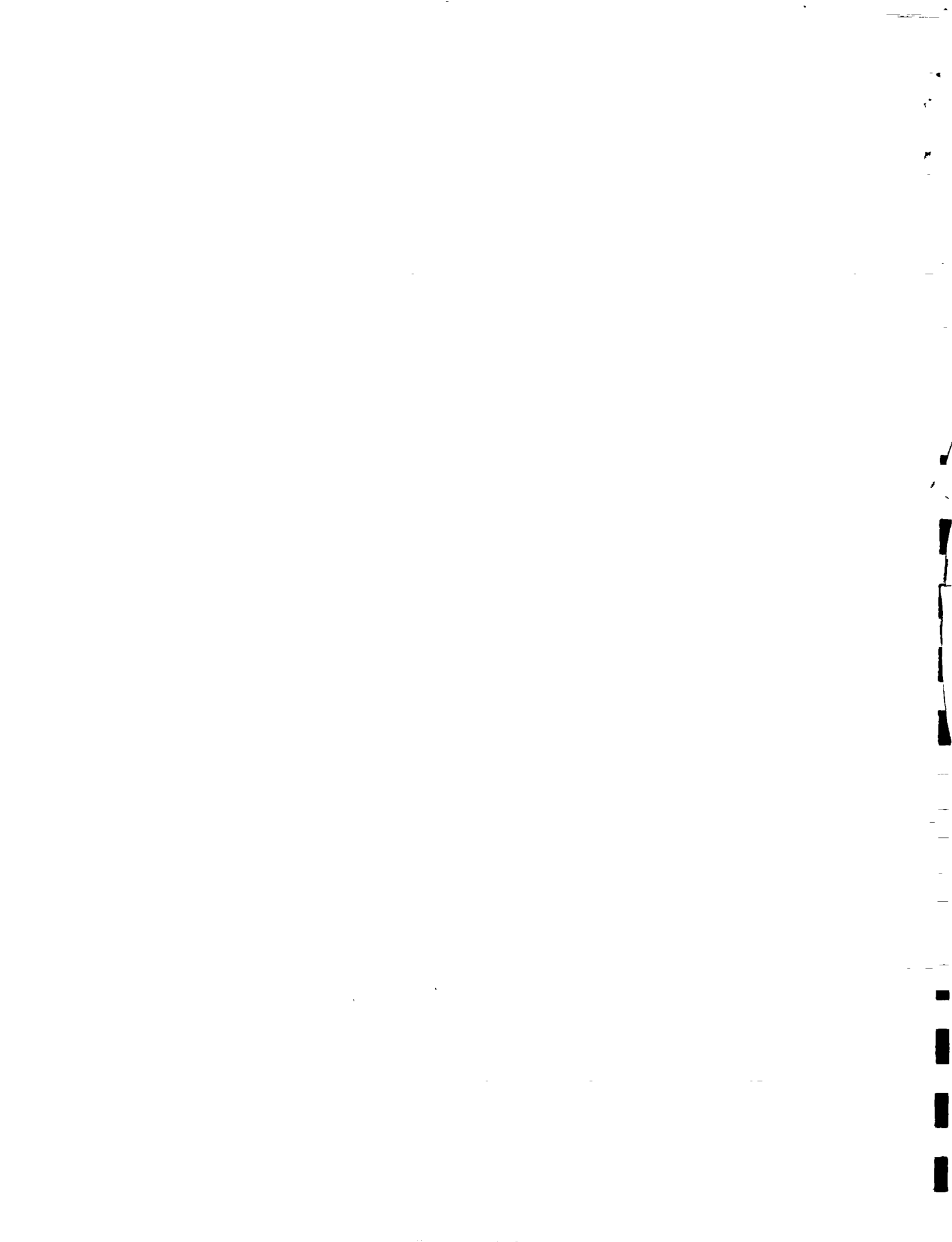
Prepared by:

Dr. A.H.M. Zehadul Karim
Associate Professor
Department of Sociology
Rajshahi University

Short Term Consultant, UNICEF

UNICEF
Bogra/Dhaka
1989

822-BD89-6719



FOREWORD

June 23, 1989

Collins
Chief
Water & Environmental
Sanitation Section, UNICEF
Dhaka, Bangladesh

LIBRARY, INTERNATIONAL REFERENCE
CENTRE FOR COMMUNITY WATER SUPPLY
AND SANITATION (IRC)
P.O. Box 93190, 2509 AD The Hague
Tel. (070) 814911 ext 141/142

ISBN: 6719.

LO: 022 BD89



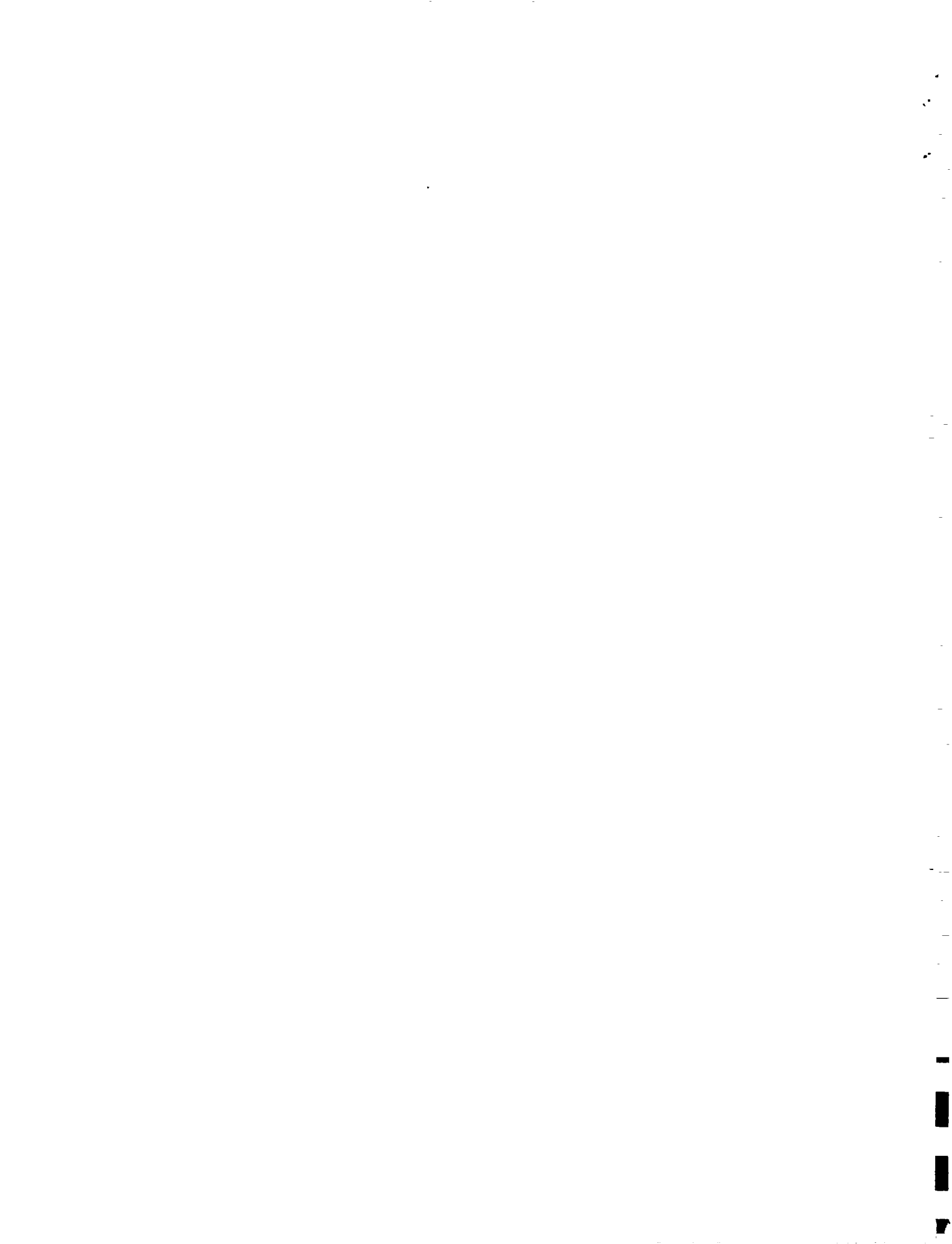
TABLE OF CONTENTS

<u>Chapter</u>	<u>Page</u>
Foreword	ii
Table of Contents	iii
List of Tables	
Executive Summary	
 Chapter 1 : Introduction	 1
1.1 Introductory Background	1
1.2 The Context of the Present Research	2
1.3 Field, Site, Methodology and Data Sources	2
1.4 Criterion in Selection of Villages	3
1.5 Data Collection	3
1.6 Data Analysis	4
1.7 The Report	4
1.8 Major Objectives of the Study	4
 Chapter 2 : Socio-Economic and Demographic Notes on Villages	 6
2.1 Demographic Notes on Villages	6
2.2 Occupation	7
2.3 Landownership Pattern	7
 Chapter 3 : The Pattern of Water Use	 10
3.1 Water Use by Source and Purpose	10
3.2 Reasons for Not Drinking Tubewell Water	10
3.3 Average Daily Per Family Water Consumption	13
3.4 Whether the Villagers are Aware that Surface Water is Bad for Health	16



TABLE OF CONTENTS (Contd.)

	<u>Page</u>
3.5 Types of Tubewell Used ...	17
3.6 Tubewell Ownership Status ...	17
3.7 The Availability of Water in Tubewells	18
3.8 Distance of Tubewell from Users House	19
3.9 Reasons for Preferring Tubewells within Respondents' Own Premises ...	20
3.10 Whether the Villagers are Willing to Buy Tubewells ...	21
3.11 The Amount of Money a Family is Willing to Pay for Buying a Tubewell ...	22
 Chapter 4 : Village Sanitation at Family Levels	 24
4.1 Defecation Practices Among the Villagers	24
4.2 Awareness of Danger in Indiscriminate Defecation ...	25
4.3 Whether the Villagers Will Give up Indiscriminate Defecation if they are Supplied with Latrines ...	25
4.4 Latrine Construction Plan ...	26
4.5 Reasons for Not Buying Sanitary Latrine	27
4.6 Whether the Respondents are Aware about Public Health Department as Latrine Supplier ...	28
4.7 Whether the Villagers are Willing to Buy Latrine from Public Health	29
4.8 The Amount of Money a Family is Willing to Pay for Buying a Latrine ...	30
4.9 Villagers Suggestions for Popularizing Latrine Use ...	30



LIST OF TABLES (Contd.)

	<u>Page</u>
Chapter 5 : Personal Hygiene Awareness of the Villagers	33
5.1 Wheather the Villagers Wash Hands Before Eating Meal ...	33
5.2 Wheather the Villagers Wash Hands with Soap Before Eating Meal ...	33
5.3 Using Soap at the Time of Bathing	34
5.4 Monthly Soap Consumption Pattern in Family ...	35
5.5 How do the Villagers Clean Hands After Defecation ...	35
5.6 Where do the Villagers Wash Children's Soiled Clothes ...	37
5.7 Distance of Latrine from Kitchen & Water Source ...	39
5.8 Practices in Disposing Garbage	39
5.9 Wheather the Villagers can Prepare Saline at Home ...	41
5.10 Where from Did the Respondents Learn to Prepare Saline ...	42
5.11 On What occasions do the Villagers Use Slipper ...	43
Chapter 6 : Concluding Recommendation ...	45
References and Endnotes ...	46



LIST OF TABLES

<u>TABLES</u>	<u>Page</u>
1. Demographic Notes on Villages ...	6
2. Principal Occupation of Household Heads ...	8
3. Landownership Pattern ...	9
4. Water Use by Source and Purpose ...	11
5. Reasons for Not Drinking Tubewell Water ...	13
6. Total Water Use in the Village ...	14
7. Villagers' Awareness Regarding the Effect of Surface Water ...	16
8. Type of Tubewell Used ...	17
9. Tubewell Ownership Status ...	18
10. The Availability of Water in Tubewell ...	19
11. Distance of Tubewells from User's House ...	20
12. Reasons for Preferring Tubewells with the Respondent's Own Premises ...	21
13. Whether the Villagers are Willing to Buy Tubewells	22
14. The Amount of Money a Family is Willing to Pay for Buying a Tubewell ...	23
15. Defecation Practices Among the Villagers ...	24
16. Awareness of Danger in Indiscriminate Defecation	25
17. Whether the Villagers will give up Indiscriminate Defecation if they are Supplied with Latrine	26
18. Latrine Construction Place ...	27
19. Reasons for Not Buying Sanitary Latrine ...	28
20. Whether the Respondents are Aware of Public Health Department as Latrine Supplier ...	29
21. Whether the Villagers are Willing to Buy Latrine from Public Health ...	30



<u>TABLES</u>	<u>Page</u>
22. The Amount of Money a Family is Willing to Pay for Buying a Latrine	31
23. Villagers' Suggestions for Popularizing Latrine Use	32
24. Wheather the Villagers Wash Hands Before Eating Their Meal	33
25. Wheather the Villagers Wash Hands with Soap Before Eating Their Meal	34
26. Using Soap at the Time of Bathing ...	34
27. Monthly Soap Consumption Pattern in Family ...	35
28. How the Respondents Clean Hands After Defecation	36
29. Where do the Villagers Wash Children's Soiled Clothes	37
30. Distance of Latrine from Kitchen and Water Source	38
31. Practices in Disposing Garbage ...	41
32. Wheather the Respondents Can Prepare Saline at Home	42
33. Where from Did the Respondents Learn to Prepare Oral Saline	43
34. On What Occasions do the Villagers Use Slipper	44

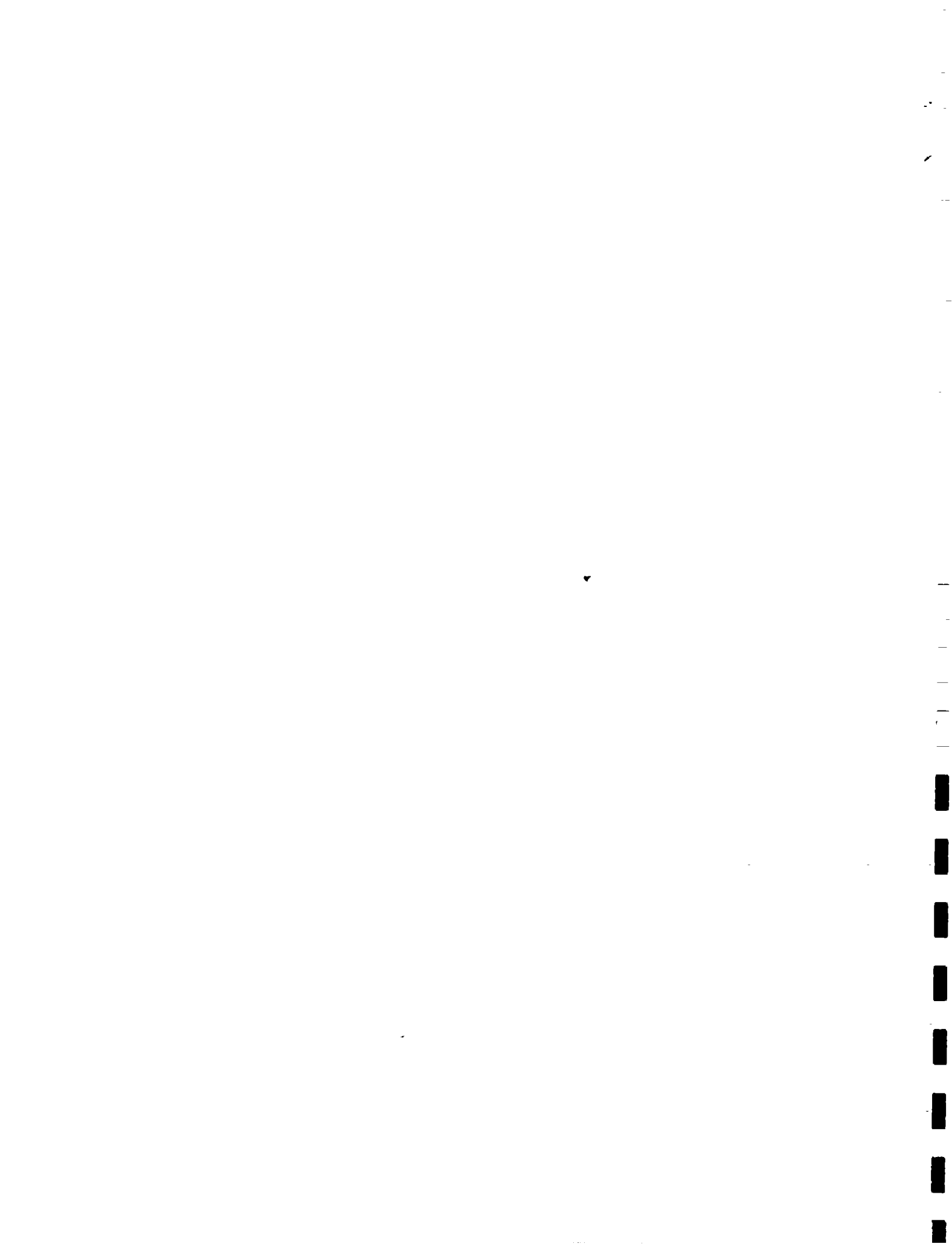


Executive Summary

This study on water use, sanitation and personal hygiene awareness has been conducted in six villages of Godagari and Sherpur Upazilas of Rajshahi and Bogra Districts.

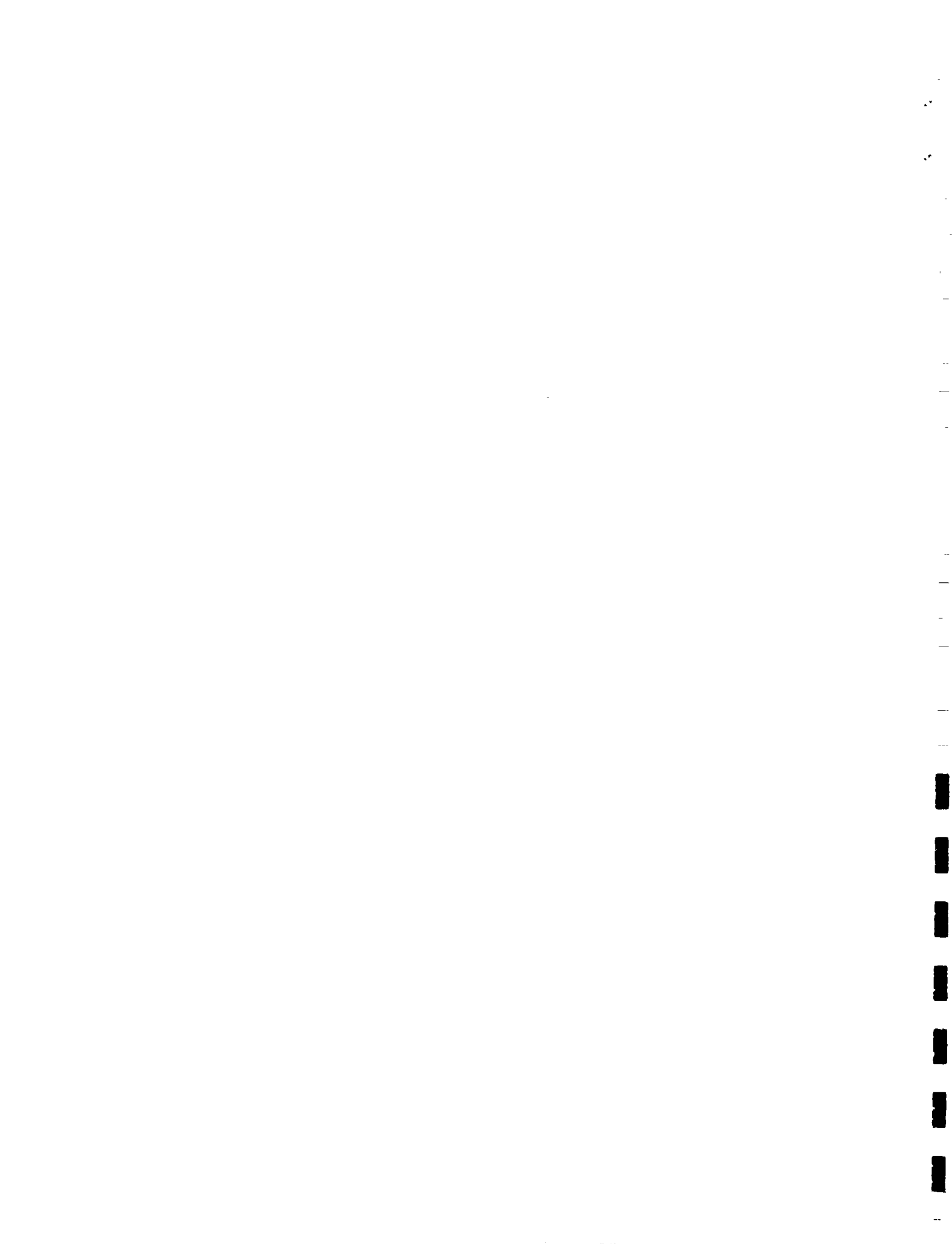
Like other parts of the country, the people of Godagari and Sherpur villages consume water for drinking, cooking, washing, bathing and for religious purpose. It is revealed from the survey that 64.17 per cent households in Godagari villages and 82.67 per cent households in Sherpur villages claim to use tubewell water for drinking. ~~About 92 per cent in Godagari villages and 90 per cent in Sherpur villages~~ admitted that ~~they are well aware about the bad effect of surface water.~~ The survey indicated that the most popular type of tubewell in the study villages is 'Tara'. The villagers expressed their willingness to install tubewell within the premises of their own houses. The reasons are to maintain purdah and it is physically convenient for the women to carry water at home as well.

The survey further indicated that 38 per cent Godagari villagers and 17 per cent Sherpur villagers use a fixed place or latrine for defecation. The remaining 62 per cent families in Godagari and 83 per cent Sherpur families defecate in fields, streets, bushes, ditches, beside the pond and in places depending on their convenience. The survey also showed that only 36.48 per cent Godagari families and 13 per cent Sherpur families have their own latrine. Regarding suggestions for popularizing latrine use, 21.82 per cent Godagari villagers and 15.67



per cent Sherpur villagers advocated the use of mass media for popularizing latrine use in the villages. About 36 per cent in Godagari and 46 per cent in Sherpur villages suggested for seeking help of extension workers to popularize latrine use.

The villagers have very low awareness in personal hygiene. Although majority of the villagers claim that they wash hands before eating their meal, only 18.15 per cent Godagari villages and 11.67 per cent in Sherpur villages admitted that they use soap in washing hands before eating meal. A great majority of the respondents (i.e., 41% in Godagari and 53 % in Sherpur) were found to dispose garbage beside their yard.



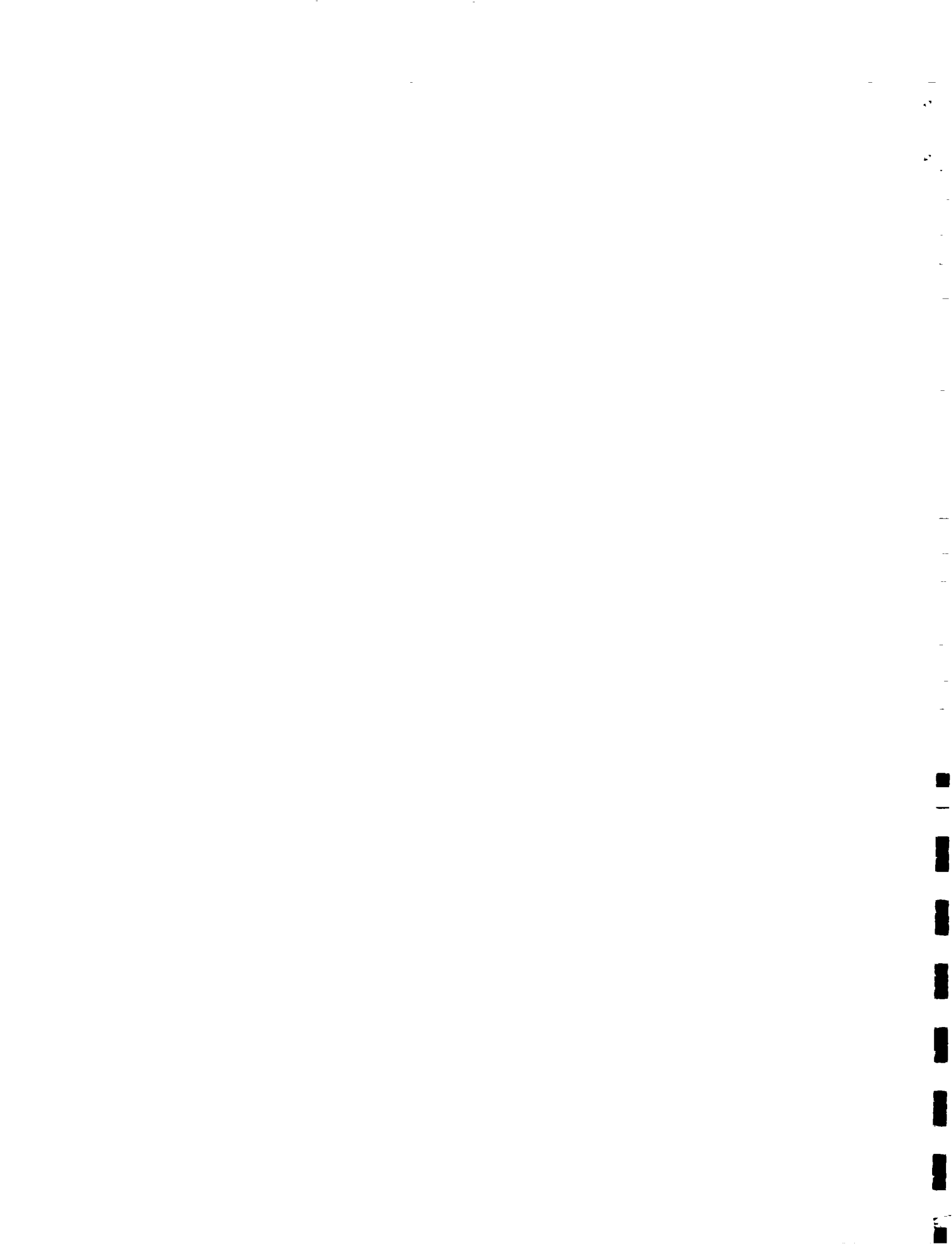
Chapter 1

Introduction

1.1 Introductory Background:

Water, sanitation and personal hygiene are related variables for preservation and promotion of good health. But level of awareness on this integrated approach is surprisingly poor in Bangladesh. DPHE-UNICEF-DANIDA¹ conducted a survey on water, sanitation and hygiene in 1986. When the respondents in that survey were asked to name activities that promote good health: only 25 per cent men and 9 per cent women correlated 'drinking tubewell water' with 'good health.' Similarly, in the same survey, less than 10 per cent of the respondents mentioned 'using latrine' or 'general cleanliness' as a practice for promoting good health. Thus it indicates clearly that the villagers in Bangladesh are yet to receive knowledge on health education, water use and sanitation practices. And it also further suggests that the social scientists and researchers should consider water use, sanitation and personal hygiene context as one of the important fields of their study.

