



Perspective of the farmers about ICT in agriculture

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Abstract : The objective of the study was to know the expectations of the farmers regarding Community Internet Center at village level for sustainable agricultural development. Most of the respondents was expected the Community Internet Center (CIC) facilities at Panchayat office of the village. They were also expecting six sets of computer with agriculture graduate having computer knowledge as operator at CIC. They expect that Government should bear expenses to run CIC. The information on farmers' related sites was expected by most of the farmers in Gujarati language that too in the audio-visual form. The major purposes to have CIC explained by the respondents were to collect agricultural information, to collect information on government's programmes, and to know more about market prices. Majority of the respondents expressed their desire to use Internet daily or twice in a week by their own. All of them expressed positive response to have proper training about the use of Internet facility through government agency, at CIC.

Key Words : Community Internet Center, ICT in agriculture

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INTRODUCTION

The major segments of our population are being lived in rural areas. Hence, quick dissemination of technology information from the agricultural research system to the farmers in the field and reporting of farmers feedback to the research system are the critical inputs in transfer of agriculture technology. To disseminate the required and recent agricultural information to the farmers in scattered villages at the variegated geographical situation in India is very difficult task. Transfer of technology to the level of farmers is not a onetime exercise because new farm technology is being constantly evolved. A continuous flow of technologies in an appropriate manner is vital to provide quick benefit of this development to the farmers. There has been a technological explosion in the field of agriculture. This demands that the farmer has to know all aspects of technology prior to its adoption. It can only be possible through the use of satellite based Internet technologies.

The number of satellite based Internet connection in Indian has crossed the two million mark and the number of telephone connections is over 320 million. Internet connectivity has touched almost all the districts in the country

and is moving down up to the village levels (Aditya, 2003). Many pilot projects to connect rural community to cyberspace are underway at various locations. The initial response of the rural people, particularly farmers has been very encouraging; many organizations are trying to establish internet connectivity to make best use to satellite based communication technology. Keeping all the things in mind the present study has been undertaken with a view to know the expectations of the farmers regarding Community Internet Centre (CIC) at village level.

MATERIALS AND METHODS

The investigation was carried out in Anand district of Gujarat state because the district is agriculturally one of the more advanced districts. Farmers having good interaction with their relatives in foreign countries. Four villages viz., Vasad, Mogar, Napad and Navli having more than 5000 population and comparatively sound infrastructure facilities were selected purposively. A list of progressive farmers was prepared with the help of village level worker from all the selected villages. Finally, 25 farmers were selected from each villages using simple random

sampling technique. Thus, the study was confined to 100 farmers. Keeping in view the objectives of the study, data were collected using structured interview schedule prepared for the purpose. Statistical tools such as frequency and per cent were employed to analyze the data.

RESULTS AND DISCUSSION

The results of the present study as well as relevant discussions have been presented under following sub heads:

Profile of the respondents :

It was observed that 64 per cent of the internet facility expecting farmers were from the middle age group, with a high school and higher secondary level of education (45 per cent) and had joint family. Sixty per cent of the respondents belonged to the small category of farmers with mixed farming as main occupation. In order to earn additional income along with farming about 46 per cent of them possessed two or more animals. More than half of the respondents were found to be the member in one or more organizations.

Expectation of the farmers about CIC :

The data presented in Table 1 indicate that cent per cent of the respondents expected to have CIC at village level. It shows that farmers have realized importance of Internet facility in villages as an effective source of information as well as for the speedy communication.

Sr. No.	Type of expectation	Number	Per cent
1.	Yes	100	100.00
2.	No	00	00.00
	Total	100	100.00

It can be observed from the data in Table 2 that building of Panchayat was preferred by 95.00 per cent of the respondents, followed by building of primary school by 81.00 per cent, building of co-operative dairy by 76.00 per cent and buildings of high school and community hall by only 5.00 and 3.00 per cent respondents, respectively. The building of Panchayat is such an informal place, where people feel much familiarity, thus it was preferred by great majority of the farmers to have CIC.

Sr. No.	Place	Number	Per cent
1.	Panchayat	95	95.00
2.	Primary school	81	81.00
3.	Co-operative dairy	76	76.00
4.	High school	05	05.00
5.	Community hall	03	03.00

The data in Table 3 indicate that operator or guide, printer, separate cabin, downloaded information in printed form and extra seating facilities were expected by 98.00, 72.00, 68.00, 63.00 and 53.00 per cent of the farmers, respectively. The data in Table 4 indicate that agriculture graduate with computer knowledge was preferred by nearly cent per cent (98.00 per cent) of the farmers as a manager of the centre, followed by any educated person of the village was preferred by 76.00 per cent, expert of computer by 57.00 per cent and primary school teacher by 28.00 per cent of the farmers.

Sr. No.	Expectation of service	Number	Per cent
1.	Operator/Person to guide and help	98	98.00
2.	Printer	72	72.00
3.	Separate cabin	68	68.00
4.	Collected information in printed form	63	63.00
5.	Extra seating facilities	53	53.00

Sr. No.	Person	Number	Per cent
1.	Agriculture graduate with computer knowledge	98	98.00
2.	Educated person of village	76	76.00
3.	Expert of computer	57	57.00
4.	Primary school teacher	28	28.00

With a view to knowing farmers' choice of source to take initial financial support to start CIC, information was collected and presented in Table 5. The first choice of the farmers to take initial financial support to start CIC was Government agencies followed by co-operative societies, villagers sharing, voluntary donation and foreign relatives. The information regarding choice of the farmers to bear expenses to run CIC was also collected and presented in Table 6. It can be seen that respondents said that Government should bear expenses to run CIC, at the same time other preferences given by them to bear expenses to run CIC were village Panchayat, co-operative dairy and collecting charges from users.

