

## Chapter 6

### MASS MEDIA COMMUNICATION AND THE AGRICULTURAL DEVELOPMENT

The policy framework for agricultural extension (India, Ministry of Agriculture 2000) highlights the opportunity for information and communication technology (ICT) to improve the quality and accelerate the transfer and exchange of information to farmers, and ICT is therefore given a high priority, particularly as a tool for improving the marketing aspects of farm enterprises. ICT has the ability to reach farmers directly, can enable two-way information sharing processes, has greater storage capacity, is faster, and can increase market efficiency by addressing information gaps and blockages (Chapman and Slaymaker 2002). There are a great number of ICT initiatives in agriculture in India. Public radio and TV programs, which account for 13 percent and 9.3 percent of sources of information accessed by farmers (NSSO 2005), are broadcast by All India Radio and Doordarshan, respectively. In the 10th five-year plan, the Department of Agriculture and Cooperation introduced new central schemes in an attempt to address the poor coverage of public extension services. The mass media support scheme launched a Kisan Channel on Doordarshan, which telecasts agriculture-related programs. Narrowcasting, which is area-specific telecasting of agricultural programs, is also being used. Through the All India FM Transmitter Network, 96 stations of All India Radio are broadcasting half-hour agriculture programs. Despite farmers' greater use of TV and radio than Kisi Vigyan Kendras (KVKs) and extension workers, the empirical impact of these services on farm household income is not known. Kisan Call Centres is another central government scheme introduced to provide information to farmers on demand. This program began in January 2004. Farmers call a common toll-free number and access expert advice from Level 1 experts (agricultural graduates) in 13 regional centers across the country, in 21 local languages (India, Department of Agriculture and Cooperation 2007b). Level 2 experts support queries from Level 1 operators. Some of the challenges to the scheme include lack of awareness, the relative inexperience of Level 1 operators and weak links between Level 1 and Level 2 experts (Working Group on Agricultural Extension 2007). Additionally, providing the required localized and specific information requested by farmers who use the service is problematic. The 2003 NSSO survey showed that 7 percent of farmers accessed information on modern technologies from newspapers.

Considering the increasing emphasis on mobiles and telecenters, this comparatively old approach is still a relevant source of information for farmers—greater than that of the extension worker or KVK. Nevertheless, within the central schemes and programs in extension, and the current ICT initiatives, newspapers are rarely considered. The “mass media to support agricultural extension” scheme focuses on TV and radio only. Mobile phone penetration in rural India is expanding rapidly (from 1.4 units per 100 persons in 1995 to 51 units, or one phone per two persons, currently). There are a number of initiatives using mobiles to communicate information directly to farmers; these include IKSL (IFFCO Kisan Sanchar Ltd. in collaboration with Airtel), Mandi on Mobile (BSNL and Uttar Pradesh Marketing Board), Reuters Market Light, and Nokia Life Tools. Most of these approaches provide market information through SMS or voice messages, or question-and-answer capabilities. To date, there has been little evaluation of the impact of these services on farm production. Other projects, such as e-Sagu and Lifelines, also use mobile phones in combination with computing technology to provide expert advice based on farmer queries. These approaches are ICT-driven- wherein Digital Green uses ICTs to support existing extension services provided by NGOs. Therefore, Digital Green partners with NGOs contribute to promote a video-based process for disseminating technology and agricultural practices. The videos are made with local resource people from the community and are shown to farmer groups established by the partner NGOs. Assessment of adoption practices in the pilot study of Digital Green shows a higher adoption rate through this video-based process than through T&V-style extension approaches (Gandhi et al. 2009). There are also a number of web-based ICT approaches that are attached to kiosks, known as telecenters, such as Unilever’s iShakti, or that work entirely online, for example, aAQUA. There is also a wide range of web portals that act as information repositories, including the Tamil Nadu Agricultural University’s Agritech web portal. Another web portal, AGMARKNET, launched during the XIth five-year plan, provides marketing information on the latest commodity prices from 2,800 major agricultural produce based wholesale markets. Other web portals include Agropedia, AGRISNET, DACNET, e-Krishi, the agribusiness portal Agriwatch and iKisan by the Nagarjuna fertilizer group (Saravanan 2010). Despite to the rapid spread of technology, many of the ICT initiatives in agriculture in India are still in the experimental stage. Consequently, there are few systematic impact studies of ICT initiatives in agriculture. Despite the lack of empirical evidence, however,

sustainability is clearly an issue, with many of the projects implemented as pilot studies but not scaled up. The different approaches tend to work in isolation from one another, with little sharing of knowledge and best practices between projects (Saravanan 2010). Therefore, this chapter is devoted to a discussion on mass media communication and agricultural development in Sivasagar district. It includes the types of mass media, their programmes and the items consumed purposes, modes and time-span of mass-media uses, and their impacts on farmers' knowledge, form and social life in the rural areas. The discussion begins with the types of mass media exposure of the villagers.

### **Types of Mass Media Exposure**

The exposure to modern mass media of the villagers and their uses indicate the way the villagers are integrated with mass media in their life style. This will help us understand the using patterns of mass media in the villages. The villagers in Sivasagar district are exposed to four types of mass media; namely, radio, TV, mobile and computer. The distribution of these media among families in the four villages of Sivasagar district in Assam is given in the following table:

Table 6.1  
Types of Mass Media among Families in the Four Villages  
(Percentages in Parentheses)

Type of Mass Media	Charal	Bhuyan	Lahdoigarh	Borbahoni	Total N=323
	No. of Families (55)	No. of Families (52)	No. of Families (115)	No. of Families (101)	
Radio	21(38.19)	22(42.30)	36(31.30)	29(28.71)	108(33.43)
Television	42(76.36)	52(100)	31(26.95)	26(25.74)	151(46.74)
Mobile	25(45.45)	52(100)	61(53.04)	31(30.69)	169(52.32)

Source: Field Data Collected from the Villages during March/April 2011

The above table shows that majority of the families have (52.32%) mobile sets in their houses, whereas nearly half (46.74%) of the families have television followed by radio (33.43%). In Borbahoni, 28.71% of the families use radio sets and one fifth (25.74%) have television sets. But interestingly they have more (30.69%) mobile sets. In Lahdoigarh also, half of the families (53.04%) have mobile phones, followed by radio (31.30%) and television (26.95%). In Bhuyan all the families have mobile and television and over two fourths of the families (42.30%) have radio.

Thus, of the total families majority of them have mobile phones and the mass media electronic sets are more in Bhuyan village. This is because of good economic conditions of the Bhuyan families.

## News Papers

Now-a-days even remote villages also have access to newspapers. The reading of newspapers has now become a part of life as it disseminates information among the masses. Reading habits among the villagers indicate what information they gather in what way. The following table shows the number of families which have subscribed newspapers in the villages:

Table 6.2  
News Paper Subscription among the Families in the Villages  
(Percentages in Parentheses)

News paper Subscription Status	Charal	Bhuyan	Lahdoigarh	Borbahoni	Total
Subscribe	09(16.36)	37(71.16)	5(4.34)	5(4.95)	56(17.34)
Do Not Subscribe	46(83.64)	15(28.84)	110(95.66)	96(95.04)	267(82.66)
Total	55(100)	52(100)	115(100)	101(100)	323(100)

Source: Field Data Collected from the Villages during March/April 2011

The table shows the distribution of families into subscription of news paper in four villages where majority of families (82.66%) do not subscribe any news paper and less than one fifth (17.34%) of them subscribe newspapers. Subscriber families of newspapers are a few in Borbahoni (4.95%) and Lahdoigarh (4.34%) while over two thirds (71.16%) of the families in Bhuyan and (16.36%) Charal subscribe newspapers.