The public sector involvement in water use and sanitation in rural Bangladesh dates back to the year 1953, when a sanitation project entitled Who-Cholera Project was undertaken in Jhalukathi in Barisal District. Later on, such projects were also carried out by the ICDDR², DPHE,³ UNICEF,⁴ DANIDA⁵ and others.⁶ And until recently, UNICEF has been conducting both independent and collaborative projects on water use, sanitation and on personal hygiene awareness in rural Bangladesh.



1.2 The Context of the Present Research:

This baseline survey on water use, sanitation and personal hygiene at the village level is sponsored by the UNICEF-Bangladesh and it has been conducted under the direct supervision of its zonal office at Bogra. The field data were collected from three villages of Godagari Upazila in Rajshahi District and three villages of Sherpur Upazila in Bogra District.

This research has provided information on water use, sanitation practices and the extent of personal awareness of the villagers at family levels in rural Bangladesh. More specifically, the study provided data on the situation of drinking water, pattern of water use and to locate the hygiene awareness of the villagers in using tubewell water. Consequently, the present survey is also concerned with rural water supply service by tubewell types. It has further provided information on the extent and type of latrine used by the villagers. The study also focused on the awareness and extent of health education knowledge of the villagers. And finally, this research integrated people's opinions and options towards improving water situation, latrine use and personal hygiene awareness at the practice level.

1.3 Field Site, Methodology and Data Sources:

As indicated before, data for this research have been gathered from six villages of Godagari and Sherpur Upazilas respectively from Rajshahi and Bogra Districts in northern part of the country. Three villages from three different unions of Godagari Upazila and three



villages from three different unions of Sherpur Upazila are the study locale. The Godagari village are: Nabagram, Domkuli and Diar Mohobbotpur. And the Sherpur villages are : Garoi, Rajapur and Khordo Bogra.

1.4 The Principal Criterion Applied in Selecting the villages are :

- a. Three villages from three different unions of the specified Upazilas have been selected.
- b. We have purposively chosen three middle and small sized villages to restrict our sample size to approximately 300 households in each Upazila.
- c. The selection of both Godagari and Sherpur Upazilas are specified by the UNICEF strategically to receive feasible opinion responses on their ongoing programs in that area.

1.5 Data Collection :

The research is principally based on survey. An all-inclusive structured interview was conducted in all the six selected villages of Godagari and Sherpur Upazilas. All heads of the households in each village were interviewed extensively to receive responses relating to their water use, sanitation and personal hygiene at family levels. Data on socio-economic and demographic aspects of the villages have also been gathered. The survey responses were often rechecked and verified through observation by the interviewers.

The field data were collected by six field investigators of which, five are male and one is a female. The investigators are honours graduates of the university and the UNICEF consultant of this study



trained them properly. The field work was carried out in December 1988 through January 1989.

1.6 Data Analysis :

Field data were hand-processed and tabulated with the help of four experienced tabulators.

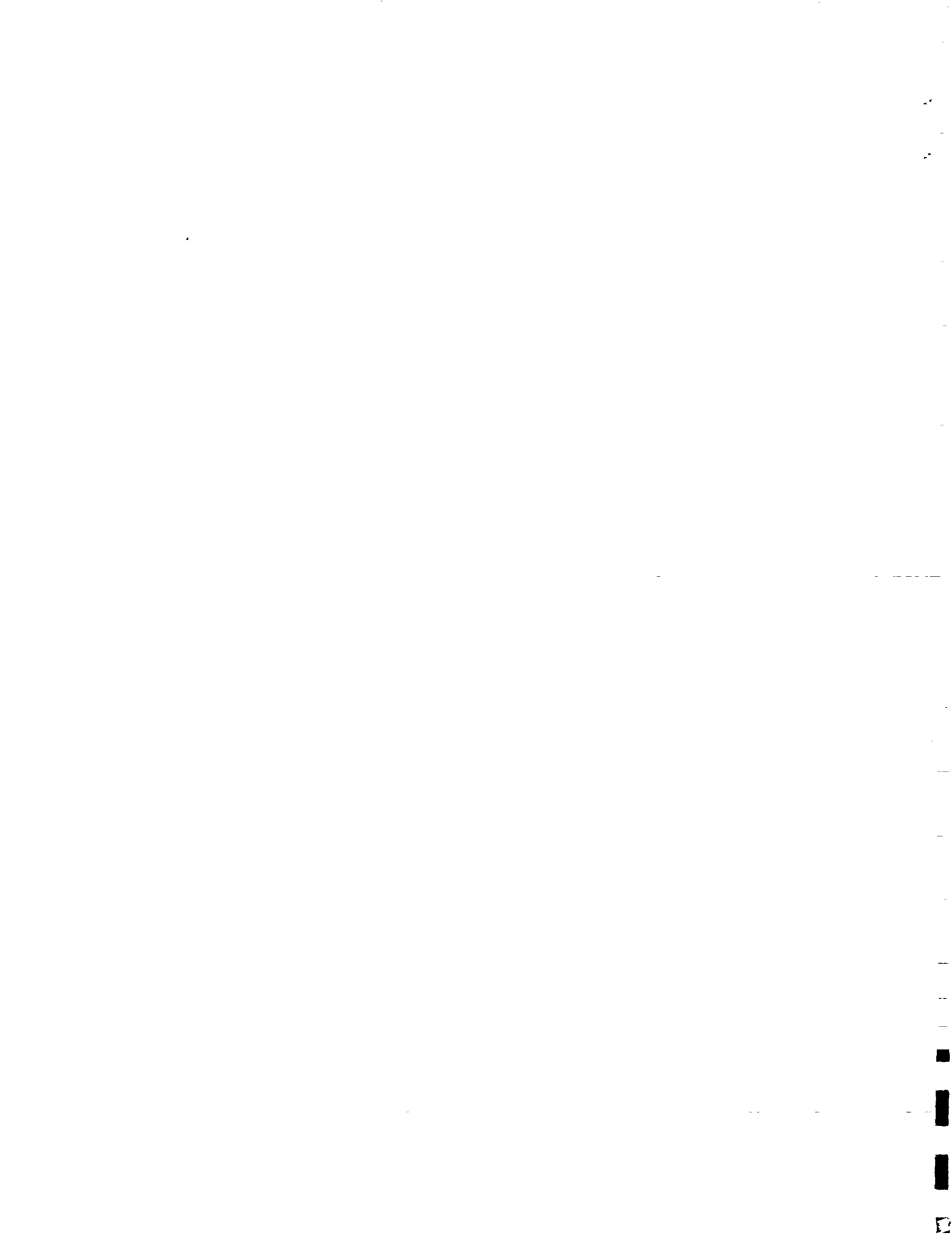
1.7 The Report :

The Report covered a wide range of statistically presentable information. The quantitative data were presented in bi-variate and simple tables. Both quantitative and qualitative data were analysed in the report. The report provided an executive summary of the research and it further contains six major sections. Section 1 introduces the problem of the study, field of the study its methodology and steps in data collection. Section 2 provided socio-economic and demographic data on the study villages. Section 3 is an analysis on water use. Section 4 focused on sanitation and section 5 provided data on personal hygiene awareness of the villagers. Section 6 is a conclusion.

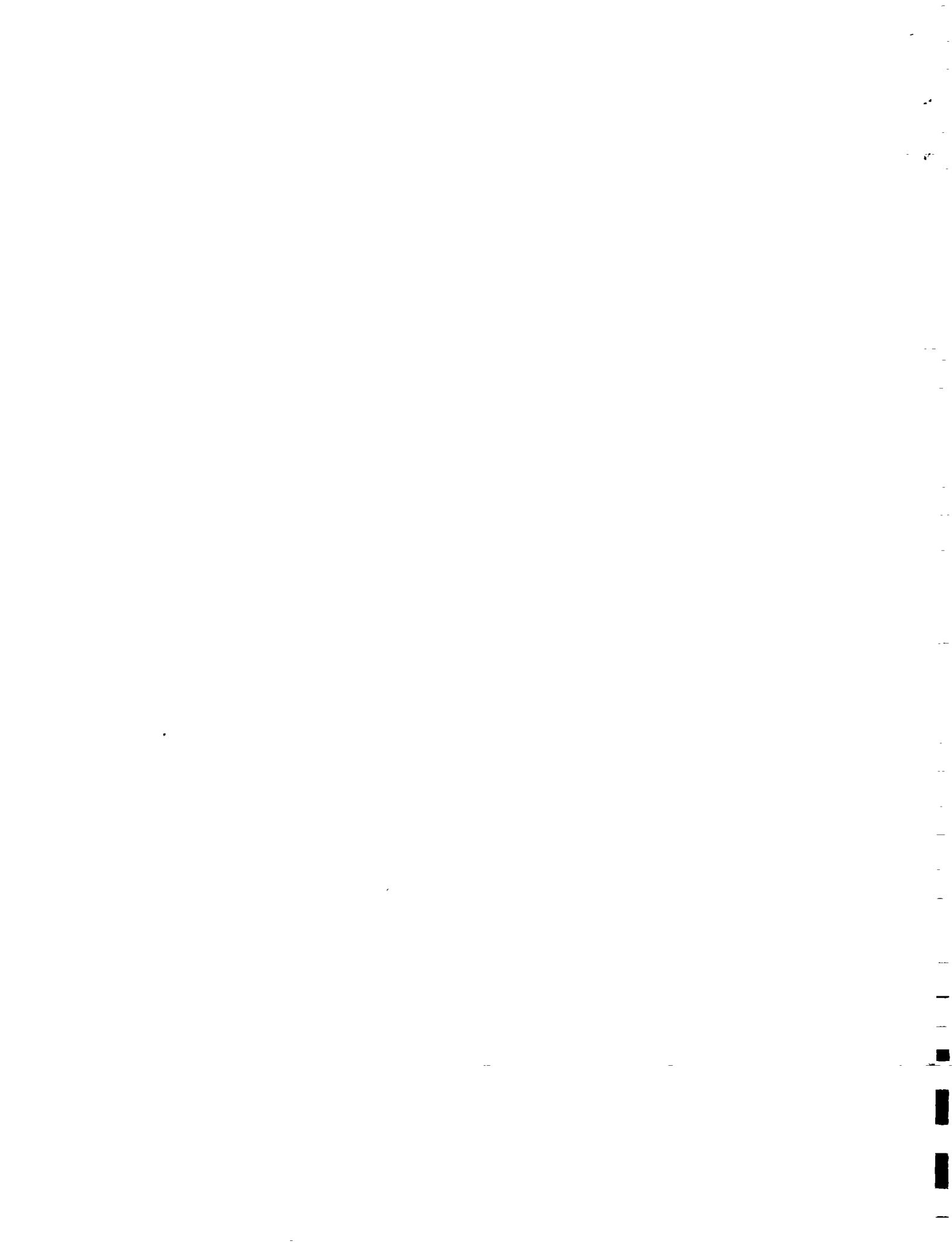
1.8 Major Objectives of the Study :

Broadly speaking, the major objectives of this survey is to provide information on water use, sanitation practices of the villagers and to know the extent of peoples' awareness about their personal hygiene at the family level in rural Bangladesh. More specifically, the objectives of the study are:

- (a) To know the pattern and extent of water use at source and at home in the study area.



- (b) To locate the water source in the study area.
- (c) To determine the situation of drinking water in the survey area.
- (d) To know about the defecation practices of the villagers.
- (e) To evaluate the ownership status of latrines.
- (f) To know the type and structure of latrine used by the villagers.
- (g) To evaluate the respondents awareness about Public Health Department as latrine suppliers.
- (h) To know people's opinion for popularizing latrine use.
- (i) To assess personal hygiene awareness of the villagers.



Socio-Economic and Demographic Notes on Villages

In this chapter, we analyze the socio-economic and demographic data of the six study villages.

2.1 Demographic Notes on Villages:

~~For~~ The table (see Table 1) indicates that among the three study villages of Godagari Upazila, Nabagram has 320 people living in 56 households, Domkuli has 935 people in 160 households and Diar Mohobbotpur has 353 people in 91 households. The percentages of literacy for Nabagram, Domkuli and Diar Mohobbotpur respectively are: 52.81, 45.02 and 43.53. On the other hand, among the three study villages of

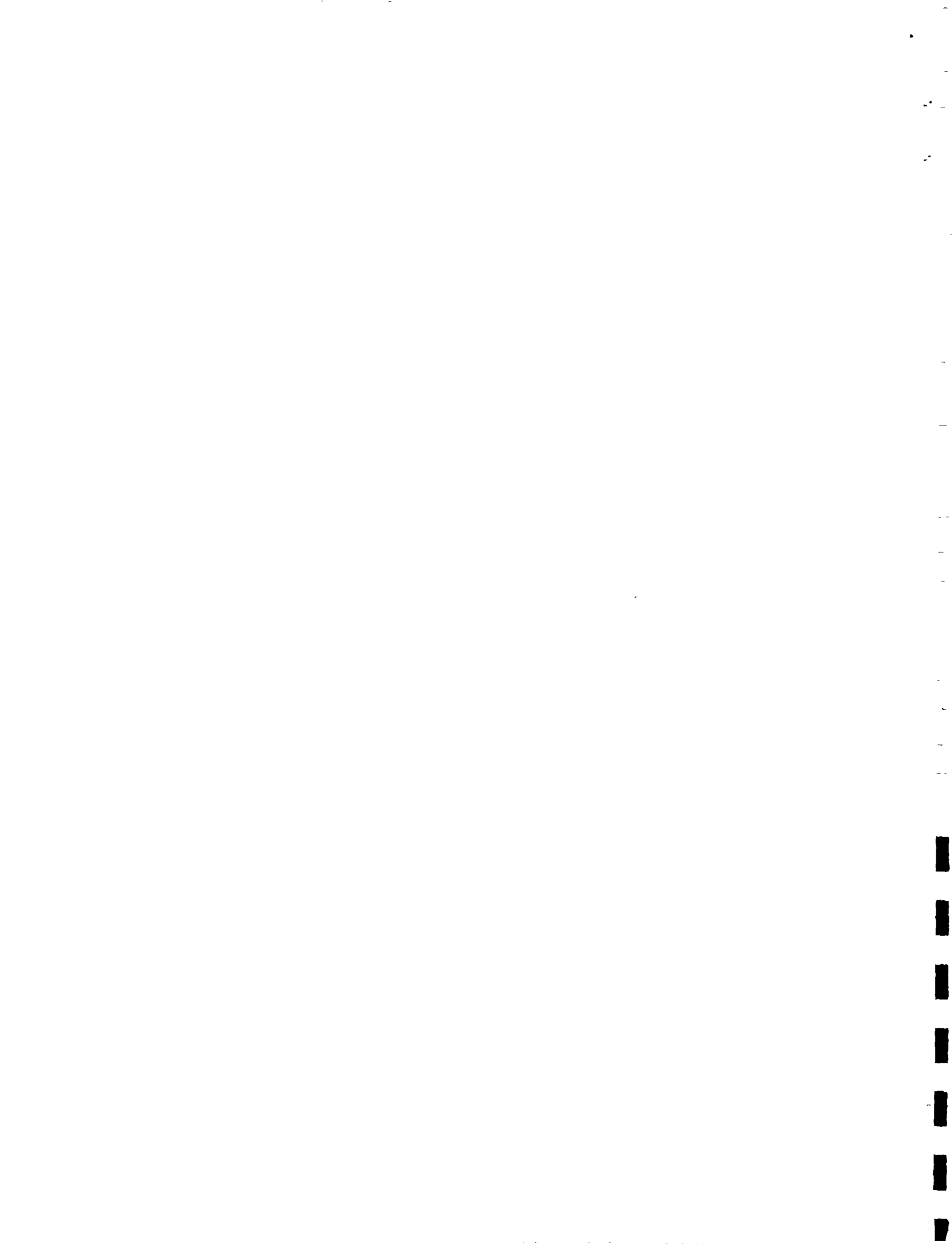
Table 1

Demographic Notes on Villages

Godagari Upazila:

<u>Name of Village</u>	<u>Total Households</u>	<u>Total Popn.</u>	<u>Male</u>	<u>Female</u>	<u>Number of Literate Persons</u>
Nabagram	56	320	189	131	169
Domkuli	160	935	485	450	421
Diar Mohobbotpur	91	353	221	132	104
Sherpur Upazila:					
Garoi	132	491	182	309	157
Rajapur	113	507	256	251	83
Khordo Bogra	55	252	137	115	76

Sherpur Upazila, Garoi has 491 people in 132 households, Rajapur has 507 people in 113 households and Khordo Bogra has 252 people in 55 households. The percentage of literacy for Garoi, Rajapur and



Khordo Bogra are respectively : 31.97, 16.90 and 30.16. The average *male-female* ratio for Godagari villages is *125:100* and for Sherpur villages it is *85:100*. The average family size for Godagari villages is 5.52 and it is 4.17 for Sherpur villages which are much below the national average.

2.2 Like other parts of the country, agriculture is the principal occupation of the people in the study villages. The agriculturists are dominant in the demographic structure of all the villages. It is evident from Table 2 that a preponderant majority of households i.e. 143 (46.58%) in Godagari villages are agriculturists and in Sherpur villages it is 147 (49%). However, in regards to other occupations of the villagers in Godagari and Sherpur, it is apparent from Table 2 that there are diversified occupational groups in the village.

2.3 Landownership Pattern :

In accordance with the ownership of landholdings, the villagers have been classified into landless (possessing no land), "marginal" (0.01 to 1 acre), "poor" (1.01 to 2.50 acre), "average" (2.51 to 7.50 acres) and "rich" (7.51 and above). It is shown in Table 3 that among 307 households in Godagari villages, 150 (48.86%) are landless, 32 (10.42%) are marginal farmers, 36 (11.73%) are poor, 49 (15.96%) are average farmers and the remaining 40 (13.03%) are rich landowners. In Sherpur villages, out of 300 households, 138 (46%) households are landless, 113 (37.67%) are marginal, 48 (16%) are poor, 40 (13.33%) are average farmers and the remaining 21 (7%) are rich families.

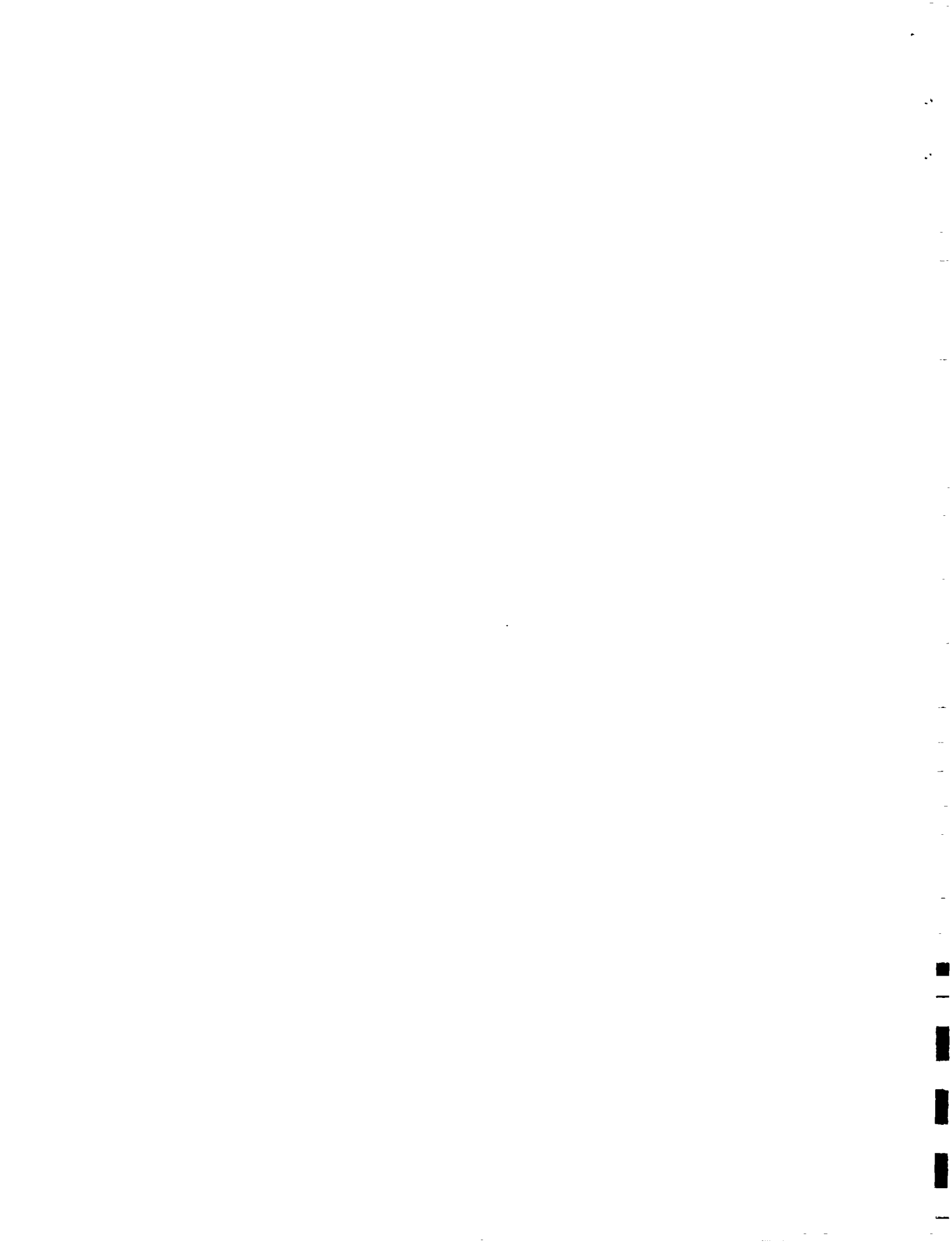


Table 2

Principal Occupations of Household Heads

Name of Village	Agriculture	Business	Service	Fishing	Day labour	Artisan	School teacher	Rickshaw puller	Doctor	Barber
Nabagram (N = 56)	32 (57.14)	1 (1.79)	1 (1.79)	--	17 (30.35)	1 (1.79)	1 (1.79)	--	--	3 (5.36)
Domkuli (N = 160)	73 (45.62)	18 (11.25)	12 (7.50)	--	50 (31.25)	2 (1.25)	3 (1.88)	--	1 (.63)	1 (.63)
Diar Mohobbotpur (N = 91)	38 (41.76)	9 (9.89)	6 (6.59)	2 (2.20)	29 (31.87)	2 (2.20)	--	5 (5.49)	--	--
Garoi (N = 132)	67 (50.76)	4 (3.03)	3 (2.27)	--	44 (33.3)	10 (7.58)	1 (.76)	3 (2.27)	--	--
Rajapur (N = 113)	47 (41.60)	10 (8.85)	5 (4.42)	--	49 (43.3)	--	--	1 (.88)	1 (.88)	--
Khordo Bogra (N = 55)	33 (60)	--	1 (1.82)	--	18 (32.73)	1 (1.82)	1 (1.82)	1 (1.82)	--	--

Note: Figures within parentheses indicate percentages.