Sr. No.	Institution	Number	Rank
1.	Government	2.00	I
2.	Co-operative societies	0.92	III
3.	By villagers' sharing	0.07	V
4.	Voluntary donation	0.65	IV
5.	Foreign relatives	1.45	II

Table 6 : The respondents as per the choice to bear expenses to run CIC (n=100)

Sr. No.	Responsible for expenditure	Number	Rank
1.	Government	1.60	I
2.	Village Panchayat	1.02	II
3.	Co-operative dairy	0.92	III
4.	By collecting charges from users	0.79	IV

Respondents were also asked to give their expectation regarding number of internet connected sets of computers (Table 7). Majority of the farmers (78 per cent) suggested that more than six sets should be there at CIC while 22.00 per cent expected 5 to 6 sets of internet connected computer sets at CIC. It can be seen from Table 8 that most of the farmers expected information in Gujarati language that too in the form of photographs and written form on agricultural related webs as well as on ICT. At the initial stage if it is difficult to provide information on most expected form, thus many of them were also expected information in audio-visual form, written form and audio form. Chauhan (2011) also reported the same.

Table 7 : The Respondents' choice to have minimum computer sets at CIC (n=100)

Sr. No.	Internet set	Number	Per cent
1.	1 to 2	00	0.00
2.	3 to 4	00	00.00
3.	5 to 6	22	22.00
4.	More than 6	78	78.00
	Total	100	100.00

Table 8: Respondents choice on form of information on internet and ICT (n=100)

Sr. No.	Type of information	Mean value	Rank
1.	In Gujarati language	1.98	I
2.	Photographs with written form	1.94	II
3.	Audio-visual form	1.91	III
4.	Written information	1.42	IV
5.	Audio form	1.20	V

The data presented in Table 9 reveal that the major uses of internet expected by the respondents were to collect agricultural information, to collect information on government's programmes, for speedy communication, for exchange information, for entertainment, to collect information for their children's education, to contact foreign relatives, to contact relatives in India, to know information on agriculture of developed country and to know more about market prices (Buddhadev, 2003). The farmers are ready to use Internet for agricultural information but on majority of the agricultural sites, information is available in English language so they are not in opposition to use it. Thus, all State Government should launch

farmers' related sites in local languages. Many State Governments have initiated their efforts in this direction. The result in Table 10 shows that farmers have real interest to be a part of Internet communication process thus, majority (78.00 per cent) of the respondents were expecting to use Internet by their own while, 22.00 per cent wanted to use it with the help of others.

Table 9: Respondents according to their purposes to have CIC (n=100)

Sr. No.	Purpose	Mean value	Rank
1.	To collect agricultural information	1.71	I
2.	To collect information on government's programmes	1.64	II
3.	For speedy communication	1.61	III
4.	For exchange information	1.21	IV
5.	For entertainment	1.11	V
6.	To collect information for their children's education	0.74	VI
7.	To contact foreign relatives	0.67	VII
8.	To contact relatives in India	0.64	VIII
9.	To know information on agriculture of developed county	0.56	IX
10.	To know more about market prices	0.51	X

Table 10 : Respondents wish to involve in the process of exploring internet (n=100)

Sr. No.	Way of internet use	Number	Per cent
1.	By own	78	78.00
2.	With the help of others	22	22.00
	Total	100	100

The expected frequency of the farmers to use Internet facility at CIC was measure. The result (Table 11) indicates that majority (63.00 %) of respondent were expecting to use internet at CIC daily or twice in a week, followed by 28 per cent whenever needed, 06.00 per cent once in a week and 3.00 per cent once in a fortnight. Thus, it can be said that favorable

Table 11: Respondents expected frequency to use internet at CIC (n=100)

Sr. No.	Expected frequency to use ICT	Number	Per cent
1.	Daily	32	32.00
2.	Twice in a week	31	31.00
2.	Once in a week	06	6.00
3.	Once on fortnight	03	3.00
4.	Once in month	00	00.00
5.	Whenever needed	28	28.00
	Total	100	100.00

expectation was observed among the farmers to use Internet at CIC. The data presented in Table 12 indicate that majority (70.00 %) of respondents expected training through government agency, followed by 13.00 per cent expected training by Agricultural University, 11.00 per cent respondents by Gram Panchayat. Only 4.00 and 2.00 per cent of them expected such training by co-operative society and NGOs. Chauhan (2011) also reported the same.

Table 12 : Respondents expected agency to receive training to use CIC (n=100)

Sr. No.	Agency	Number	Per cent
1.	Government	70	70.00
2.	Co-operative society	04	04.00
3.	NGOs	02	02.00
4.	Gram Panchayat	11	11.00
5.	Agricultural University	13	13.00
	Total	100	100.00

Conclusion :

Cent per cent respondent expected the Community Internet Centre (CIC) facilities at village level. Slightly less than cent per cent of them preferred Panchayat office as the best place of CIC and they were expecting agriculture graduate with computer knowledge as operator or guide at CIC. The respondents expressed that there should be more than six sets of computer, further they expected that government should bear expenses to run CIC. The information on farmers’ related sites was expected by most of the farmers in Gujarati language

that too in the audio-visual form. The major purposes to have CIC explained by the respondents were to collect agricultural information, to collect information on government’s programmes, to speedup communication, to exchange information, and to know more about market prices. Majority of the respondents expressed their desire to use Internet daily or twice in a week by their own. All the respondents expressed positive response to have proper training about the use of Internet facility through government agency, at CIC for sustainable agricultural development.

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