Thus, subscription of newspaper in the three villages is very low due to replacement of electronic media like television; however, in Bhuyan it is high due to the easy means of accessing new media for them that acquiring from Amguri town.

The villagers generally read Assamese newspapers except a few families in the four villages. So, newspapers in the villages can be categorized into two groups; namely, (i) Assamese and (ii) English. The following table shows distribution of the families by names of the newspapers which they preferred to read:

Table 6.3  
Genderwise Distribution of Villagers into Names of Newspapers Read by Them  
(Percentages in Parentheses)

Name of Newspaper	Charal			Bhuyan			Lahdoigath			Borbahoni			Grand Total		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Assam Tribune	--	--	--	5 (5.74)	2 (3.12)	7 (4.63)	--	--	--	--	--	--	5 (3.645)	2 (2.35)	7 (3.15)
Times of India	1 (4.16)	--	1 (2.77)	--	--	--	--	--	--	--	--	--	1 (0.73)	--	1 (0.45)
Dainik Janambhumi	10 (41.66)	6 (50)	16 (44.44)	40 (45.97)	32 (36.78)	72 (47.68)	5 (35.71)	--	5 (25)	4 (33.33)	3 (100)	7 (46.66)	59 (43.07)	41 (48.23)	100 (45.05)
Pratidin	7 (29.16)	4 (33.33)	11 (30.55)	22 (25.28)	12 (13.79)	34 (22.51)	4 (28.57)	4 (66.66)	8 (40)	2 (16.66)	--	2 (13.33)	35 (25.53)	20 (23.53)	55 (24.77)
Dainik Agradoot	2 (8.33)	2 (16.66)	4 (11.11)	--	8 (9.19)	8 (5.29)	2 (14.28)	--	2 (10)	3 (25)	--	3 (20)	7 (5.11)	10 (11.77)	17 (7.65)
Dainik Batori	--	--	--	7 (8.04)	--	7 (4.63)	--	--	--	--	--	--	7 (5.11)	--	7 (3.15)
Asomiya Khabar	--	--	--	5 (5.74)	--	5 (3.31)	--	--	--	--	--	--	5 (3.65)	--	5 (2.25)
Amar Asom	4 (16.66)	--	4 (11.11)	8 (9.19)	10 (11.49)	18 (11.92)	3 (21.42)	2 (33.34)	5 (25)	3 (25)	--	3 (20)	18 (13.15)	12 (14.12)	30 (13.51)
Total	24 (100)	12 (100)	36 (100)	7 (100)	64 (100)	151 (100)	14 (100)	6 (100)	20 (100)	12 (100)	3 (100)	15 (100)	137 (100)	85 (100)	222 (100)

Source: Field Data Collected from the Villages during March/April 2011

The above table shows the names of newspapers read by the villagers. The largest section of the villagers read the local newspapers such as Dainik Janambhumi (45.05%), Pratidin (24.77%) and Amar Asom (13.51%). Of them (7.65%) villagers read Dainik Agradoot whereas a few villagers (3.15%) read national newspaper such as the Assam Tribune and equal percentage of villagers (3.15%) read Dainik Batori. A few (2.25%) of them read Asomiya Khabor and a very few of them read a national paper, the Times of India. It is found that none of the Lahdoigarh and Borbahoni read the Assam Tribune, The Times of India, Asomiya Khabor and Dainik Batori due to unavailability of such newspapers in the villages.

Further, the readers of Dainik Janambhumi among the males (43.07%) are less than females (48.23%) in the villages. Likewise, around one fourth of males (25.53%) and (23.53%) females read Pratidin. Female readers of Dainik Agradoot and Amar Asom are more than males. The national news paper such as Assam Tribune is read by only a few females (2.35%) among the villagers. There are no female readers of newspapers such as Dainik Batori, Asomiya Khabor and the Times of India.

Thus, due to teaching of vernacular language in school level in the villages, the both male and female villagers prefer to read local newspaper which is written in local language and easy to understand it.

### ***News Items Read***

On the basis of the items of the newspaper villagers read, the distribution of the families in the four villages is given into 10 categories, namely; (i) Headlines, (ii) Employments, (iii) Politics, (iv) Sports (v) Advertisement (vi) Editorial (vii) Cinema, (viii) International (ix) Affairs, (ix) Zodiac and (x) Agricultural news. These are shown in the following table:

Table 6.4  
News Items Read by the Villagers  
(Percentages in Parentheses)

News Items	Charal N=36			Bhuyan N=151			Lahdoigarh N=20			Borbahoni N=15			Grand Total N=222		
	M (24)	F (12)	T (36)	M (87)	F (64)	T (151)	M (14)	F (6)	T (20)	M (12)	F (3)	T (15)	M (137)	F (85)	T (222)
Headlines	24(100)	12(100)	36(100)	87(100)	64(100)	151(100)	14(100)	6(100)	20(100)	12(100)	3(100)	15(100)	137(100)	85(100)	222(100)
Employments	7(29.16)	2(16.66)	9(25)	14(16.09)	7(10.93)	21(13.90)	2(14.28)	--	2(10)	--	--	--	23(16.78)	76(89.41)	99(44.59)
Politics	12(50)	--	12(33.33)	87(100)	10(15.62)	97(64.23)	6(42.85)	--	6(30)	12(100)	1(33.33)	13(86.66)	117(85.40)	11(12.94)	128(57.65)
Sports	--	--	--	7(8.04)	2(3.12)	9(14.06)	--	--	--	2(16.66)	--	2(13.33)	9(6.56)	2(2.35)	11(4.95)
Advertisement	3(12.5)	--	3(8.33)	7(8.04)	2(3.12)	9(5.96)	--	--	--	--	--	--	10(7.29)	2(2.35)	12(5.40)
Editorial	9(37.5)	--	9(25)	57(65.51)	4(6.25)	61(40.39)	4(28.57)	--	4(20)	7(58.33)	1(33.33)	8(53.33)	77(56.20)	5(5.88)	82(36.93)
Cinema	4(16.66)	--	4(11.11)	15(17.24)	3(4.68)	18(11.92)	1(7.14)	2(33.33)	3(15)	--	--	--	20(14.59)	5(5.88)	25(11.26)
International Affairs	7(29.16)	--	7(19.44)	56(64.36)	10(15.62)	66(43.70)	4(28.57)	--	4(20)	5(41.66)	--	5(33.33)	72(52.55)	10(11.76)	82(36.93)
Zodiac	5(20.83)	9(75)	14(38.88)	5(5.74)	6(9.37)	11(7.28)	--	2(33.33)	2(10)	1(8.33)	2(66.66)	3(20)	11(8.02)	19(22.35)	30(13.51)
Agricultural	10(41.66)	3(25)	13(36.11)	35(40.22)	9(14.06)	44(29.13)	8(57.14)	2(33.33)	10(50)	5(41.66)	2(66.66)	7(46.66)	58(42.33)	16(18.82)	74(33.33)

Source: Field Data Collected from the Villages during March/April 2011

The table shows that all the 222 readers read headlines; over two fourths (44.59%) read employment related news. Nearly three fifths (57.65%) of the villagers read politics related news in all the villages whereas very less number of villagers read sports (4.95%) and advertisement (5.40%) news. Over one third of villagers (36.93%), each, read editorial and international affairs. Over one tenth of villagers read the news and views on cinema (11.26%) and zodiac signs (13.51%). One third of readers (33.33%) read agricultural news in the newspapers. The employment related news is read by more females (89.41%) than males (16.78%) only because of more educated females are found in four villages. It is found that agricultural related items are read in all the villages by both males and females.