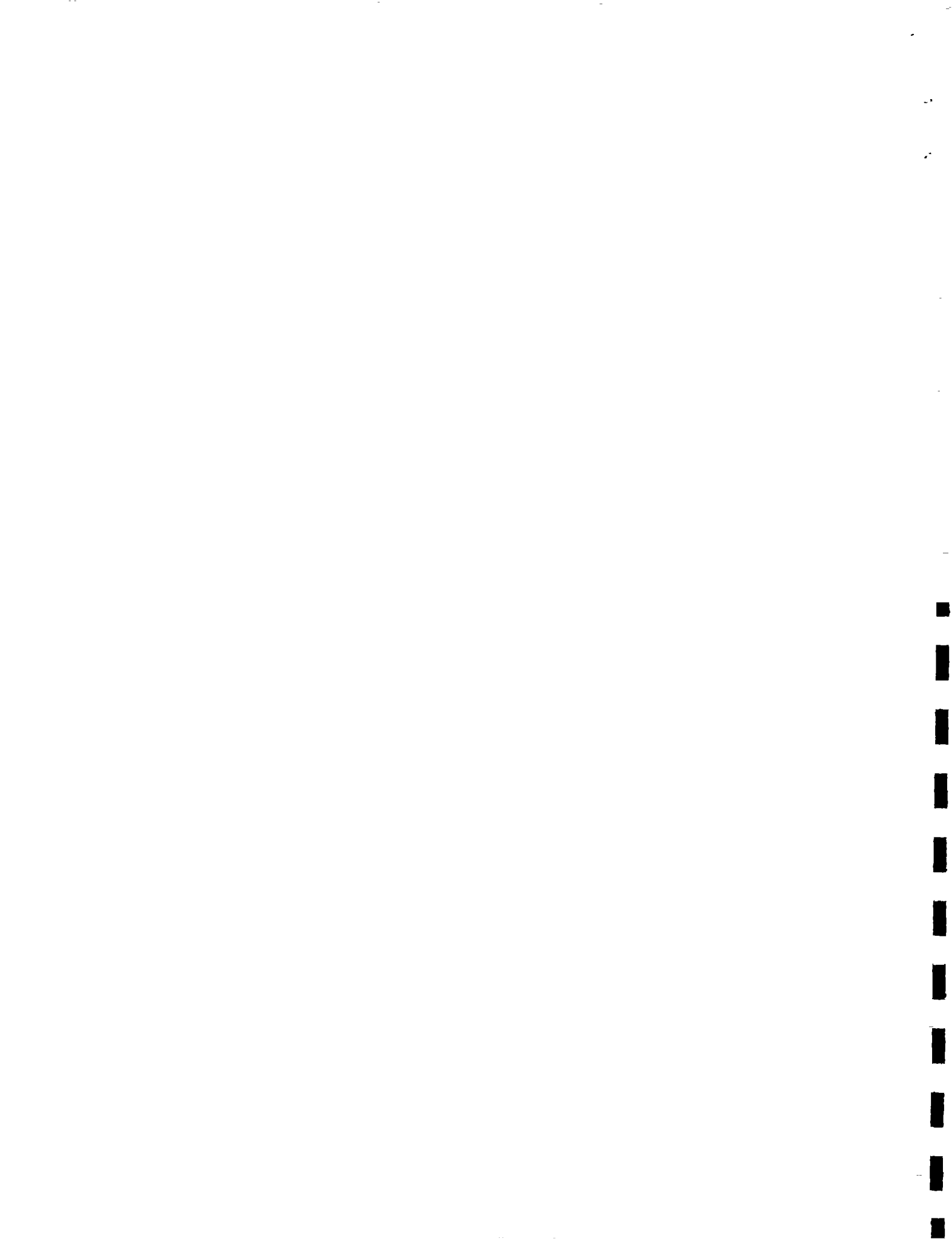


Table 3

Landownership PatternA: Godagari Upazila

Name of Village	Landless (possessing no land)	Marginal (0.01- 1 acre)	Poor (1.01- 2.50 acre)	Average (2.51- 7.50)	Rich (7.51 and above)
Nabagram (N = 56)	28 (50)	4 (7.14)	9 (16.07)	6 (10.71)	9 (16.07)
Domkuli (N = 160)	71 (44.38)	22 (13.75)	17 (10.63)	31 (19.38)	19 (11.88)
Diar Mohobbotpur (N = 91)	51 (56.04)	6 (6.59)	10 (10.99)	12 (13.19)	12 (13.19)

B : Sherpur Upazila

Garoi (N = 132)	63 (47.73)	12 (9.09)	21 (15.91)	25 (18.94)	11 (8.33)
Rajapur (N = 113)	55 (48.67)	30 (26.55)	15 (13.27)	8 (7.08)	5 (4.42)
Khordo Bogra (N = 55)	20 (36.36)	11 (20.00)	12 (21.82)	7 (12.75)	5 (9.09)

Note: Figures within parentheses indicate percentages.



Chapter 3

The Pattern of Water Use

3.1 Water Use by Source and Purpose:

Like other parts of the country, the people in Godagari and Sherpur villages consume water for drinking, cooking, washing, bathing and for religious purpose. Table 4 indicates that 64.17% households in Godagari villages and 82.67% households in Sherpur villages claim to use tubewell water for drinking. This indicates that recently there is an increasing public awareness in the use of tubewell water.

However, the data also show that 35.50% households in Godagari village and 17.33% in Sherpur village still procure their drinking water from ringwells which indicates that there is still a good number of people who are not yet concerned about the pollution of ringwell water. It is observed from the table that the percentage of awareness regarding tubewell water has appeared higher in Sherpur villages as compared to Godagari villages. The reason for such a differentiation in number is due to the reason that one of the study villages (Nabagram) of Godagari Upazila does not have any tubewell. The table (i.e. Table 4) further suggests that although the awareness for drinking tubewell seems to be high, but for purpose of bathing, cooking and dish washing the villagers still use ponds and other surface water which are polluted. The observed use of surface water for other activities is reported in Table 4.

3.2 Reasons for not Drinking Tubewell Water:

When the respondents were asked to mention the reasons why did they use surface water for drinking instead of tubewell water: more than

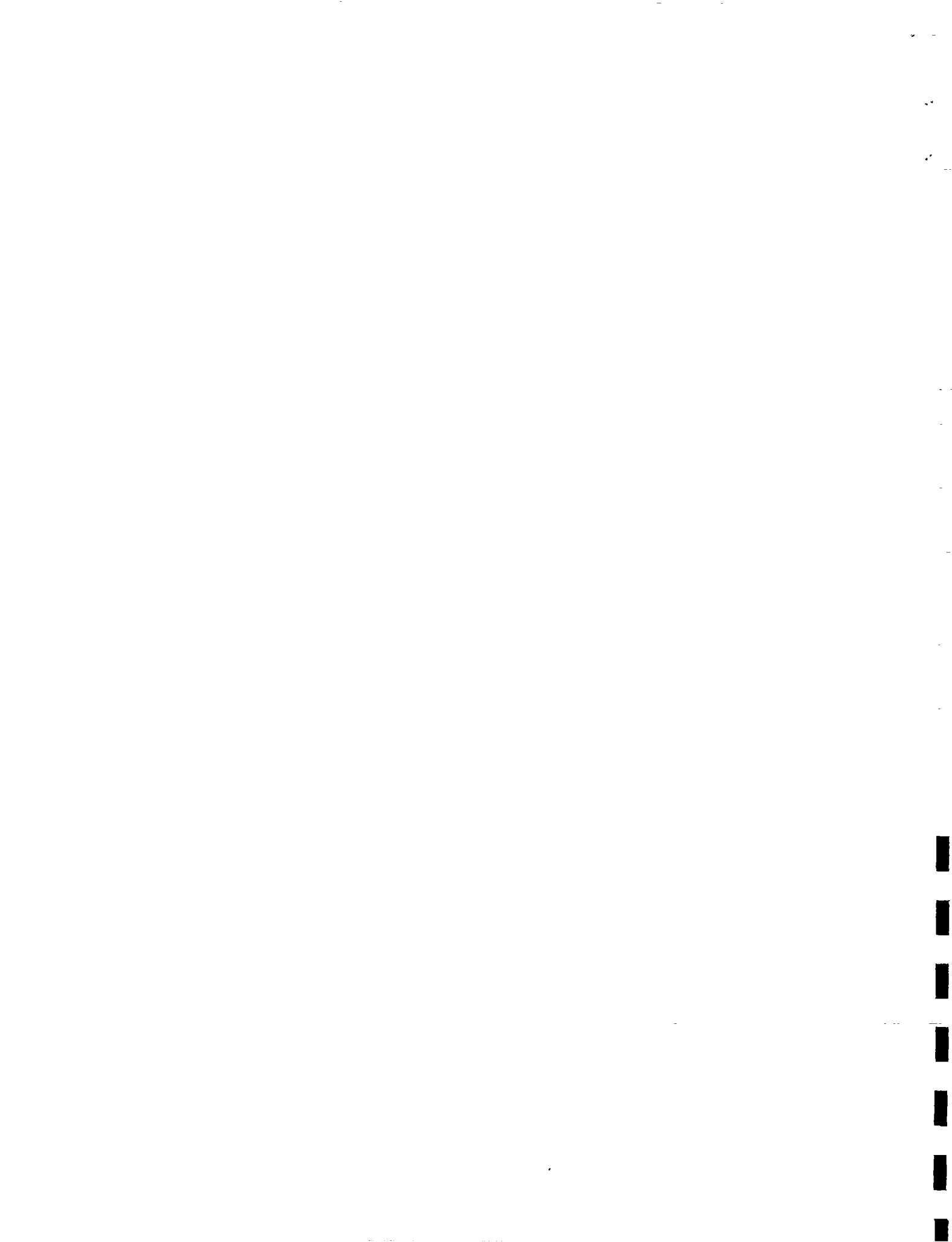


Table 4

Water Use by Source and Purpose

Name of Village	Purpose of Water Use	Sources of Water				
		River	Pond	Ditch	Ringwell	Tubewell
A: Godagari Upazila						
Nabagram (N = 56)	Drinking	--	--	--	50 (89.29)	6 (10.71)
	Cooking & Dish	--	12 (21.43)	--	44 (78.57)	--
	Washing	--	49 (87.50)	--	7 (12.50)	--
	Bathing	--	18 (40)	--	27 (60)	--
Domkuli (N = 160)	Drinking	--	--	--	44 (27.50)	116 (72.50)
	Cooking & Dish	--	--	--	46 (28.75)	114 (71.25)
	Washing	52 (32.50)	45 (28.12)	15 (9.37)	23 (14.38)	25 (15.63)
	Bathing	2 (1.25)	--	--	48 (40)	110 (68.75)
Diar Mohobbot- pur (N = 91)	Drinking	1 (1.99)	--	--	15 (16.49)	75 (82.42)
	Cooking & Dish	8 (8.79)	3 (3.30)	--	15 (16.49)	65 (71.43)
	Washing	66 (72.53)	7 (7.69)	--	6 (6.69)	12 (13.19)
	Bathing	9 (9.89)	--	--	13 (14.29)	69 (75.82)

contd.



Table 4 (contd.)

Name of Village	Purpose of Water Use	Sources of Water				
		River	Pond	Ditch	Ringwell	Tubewell
B: Sherpur Upazila						
Garoi (N = 132)	Drinking	--	--	--	7 (5.30)	125 (94.70)
	Cooking & Dish Washing	--	--	--	7 (5.30)	125 (94.70)
	Bathing	33 (25)	5 (3.79)	--	7 (5.30)	87 (65.91)
	Religious	--	--	--	7 (5.30)	116 (94.31)
Rajapur (N = 113)	Drinking	--	--	--	28 (24.78)	85 (75.22)
	Cooking & Dish Washing	--	--	--	36 (31.86)	77 (68.14)
	Bathing	--	--	--	38 (33.63)	75 (66.37)
	Religious	--	1 (.96)	--	34 (32.69)	69 (66.35)
Khordo Bogra (N = 55)	Drinking	--	--	--	17 (30.91)	38 (69.09)
	Cooking & Dish Washing	--	--	--	18 (52.73)	37 (67.27)
	Bathing	2 (3.65)	7 (12.73)	--	2 (3.65)	37 (67.27)
	Religious	--	--	--	15 (28.30)	38 (71.70)

Figures within parentheses indicate percentages.

Note: In Nabagram 11 households, in Garoi 9 households, in Rajapur 10 households and in Khordo Bogra 2 households are the Hindus. The use of water for religious purpose for these households have been excluded.



90 per cent respondents in Godagari villages and 92 per cent in Sherpur villages replied that they do not use tubewell water as they do not own or do not have access to it. The remaining 10 per cent respondents in Godagari villages and 8 per cent in Sherpur villages however, described that they dislike tubewell water for its bad taste.

Table 5

Reasons for not Drinking Tubewell Water

Name of Villages	Reasons		
	Lack of Tubewell	Bad taste of Tubewell Water	Total
A: <u>Godagari Upazila</u>			
Nabagram	53 (94.64)	3 (5.36)	56 (100)
Domkuli	41 (87.23)	6 (12.77)	47 (100)
Diar Mohobbotpur	15 (83.33)	3 (16.67)	18 (100)
B: <u>Sherpur Upazila</u>			
Garoi	5 (100)	—	5 (100)
Rajapur	28 (96.55)	1 (3.44)	29 (100)
Kherdo Bogra	13 (81.25)	3 (18.75)	16 (100)

3.3 Average Daily Per Family Water Consumption:

The total water consumption by purpose and source of the study villages is presented in Table 6. Average daily per family consumption of tubewell water in Godagari villages is 0.57 liters and average daily per family consumption of water for these villages from all other sources is 2 liters. This situation is reverse in Sherpur villages where average daily per family consumption of tubewell water is 2.33

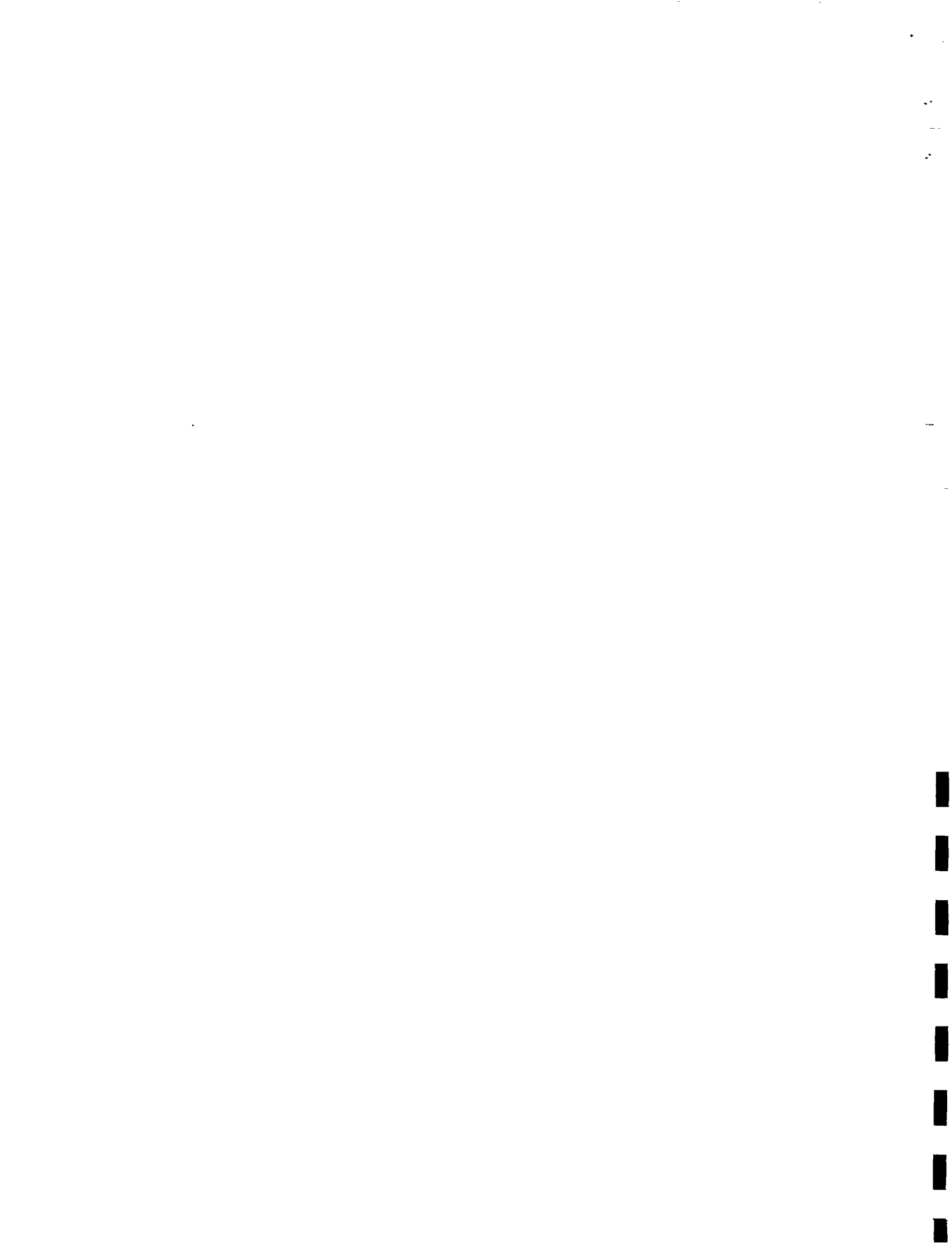


Table 6

Total Water Use in the Villages

Name of Village	Average Per Family Water Consumption in Liters at Source and at Home						
	Use	A Tubewell Only			B All Other Sources		
		Use at source	Brought Home	Total consumption	Use at Source	Brought Home	Total consumption
A: Godagari Upazila							
Nabagram (N = 56)	Drinking	-	-	-	-	33.39	33.39
	Cooking	-	-	-	36.25	10.18	46.43
	Dish washing	-	-	-	-	40	40
	Washing Cloths	-	-	-	76.96	1.07	78.03
	Bathing	-	-	-	88.39	0.71	89.10
	Sanitation	-	-	-	-	27.67	27.67
	Washing cattle & feeding them	-	-	-	26.25	44.46	70.71
	Total				227.85	124.09	351.94
	Domkuli (N = 150)	Drinking	0.17	13.34	13.51	-	5.86
Cooking		5.39	23.14	28.53	7.20	12.64	19.84
Washing Clothes		6.25	1.31	7.56	31.82	2.71	34.53
Bathing		6.26	1.48	7.74	53.78	1.71	55.49
Religious		0.87	3.45	4.32	2.55	2.76	5.31
Sanitation		-	8.22	8.22	-	7.96	7.96
Washing cattle & for feeding them		-	1.22	1.22	8.05	6.93	14.98
Total		18.94	52.16	71.10	103.40	40.57	143.97
Diar Mohobbotpur (N = 97)		Drinking	-	17.62	17.62	-	4.23
	Cooking	8.15	28.76	36.91	1.92	6.92	8.84
	Washing Clothes	6.15	6.84	12.99	31.00	1.77	32.77
	Bathing	6.62	8.46	15.08	49.46	2.15	51.61
	Religious	1.00	6.23	7.23	-	2.46	2.46
	Sanitation	-	12.76	12.76	-	6.31	6.31
	Washing Cattle & for feeding them	-	2.69	2.69	5.09	8.39	13.48
	Total	21.92	83.36	105.28	87.46	32.25	119.19

contd.

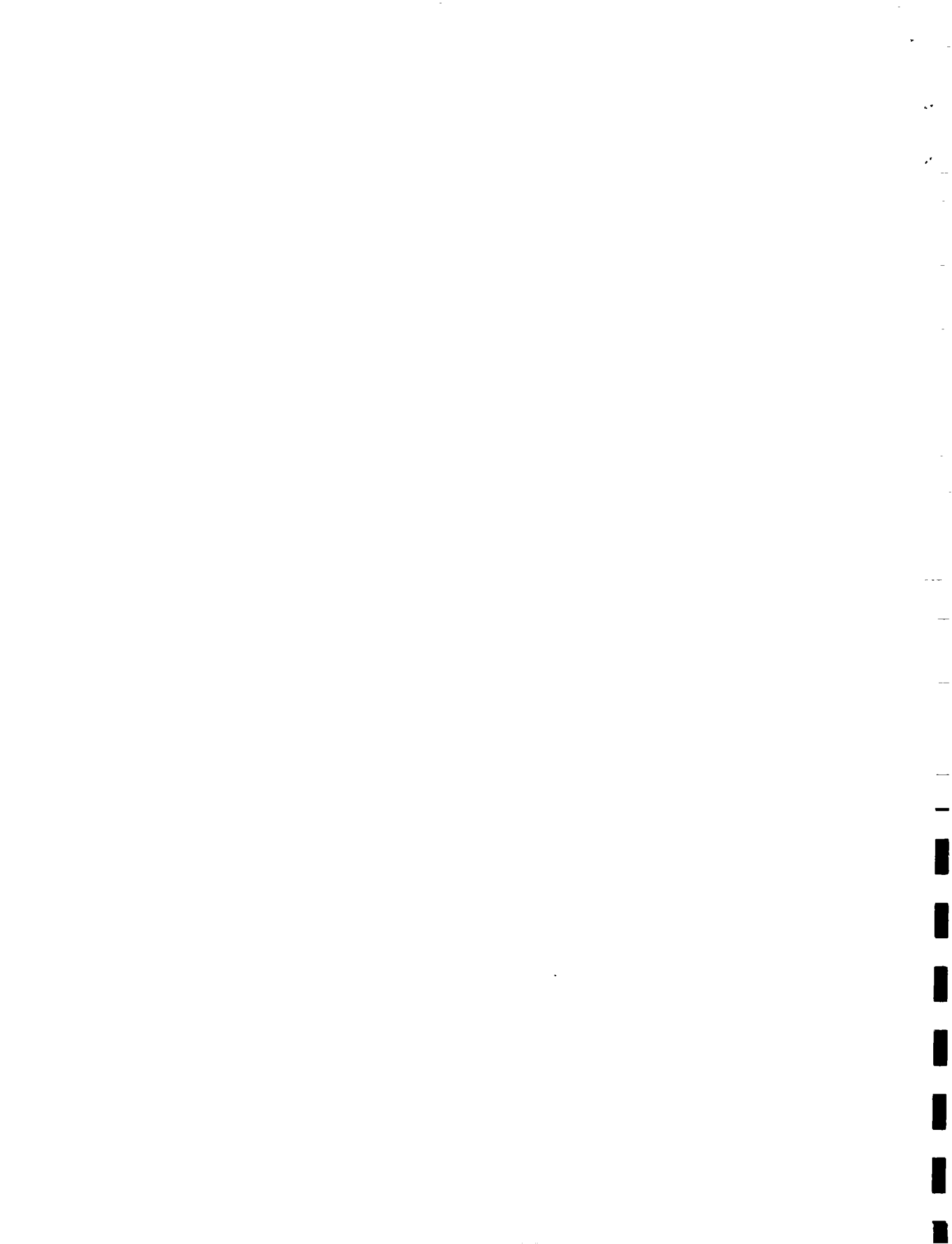


Table 6 (contd.)

Name of Village	Average Per Family Water Consumption in Liters at Source and at Home						
	Use	A Tubewell Only			B All Other Sources		
		Use at source	Brought Home	Total consumption	Use at source	Brought Home	Total consumption
B: Sherpur Villages							
Garoi (N = 132)	Drinking	-	23.26	23.26	-	0.61	0.61
	Cooking	25.07	44.01	69.08	0.15	1.06	1.21
	Washing Clothes	44.32	2.61	46.93	20.53	-	20.53
	Bathing	69.32	1.89	71.21	27.19	-	27.19
	Religious	5.60	5.68	11.28	-	0.53	0.53
	Sanitation	29.62	-	29.62	-	1.74	1.74
	Washing cattle & for feeding them	-	32.89	32.89	2.87	0.38	3.25
	Total	173.93	110.34	284.27	50.74	4.32	55.06
Rajapur (N = 113)	Drinking	-	15.48	15.48	-	5.57	5.57
	Cooking	9.55	32.65	42.20	5.48	11.22	16.71
	Washing Clothes	23.27	12.30	35.57	13.71	2.03	15.74
	Bathing	35.57	19.02	54.59	23.27	1.15	24.42
	Religious	2.21	4.86	7.07	1.42	1.50	2.92
	Sanitation	-	17.52	17.52	-	5.15	5.15
	Washing cattle & for feeding them	-	29.56	29.56	-	7.70	7.70
	Total	70.60	131.37	201.97	43.88	34.33	78.21
Khordo Bogra (N = 55)	Drinking	-	12.90	12.90	-	5.45	5.45
	Cooking	10.36	32.90	43.26	7.81	8.00	15.81
	Washing Clothes	28.18	12.00	40.18	13.45	1.45	14.90
	Bathing	44.00	12.00	56.00	18.36	1.09	19.45
	Religious	2.18	7.09	9.27	0.73	2.00	2.73
	Sanitation	-	20.18	20.18	-	4.73	4.73
	Washing cattle & for feeding them	-	42.90	42.90	-	8.36	8.36
	Total	84.72	139.97	224.69	40.35	31.08	71.43

7

liters and this consumption from all other sources is 0.68 liters. A comparatively greater awareness in the use of tubewell water in Sherpur villages is perhaps due to greater number of tubewells available there. By contrast, in Godagari villages the consumption of tubewell water declined as one of its study villages (Nabagram) does not have any tubewell. This situation obviously increased their dependence on surface water.