Thus, of the total agricultural items reading, Borbahoni is found highest percentage as compare to the rest villages though the numbers of villagers is less in reading and in gender-wise too female percentage of reading agricultural item is higher.

On the basis of time spent on newspaper reading in a day the families are classified into two categories; namely, (i) 1 hour reading and (ii) 1- 2 hour reading. The distribution of the families into these categories is shown in the following table:

Table 6.5  
Time Span of Newspaper Reading among Families in the Villages  
(Percentages in Parentheses)

Time Span (in hours)	Charal			Bhuyan			Lahdoigarh			Borbahoni			Grand Total		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
1	12 (50)	11 (91.66)	23 (63.88)	37 (42.52)	52 (81.25)	101 (66.89)	4 (28.58)	6 (100)	10 (50)	7 (58.33)	3 (100)	10 (66.66)	60 (43.79)	72 (84.71)	132 (59.45)
1-2	12 (50)	1 (8.34)	13 (36.12)	50 (57.48)	12 (18.75)	50 (33.11)	10 (71.42)	--	10 (50)	5 (41.66)	--	5 (33.34)	77 (56.21)	13 (15.29)	90 (40.55)
Total	24 (100)	12 (100)	36 (100)	87 (100)	64 (100)	151 (100)	14 (100)	6 (100)	20 (100)	12 (100)	3 (100)	15 (100)	137 (100)	85 (100)	222 (100)

Source: Field Data Collected from the Villages during March/April 2011

The table shows that majority of the villages (59.45%) read news paper for less than one hour whereas two fifths (40.55%) of them read for one to two hours in a day. Most (84.71%) of the female and over two thirds (43.79%) of the male villagers read newspaper for less than one hour per day. On the other hand, number of those



who read newspapers for one to two hours is greater among the males (56.34%) than the females (15.29%).

In Lahdoigarh over one fourth of the male (28.58%) villagers read newspaper for less than one hour and 71.42% of them read it for one to two hours, whereas all of its female readers read it for less than one hour.

In Borbahoni, all the female and over than half (58.33%) of the male villagers read newspaper for less than one hour. Over two fifths (41.66%) of them read it for 1-2 hours a day.

In Bhuyan, out of the total villagers (57.48%) of male and 18.75% of female read it for 1-2 hours. Majority (81.25%) of the females and two fifths (42.52%) of the males read it for less than one hour. In Charal, most (91.66%) of the females and half (50%) of the males read newspapers for less than one hour whereas another half of total males and less than one tenth (8.34%) read it for 1-2 hours. It is found that most of the villagers spend less than one hour in reading newspaper. Moreover, in Lahdoigarh and Borbahoni none of the female read 1-2 hours on newspaper because of busy in household work and engaged in tea garden.

The villagers' habit of reading agricultural news on newspaper is shown below by categorising them into four groups, namely; (i) Regularly (high), (ii) Occasionally (medium), (iii) Sometimes (low) and Rarely (very low) The following table shows the frequency of reading newspapers in the villages:

Table 6.6  
Reading of Agricultural Items in News Papers in a Week  
(Percentages in Parentheses)

Frequency of Reading	Charal			Bhuyan			Lahdoigarh			Borbahoni			Grand Total		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Regularly	2(20)	-	2(15.39)	21(60)	1(11.11)	22(50)	3(37.5)	-	3(30)	2(40)	-	2(28.57)	28(48.27)	1(6.25)	29(39.18)
Occasionally	4(40)	2(66.67)	6(46.15)	5(14.28)	4(44.44)	9(20.45)	2(25)	2(100)	4(40)	3(60)	1(50)	4(57.15)	14(24.13)	9(56.25)	23(31.08)
Sometimes	2(20)	-	2(15.38)	3(8.57)	1(11.11)	4(9.09)	1(12.5)	-	1(10)	-	1(50)	1(14.28)	6(10.35)	2(12.5)	8(10.82)
Rarely	2(20)	1(33.33)	3(23.08)	6(17.15)	3(33.34)	9(20.46)	2(25)	-	2(20)	-	-	-	10(17.25)	4(25)	14(18.92)
Total	10(100)	3(100)	13(100)	35(100)	9(100)	44(100)	8(100)	2(100)	10(100)	5(100)	2(100)	7(100)	58(100)	16(100)	74(100)

Source: Field Data Collected from the Villages during March/April 2011

The table shows that out of 74 villagers who read agricultural topics in news paper, around two fifths (39.18%) of villagers read regular agricultural topics in a week. 31.08% of villagers read it occasionally and one tenth (10.82%) of villagers read it rarely. 18.92% of villagers are found never reading in a week.

The data also reveal that 48.27% of male and 6.25% of female read agricultural item on news paper regularly whereas over half of female (56.25%) and 24.13% of male read it occasionally followed by rarely readers (10.35% male and 12.5% female). One fourth (25%) of female and 17.25% of male villagers are found who never read agricultural news in a week. Thus, of the reading on agricultural item in newspaper most of the villagers are regularly read in a week but none of the females are found in all villages due to household work activities. So, highest villagers are found in Bhuyan who read more agricultural items compared to other three villages as majority of them are illiterate.

### Magazines

Moreover, other than newspapers, the villagers subscribe magazines to read it in the villages. The distribution of family having subscribe magazine is given in the following table:

Table 6.7  
Subscription of Magazines among Families in the Four Villages  
(Percentages in Parentheses)

Subscription Status of Magazine	Charal	Bhuyan	Lahdoigarh	Borbahoni	Total
Subscribe	04 (7.27)	15 (28.84)	02 (1.73)	03 (2.97)	24 (7.43)
Do Not Subscribe	51 (92.73)	37 (71.16)	113 (98.27)	98 (97.02)	299 (92.56)
Total	55 (100)	52 (100)	115 (100)	101 (100)	323 (100)

Source: Field Data Collected from the Villages during March/April 2011

The table shows that only 7.43% of the total villagers subscribe magazines in the four villages: Borbahoni (2.97%), Lahdoigarh (1.73%), Bhuyan (28.84%) and Charal (7.27%).

Thus, the subscription of magazines is very less in the villages and it is notable that they do not subscribe any agricultural magazine, which is clear from the following table showing the magazines they read:

Table 6.8  
Reading Magazines Read by the Villagers  
(Percentages in Parentheses)

Name of Magazine	Charal			Bhuyan			Lahdoigarh			Borbahoni			Grand Total		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Health	2 (25)	2 (40)	4 (30.76)	12 (38.70)	3 (21.42)	15 (33.33)	--	--	--	1 (20)	--	1 (11.11)	15 (33.33)	5 (20.83)	20 (28.98)
Bismoi	3 (37.5)	1 (20)	4 (30.76)	8 (25.80)	1 (7.14)	9 (20)	1 (100)	--	1 (100)	3 (60)	1 (25)	4 (44.45)	15 (33.33)	3 (12.5)	18 (26.08)
India Today	1 (12.5)	--	1 (7.69)	4 (12.90)	--	4 (8.88)	--	--	--	--	--	--	5 (11.11)	--	5 (7.25)
Goriyakhi	2 (25)	--	2 (15.38)	7 (22.58)	3 (21.42)	10 (22.22)	--	--	--	1 (20)	--	1 (11.11)	10 (22.23)	3 (12.5)	13 (18.85)
Nandini	--	2 (40)	2 (15.38)	--	7 (50)	7 (15.55)	1 (100)	1 (100)	1 (100)	--	1 (25)	1 (11.11)	--	11 (45.83)	11 (15.95)
Priyo Sakhi	--	--	--	--	--	--	--	--	--	--	2 (50)	2 (22.22)	--	2 (8.34)	2 (2.89)
Total	8 (100)	5 (100)	13 (100)	31 (100)	14 (100)	45 (100)	1 (100)	1 (100)	2 (100)	5 (100)	4 (100)	9 (100)	45 (100)	24 (100)	69 (100)