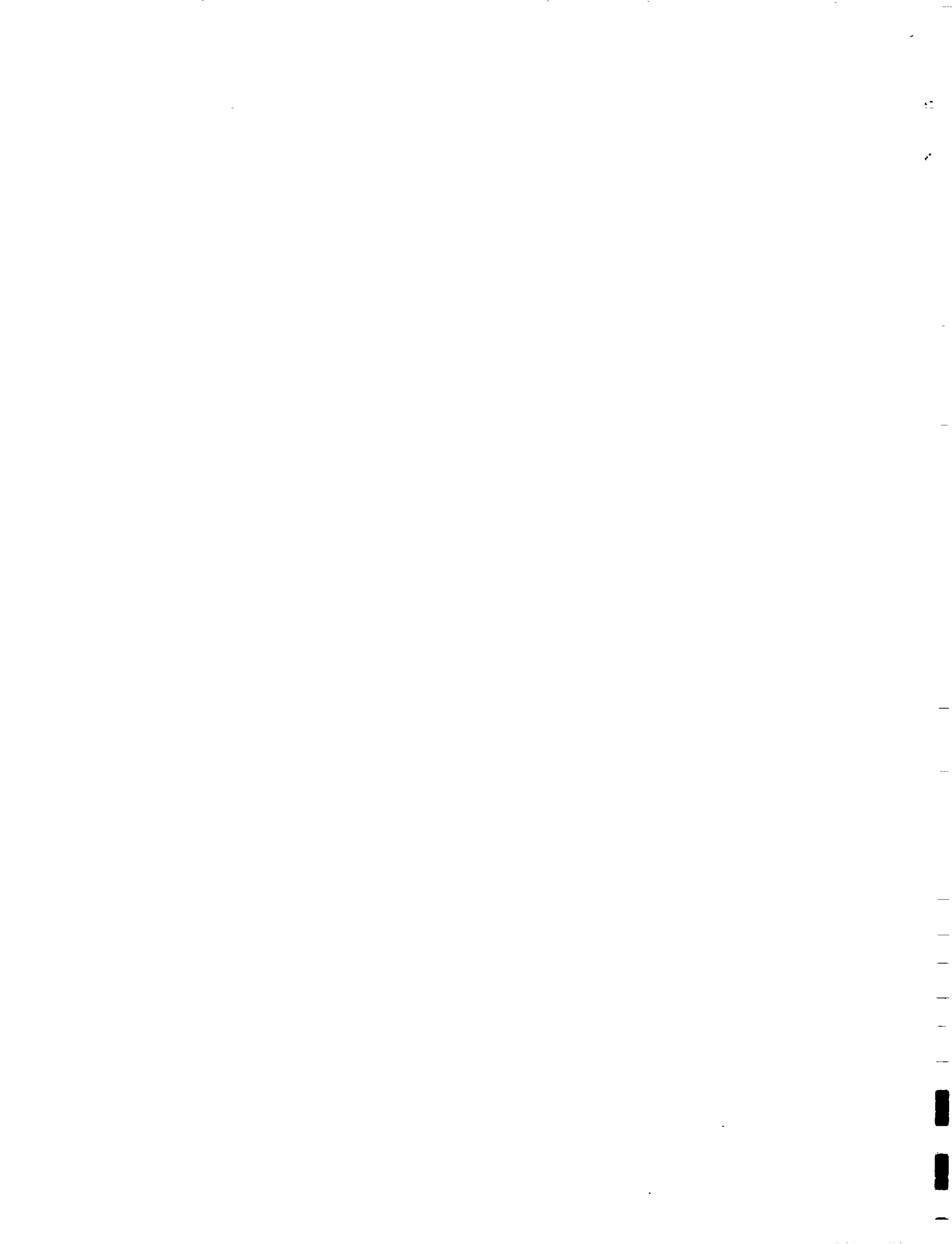
3.4 Whether the Villagers are Aware that Surface Water is Bad for Health:

When the villagers were asked if they are aware that surface water is bad for health: about 92 per cent Godagari villagers and 90 per cent Sherpur villagers admitted that they are well aware about it. This is really encouraging that the rural people have started leaving the bad effect of surface water.

Table 7

Villagers Awareness Regarding the Effect of Surface Water

<u>Name of Village</u>	<u>Aware</u>	<u>Not Aware</u>	<u>Total</u>
<u>Godagari</u>			
Nabagram	53 (94.64%)	3 (5.36%)	56 (100%)
Domkuli	146 (91.28%)	14 (8.75%)	160 (100%)
Diar Mohobbotpur	83 (91.21%)	8 (8.79%)	91 (100%)
<u>Sherpur</u>			
Garoi	119 (90.15%)	13 (9.81%)	132 (100%)
Rajapur	100 (88.50%)	13 (11.50%)	113 (100%)
Khordo Bogra	52 (94.55%)	3 (5.45%)	55 (100%)



3.5 Types of Tubewell Used:

The data on types of tubewell used in the study villages reveal that a preponderant majority of the tubewell users i.e., 100 per cent in Godagari villages and 96 per cent in Sherpur villages have been using shallow tubewell. Only 4 per cent tubewell users in Sherpur villages have been found to use Tara. It is observed that the conventional deep-set or any other types of tubewell are not in use in these regions.

Table 8

Type of Tubewell Used

Name of Village	<u>Type of Tubewell Used</u>		
	<u>Shallow</u>	<u>Tara</u>	<u>Total</u>
Nabagram	-	-	-
Domkuli	116 (100%)	-	116 (100%)
Diar Mohobbotpur	75 (100%)	-	75 (100%)
Garoi	117 (91.41%)	11 (8.59%)	128 (100%)
Rajapur	86 (100%)	-	86 (100%)
Khordo Bogra	37 (100%)	-	37 (100%)

3.6 Tubewell Ownership Status:

The families using tubewell water were asked about the ownership status of their tubewells. It is observed from the table that only 11 per cent in Godagari villages and 32.94 per cent in Sherpur villages have their own tubewells. The remaining families either procure water from their neighbors' tubewell or from the public tubewell installed by the Public Health Department and NGOs (Non-government Organizations).

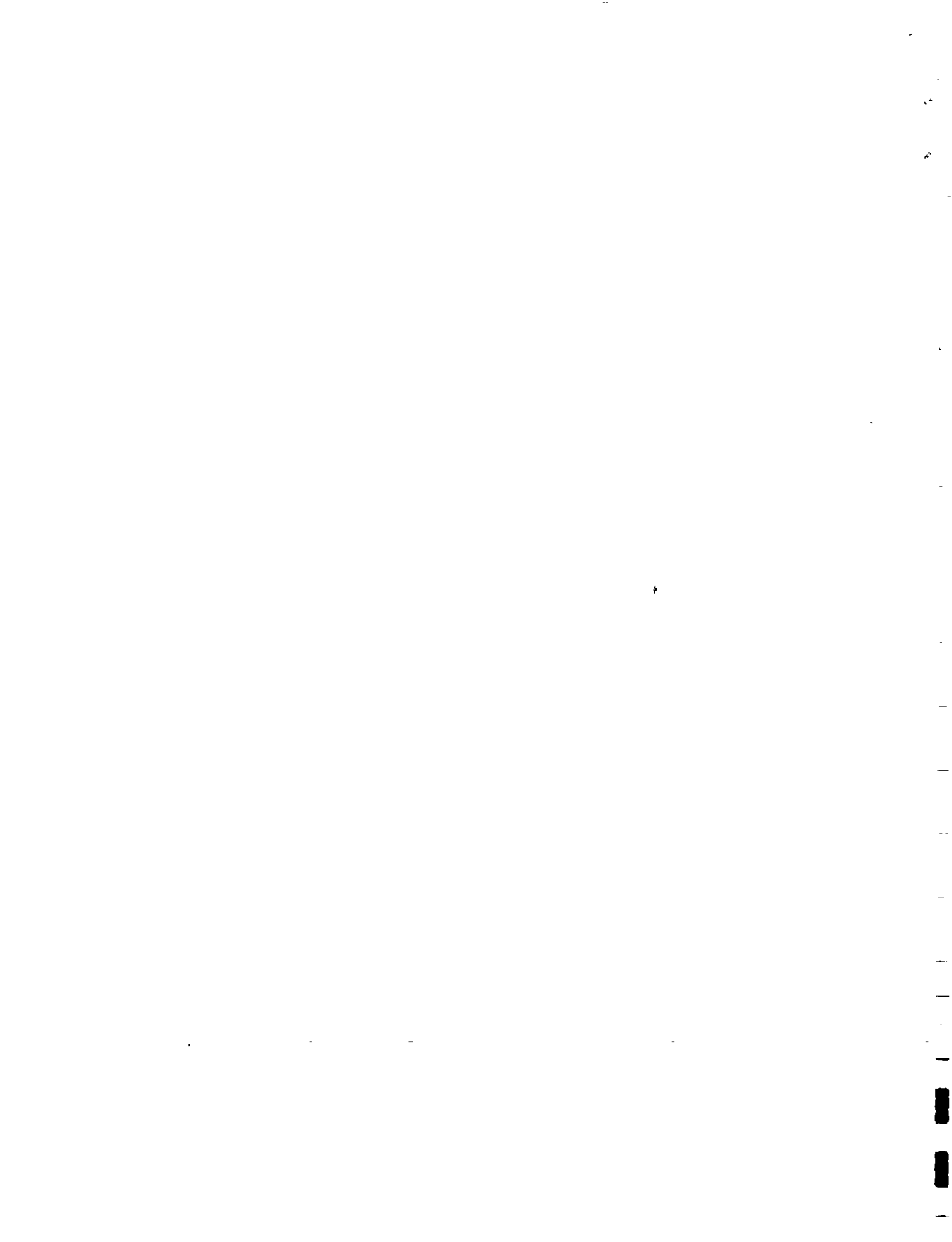


Table 9

Tubewell Ownership Status

<u>Name of Village</u>	<u>Self Tubewell</u>	<u>Belongs to the Neighbors'</u>	<u>Installed by Govt. & NGOs</u>	<u>Total Respondents</u>
<u>Godagari</u>				
Nabagram	NA	NA	NA	NA
Domkuli	13 (11.21%)	4 (3.45%)	99 (85.34%)	116 (100%)
Diar Mohobbotpur	8 (10.66%)	11 (14.67%)	56 (74.67%)	75 (100%)
<u>Sherpur</u>				
Garoi	34 (26.56%)	42 (32.81%)	52 (40.63%)	128 (100%)
Rajapur	35 (40.70%)	28 (32.56%)	23 (26.74%)	86 (100%)
Khordo Bogra	15 (35.59%)	7 (17.07%)	19 (46.34%)	41 (100%)

3.7 The Availability of Water in Tubewells:

The tubewell users were asked how many months in a year their tubewell could provide them with water. Almost all the respondents in Godagari (about 96%) and Sherpur (92%) villages unanimously stated their tubewells provide them with water throughout the year. This shows very favourable situation for the tubewells in terms of water availability.



Table 10

The Availability of Water in Tubewells

Name of Village	Water available for 6 months	Water available for 7 to 12 months	Water Available throughout the year	Total
Nabagram	NA	NA	NA	NA
Domkuli	-	3 (2.59%)	113 (97.41%)	116 (100%)
Diar Mohobbotpur	2 (2.67%)	3 (4%)	70 (93.33%)	75 (100%)
Garoi	2 (1.56%)	4 (3.12%)	122 (95.32%)	128 (100%)
Rajapur	-	13 (15.12%)	73 (84.88%)	86 (100%)
Khordo Bogra	-	2 (4.88%)	39 (95.12%)	41 (100%)

3.8 Distance of Tubewell from Users' House:

Distance of the tubewells from users' house has been shown in Table 11. It is evident from Table 11 that more than 73 per cent of tubewell users in Godagari villages and more than 76 per cent of tubewell users in Sherpur villages have their tubewells located within the range of 100 feet from their respective houses. It may be understandable that the shorter the distance of the tubewell location, the higher will be the frequency of its use. Those who are living far from the tubewells will find it inconvenient to use it. From this point of view, our study fillages are to some extent in an advantageous position.

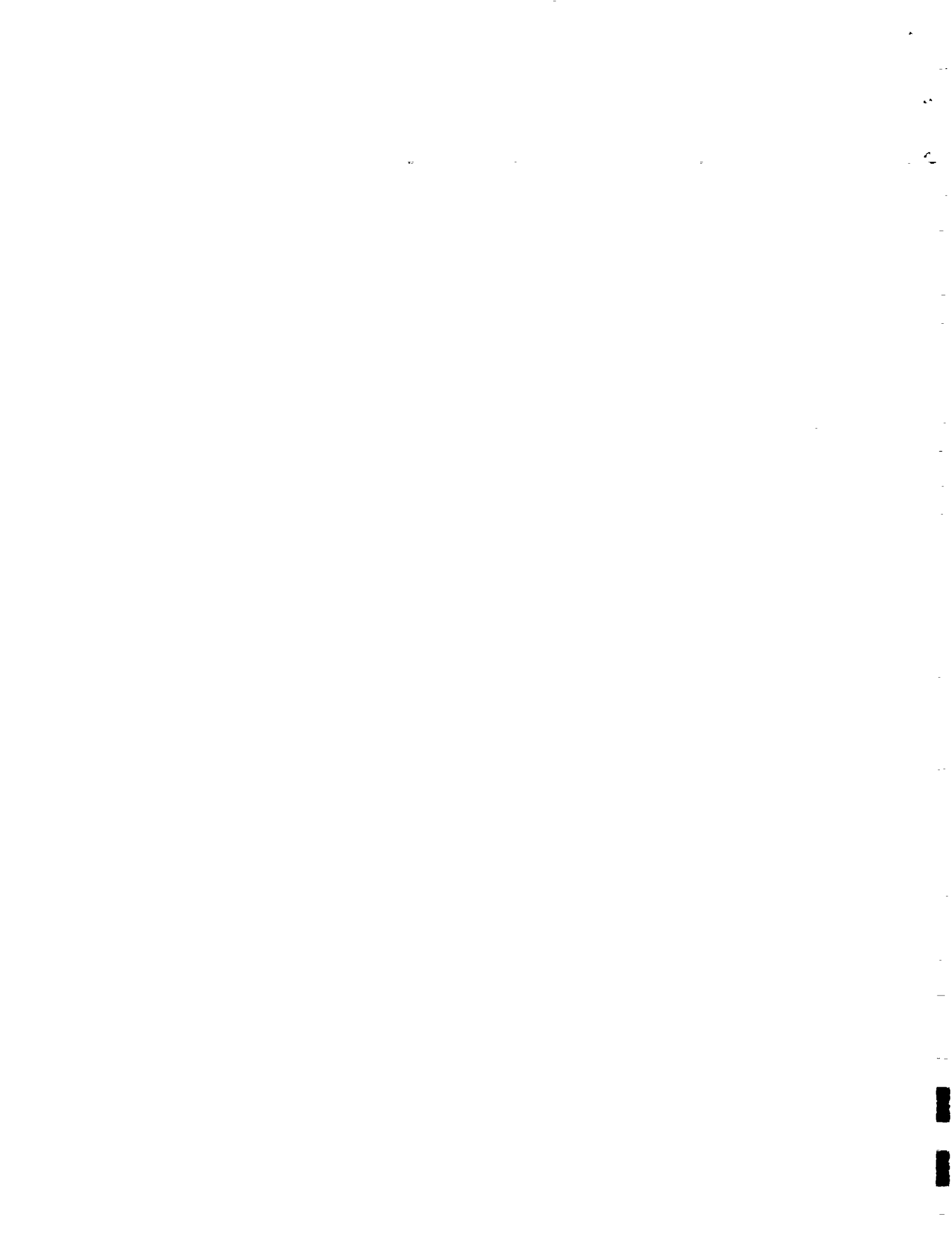


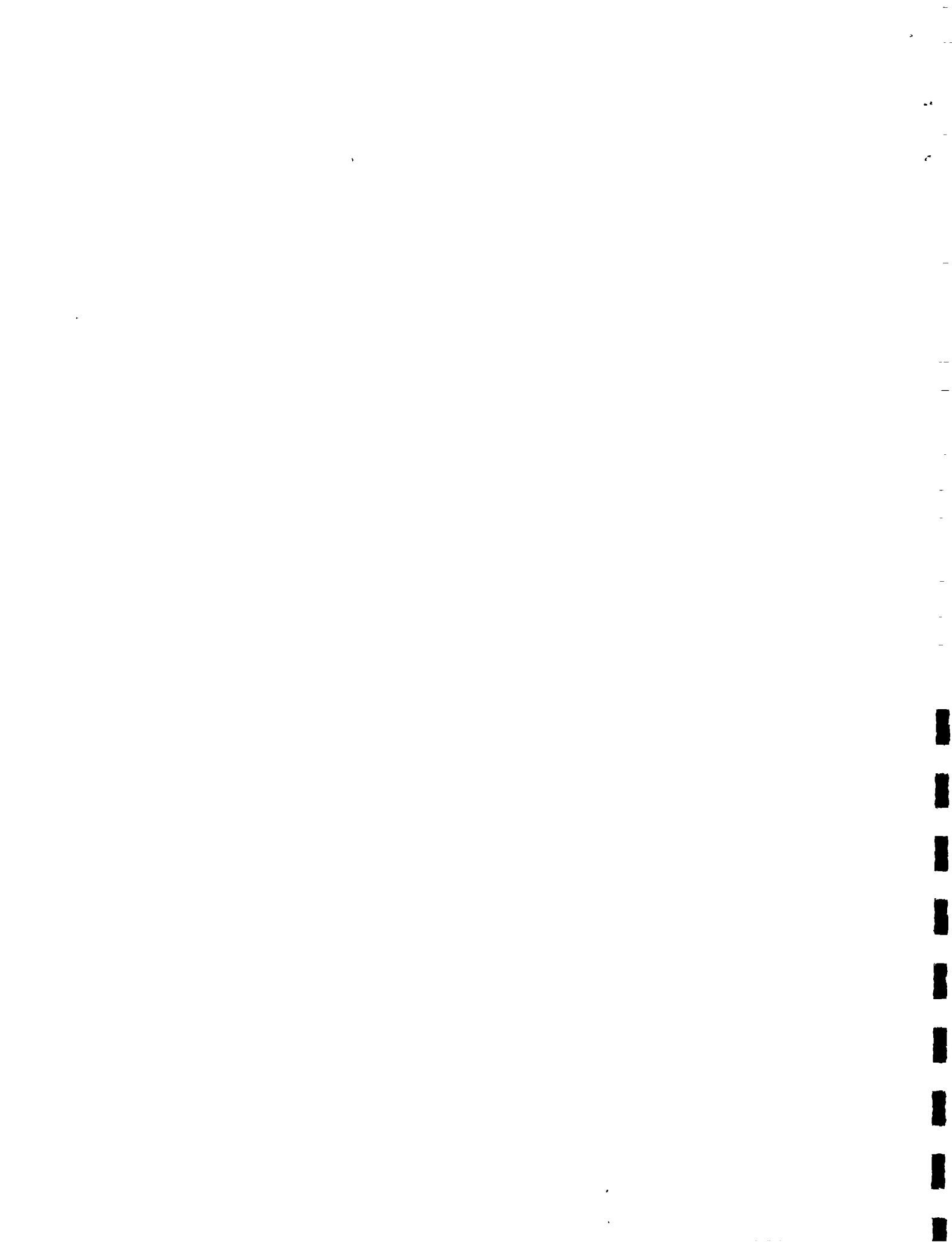
Table 11

Distance (in feet) of Tubewells from User's House

Name of Village	Distance in in Feet				Total
	1 to 100	101-200	201-300	300 and above	
Nabagram	NA	NA	NA	NA	NA
Domkuli	89 (76.72%)	13 (11.21%)	10 (8.62%)	4 (3.45%)	116 (100%)
Diar Moho- botpur	51 (67.11%)	20 (26.31%)	5 (6.58%)	-	75 (100%)
Garoi	84 (65.62%)	20 (15.63%)	21 (16.41%)	3 (2.34%)	128 (100%)
Rajapur	74 (86.05%)	6 (6.96%)	5 (5.81%)	1 (1.16%)	86 (100%)
Khordo Bogra	37 (90.25%)	1 (2.44%)	3 (7.31%)	-	41 (100%)

3.9 Reasons for Preferring Tubewells Within Respondents Premises :

Each and every family prefers to instal tubewells within their own premises. In replying to the question why do the villagers prefer to install tubewells within their own premises: about 61 per cent Godagari families and 64 per cent Sherpur families indicated that they prefer the tubewells within their premises to maintain purdah (seclusion) for their housewives. The remaining 39 per cent respondents in Godagari villages and 36 per cent in Sherpur villages however, answered that they want the tubewells within their premise because in that case there is physical convenience for their women to carry water. In rural Bangladesh, household activities are performed by the women and so it is quite obvious that women mostly carry water. At the same time, in rural Bangladesh it is also expected that women should not go very far of their



houses. If the tubewells are located very close to their houses or within their own premises, the use of tubewell water will automatically increase.

Table 12

Reasons for Preferring Tubewells Within the Respondents' Own Premises

<u>Name of Village</u>	<u>To maintain Purdah</u>	<u>Physical Convenience for Women</u>	<u>Total</u>
Nabagram	25 (44.64%)	31 (55.36%)	56 (100%)
Domkuli	96 (60%)	64 (40%)	160 (100%)
Diar Mohobbotpur	65 (71.43%)	26 (28.57%)	91 (100%)
Gorai	83 (62.88%)	49 (37.12%)	132 (100%)
Rajapur	76 (67.26%)	37 (32.74%)	113 (100%)
Khordo Bogra	33 (60%)	22 (40%)	55 (100%)

3.10 Whether the Villagers are Willing to Buy Tubewells:

All the households in the study villages were asked whether they are willing to buy tubewells: about 45 per cent Godagari respondents and 43 per cent Sherpur respondents have shown their interest to buy tubewells. The interest for buying tubewell has come down in the study villages as most of the villagers have good access to tubewells. As compared to other study villages, the percentage in Nabagram has gone up as this village does not have any tubewells.

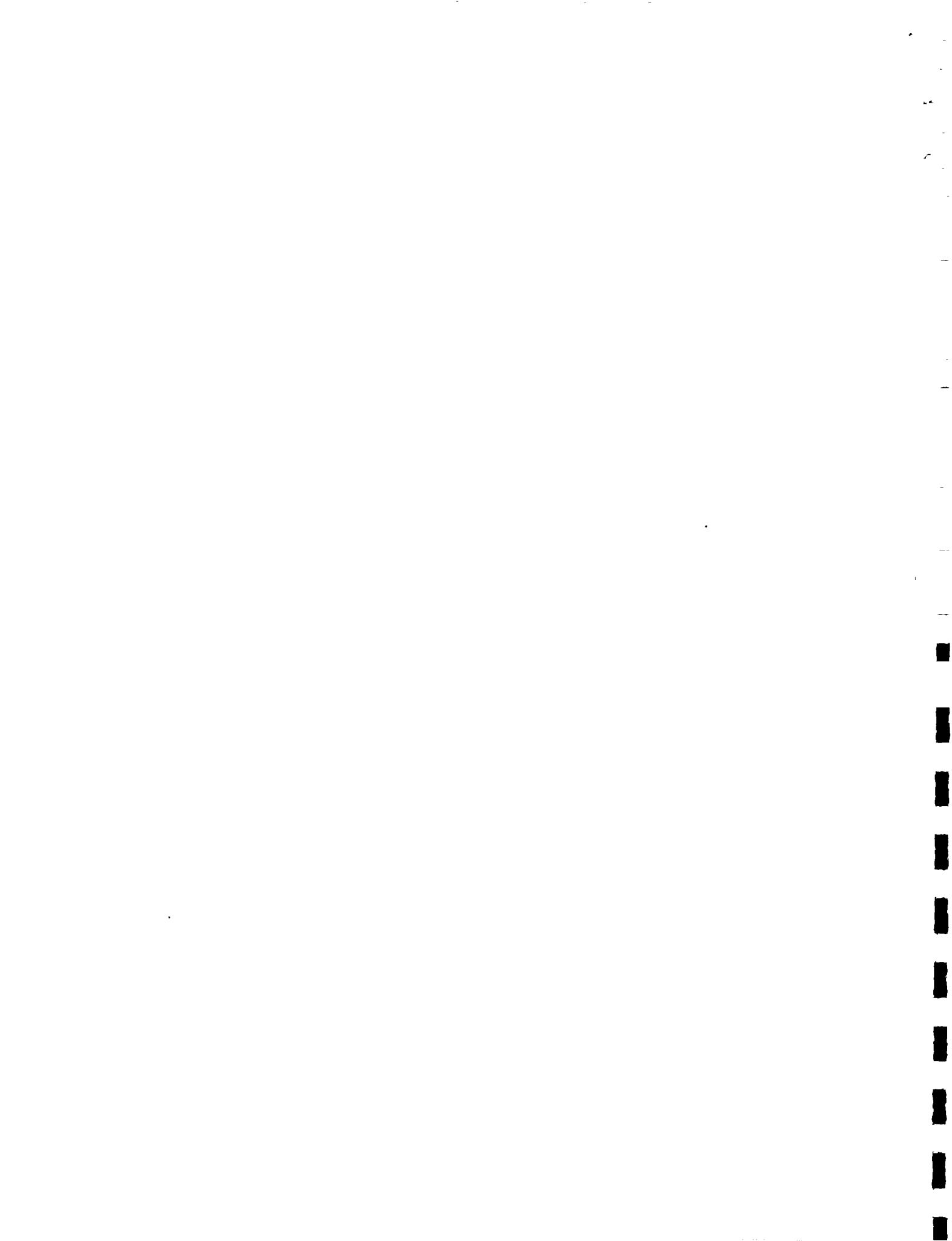


Table 13

Whether the Villagers are Willing to Buy Tubewells

<u>Name of Village</u>	<u>Yes</u>	<u>No</u>	<u>Total</u>
Nabagram	37 (66.07%)	19 (33.93%)	56 (100%)
Domkuli	62 (38.75%)	98 (61.25%)	160 (100%)
Diar Mohobbotpur	39 (42.86%)	52 (57.14%)	91 (100%)
Goroi	46 (34.85%)	86 (65.15%)	132 (100%)
Rajapur	58 (51.33%)	55 (48.67%)	113 (100%)
Khordo Bogra	25 (45.45%)	30 (54.55%)	55 (100%)

3.11 The Amount of Money a Family is Willing to Pay for Buying a Tubewell :

The buying range of the tubewell buyers are shown in Table 14. It is observed that most of the tubewell buyers (77.54% in Godagari and 96.12% in Sherpur) fall within the range of Taka 500. It is quite likely that about 60 per cent of the villagers in Godagari and about 64 per cent in Sherpur being landless and marginal, they should have economic constraint to pay more than 500 taka for a tubewell.

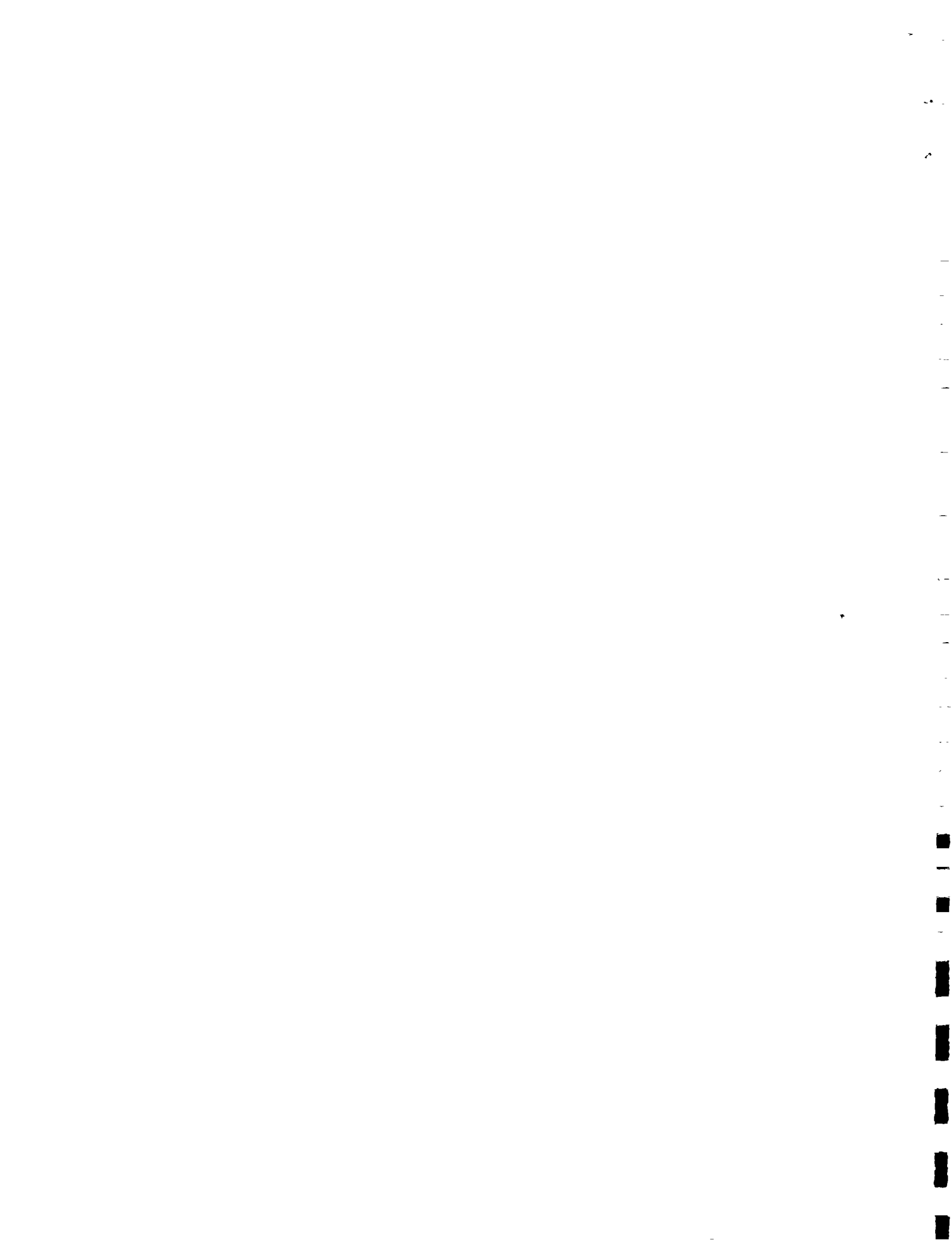
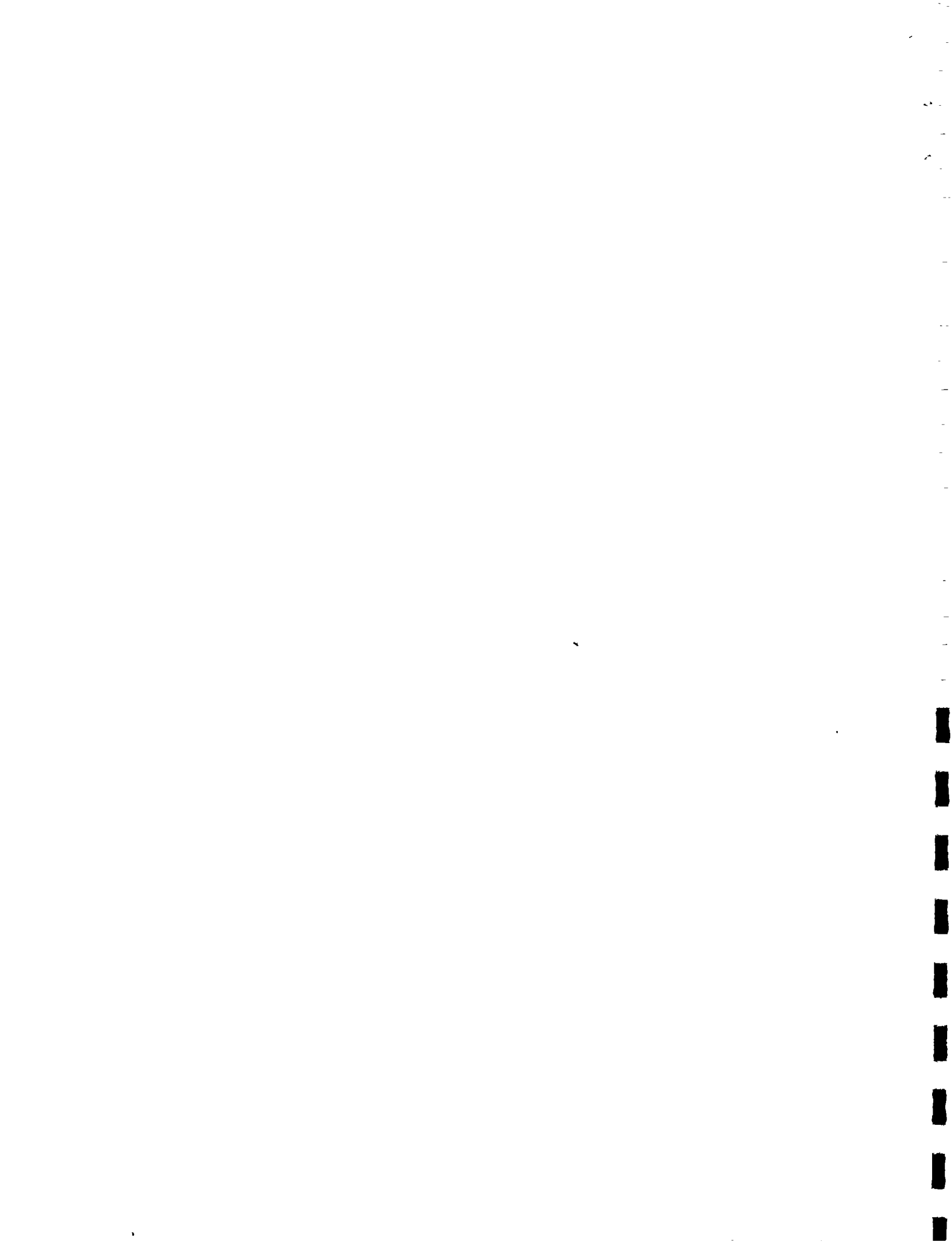


Table 14

The Amount of Money (in Taka) a Family is willing
to Pay for Buying a Tubewell

(Range in Taka)

Name of Village	1 - 100	101- 500	501- 1000	1001- 1500	1501 + above	Total
Nabagram	9 (24.33%)	13 (37.84%)	11 (29.73%)	1 (2.70%)	2 (5.40%)	37 (100%)
Domkuli	19 (30.65%)	36 (58.06%)	4 (6.45%)	-	2 (3.23%)	62 (100%)
Diar Mohobbotpur	10 (25.64%)	20 (51.28%)	6 (15.38%)	3 (7.70%)	-	39 (100%)
Gagoi	24 (52.17%)	20 (43.48%)	1 (2.17%)	1 (2.17%)	-	46 (100%)
Rajapur	23 (39.65%)	33 (56.90%)	2 (3.45%)	-	-	58 (100%)
Khordo Bogra	7 (28%)	17 (68%)	-	1 (4%)	-	25 (100%)



4. Village Sanitation at Family Levels

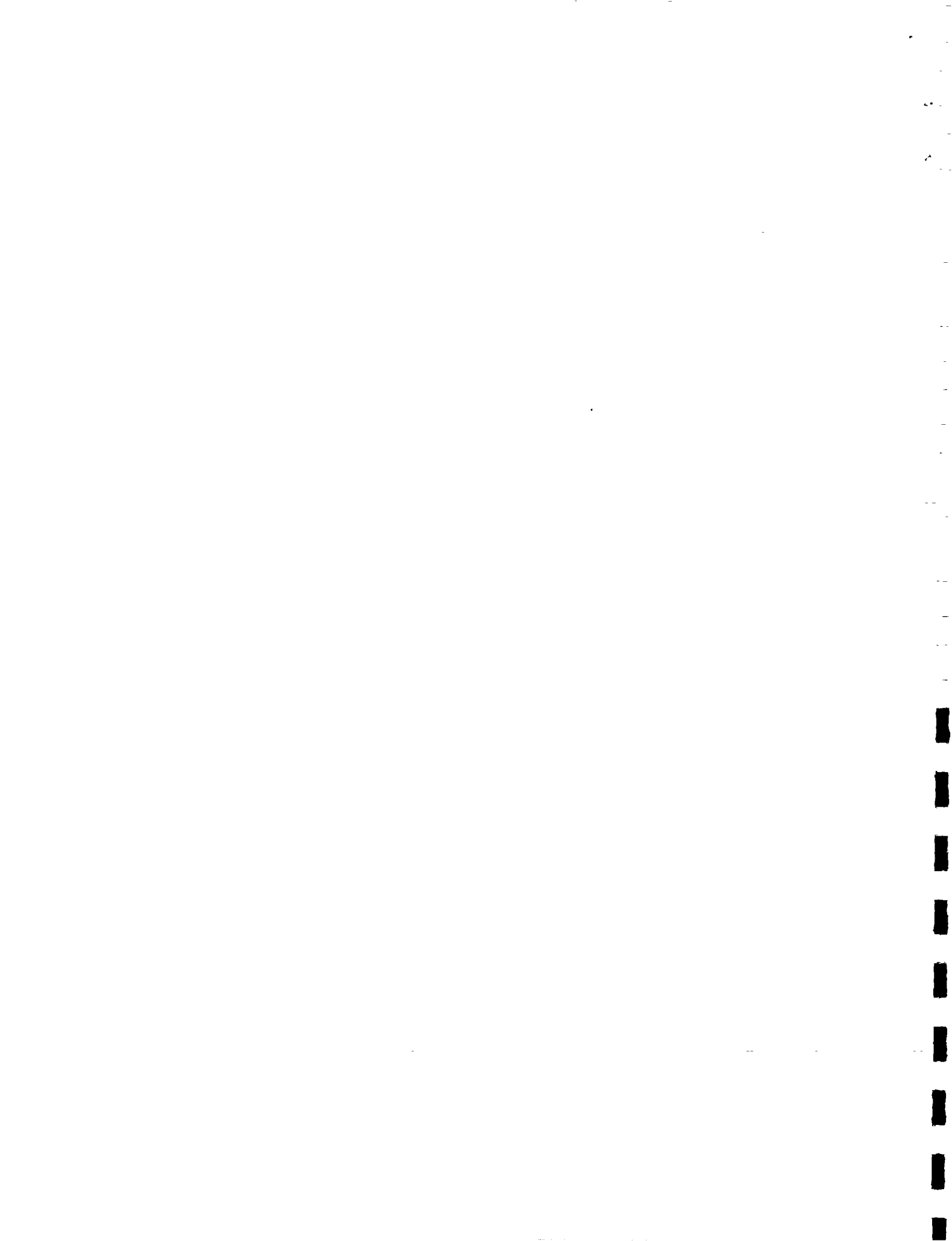
4.1 Defecation Practices Among the Villagers:

The survey indicated that 38 per cent Godagari villagers and only 17 per cent Sherpur villagers use a fixed place or latrine for defecation. The remaining 62 per cent families in Godagari villages and 83 per cent in Sherpur villages still defecate in fields, streets, bushes, ditches, beside the pond and in places depending on their convenience. The table further indicates that only 36.48 per cent Godagari families and 13 per cent Sherpur families have their own latrine.

Table 15

Defecation Practices Among the Villagers

Name of village	Families Using Fixed Latrine		Fixed Place or Latrine for Defecation			
	Own	Others'	Fields & Streets	Beside Pond & Ditches	Bush	Depending on convenience
Nabagram (N = 56)	22 (39.29%)	1 (1.78%)	12 (21.43%)	-	1 (1.78%)	20 (35.71%)
Domkuli (N = 160)	72 (45%)	4 (2.50%)	15 (9.37%)	2 (1.25%)	12 (7.50%)	55 (34.38%)
Diar Mohobbotpur (N = 91)	18 (19.78%)	-	7 (7.69%)	8 (8.79%)	26 (28.51%)	32 (35.17%)
Garoi (N = 132)	19 (14.39%)	4 (3.03%)	28 (21.21%)	-	36 (27.27%)	45 (34.00%)
Rajapur (N = 113)	13 (11.50%)	6 (5.31%)	23 (20.36%)	4 (3.54%)	18 (15.93%)	49 (43.36%)
Khordo Bogra (N = 55)	7 (12.73%)	2 (3.64%)	8 (14.54%)	-	10 (18.18%)	28 (50.91%)



4.2 Awareness of Danger in Indiscriminate Defecation:

The villagers were asked whether they are aware of danger in indiscriminate defecation: about 82.4% respondents in Godagari villages and 81% in Sherpur villages claimed that they are quite aware of the danger in indiscriminate defecation. The remaining 18% family heads in Godagari villages and 19% in Sherpur villages replied that they are not at all aware of the danger in indiscriminate defecation.

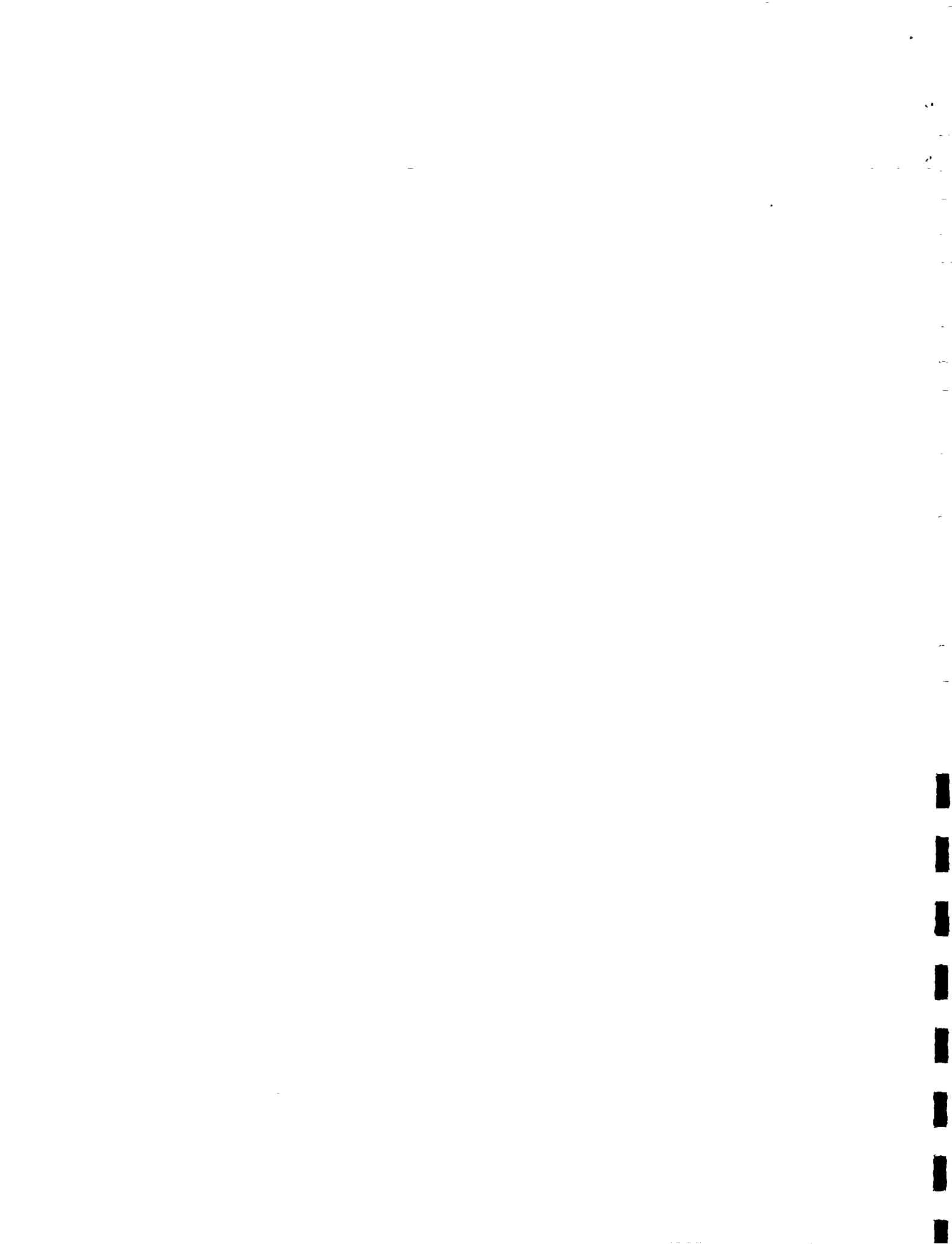
Table 16

Awareness of Danger in Indiscriminate Defecation

<u>Name of village</u>	<u>They are Aware</u>	<u>They are not Aware</u>
Nabagram (N = 56)	50 (89.29%)	6 (10.71%)
Domkuli (N = 160)	130 (81.25%)	30 (18.75%)
Diar Mohobbotpur (N = 91)	71 (78.02%)	20 (21.98%)
Garoi (N = 132)	97 (73.48%)	35 (26.52%)
Rajapur (N = 113)	98 (86.73%)	15 (13.27%)
Khordo Bogra (N = 55)	48 (87.27%)	7 (12.73%)

4.3 Whether the Villagers will give up Indiscriminate Defecation if they are supplied with latrines :

The opinion responses were taken from all heads of the families whether they think that the villagers will give up indiscriminate defecation if each family in the village is supplied with a latrine. According to the survey 81 per cent respondents in Godagari villages and 91 per cent in



Sherpur villages opined that the villagers will give up indiscriminate defecation if latrines are made available to them. There is some reasons to believe it as Domkuli being a 'model village' each and every family of that was given a latrine under the leadership of Upazila Chairman. It may be suspected that the percentage of latrine use in that village is higher as compared to other study villages. On the other side, our observation also suggests that many villagers who were given latrine have not been using them. Instead of installing the latrines, the villager, rather use those rings as feeding pan for their cattle.

Table 17

Whether the Villagers will give up Indiscriminate Defecation if they are supplied with latrines

<u>Name of Village</u>	<u>Yes</u>	<u>No</u>
Nabagram (N = 56)	41 (73.21%)	15 (26.79%)
Domkuli (N = 160)	129 (80.62%)	31 (19.38%)
Diar Mohobbotpur (N= 91)	79 (86.81%)	12 (13.19%)
Garoi (N = 132)	121 (91.67%)	11 (8.33%)
Rajapur (N = 113)	105 (92.92%)	8 (7.08%)
Khordo Bogra (N = 55)	47 (85.45%)	4 (14.55%)

4.4 Latrine Construction Plan :

It is observed from Table 15 that 112 latrines in Godagari village and 39 in Sherpur have been constructed. Out of 112 latrines in Godagari 55 (49.11%) fulfill the criterion of a target latrine. Similarly, out



of 39 latrines in Sherpur villages only 7 (17.95%) are target latrines. It indicates and it has been observed that people judge a latrine by its superstructure not by its hygienic criterion.

Table 18

Latrine Construction Plan

Name of Village	Self			Public Health		
	Target	Non-target	Total	Target	Non-target	Total
A						
Nabagram (N = 22)	2 (12.50%)	14 (87.50%)	16 (100%)	6 (100%)	-	6 (100%)
Domkuli (N = 72)	16 (38.10%)	26 (61.90%)	42 (100%)	29 (96.67%)	1 (3.33%)	30 (100%)
Diar Mohobbotpur (N = 18)	-	16 (100%)	16 (100%)	2 (100%)	-	2 (100%)
B						
Garoi (N = 19)	2 (10.53%)	17 (89.47%)	19 (100%)	-	-	-
Rajapur (N = 13)	1 (7.69%)	12 (92.31%)	13 (100%)	-	-	-
Khordo Bogra (N = 7)	1 (25%)	3 (75%)	4 (100%)	3 (100%)	-	3 (100%)

4.5 Reasons for Not Buying Sanitary Latrine :

A total of 252 households in Godagari villages and 293 households in Sherpur villages were found who have not yet installed any sanitary latrine. There are different reasons behind non-installation of sanitary latrines. A great majority of the respondents (i.e., 80.56% in Godagari and 89.76% in Sherpur) replied that they did not buy it because of the economic reason. Observation indicates that there are some families who



received latrine free of cost. They replied that they did not install a latrine because they do not have sufficient land for its installation. Some respondents, however, very honestly admitted that they did not feel like buying a latrine. Reasons for not buying sanitary latrine are shown in Table 19 below.

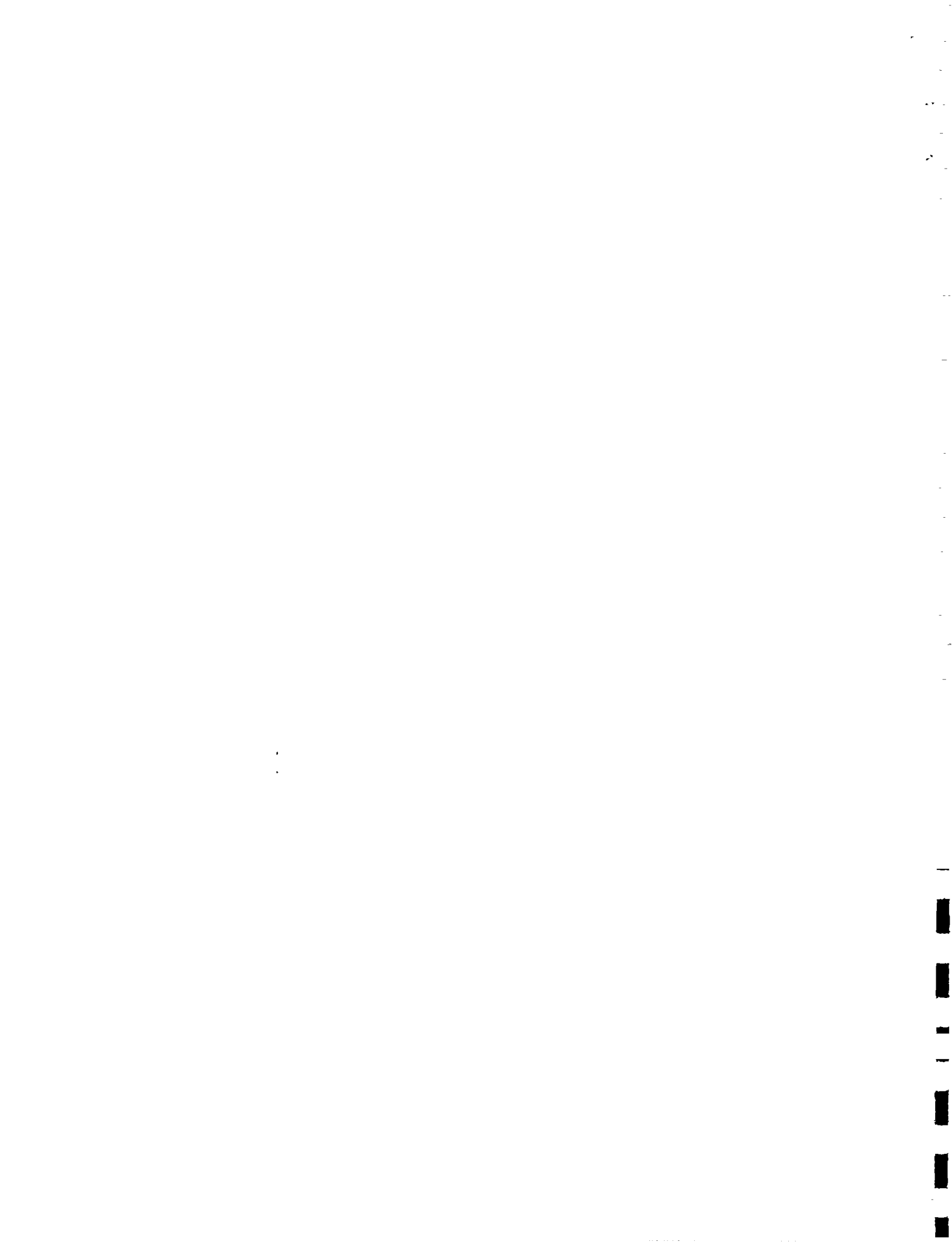
Table 19

Reasons for Not Buying Sanitary Latrine

Name of Village (No. of Resp.)	Economic reason	No land for installation	Does not feel the necessity	Distance from settling center	Does not find of center for buying	Total
Nabagram (N = 48)	35 (72.92%)	13 (27.08%)	11 (22.92%)	2 (4.17%)	3 (6.25%)	64
Domkuli (N = 115)	99 (86.09%)	32 (27.82%)	36 (31.30%)	-	2 (1.74%)	169
Diar Mohobbotpur (N = 89)	69 (77.53%)	8 (8.99%)	9 (10.11%)	1 (1.12%)	2 (2.25%)	89
Caroi (N = 130)	116 (89.23%)	20 (15.38%)	21 (16.15%)	1 (0.77%)	-	158
Rajapur (N = 112)	97 (86.61%)	12 (10.71%)	7 (6.25%)	-	4 (3.5%)	120
Khordo Bogra (N = 51)	50 (98.04%)	5 (9.80%)	4 (7.84%)	1 (1.96%)	1 (1.96%)	61

4.6 Whether the Respondents are Aware about Public Health Department as Latrine Supplier :

In Bangladesh, the Department of Public Health and Engineering (DPHE) has been assisting the people by supplying the latrine at the village level. For that reason, the villagers often are aware of their role as latrine



suppliers. On the question of whether the villagers are aware about Public Health Department as suppliers : an average of 74.27 per cent of Godagari villagers and 60.67 per cent Sherpur villagers replied that they are aware of this.