Source: Field Data Collected from the Villages during March/April 2011

The table shows that over one fourth (28.98%) of the villagers read health magazines, followed by those who read the type of magazines like Bismoi (26.08%), Goriakhi (18.85%) and Nandini (15.95%). A few of them (7.25%) read India Today and a very few (2.89%) read Priyo-Sakhi magazines. The male readers of health magazines (33.33%) are found high in Borbahoni than female (20.83%) whereas the same number of males (33.33%) read Bismoi and over one tenth (12.5%) of female read it. Over one fifth (22.23%) of males read Griakhi and 12.5% of females read it. The magazine like Prio-sakhi (8.34%) and Nandini (45.83%) are read only by female villagers whereas India Today is read by males (11.11%) only. It is found that in Lahdoigarh both Health and Priyo Sakhi magazines are not read by the villagers and only in Borbahoni female villagers read Priyo Sakhi because the other villagers are not conscious about such magazines.

On the basis of the time spent on magazine reading in a day the families are classified into two categories; namely, (i) 1 hour and (ii) 1- 2 hours and the distribution of the families into these categories is shown in the following table:

Table 6.9  
Time Spent by the Villagers on Reading Magazines  
(Percentages in Parentheses)

Time spend in hours	Charal			Bhuyan			Lahdoigarh			Borbahoni			Grand Total		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Less than 1	3 (37.5)	2 (40)	5 (38.46)	19 (61.29)	5 (35.72)	24 (53.33)	1 (50)	--	1 (50)	2 (40)	2 (50)	4 (44.44)	25 (55.55)	9 (37.5)	34 (49.27)
1-2	5 (62.5)	3(60)	8 (61.54)	12 (38.71)	9 (64.28)	21 (46.67)	--	1 (50)	1 (50)	3 (60)	2 (50)	5 (55.56)	20 (44.45)	15 (62.5)	35 (50.73)
Total	8 (100)	5 (100)	13 (100)	31 (100)	14 (100)	45 (100)	1 (100)	1 (100)	2 (100)	5 (100)	4 (100)	9 (100)	45 (100)	24 (100)	69 (100)

Source: Field Data Collected from the Villages during March/April 2011

The data show that most of these villagers read magazine for 1-2 hours a day; about half of them (49.27%) read it for one hour. Of the total female magazine readers 37.5% and 55.55% males read 1 hour per day. Over three fifths (62.5%) of the females in the four villages read magazines for 1-2 hours.

In Borbahoni, females read more magazines than males (44.44%) while in Lahdoigarh an equal percentage of male and female villagers read magazines. In Bhuyan, majority of the villagers (53.33%) read magazines for 1 hour. Over two fifths (46.67%) read it for 1-2 hours a day. Charal shows similar magazines reading habits among its villagers. Females (61.54%) spend more time on magazine reading than males (38.46%).

Thus, magazine-reading habit among females is higher than male villagers. However, in Lahdoigarh neither males nor females do not spend time in reading of any magazine related to agriculture like Goriyakhi, Nandini, Priyo Sakhi etc. Therefore, all the villagers need information related to agricultural magazine for more agricultural development.

## **Radio**

The broadcast media include mainly radio. Radio is an electronic audio-medium for broadcasting programmes to the audience. It is a simple way to disseminate information from one place to another situated in far-flung areas within a fraction of seconds. Due to its low costs and high advantage it is still popular device for communication all over the world. The first radio station was inaugurated in Bombay and Calcutta in July and August, 1972. The first radio programme journal India Radio Times was started on July 15, 1927. Its name was later changed to the India Listener and again to Akashvani. In the four villages only 108 families have radio and their members listen radio programmes. Radio has still powerful connection with the villagers. Many programmes are broadcast on radio such as news, music, drama, health programme, documentary films, sports, agricultural programmes, etc. The distribution of the villagers into the radio channels they listen is shown in the following table:

Table 6.10  
Types of Radio Programmes Listened in Families of the Villages  
(Percentages in Parentheses)

Type of Programme	Charal N=21	Bhuyan N=22	Lahdoigarh N=36	Borbahoni N=29	Total N=108
News	21 (100)	22 (100)	36 (100)	29 (100)	108 (100)
Music	21 (100)	22 (100)	36 (100)	29 (100)	108 (100)
Sports	8 (38.09)	7 (31.81)	--	1 (3.44)	16 (14.81)
Agricultured	7 (33.33)	8 (36.36)	5 (13.88)	4 (13.79)	24 (22.22)
Drama	9 (42.85)	4 (18.18)	12 (33.33)	9 (31.03)	34 (31.48)
Health	15 (71.42)	6 (27.27)	7 (19.44)	5 (17.24)	33 (30.55)
Educational	5 (23.80)	2 (9.09)	--	2 (6.89)	9 (8.33)

Source: Field Data Collected from the Villages during March/April 2011

The table shows that all of the radio listening families listen news and music. Over one tenth of families (14.81%) listen programmes on sports and a few (8.33%) listen educational programmes on it. Over one fifth (22.22%) of these families listen agricultural news and nearly one third, each, listen drama (31.48%) and health news (30.55%).

Thus, the villagers listen news and music than other programmes like agriculture in the four villages.

#### ***Agricultural Programmes on Radio***

Among the radio listeners a few villagers have a habit to listen agricultural programme on radio. They mostly listen two programmes, namely, (i) Krishi Anusthan and (ii) Khetir diha. The following table shows the names of agricultural programmes listened by the villagers:



**Table 6.11**  
**Agricultural Programme on Radio Listening Families in the Villages**  
**(Percentages in Parentheses)**

Name of Programme	Charal			Bhuyan			Lahdoigarh			Borbahoni			Grand Total		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Krishi Anusthan	3 (60)	2 (100)	5 (71.42)	4 (50)	3 (60)	7 (53.84)	2 (66.67)	2 (100)	4 (80)	2 (50)	1 (100)	3 (60)	11 (55)	8 (80)	19 (63.34)
Khetir Diha	2(40)	-	2 (28.58)	4 (50)	2 (40)	6 (46.16)	1 (33.33)	-	1 (20)	2 (50)	-	2 (40)	9 (45)	2 (20)	11 (36.66)
Total	5 (100)	2 (100)	7 (100)	8 (100)	5 (100)	13 (100)	3 (100)	2 (100)	5 (100)	4 (100)	1 (100)	5 (100)	20 (100)	10 (100)	30 (100)

Source: Field Data Collected from the Villages during March/April 2011

The data show that out of only 30 villagers who listen agricultural programmes on radio, majority (63.34%) listen Krishi Anusthan broadcast by AIR Dibrugarh and Guwahati, out of which four fifths (80%) of the females and 55% of the males are listening Khetir Anusthan; one fifth (20%) of the females and over two fifths (45%) of the males are listening Khetir Diha. Thus, most of the villagers listen Krishi Anusthan on radio broadcast by AIR Dibrugarh and Guwahati. Moreover, none of the female villagers listen Khetir Diha in the villages of Charal Lahdoigarh and Borbahoni. The following table shows time span of daily listening on radio among the villagers:

Table 6.12  
Time Span of Daily Radio Listening among the Villagers  
(Percentages in Parentheses)

Time span (in hours)	Charal			Bhuyan			Lahdoigarh			Borbahoni			Grand Total		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Less than 1	10 (24.39)	15 (25.42)	25 (25)	11 (32.35)	21 (51.21)	32 (42.66)	39 (47.56)	34 (44.74)	73 (46.21)	31 (38.75)	31 (47.69)	62 (42.75)	91 (38.39)	101 (41.91)	192 (40.16)
1-2	31 (75.61)	44 (74.58)	75 (75)	23 (67.65)	20 (48.79)	43 (57.34)	43 (52.44)	42 (55.26)	85 (53.79)	49 (61.26)	34 (52.51)	83 (57.24)	146 (61.61)	140 (58.09)	286 (59.84)
Total	41 (100)	59 (100)	100 (100)	34 (100)	41 (100)	75 (100)	82 (100)	76 (100)	158 (100)	80 (100)	65 (100)	145 (100)	237 (100)	241 (100)	478 (100)

Source: Field Data Collected from the Villages during March/April 2011

The table shows that three fifths (59.84%) of the villagers spent 1-2 hours on radio listening in a day whereas two fifths (40.16%) of them listen it for less than 1 hour. In Borbahoni over two fifths of the villagers listen it for less than 1 hour and the rests listen programme on it for 1-2 hours in a day. In Lahdoigarh, nearly half (46.21%) of the villagers listen radio programme on it for less than 1 hour whereas over half (53.79%) of them listen it for 1-2 hours in a day. In Bhuyan over two fifths (42.66%) of the villagers listen radio programme for less than 1 hour and 57.34% listen it for 1-2 hours per day. Three fourths of the villagers (75%) listen radio programme for 1-2 hours per day and one fourth (25%) listen on it less than 1 hour.

Thus, in these four villages most of them listen 1-2 hours in radio and of the total population, the percentage of female population listening radio programmes is higher than the male due to staying at home in most of the time. Besides, listing radio programme is higher in Borbahoni and Lahdoigarh than rest of the two villages because of having more radio than TV.

### **Audio-visual Media**

Television and cinema are playing an important role in communication among people. These media are more popular due to their words and sounds effects. Television is faster than cinema in the process of carrying information, ideas, and experiences to audiences. Compared to radio, television has less impact on rural society in India due to high costs of its receiving sets. Television, a powerful medium of mass communication and agent of social and educational change, is now being very well recognized in our country, and despite grave financial stringency the nation has resolved to sacrifice its most precarious and precious resources for the expanding TV facilities for the benefit of our teeming millions. Television, no longer remains a preserve of the affluent homes of the upper and middle class people of our cities, but it really reaches to the villagers in far flung states whereby their lives might also receive the light of freedom, enlightenment, integration and new aspirations. Television came to Indian media in September 1959 as an experimental project aimed at to transmitting educational as well as development programmes. First it telecast the programmes for Delhi and its surrounding areas. After 1965 it started to telecast programmes to different parts of the country in the name of Doordarshan.

### *Programmes Watched on Television*

The habit of watching television programmes shows the villagers' contact with the outside world. Villagers have experienced various programmes broadcast by different channels. Majority of the villagers have their TV sets to watch programmes. The following table shows the patterns of watching television in the four villages:

Table 6.13  
TV Programme Watching on among Families in the Four Villages  
(Percentages in Parentheses)

Television Programme	Charal N=42	Bhuyan N=52	Lahdoigarh N=31	Borbahoni N=26	Total N=151
News	42 (100)	52 (100)	31 (100)	26 (100)	151 (100)
Cartoons	9 (21.42)	13 (25)	02 (6.45)	03 (11.53)	27 (17.88)
Sports	32 (76.19)	52 (100)	19 (61.29)	16 (61.53)	119 (78.80)
Agriculture	4 (9.52)	4 (7.69)	02 (67.74)	01 (3.84)	11 (7.28)
Dance	42 (100)	52 (100)	31 (100)	26 (100)	151 (100)
Health	09 (21.42)	18 (34.61)	03 (9.67)	03 (11.53)	33 (21.85)
Education	12 (28.57)	14 (26.92)	03 (9.67)	--	29 (19.20)
Mythological	8 (19.04)	10 (19.23)	07 (22.58)	02 (7.69)	27 (17.88)
Serials	42 (100)	52 (100)	31 (100)	26 (100)	151 (100)
Films	42 (100)	52 (100)	31 (100)	26 (100)	151 (100)

Source: Field Data Collected from the Villages during March/April 2011

The table shows that all the families watch news, dance, serials and films in their houses. Nearly one fifth (17.88%) of them watch cartoons and mythological programmes. About four fifths (78.80%) of them watch sports and health programmes on television. A few (7.28%) families watch agricultural programmes in the four villages as compare to other programmes and also found lowest percentage of watching agricultural programmes in Borbahoni.

The villagers are tuning different types of channels, including national and international channels to get new information. The channels like DY365, News live, Rang, Sony max, Animal planet, Discovery and Zee Cinema is very popular among

the villagers. The following table shows the television channels mostly tuned by the families in the four villages:

**Table 6.14**  
**TV Channel Preferences among Families in the Villages**  
**(Percentages in Parentheses)**

Television Channel	Charal N=42	Bhuyan N=52	Lahdoigarh N=31 (paid: 23, Non paid: 8)	Borbahoni N=26	Total N=151
RANG	42(100)	52(100)	31(100)	26(100)	151(100)
BBC	--	4(7.69)	--	03(11.53)	7(4.63)
SONYMAX	42(100)	52(100)	14(45.16)	16(61.53)	124(82.11)
ESPN	10(23.80)	19(36.53)	--	05(19.23)	34(22.51)
STAR MOVIES	3(7.14)	52(100)	31(100)	20(76.92)	106(70.19)
HBO	04(9.52)	18(34.61)	--	--	22(14.56)
DD SPORTS	22(52.38)	13(25)	03(9.67)	08(30.76)	46(30.46)
SAB TV	42(100)	52(100)	31(100)	26(100)	151(100)
MGM	2(4.76)	22(42.30)	--	26(100)	50(33.11)
DD BHARATI	--	12(23.07)	--	02(7.69)	14(9.27)
FTV	12(28.57)	14(26.92)	02(6.45)	04(15.38)	32(21.19)
AXN	4(9.52)	9(17.30)	04(12.90)	03(11.53)	20(13.24)
ANIMAL PLANET	42(100)	52(100)	31(100)	26(100)	151(100)
B4U	6(14.28)	50(96.15)	31(100)	26(100)	113(74.83)
CARTOON NETWORK	9(21.42)	13(25)	04(12.90)	15(57.69)	41(27.15)
ZEE NEWS	15(35.71)	40(76.92)	--	16(61.53)	71(47.01)
ZEE CINEMA	42(100)	52(100)	31(100)	26(100)	151(100)
DISCOVERY	42(100)	52(100)	31(100)	26(100)	151(100)
NEWS LIVE	42(100)	52(100)	31(100)	26(100)	151(100)
DY365	42(100)	52(100)	23(74.19)	26(100)	143(94.70)
AAJ TAK	34(80.95)	52(100)	16(51.61)	16(61.53)	118(78.14)
DD1	--	--	08(25.80)	--	8(5.29)

Source: Field Data Collected from the Villages during March/April 2011

The table reveals that all the families watch channels like Rang, Sab TV, Animal Planet, Zee Cinema, Discovery and News Live. Of the families 94.70% watch DY365, followed subsequently by Sony max (82.11%), Aaj Tak (78.14%), B4U (74.83%), Star Movies (70.19%), and Zee news (47.01%). More than one tenth of them watch HBO (14.56%), BBC (4.63%), DD 1(5.29%); around one third of families watch DD sports (30.46%), MGM (33.11%) and Cartoon Network (27.15%). Over one fifth (21.19%) of families watch FTV, over one tenth (13.24%) of them watch AXN and less than of it are watching DD Bharati (9.27%). In all villages TV channel like Rang, New Live DY365 and Aaj Tak are preferred in all the families

which is also telecast important agricultural information, however, DD1 which is also one of the important channel for the farmer that telecast agricultural programmes are miss out in the villages of Charal, Bhuyan and Borbahoni, and also only few families are preferred in Lahdoigarh because of lacking knowledge on the important of this channel.