Table 20

Whether the Respondents are Aware of Public Health Department as Latrine Supplier

<u>Name of Village</u>	<u>Yes</u>	<u>No</u>
Nabagram (N = 56)	40 (71.43%)	16 (28.57%)
Domkuli (N = 160)	126 (78.75%)	34 (26.25%)
Diar Mohobbotpur (N = 91)	62 (68.13%)	29 (31.87%)
Garoi (N = 132)	82 (62.12%)	50 (37.88%)
Rajapur (N = 113)	67 (59.29%)	46 (40.70%)
Khordo Bogra (N = 55)	33 (60%)	22 (40%)

4.7 Whether the Villagers are Willing to Buy Latrine from Public Health :

On an enquiry about the villagers' willingness to buy latrine from Public Health : about 49 per cent Godagari villages and 73 per cent Sherpur from villagers expressed their willingness to buy latrines for public health.

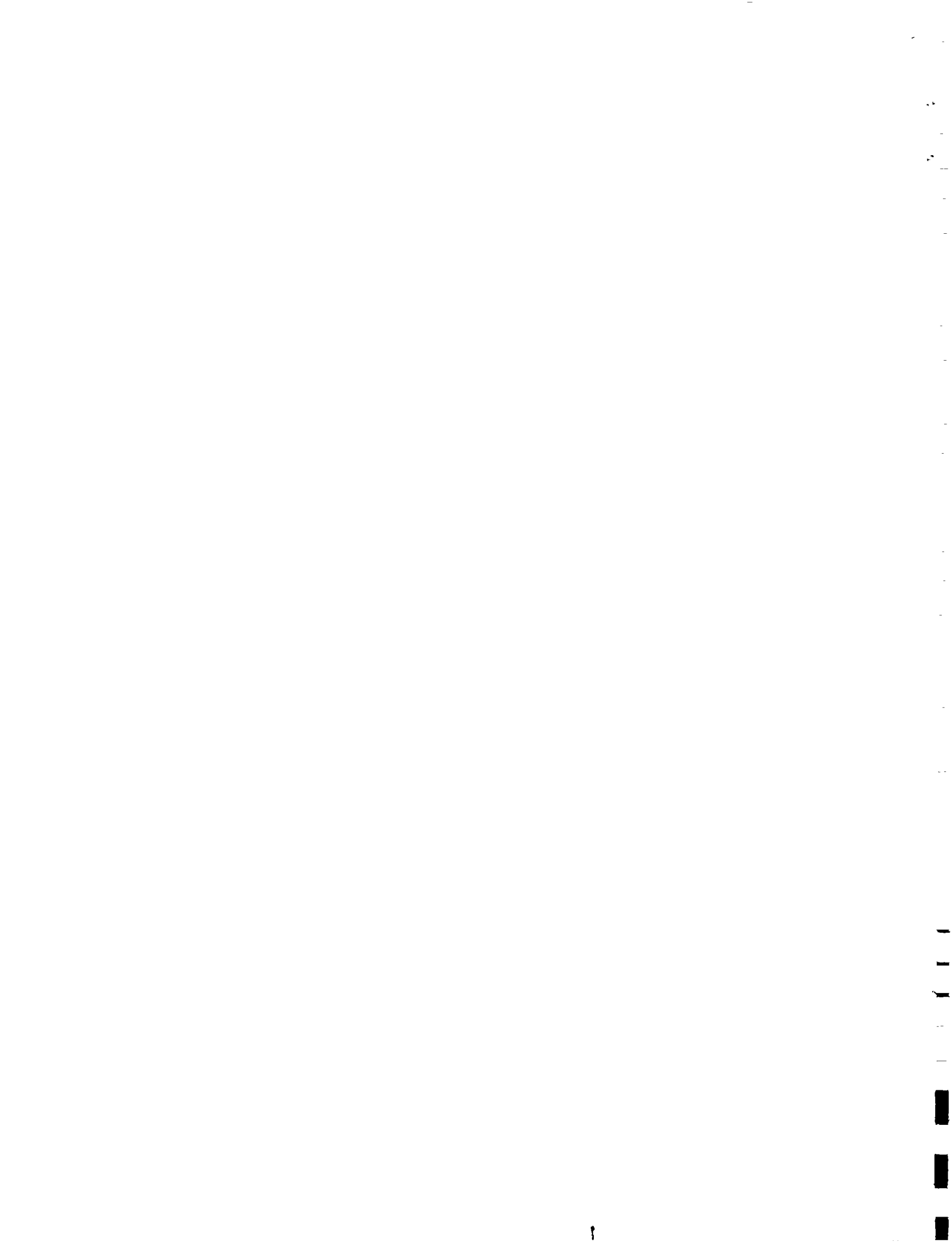


Table 21

Whether the Villagers are Willing to Buy
Latrine from Public Health

<u>Name of Village</u>	<u>Yes</u>	<u>No</u>
Nabagram (N = 56)	36 (64.29%)	20 (35.71%)
Domkuli (N = 160)	55 (34.38%)	105 (65.63%)
Diar Mohobbotpur (N = 91)	59 (64.84%)	32 (31.11%)
<hr/>		
Garoi (N = 132)	84 (65.91%)	41 (34.09%)
Rajapur (N = 113)	91 (80.53%)	22 (19.47%)
Khordo Bogra (N = 55)	42 (76.36%)	13 (23.64%)

4.8 The Amount of Money a Family is Willing
to Pay for Buying a Latrine :

The respondents who are willing to buy tubewell from Public Health were asked to provide an amount of money they could pay for a latrine. The breakdown of the amount they are willing to pay are shown in Table 22.

4.9 Villagers Suggestions for Popularizing Latrine Use:

Regarding suggestions for popularizing latrine use, 21.82 per cent Godagari villagers and 15.67 per cent Sherpur villagers advocated to use the mass media for popularizing the latrine use in rural areas. About 36 per cent Godagari villagers and 46 per cent Sherpur villagers suggested for seeking help of the extension workers to popularize latrine use. The remaining 43 per cent in Godagari villages and 38 per cent in Sherpur villages did not suggest anything as they are not at all aware of this

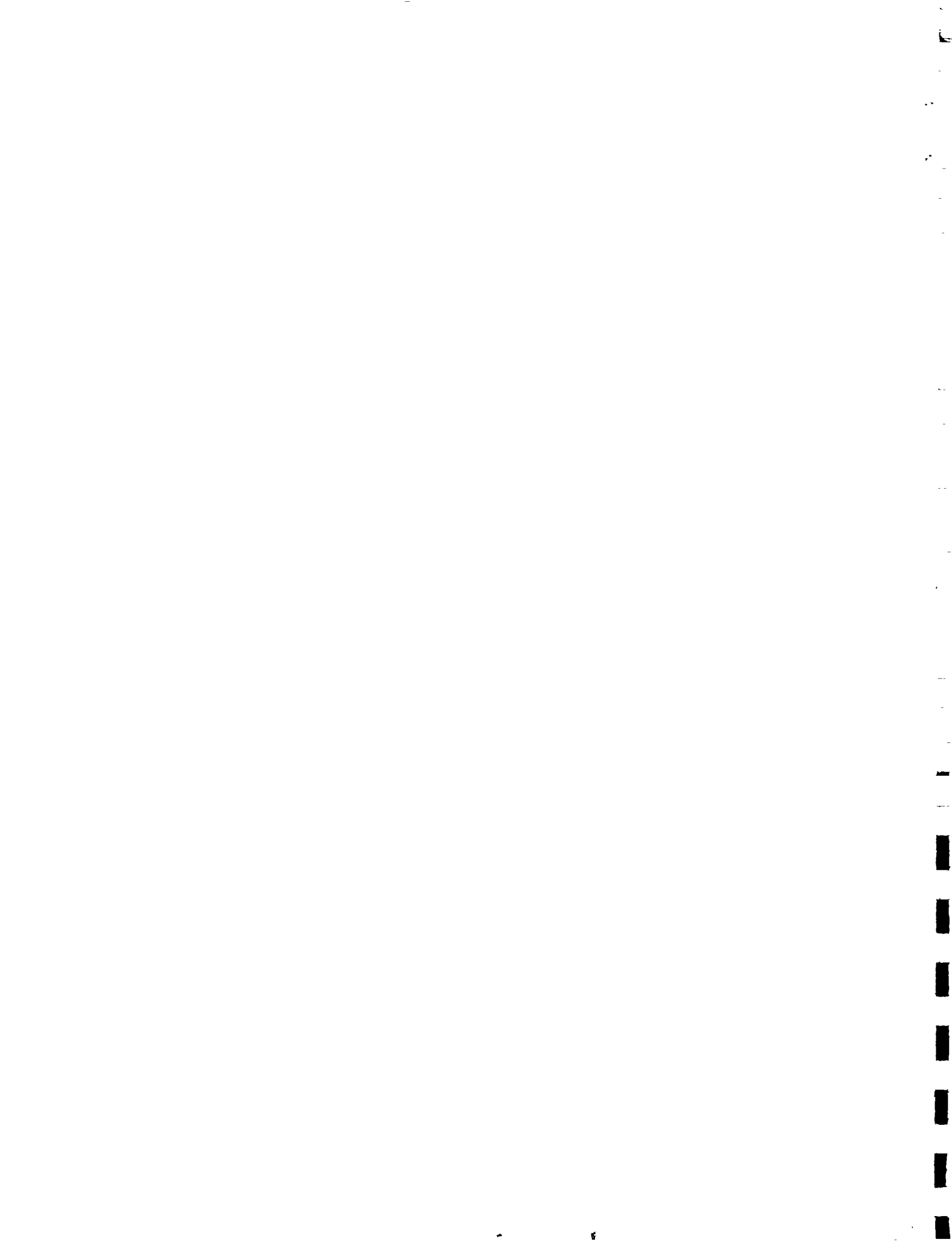


Table 22

The Amount of Money a Family is Willing to Pay for
Buying a Latrine

(Amount in Taka)

Name of Village	1 - 50	51 - 100	101 - 200	201 - 300	301 +	Total
Nabagram	6 (16.67%)	7 (19.44%)	6 (16.67%)	10 (27.78%)	7 (19.44%)	36 (100%)
Domkuli	20 (36.36%)	19 (34.55%)	6 (10.91%)	9 (16.36%)	1 (1.82%)	55 (100%)
Diar Mohobbotpur	11 (18.65%)	24 (40.68%)	15 (25.42%)	8 (13.56%)	1 (1.69%)	59 (100%)
Garoi	40 (45.98%)	27 (31.03%)	7 (8.05%)	11 (12.64%)	2 (2.30%)	87 (100%)
Rajapur	45 (49.45%)	34 (37.36%)	9 (9.89%)	3 (3.29%)	-	91 (100%)
Khordo Bogra	8 (42.86%)	14 (33.33%)	7 (16.67%)	3 (7.14%)	-	42 (100%)

question. Some health programmes and health messages in Bangladesh are broadcast on radio and television. But using media alone to promote sanitation and to disseminate health education can not be very effective in Bangladesh. Because between 13 per cent and 27 per cent rural households in Bangladesh own a radio and less than 1 per cent men and women in rural areas have access to television. Assuming that the figures mentioned above are correct, and these people have access to the media, but even then it is not logical to expect that all of them would listen to it regularly. So media may be used as a supplementary method for popularizing a particular program. It may substantiate other methods.

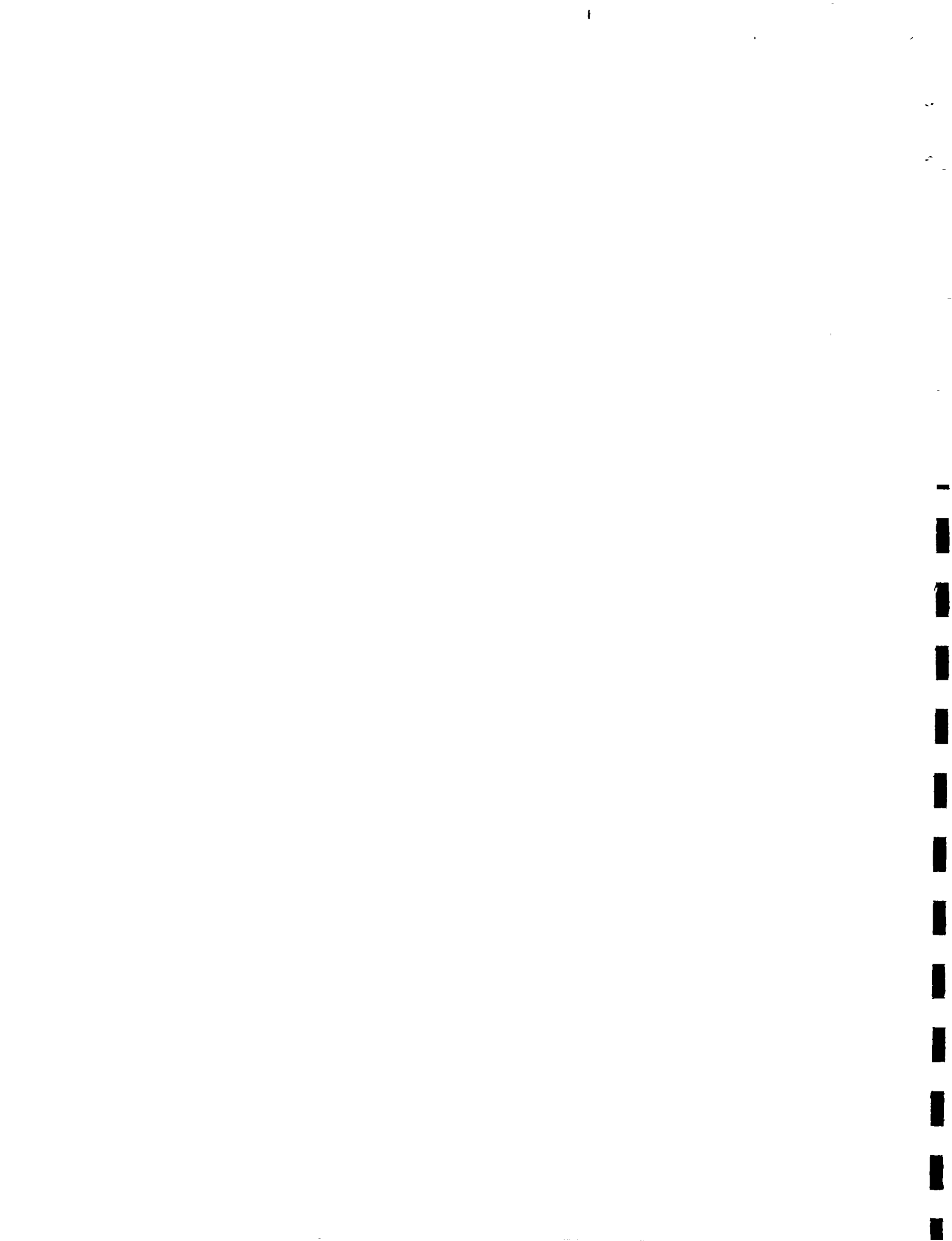
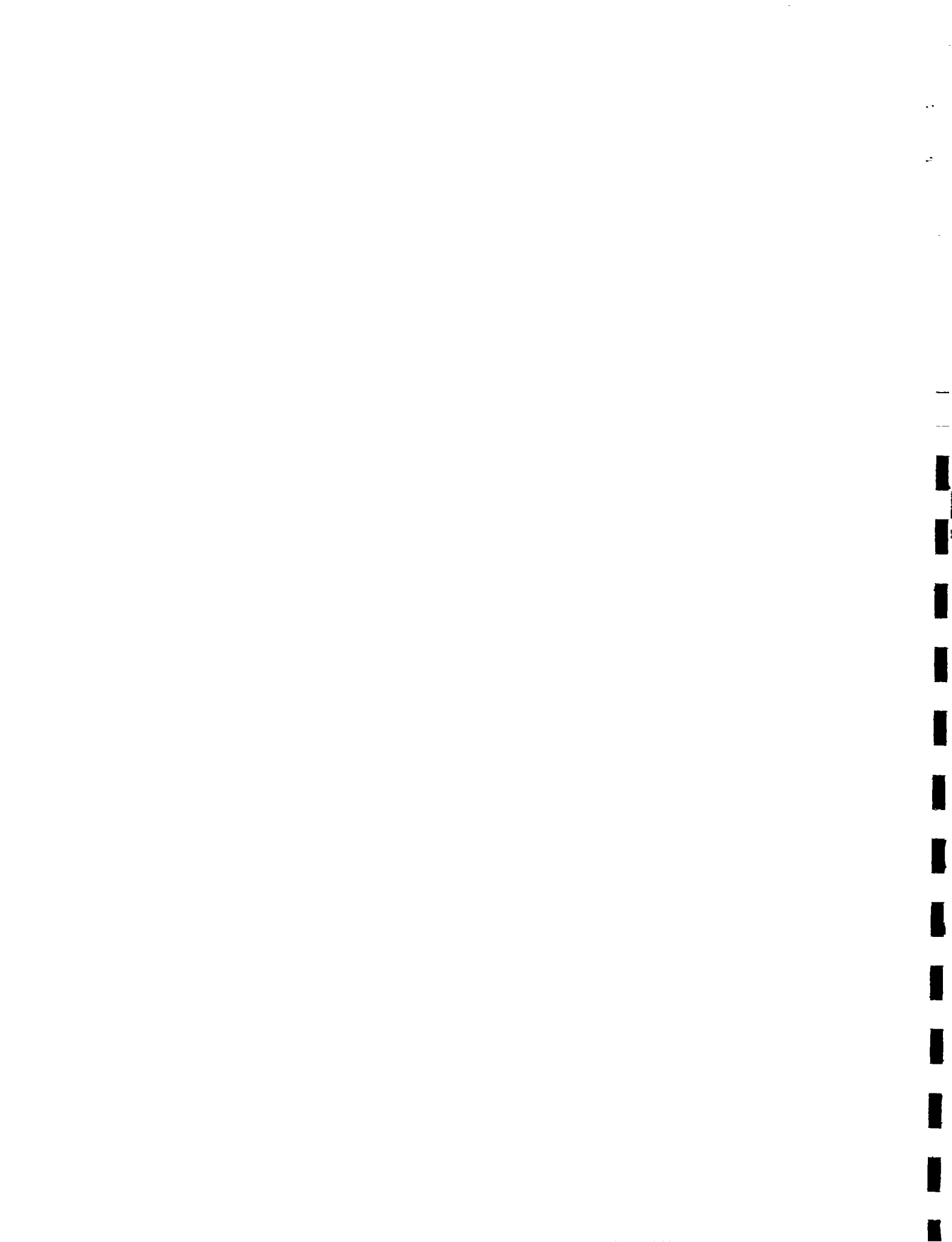


Table 23

Villagers' Suggestions for Popularizing Latrine Use

Name of Village	Not Aware	Suggested Popularizing Mass Media	Suggested Popularizing through Extension workers	Total
Nabagram	28 (50.00%)	7 (12.50%)	21 (37.50%)	56 (100%)
Domkuli	67 (41.88%)	40 (25.00%)	53 (33.12%)	160 (100%)
Diar Mohobbotpur	37 (40.66%)	20 (21.98%)	34 (37.36%)	91 (100%)
Garoi	35 (26.51%)	27 (20.45%)	70 (53.04%)	132 (100%)
Rajapur	55 (48.67%)	3 (2.66%)	55 (48.67%)	113 (100%)
Khordo Bogra	25 (45.45%)	17 (30.91%)	13 (23.64%)	55 (100%)



Chapter 5

5. Personal Hygiene Awareness of the Villagers

This section provides data on knowledge of personal hygiene awareness of the villagers.

5.1 Whether the Villagers Wash Hands Before Eating Meal:

In response to a question whether the villagers wash hands before eating meal : almost all the respondents (86.32% in Godagari and 85% in Sherpur) claim that they wash hands before eating their meal.

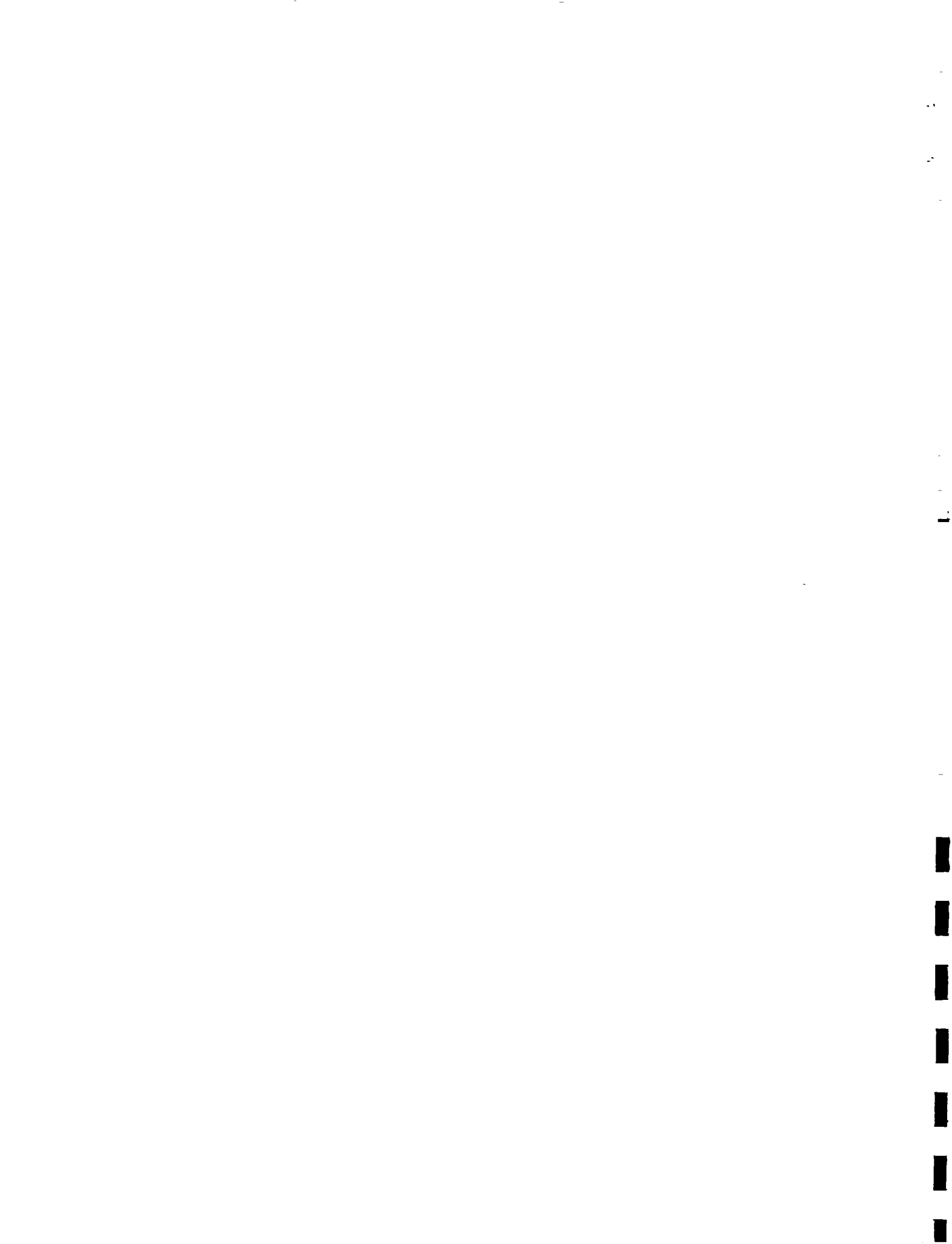
Table 24

Whether the Villagers Wash Hands Before Eating their Meal

<u>Name of Village</u>	<u>Yes</u>	<u>No</u>	<u>Total</u>
Nabagram	49 (87.50%)	7 (12.50%)	56 (100%)
Domkuli	139 (86.88%)	21 (13.13%)	160 (100%)
Diar Mohobbotpur	77 (84.62%)	14 (15.38%)	91 (100%)
Garoi	115 (87.12%)	17 (12.88%)	132 (100%)
Rajapur	97 (85.84%)	16 (14.16%)	113 (100%)
Khordo Bogra	43 (78.18%)	12 (21.82%)	55 (100%)

5.2 Whether the Villagers Wash Hands with Soap Before Eating Meal :

Although majority of the villagers claim that they wash hands before meal (see Table 24), very few of them (18.15% for Godagari villages and 11.67% for Sherpur) however, use soap in washing hands before eating meal. This



provides very unfavorable situation for the villagers in terms of their personal hygiene awareness. Because in Bangladesh, the villagers in the field with mud and dust. So, from hygienic point of view, it is very much expected that they use soap for cleaning their hands before eating their meal.