***Time Span of Watching Television***

Like others media, the villagers spend time on TV watching in their families. On the basis of time, it is classified into three categories; namely, (i) less than 1 hour and (ii) 1- 2 hours and (iii) 3-4 hours. The distribution of the families into these categories is shown in the following table:

Table 6.15  
Time Span of Watching TV among the Villagers  
(Percentages in Parentheses)

Time Span (in hours)	Charal			Bhuyan			Lahdoigarh			Borbahoni			Grand Total		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Less than 1	21(38.18)	14(19.44)	35(27.55)	20(21.73)	26(26.53)	46(24.22)	13(19.11)	23(28.39)	36(24.16)	10(19.61)	8(24.24)	18(21.42)	64(24.06)	71(25)	135(24.54)
1-2	21(38.18)	24(33.33)	45(35.44)	35(38.05)	49(50)	84(44.21)	40(58.83)	46(56.79)	86(57.71)	16(31.38)	14(42.42)	30(35.71)	112(42.10)	133(46.83)	245(44.54)
3-4	13(23.64)	34(47.23)	47(37.01)	37(40.22)	23(23.47)	60(31.57)	15(22.06)	12(14.82)	27(18.13)	25(49.01)	11(33.34)	36(42.85)	90(33.84)	80(28.16)	170(30.90)
Total	55(100)	72(100)	127(100)	92(100)	98(100)	190(100)	68(100)	81(100)	149(100)	51(100)	33(100)	84(100)	266(100)	284(100)	550(100)

Source: Field Data Collected from the Villages during March/April 2011

The table shows that of the total villagers, two fourth (44.54%) of villagers spent 1-2 hours, whereas 30.90% of villagers spent 3-4 hours and 24.54% of them spent less than 1 hour. In Borbahoni, of the total viewers, 42.85% of villagers spent 3-4 hours, followed by 1-2 hours (35.71%) and less than 1 hour (24.24%). In Lahdoigarh, half (57.71%) of villagers spent 1-2 hours, followed by less than 1 hour (24.16%) and 3-4 hours (18.13%). In Bhuyan, 44.21% of villagers spent 1-2 hours, 31.57% spent 3-4 hours and 24.22% of villagers spent less than one hour. In Charal, of total viewers 37.01% of villagers spent 3-4 hours, followed by 1-2 hours (35.44%) and 27.55% (less than 1 hour).

Thus, almost equal male (24.06%) and female viewers (25%) watch television for less than one hour, over two fourth (42.10%) of male and 46.83% of female watch television for 1-2 hours and one third (33.84%) of male and over one fourth (28.16%) of female watch television for 3-4 four hours among the four villages.

It is found that most of the villagers spend 1-2 hours on watching TV and female viewers is more than the male viewers. Among the villages, Lahdoigarh villagers found highest percentage of TV viewers by spending 1-2 hours. It can be said that by transmission of more agricultural programme the villagers may benifited and practice.

### **Computer Knowledge**

Among modern mass media computer is an important instrument for communication around the world. A few families have minimum knowledge on computer or they use it. In the two villages, some of the families use computer as a tool of education. 18 families have computer knowledge in the villages: 1 in Borbahoni, 3 in Lahdoigarh and 4 in Charal and 10 in Bhuyan. Thus, a very small fraction of families have computers. Out of these over a half are from Bhuyan they have learnt computer operating from different places.

By the place of computer learning, the members of families are classified into three categories; viz, (i) home (ii) cybercafe, (iii) office. The following table distributes the families of computer knowledge into the places of learning.



Table 6.16  
Places of Computer Use in the Villages  
(Percentages in Parentheses)

Place	Charal	Bhuyan	Lahdoigarh	Borbahoni	Total
Home	2(50)	4(40)	2(66.6)	1(100)	9(50)
Cyber Cafe	--	2(20)	1(33.34)	--	3(16.66)
Office	2(50)	4(40)	--	--	6(33.34)
Total	4(100)	10(100)	3(100)	1(100)	18(100)

Source: Field Data Collected from the Villages during March/April 2011

The table shows that half (50%) of the families who have computer learn it at their own home whereas over one tenth (16.66%) of them learn it in cyber café in the villages like Bhuyan (20%) and Lahdoigarh (33.33%). One third (33.34%) of the families learn and use it at offices where 50% are in Charal and 40% are in Bhuyan. Thus, most of the villagers in Bhuyan are learned computer in their home because some families are affordable to buy it.

The purposes of using computer in the villages are categorized into four groups such as (i) education, (ii) business (iii) entertainment and (iv) games. The following table shows gender wise distribution of villagers into purposes of using computer in four villages:

Table 6.17  
Uses of Computer and Families in the Four Villages  
(Percentages in Parentheses)

Purpose	Charal			Bhuyan			Lahdoigarh			Borbahoni			Grand Total		
	M	F	T	M	F	T	M	F	T	M	F	T	T M	T F	Total
Education	2(33.33)	1(50)	3(12.5)	6(42.85)	7(58.34)	13(50)	--	2(100)	2(40)	2(100)	1(100)	3(100)	10(40)	11(64.70)	21(50)
Business	--	--	--	4(28.57)	4(33.33)	8(30.77)	--	--	--	--	--	--	4(16)	4(23.52)	8(19.05)
Entertainment	3(50)	1(50)	4(50)	3(21.43)	--	3(11.54)	3(100)	--	3(60)	--	--	--	9(36)	1(5.89)	10(23.80)
Games	1(16.67)	--	1(12.5)	1(7.15)	1(8.33)	2(7.69)	--	--	--	--	--	--	2(8)	1(5.89)	3(7.15)
Total	6(100)	2(100)	8(100)	14(100)	12(100)	26(100)	3(100)	2(100)	5(100)	2(100)	1(100)	3(100)	25(100)	17(100)	42(100)

Source: Field Data Collected from the Villages during March/April 2011

The table shows that of 42 families half (50%) use computer for educational purposes, about more than one fourth (23.80%) for entertainment, about one fifth (19.05%) for business such as in grocery shop (wholesale), brick factory etc. and only a few (7.15%) for games.

Of the total villages, all villagers in Borahoni use computer for educational purposes whereas in Lahdoigarh all of them use it for entertainment (60%) and education (40%). In Bhuyan, 50% use in education, 30.77% in business, 11.54% in entertainment and 7.69% use it for games. Of total villagers 50% of them use it for entertainment, 12.5% in education and games in Charal village. Thus, only in Bhuyan computer is used for business purposes by both the sexes.

## Internet Facility

Now-a-days, internet facility is very common in rural areas also through data card, modem or broad band but these villagers have very low level of internet use in all the four villages. In all, the families use internet: Charal (2), Bhuyan (8), Lahdoigarh (3) and Barbahoni (1). The villagers access it in different places and classified into three categories; viz, (i) home (ii) cybercafé, (iii) office. The following table shows the places of Internet use:

Table 6.18  
Places of Internet Use in the Villages  
(Percentages in Parentheses)

Place	Charal (%)			Bhuyan (%)			Lahdoigarh (%)			Borbahoni (%)			Grand Total M/F
	M	F	T	M	F	T	M	F	T	M	F	T	
Home	--	1(50)	1(25)	7(46.66)	3(50)	10(47.62)	2(66.66)	1(100)	3(75)	1(50)	1(100)	2(66.66)	16(50)
Cyber Café	--	1(50)	1(25)	5(33.34)	2(33.34)	7(33.33)	1(33.34)	--	1(25)	1(50)	--	1(33.34)	10(31.25)
Office	2(100)	--	2(50)	3(20)	1(16.66)	4(19.05)	--	--	--	--	--	--	6(18.75)
Total	2(100)	2(100)	4(100)	15(100)	6(100)	21(100)	3(100)	1(100)	4(100)	2(100)	1(100)	3(100)	32(100)

Source: Field Data Collected from the Villages during March/April 2011

The table shows that of the total 32 villagers half of them (50) use it at their own home followed by cyber café (31.25%) and office (18.75%) whereas 66.66% are found to use at home, 33.34% use in café in Borbahoni village.

In Lahdoigarh 75% are using at home and 25% using it in café whereas in Bhuyan 47.62% use at home, 33.33% in café and 16.66% use it in office. Half (50%) of the villagers use internet in office, followed by those who use it at home (25%) and in cyber cafés (25%). It is found that only in Charal and Bhuyan villagers are access internet in the office and none of the female villagers of Charal which indicate that they are engaged in jobs.

Villagers using internet in a week are seen for accessing to internet facilities in the four villages. Using internet depends on facilities of internet accessing points or places. The villagers are categorized into five groups; namely, (i) Daily (Very High), (ii) 5-6 (High), (iii) 3-4 (Medium), (iv) 1-2 (Low) and (v) Occasionally (Very Low) on the basis of spending days in a week. The following table shows details on using internet in a week:

Table 6.19  
Internet Using per Week among the Villagers  
(Percentages in Parentheses)

Frequency	Charal (%)			Bhuyan (%)			Lahdoigarh (%)			Borbahoni (%)			Grand Total		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Daily (Very High)	2(100)	--	2(50)	8(53.33)	1(16.67)	9(42.86)	--	--	--	--	--		10(45.45)	1(10)	11(34.37)
5-6 days a week (High)	--	--	--	2(13.33)	--	2(9.52)	--	--	--	--	--		2(9.09)	--	2 (6.25)
3-4 days a week (Medium)	--	1(50)	1(25)	1(6.66)	1(16.67)	2(9.52)	1(33.34)	1(100)	2(50)	1(50)	1(100)	2(66.66)	3(13.63)	4(40)	7(21.87)
1-2 days a week (Low)	--	--	--	1(6.68)	2(33.33)	3(14.29)	1(33.33)	--	1(25)	1(50)	--	1(33.33)	3(13.63)	2(20)	5(15.63)
Occasionally (Very Low)	--	1(50)	1(25)	3(20)	2(33.33)	5(23.81)	1(33.33)	--	1(25)	--	--		4(18.18)	3(30)	7(21.87)
Total	2(100)	2(100)	4(100)	15(100)	6(100)	21(100)	3(100)	1(100)	4(100)	2(100)	1(100)	3(100)	22(100)	10(100)	32(100)

Source: Field Data Collected from the Villages during March/April 2011

The table shows that one third (34.37%) of villagers use internet daily including male (45.45%) and female (10%). Over one fifth (21.87%) of villagers are found in medium category whereas over one tenth (15.63%) use it for 1-2 days in a week. In Borbahoni 66.66% of villagers use internet for 3-4 days followed by 1-2 days. Half of villagers (50%) use it for 3-4 days and one fourth (25%) use it for 1-2 days or occasionally in Lahdoigarh. In Bhuyan 42.86% of them use daily, followed by occasionally (23.81%), 1-2 days (14.29%) and 9.52% in 5-6 days and 3-4 days.

Thus, of the total villagers, male internet user is higher than female, it is because of males are engaged in different works than females. Moreover, the frequency of using internet in a week is found higher rate in Bhuyan due to the advancement of economic and literacy rate.

Benefits of internet accessing depend on the hours that they spend on internet in a day. By their time span the villagers are categorized into five groups namely, (i) less than 1(ii) 1-2 (iii) 3-4 and (iv) 4-5. The following table shows time span of using internet in a day:

Table 6.20  
Time Span of Daily Internet Using among the Villagers  
(Percentages in Parentheses)

Time Span of Internet Use (in hours)	Charal			Bhuyan			Lahdogarh			Borbahoni			Grand Total		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Less than 1	--	1(50)	1(25)	4(26.66)	3(50)	7(33.33)	--	--	--	--	--	--	4(18.18)	4(40)	8(25)
1-2	--	1(50)	1(25)	8(53.34)	2(33.33)	10(47.62)	3(100)	1(100)	4(100)	2(100)	1(100)	3(100)	13(59.09)	5(50)	18(56.25)
3-4	--	--	--	3(20)	1(16.67)	4(19.05)	--	--	--	--	--	--	3(13.63)	1(10)	4(12.25)
4-5	2(100)	--	2(50)	--	--	--	--	--	--	--	--	--	2(9.09)	--	2(6.25)
Total	2(100)	2(100)	4(100)	15(100)	6(100)	21(100)	3(100)	1(100)	4(100)	2(100)	1(100)	3(100)	22(100)	10(100)	32(100)

Source: Field Data Collected from the Villages during March/April 2011

The data reveal that more than half (56.25%) of the villagers spent for 1-2 hours where almost three fifths (59.09%) of male and half (50%) of female spent time within this category. One fourth (25%) of villagers spent less than one hour and one third (33.33%) of villagers are found in Bhuyan and another one fourth (25%) in Charal. None of the villagers is found in other two villages in this category. The villagers who have been using it for 3-4 hours in a day are nil in three villages except Bhuyan indicating more than one tenth (12.25%) villagers. In Charal few (6.25%) of the villagers spent 4-5 hours in a day and the rests of the villages are found in this category.

Thus, in all the villages 1-2 hours are spent daily in Internet and only few of the male villagers use internet for 4-5 hours in Charal and none of the villagers are found in rest of the villages by spending 4-5 hours.

Purposes of using internet are different among the villagers. By purpose these are categorized into six groups; namely (i) email, (ii) e-commerce, (iii) academic, (iv) chatting, (v) downloading materials and (vi) watching video clips. The following table shows gender wise distribution of villagers' purposes of using internet:

Table 6.21  
Villagers' Purposes of Using Internet  
(Percentages in Parentheses)

Purpose	Charat			Bhuyan			Lahdoigarh			Borbahoni			Grand Total		
	M N=2	F N=2	T N=4	M N=15	F N=6	T N=21	M N=2	F N=2	T N=4	M N=2	F N=1	T N=3	M N=21	F N=11	T N=32
Email	2(50)	2(50)	4(100)	10(47.61)	4(19.04)	14(66.66)	3(75)	1(25)	4(100)	2(66.66)	1(33.33)	3(100)	17(80.95)	8(72.72)	25(78.12)
E-Commerce	2(50)	--	2(50)	5(23.80)	--	5(23.80)	--	--	--	--	--	--	7(33.33)	--	7(21.87)
Academic	--	2(50)	2(50)	3(14.28)	6(28.57)	9(42.85)	3(75)	1(25)	4(100)	2(66.66)	1(33.33)	3(100)	8(38.09)	10(90.90)	18(56.25)
Chatting	--	--	--	8(38.09)	6(28.57)	14(66.66)	3(75)	1(25)	4(100)	2(66.66)	1(33.33)	3(100)	13(61.90)	8(72.72)	21(65.62)
Downloading Materials	2(50)	2(50)	4(100)	15(71.42)	6(28.57)	21(100)	2(100)	1(25)	4(100)	2(66.66)	1(33.33)	3(100)	21(100)	10(90.90)	32(100)
Watching Video Clips	2(50)	--	2(50)	7(33.33)	6(28.57)	13(61.90)	3(75)	1(25)	4(100)	2(66.66)	1(33.33)	3(100)	14(66.66)	8(72.72)	22(68.75)

Source: Field Data Collected from the Villages during March/April 2011

The data reveal that all the villagers' purpose of using internet is for downloading material. Nearabout four fifths (78.12%) use it for checking emails, 65.62% for chatting, 56.25% in academic and 21.87% in e-commerce; whereas cent percentage of villagers found in the category of downloading materials.