Table 25

Whether the Villagers Wash Hands with Soap Before Eating Their Meal

<u>Name of Village</u>	<u>Yes</u>	<u>No</u>	<u>Total</u>
Nabagram	11 (19.64%)	45 (8.36%)	56 (100%)
Domkuli	33 (20.63%)	127 (79.38%)	160 (100%)
Diar Mohobbotpur	11 (12.09%)	80 (87.91%)	91 (100%)
Garoi	17 (12.88%)	115 (87.12%)	132 (100%)
Rajapur	10 (8.85%)	103 (91.15%)	113 (100%)
Khordo Bogra	8 (14.55%)	47 (85.45%)	55 (100%)

5.3 Using Soap at the Time of Bathing :

The diversified use of soap at the time of bathing has been shown in Table 26. The table shows that 17.59 per cent Godagari villagers and 6.33 per cent Sherpur villagers never use soap during their bathing. About 18 per cent Godagari villagers and 23.33 per cent Sherpur villagers however, use soap 4 days a week. And 33.88 per cent Godagari villagers and 41 per cent Sherpur villagers use soap once in a week. A very insignificant number of persons (i.e., 1.95% in Godagari and 5.33% in Sherpur) were found to use soap everyday.

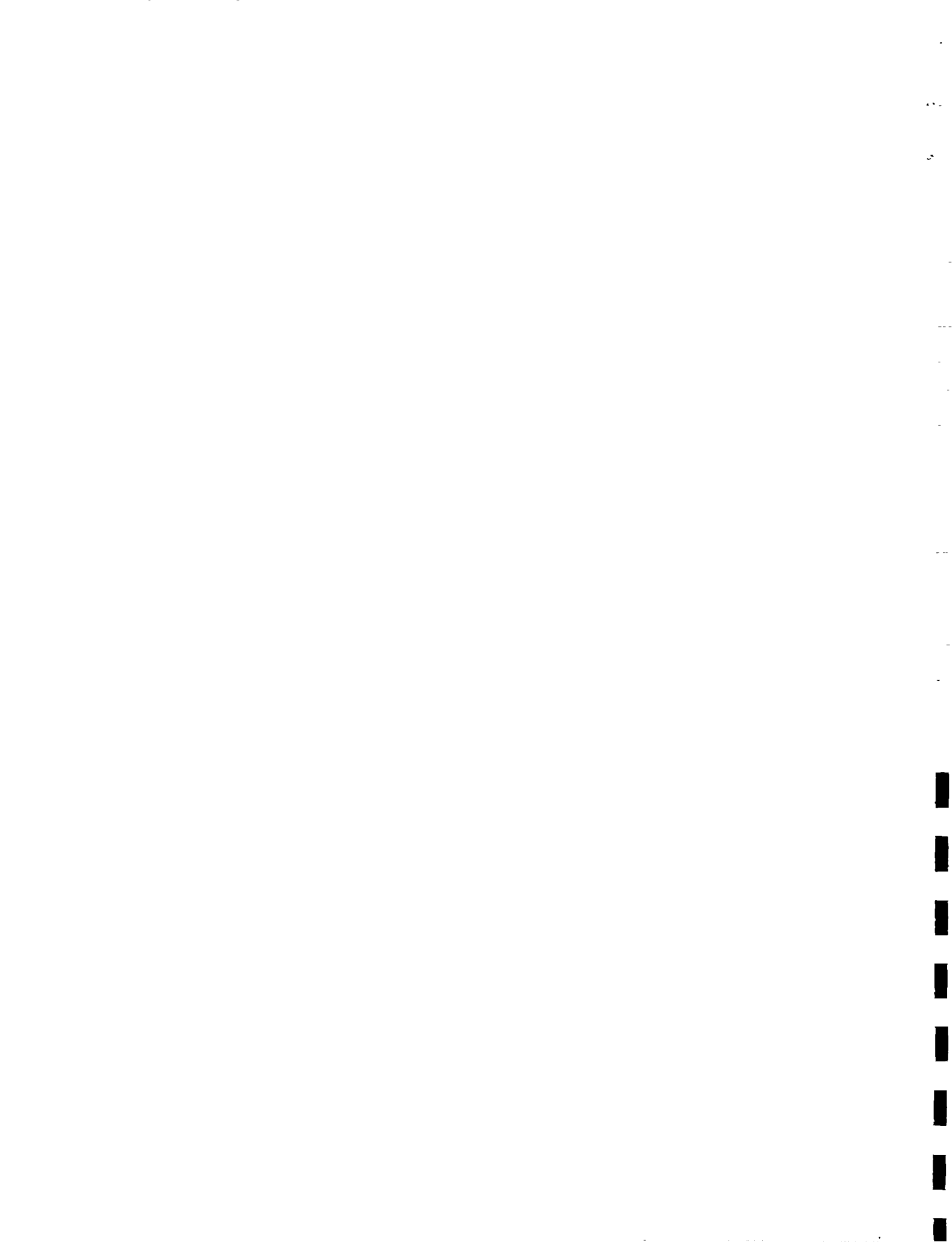


Table 26

Using Soap at the Time of Bathing

Name of Village	4 days in a week	Once in a week	Twice in a week	Twice in a month	Once in a month	Never used	Use every-day	Total
Nabagram	15 (26.79)	22 (39.29)	6 (10.71)	2 (3.57)	2 (3.57)	6 (10.71)	3 (5.36)	56 (100)
Domkuli	32 (20.00)	52 (32.50)	19 (11.87)	10 (6.25)	6 (3.75)	39 (24.37)	2 (1.25)	160 (100)
Diar Mohobbotpur	22 (24.18)	30 (32.97)	10 (10.99)	10 (10.99)	9 (9.89)	9 (9.89)	1 (1.10)	91 (100)
Garoi	34 (25.76)	49 (37.14)	18 (13.64)	5 (3.79)	10 (7.55)	9 (6.82)	7 (5.30)	132 (100)
Rajapur	23 (20.35)	47 (41.59)	16 (14.16)	8 (7.8)	7 (6.19)	6 (5.13)	6 (5.13)	113 (100)
Khordo Bogra	13 (23.64)	27 (49.09)	6 (10.91)	-	2 (3.64)	4 (7.27)	3 (5.45)	55 (100)

Note: Figures within parentheses indicate percentages.

5.4 Monthly Soap Consumption Pattern in Families:

The villagers were asked to compute the monthly consumption of soap in their respective families. The soap consumption of the villagers has been divided into three broad expenditure categories. As found, 67.12 per cent in Godagari and 88.01 per cent of Sherpur villagers' monthly expenditure on soap ranged between 1 to 20 taka.

5.5 How do the Villagers Clean Hands After Defecation :

The villagers use mud, ash, soap and water for cleaning hands after defecation. And it has been found that a great majority of the respondents (e.g. 78.50% in Godagari and 85.67% in Sherpur) replied that they use mud to clean their hands.



Table 27

Monthly Soap Consumption Pattern in Family

(Amount in Taka spent)

Name of Village	Type of Soap	1-20	21-30	31 +	Total
Nabagram	Toilet Soap	27	6	8	41
	Washing Soap	31	10	11	52
	Soda	41	4	3	48
Domkuli	Toilet soap	84	22	12	118
	Washing Soap	85	35	34	154
	Soda	143	7	-	150
Diar Mohobbotpur	Toilet Soap	61	9	7	77
	Washing Soap	67	13	6	86
	Soda	76	1	-	77
Garoi	Toilet Soap	94	9	7	110
	Washing Soap	105	21	3	129
	Soda	88	-	-	88
Rajapur	Toilet Soap	79	7	3	89
	Washing Soap	92	17	2	111
	Soda	66	-	-	66
Khordo Bogra	Toilet Soap	32	5	5	42
	Washing Soap	47	3	2	52
	Soda	21	1	-	22



A very small number of respondents (e.g., 7.82% in Godagari and 6% in Sherpur) said that they wash hands with soap after defecation. Although it is often observed that villagers even do not wash hands after defecation, surprisingly our responses in the survey indicate that all the villagers somehow possess the habit of cleaning hands after defecation. This is because the answers for this question was specified. I assume that if the question was asked slightly in a different form. The responses would have been different.

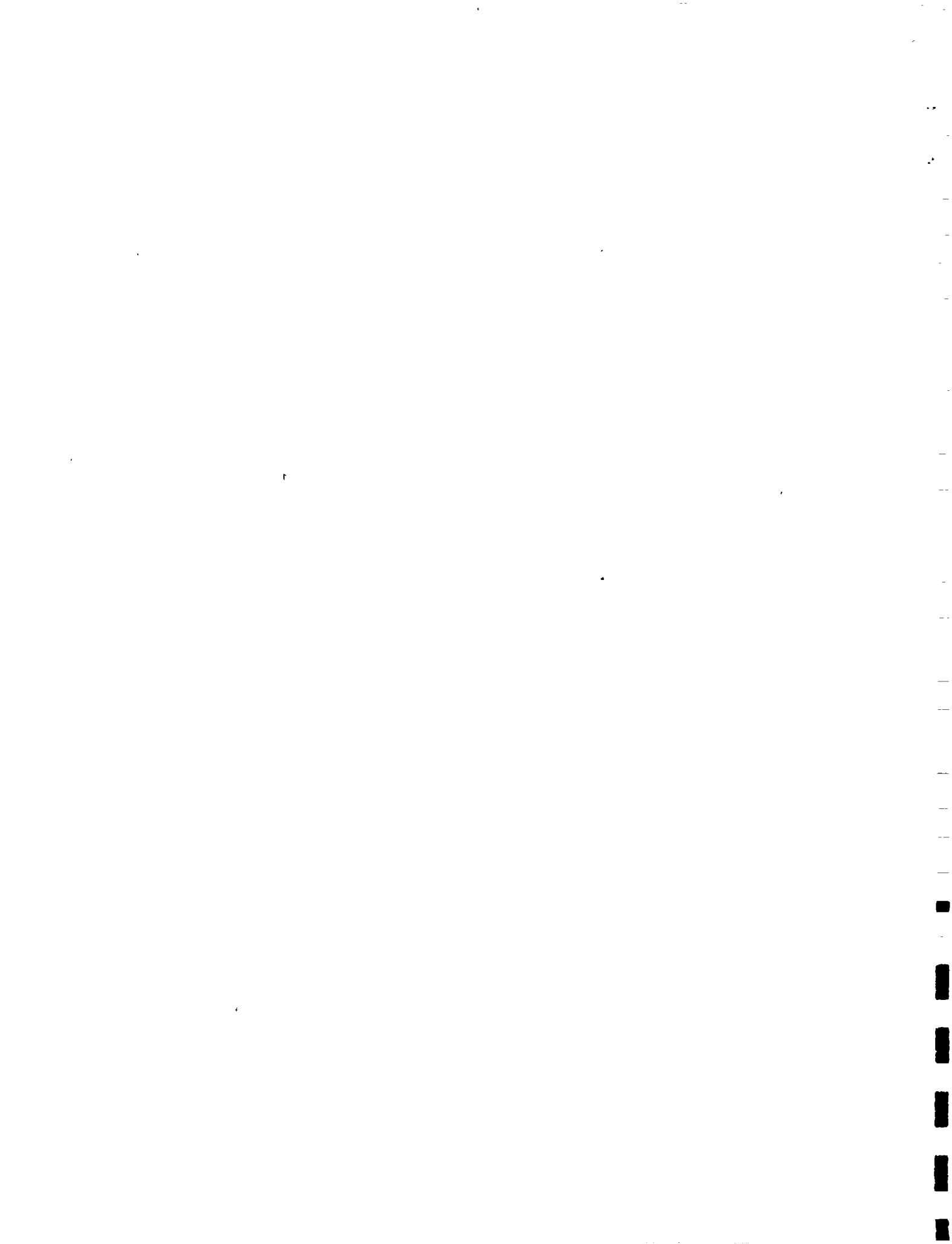
Table 28

How the Respondents Clean Hands After Defecation

<u>Name of Village</u>	<u>With mud</u>	<u>With Ash</u>	<u>With Soap</u>	<u>Only water</u>	<u>Total</u>
Na bagram	35(62.50%)	8(14.28%)	9 (16.07%)	4 (7.14%)	56(100%)
Domkuli	129(80.63%)	17(10.63%)	10(6.25%)	4 (2.50%)	160(100%)
Diar Mohobbotpur	77(84.62%)	5(5.49%)	5(5.49%)	4(4.40%)	91(100%)
Garoi	115(87.12%)	3(2.27%)	12(9.09%)	2(1.52%)	132(100%)
Rajapur	98(86.73%)	6(5.31%)	2(1.77%)	7(6.19%)	113(100%)
Khordo Bogra	44(80%)	6(10.91%)	4 (7.27%)	1(1.82%)	55(100%)

5.6 Where Do the Villagers Wash Children's Soiled Clothes:

The villagers wash their children's soiled clothes (with stool) in the ponds, rivers, tubewell platforms, well platform and often at the yard by carrying water at home. It is observed from the table that villagers have very low awareness in this respect. When there are ponds and rivers, the villagers wash children's soiled clothes there. And some people use



those surface water for cooking, cleaning and for other household activities. (see Table 4 and 6 of Chapter 3). However, the percentage of using ponds and rivers for cleaning children's soiled clothes is very high in Godagari villages whereas having no river and ponds in Rajapur and Khordo Bogra in Sherpur Upazila, the percentage of using tubewell platform for the cleaning children's soiled clothes is very high (see Table 29).

Table 29

Where Do the Villagers Wash Children's Soiled* Clothes

<u>Name of Village</u>	<u>Pond</u>	<u>River</u>	<u>Tubewell platform</u>	<u>Well platform</u>	<u>At the yard</u>	<u>Total</u>
Nabagram (N = 45)	54 (98.18%)	1 (1.81%)	-	-	-	55 (100%)
Domkuli (N = 121)	85 (52.80%)	53 (32.91%)	5 (3.10%)	6 (3.72%)	1 (0.62%)	161 (100%)
Diar Moho- bhotpur(N= 67)	45 (59.21%)	20 (26.31%)	10 (13.16%)	1 (1.32%)	-	76 (100%)
Garoi (N = 69)	39 (29.78%)	29 (22.13%)	38 (29%)	16 (12.21%)	9 (6.88%)	131 (100%)
Rajapur (N = 76)	-	-	69 (56.56%)	28 (22.96%)	25 (20.50%)	122 (100%)
Khordo Bogra (N = 35)	11 (20.38%)	-	22 (40.74%)	8 (14.81%)	13 (24.08%)	54 (100%)

*With stool.



5.7 Distance of Latrine from Kitchen and Water Source :

Since the majority of the latrines and in the villages are non-target, their location-distance from kitchen and water source is very significant from hygienic point of view. The general expected view is that if the latrine are non-target, it is better to have more distance of it from kitchen and water source. As mentioned by the respondents about the distance of latrine from kitchen and water source are grouped in three categories. It has been observed that the majority of the respondents (see Table 30) who preferred to keep their latrine at a distance of 100 feet from the kitchen and water source. The respondents have two arguments in favor of this: one, it is convenient for the women to get access to the latrines. Second, since water is to be carried to the latrines, it is easier if the latrines are located at a short distance.

5.8 Practices in Disposing Garbage:

The villagers in Bangladesh have very low awareness in disposing garbage. In the village, the housewives even do not mind in throwing the garbage beside the yard. The garbage disposing practice of the villagers has been shown in five different heads in Table 41. And it is found that about 3 per cent respondents in Godagari villages and 2.67 per cent respondents in Sherpur villages throw garbage anywhere and everywhere. About 23 per cent respondents in Godagari and 10.33 per cent in Sherpur villagers throw garbage beside the yard at a fixed place. The villagers told us that they throw these garbage at beside the yard at a fixed place because these are often used as fertilizers. A great majority of the respondents (41% in Godagari and 53% in Sherpur) are found to throw garbage beside the yard. Some villagers however, throw garbage beside the ditch and near the bush.

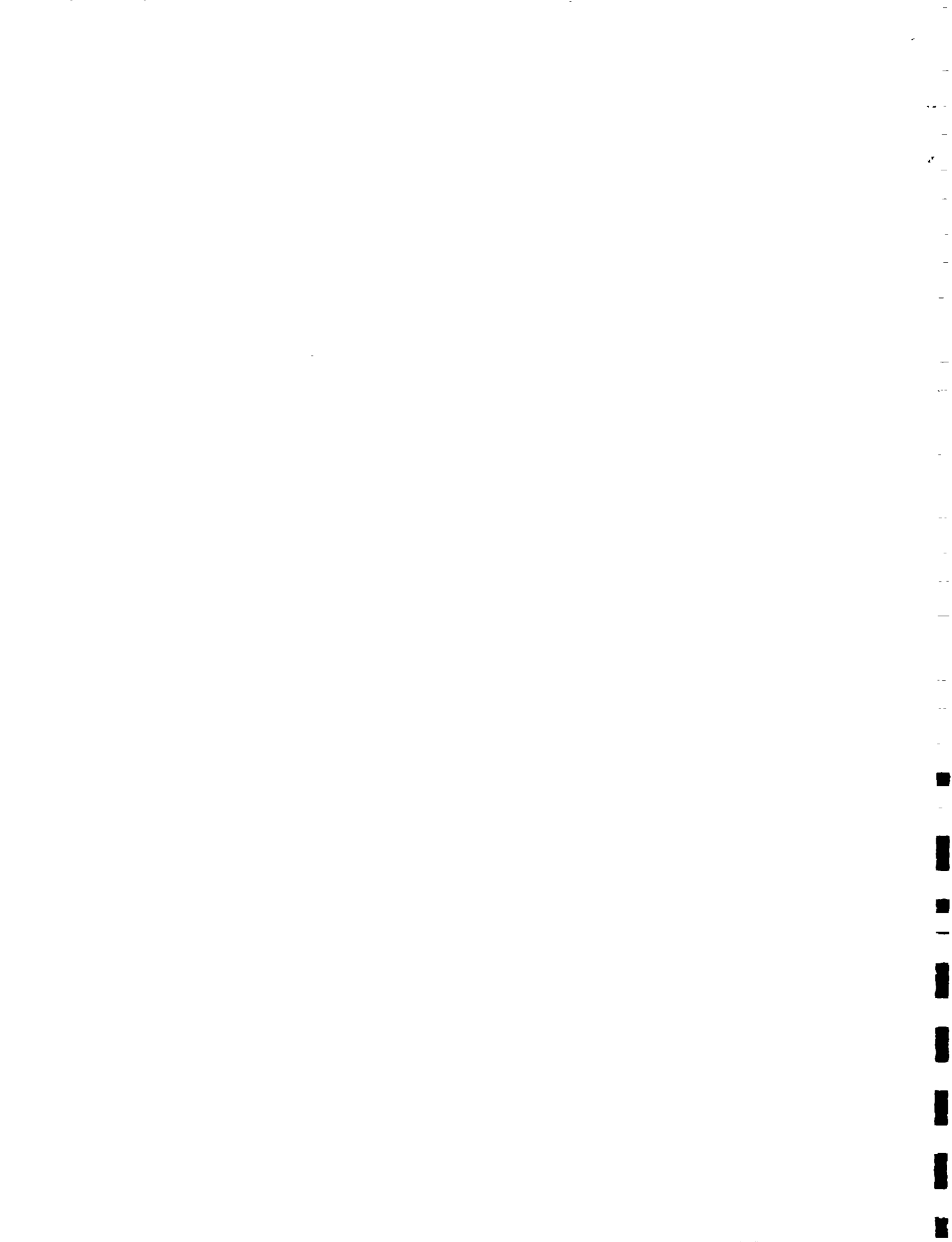


Table 30

Distance (in feet) of Latrine from Kitchen and Water Source

Village	Distance from Kitchen					Distance from Water Source				
	1-50	51-100	101-150	151 +	Total	1-50	51-100	101-150	151 +	Total
Nabagram	15 (68.18%)	6 (27.27%)	1 (4.55%)	-	22 (100%)	9 (40.91%)	3 (13.64%)	4 (18.18%)	6 (27.27%)	22 (100%)
Domkuli	36 (50%)	32 (44.44%)	2 (2.78%)	2 (2.78%)	72 (100%)	32 (44.44%)	28 (38.89%)	6 (8.34%)	6 (8.34%)	72 (100%)
Diar Mohobbotpur	5 (27.78%)	12 (66.67%)	-	1 (5.55%)	18 (100%)	5 (27.78%)	8 (44.44%)	2 (11.11%)	3 (16.67%)	18 (100%)
Garoi	13 (68.42%)	3 (15.79%)	3 (15.79%)	-	19 (100%)	12 (63.16%)	5 (26.32%)	1 (5.26%)	1 (5.26%)	19 (100%)
Rajapur	9 (69.24%)	2 (15.38%)	1 (7.69%)	1 (7.69%)	13 (100%)	9 (69.29%)	2 (15.38%)	-	2 (15.38%)	13 (100%)
Khordo Bogra	5 (71.42%)	1 (14.29%)	1 (14.29%)	-	7 (100%)	6 (85.71%)	-	-	1 (14.29%)	7 (100%)

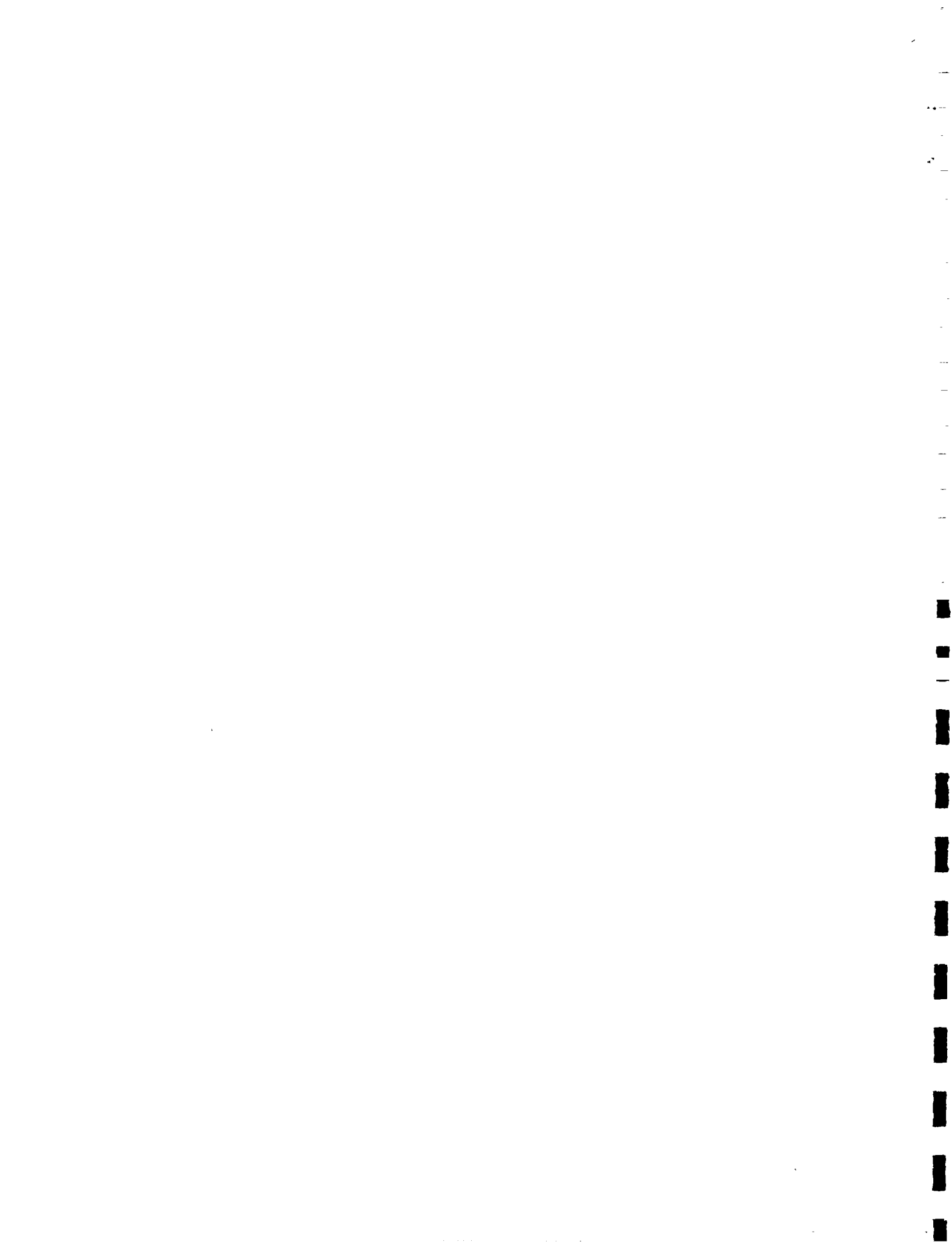


Table 31

Practices in Disposing Garbage

Name of Village	Anywhere and Everywhere	Beside the yard at a fixed place	Beside the yard	Beside the Ditch	Near the Bush	Total
Nabagram	1 (1.79%)	19 (33.93%)	24 (42.57%)	10 (17.86%)	2 (3.57%)	56 (100%)
Domkuli	1 (0.63%)	34 (21.25%)	63 (39.38%)	45 (28.13%)	17 (10.63%)	160 (100%)
Diar Mohobbotpur	6 (6.59%)	16 (17.58%)	39 (42.86%)	18 (19.78%)	12 (13.19%)	91 (100%)
Garoi	2 (1.52%)	17 (12.88%)	74 (56.06%)	13 (9.84%)	26 (19.70%)	132 (100%)
Rajapur	4 (3.54%)	14 (12.39%)	74 (65.49%)	12 (10.61%)	9 (7.96%)	113 (100%)
Khordo Bogra	2 (3.64%)	12 (21.82%)	33 (60%)	5 (9.09%)	3 (5.45%)	55 (100%)

5.9 Wheather the Villagers Can Prepare Saline at Home :

When the respondents were asked wheather they know preparing saline at home: about 88 per cent respondents in Godagari villages and 89 per cent in Sherpur villages claim that they can prepare it at home. This response was often verified by observation. As appears in the table, personal hygiene awareness seems very high in this regard. This is however, not very unusual as a number of NGOs (Non-Government Organization), government health workers and mass media have been paying much attention in this respect. However, the rationale for receiving high responses on its positive side is that the household heads actually replied to the questions and it is quite likely that the household heads by priviledge and opportunities have greater access to such knowledge.

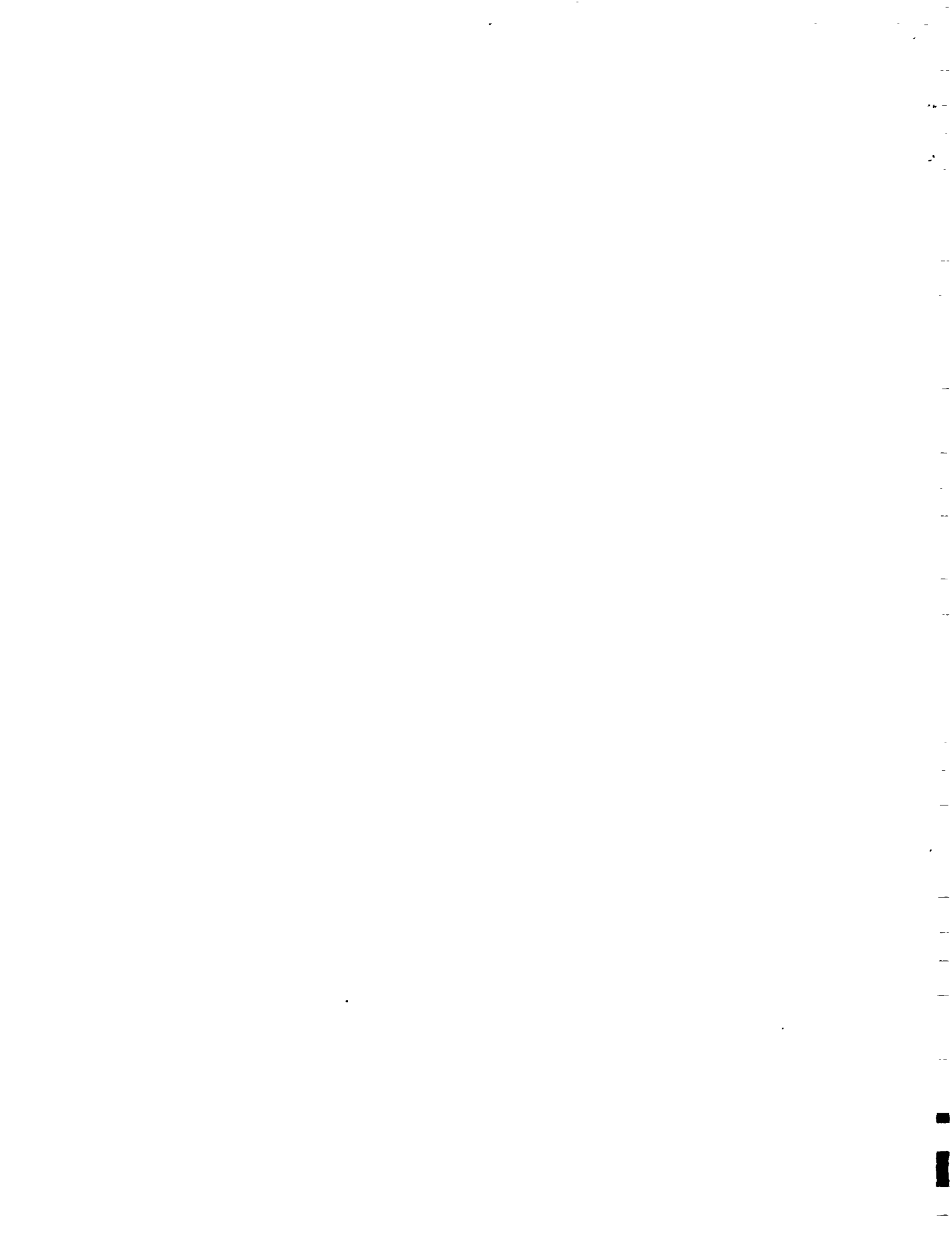


Table 32

Whether the Respondents can Prepare Saline at Home

<u>Village</u>	<u>Yes</u> <u>They can prepare</u> <u>saline at Home</u>	<u>No</u> <u>They cannot prepare</u> <u>saline at Home</u>	<u>Total</u>
Nabagram	53 (94.64%)	3 (5.36%)	56 (100%)
Domkuli	138 (86.25%)	22 (13.75%)	160 (100%)
Diar Mohobbotpur	78 (85.71%)	13 (14.29%)	91 (100%)
Garoi	114 (86.36%)	18 (13.64%)	132 (100%)
Rajapur	104 (92.04%)	9 (7.96%)	113 (100%)
Khordo Bogra	50 (96.15%)	5 (3.85%)	55 (100%)

5.10 Where from Did the Respondents Learn
to Prepare Saline :

The respondents were asked to mention the sources from which they have learned to prepare saline at home. Different sources appeared in Table 33. As revealed, about 86% respondents in Godagari and about 65% respondents in Sherpur replied that they learned to prepare saline through the BRAC (Bangladesh Rural Advancement Committee) workers. It is observed from the table that family planning and health workers are also important source of their knowledge as in Sherpur Upazila 32% respondents named the family planning and health workers from whom they learned this technique. Beyond that, some mentioned about the radio and television. And some respondents mentioned that they learned to prepare saline from their neighbors, school teachers, and from some government officials.

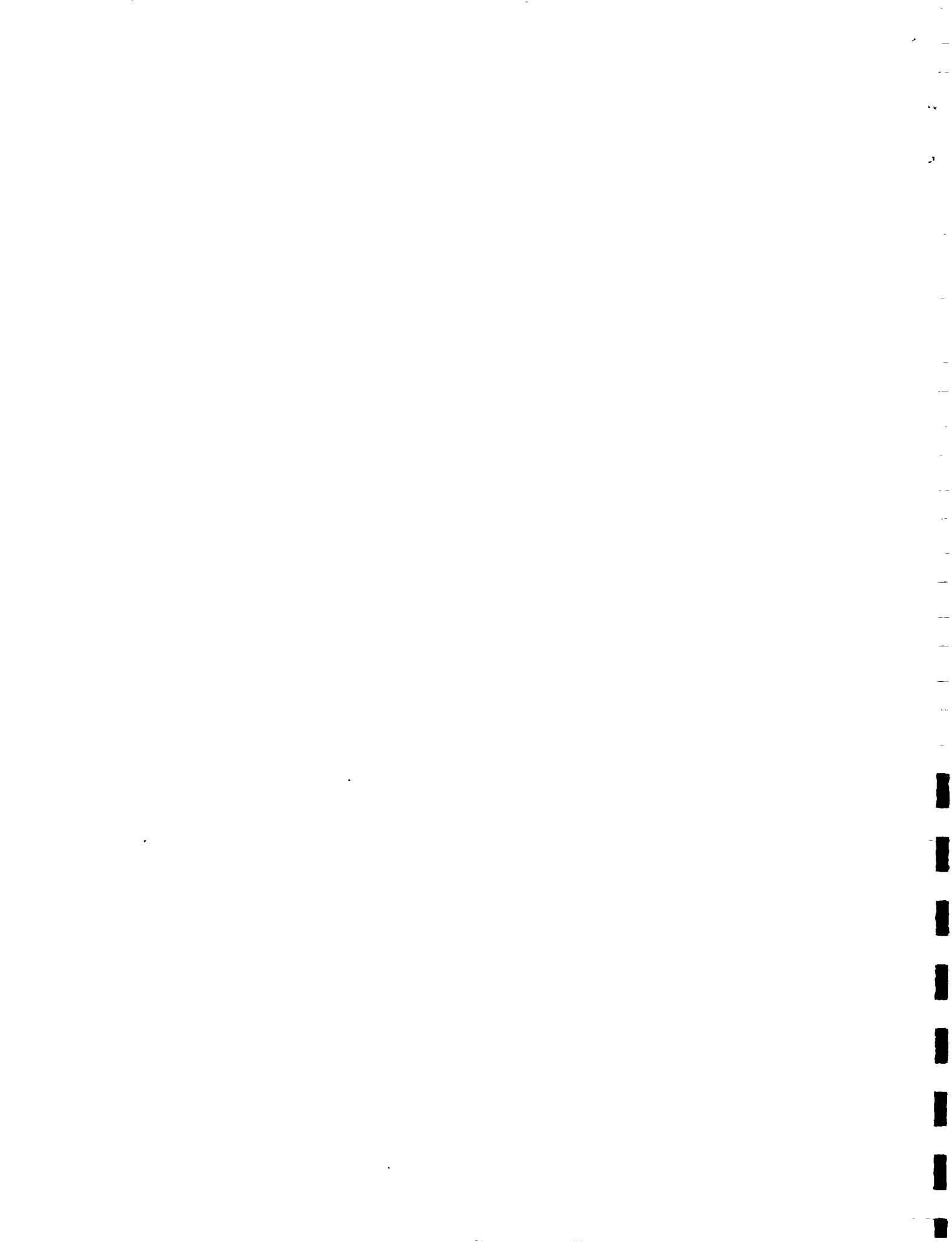


Table 33

Where from Did the Respondents Learn to Prepare Oral Saline

Name of Village	BRAC	Family Planning & Health worker	Radio	Television	Others	Total
Nabagram (N = 53)	43 (62.32%)	2 (2.90%)	20 (28.99%)	-	4 (5.80%)	69 (100%)
Domkuli (N = 138)	118 (73.75%)	12 (7.51%)	20 (12.50%)	5 (3.12%)	5 (3.12%)	160 (100%)
Diar Mohobbotpur (N = 78)	70 (76.92%)	2 (2.20%)	15 (16.48%)	-	4 (4.40%)	91 (100%)
Garoi (N = 114)	51 (42.15%)	57 (47.10%)	12 (9.92%)	-	1 (0.83%)	121 (100%)
Rajapur (N = 104)	97 (85.84%)	8 (7.08%)	6 (5.31%)	-	2 (1.77%)	113 (100%)
Khordo Bogra (N = 50)	25 (48.08%)	21 (40.38%)	-	-	6 (11.54%)	52 (100%)

5.11 On What Occasions the Villagers Use Slipper:

To judge villagers' personal hygiene awareness further, the family heads were asked to mention the occasions when they wear slipper. Five different types of responses were recorded. A great majority (i.e., 44.82% in Godagari villages and 44.94% in Sherpur villages) of respondents claimed that they wear slipper for all the time of the day. Some respondents (21.72% in Godagari and 14.35% in Sherpur) use slipper for defecation purpose only. More than 7 per cent respondents in Godagari village and about 15 per cent in Sherpur however, admitted that they never use slipper.

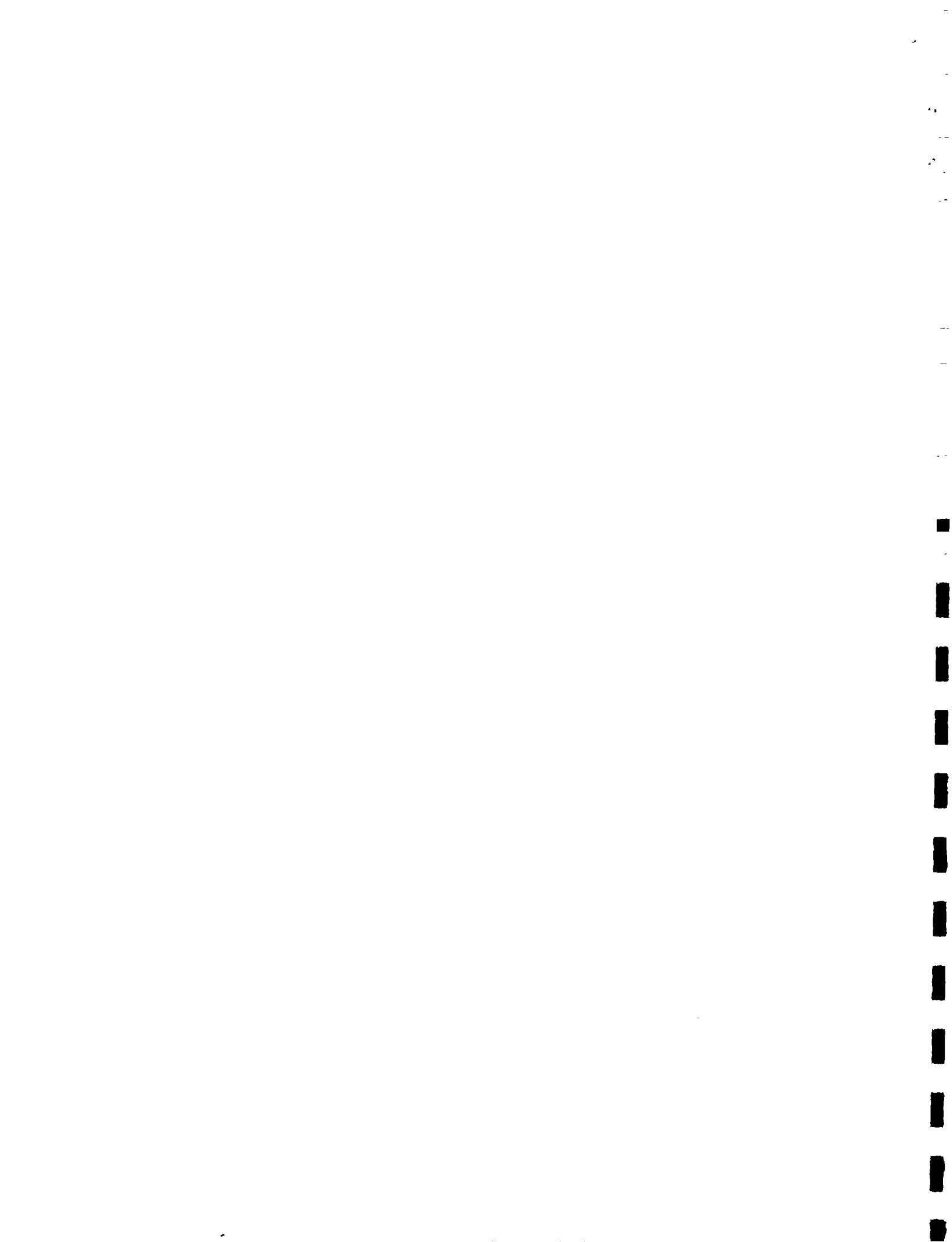
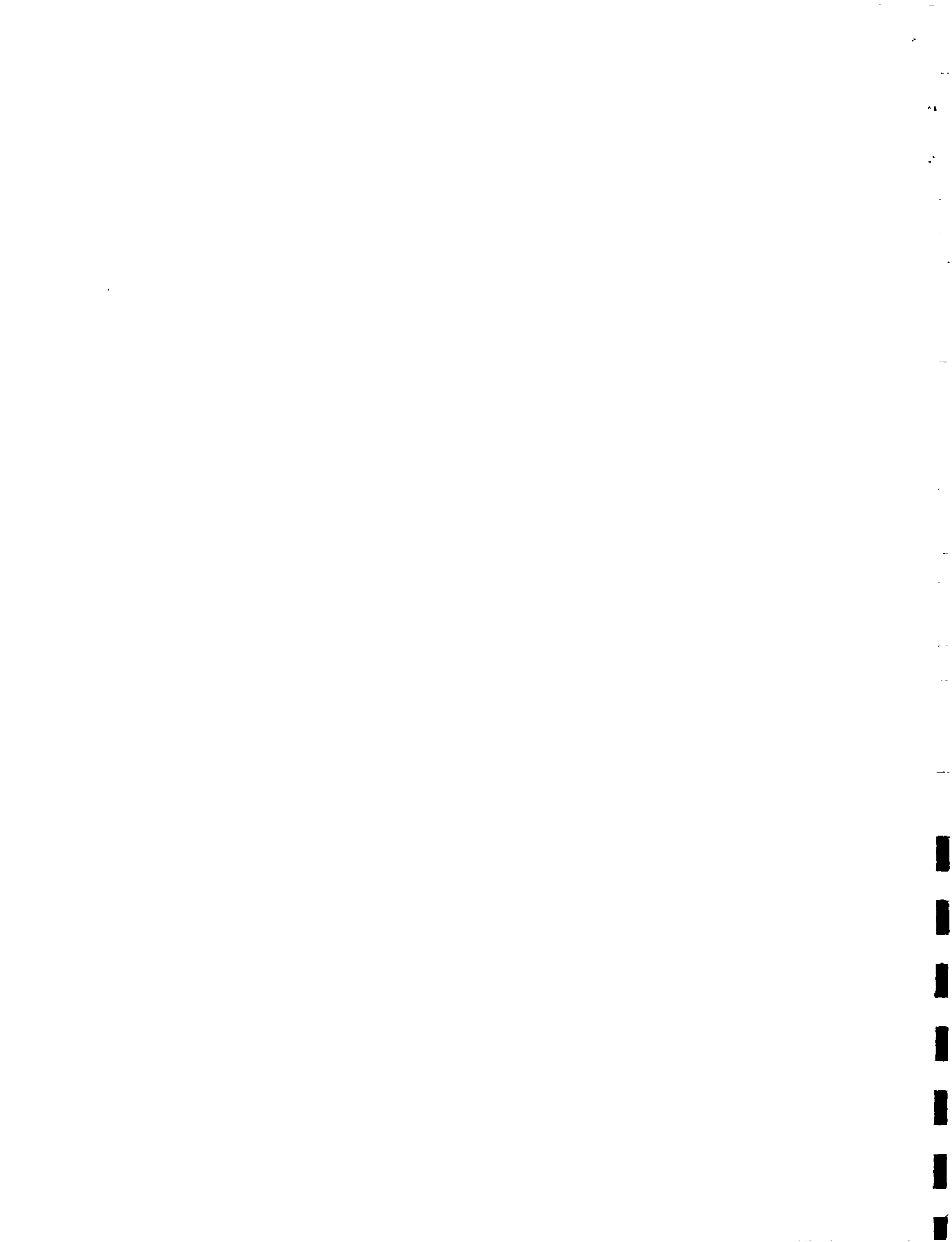


Table 34

On What Occasions Do the Villagers Use Slipper

Name of Village	For all time	Only at Night	For Religious purpose only	For defecation purpose	Never Use	Total
Nabagram (H = 56)	42 (46.67%)	6 (6.66%)	15 (16.67%)	20 (22.22%)	7 (7.78%)	90 (100%)
Domkuli (H = 60)	122 (44.04%)	13 (4.70%)	64 (23.10%)	59 (21.30%)	19 (6.86%)	277 (100%)
Diar Moho- bhotpur (H = 91)	65 (45.14%)	1 (0.69%)	36 (25.00%)	32 (22.22%)	10 (6.94%)	144 (100%)
Total	229 (44.82%)	20 (3.91%)	115 (22.50%)	111 (21.72%)	36 (7.05%)	511 (100%)
Garoi (H = 132)	91 (49.19%)	20 (10.81%)	26 (14.05%)	26 (14.05%)	22 (11.89%)	185 (100%)
Rajapur (H = 113)	62 (41.06%)	11 (7.28%)	25 (16.56%)	18 (11.92%)	35 (23.18%)	151 (100%)
Khordo Bogra (H = 55)	38 (42.70%)	4 (4.49%)	25 (28.09%)	17 (19.10%)	5 (5.62%)	89 (100%)
Total	191 (44.94%)	35 (8.24%)	76 (17.88%)	61 (14.35%)	62 (14.59%)	425 (100%)

Note: H = Households.



Concluding Recommendations

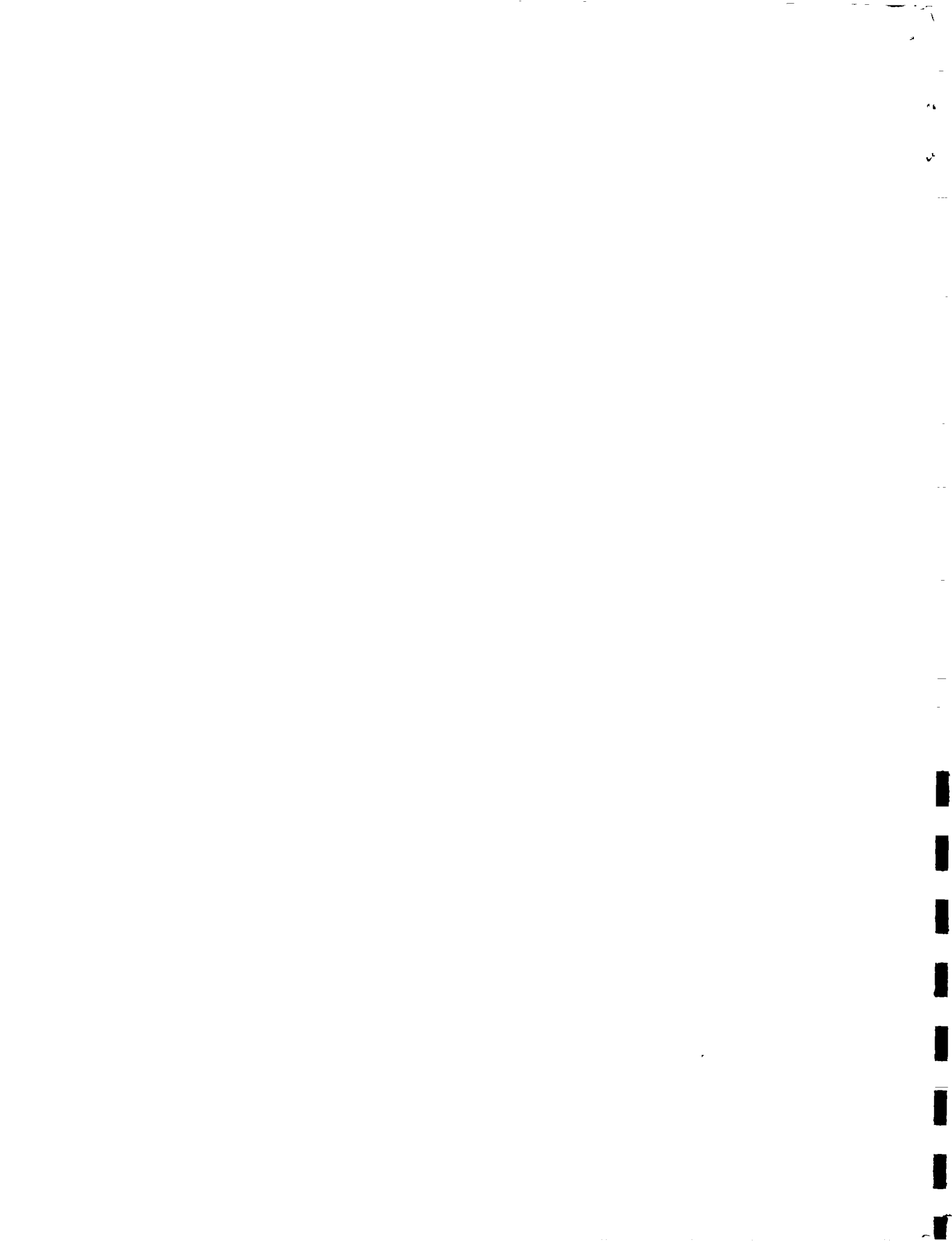
In view of the findings of the survey, the following recommendations may be suggested:

Water, Sanitation and Personal Hygiene should be an integrated strategy for health promotion in rural Bangladesh. Since there is exceedingly low awareness on water, sanitation and personal hygiene, there should be more and more studies by the social scientists and health planners to explore diversified aspects of this issue. More and more attention on the part of the researchers will additionally help villagers to realize the gravity of this issue through an interactive process.

It is also understandable that increasing service coverage will improve the awareness situation in the villages. For example, having greater access to tubewells in Sherpur villages in our study area increased the use of tubewell water in that area as compared to Godagari villages.

Instead of supplying materials free of cost, provision should be developed to fix up a price keeping pace with the socio-economic conditions of the beneficiaries.

The grass-root level workers, extension workers may be engaged in motivating the villagers. Follow up for installation of tubewells and latrines should be properly carried out by field level workers. The villagers may also be given training in repairing and maintenance of tubewells and latrines.



Endnotes and References Cited

1. DPHE-UNICEF-DANIDA Towards a Strategy for Health Promotion
Dhaka, January, 1986.
2. ICDDR, B Water and Sanitation Intervention Study: Teknaf,
Bangladesh, 1980-82, Dhaka, June 1985.
3. DPHE-UNICE-WHO User Perceptions and Observed Use of Latrines
in Rahmatpara, Dhaka, October, 1983.
4. UNICEF A Study Report on Collaboration Among Grameen Bank,
Department of Public Health Engineering and UNICEF in
Rural Water Supply in Bangladesh 1985-86, Vol. II,
Main Report, Dhaka, 1987-88.
5. DANIDA See Carl Bro International A/S. Iron Removal Technology
in DANIDA-sponsored Rural Water Supply Projects in
Sri Lanka, Bangladesh and Orissa, India. February 1986.
A report prepared for DANIDA.
6. Also see DPHE-UNICEF-WHO Development of an Integrated Approach
Towards Rural Water Supply and Sanitation.

John Briscoe, The Role of Water Supply in Improving Health
in Poor Countries. ICDDR, Bangladesh. September 1977.
Scientific Report No. 6.