Only in Bhuyan, majority of the villagers use internet for all the categories of use: Email and chatting (66.66%), e-commerce (23.80%), academic (42.85%), downloading materials (100), and Watching Video Clips (61.90). Moreover, Bhuyan and Charal are the only two villages accessing internet for the purpose of e-commerce that indicates the villagers are interested in business.

### Mobile Phone

Like Internet, mobile phone is a new media which became popular from 2005. Due to easy communication and technological facilities it is very popular among youths. In the villages every family which can afford to buy mobile do use mobile, especially the middle and younger age groups. Mobile becomes one of the fashionable communication devices to the villagers. Of the families 169 (52.33%) have mobile phone in Charal (55), Bhuyan (52), Lahdoigarh (115) and Borbahoni (101). It is found that all the families in Bhuyan have mobile phone, followed by Lahdoigarh (53.04%), Charal (45.45%) and Borbahoni Village (30.69%). It indicates that mobile become one of the important device for communication of any matter in the villages.

On the basis mobile using purpose in the villages are divided into three groups; namely (i) business, (ii) relatives and (iii) agriculture. The distribution of the mobile using families is given below:

Table 6.22  
Purposes of Using Mobile Phone among the Villagers  
(Percentage in Parentheses)

Purpose	Charal	Bhuyan	Lahdoigarh	Borbahoni	Total N=323
	N=55	N=52	N=115	N=101	
Business	3(5.45)	17(32.69)	40(34.78)	7(6.93)	67(20.74)
Relatives	25(45.45)	52(100)	61(53.04)	31(30.69)	169(52.32)
Agriculture	11(20)	23(44.23)	13(11.30)	5(4.95)	52(16.09)

Source: Field Data Collected from the Villages during March/April 2011

The table reveals that over half (52.32%) of families use it to communicate with their relatives: 100% in Bhuyan, followed by Lahdoigarh (53.04%), Charal (45.45%) and Borbahoni (30.69%). One fifth (20.74%) of the villagers use it for business purposes including agriculture, grocery shops, furniture etc. Of these, one third (34.78%) of them in Lahdoigarh and about one third (32.69%) in Bhuyan and a few of them (6.93%) in Borbahoni and in Charal (5.45%) who also use it for business purposes. Uses of mobile in agricultural purposes found less; only 16.09% of them use it. Over two fifths (44.23%) of families in Bhuyan use it for agricultural purposes followed by Charal (20%), Lahdoigarh (11.30%) and Borbahoni (4.95%). Thus, the use of mobile phone on agricultural purpose may found less in all the villages but it become one of the important device to communicate regarding agricultural activities in present days in the villages.

Briefly, the following are the major patterns of interpersonal communication in the agricultural development of the four villages:

1. Of the total families majority of them have mobile phones and the mass media electronic sets are more in Bhuyan village. This is because of good economic condition of the Bhuyan families.
2. Subscription of newspaper in the three villages is very low due to replacement of electronic media like television; however, in Bhuyan it is high due to the easy means of accessing to new media which they acquire from Amguri town.
3. The largest section of the villagers read the local newspapers such as Dainik Janambhumi (45.05%), Pratidin (24.77%) and Aamar Asom (13.51%). Of them 7.65% villagers read Dainik Agradoot whereas a few villagers (3.15%) read national newspaper such as the Assam Tribune and equal percentage of villagers (3.15%) read Dainik Batori. A few (2.25%) of them read Asomiya Khabor and a very few of them read a national paper, the Times of India.
4. Both male and female villagers prefer to read local newspapers in local language which is easy to understand it.
5. Borbahoni has the highest percentage as compared to the rest of the villages though the numbers of villagers is less in reading and gender-wise too female percentage of reading agricultural items is higher.



6. In Lahdoigarh and Borbahoni none of the females spend 1-2 hours on newspaper reading because they are busy in household work and are engaged in tea gardens.
7. Most of the villagers read agricultural item in newspaper regularly in a week but none of the females are found to read such items in all the four villages due to household work activities. So, the highest number of readers among the villagers are found in Bhuyan who read more agricultural items as compared to other three villages because majority of them are illiterate.
8. Magazine-reading habit among females is higher than male villagers. However, in Lahdoigarh neither males nor females do not spend time in reading of any magazine related to agriculture like Goriyakhi, Nandini, Priyo Sakhi etc. Therefore, all the villagers need information related to agricultural magazine for more agricultural development.
9. Most of these villagers read magazine for 1-2 hours in a day and about half of them (49.27%) read it for one hour. Of the total magazine readers 37.5% of female and 55.55% of males read less than 1 hour per day. Over three fifths (62.5%) of the females read magazines for 1-2 hours in the four villages.
10. Over one tenth of the families (14.81%) listen programmes on sports and a few (8.33%) listen educational programmes on radio. Over one fifth (22.22%) of these families listen agricultural news and nearly one third, each, listen drama (31.48%) and health news (30.55%). The villagers of Lahdoigarh and Borbahoni listen news and music than other programmes like agriculture.
11. Most of the villagers listen Krishi Anusthan on radio broadcast by AIR Dibrugarh and Guwahati. Moreover, none of the female villagers listen Khetir Diha in the villages of Charal Lahdoigarh and Borbahoni
12. Most of them listen radio for 1-2 hours and of the total population, the percentage of female population listening radio programmes is higher than the males as they stay at home most of the time. Besides, listening radio programme is higher in Borbahoni and Lahdoigarh than the rest of the two villages because of having more radio than TV.

13. Most of the villagers in Bhuyan are learned computer in their home because some families are affordable to buy it. Only in Bhuyan computer is used for business purposes by both the sexes.
14. Over half (52.32%) of families use mobile phone to communicate with their relatives: 100% in Bhuyan, followed subsequently by Lahdoigarh (53.04%), Charal (45.45%) and Borbahoni (30.69%). One fifth (20.74%) of the villagers use it for business purposes including agriculture, grocery shops, furniture, etc. Of these, one third (34.78%) of them in Lahdoigarh and about one third (32.69%) in Bhuyan and a few of them (6.93%) in Borbahoni and in Charal (5.45%) also use it for business purposes. Uses of mobile phone in agricultural purposes are found less; only 16.09% of them use it. Over two fifths (44.23%) of families in Bhuyan use it for agricultural purposes followed by Charal (20%), Lahdoigarh (11.30%) and Borbahoni (4.95%).

In sum, mass media communication has less impact in the agricultural development of the four villages. Although the villagers access to new media like Radio, TV, print media, mobile, internet, computer etc., it deeply impact on their life style including dress pattern, food habits and ways of living. It hardly impacts on agricultural communication as well as development. The villagers in Bhuyan are found exceptional in few cases; where some families are communicating over these media. Among mass media the villagers prefer newspaper, mobile phone, radio, television and magazine as a source of communication in the four villages. Overall habits of listening radio, watching agricultural items on TV and reading newspapers are found in Bhuyan village.