

# Setting Up Village Community Information Centres For Farmers : A Pilot Project

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**ABSTRACT:** *In present day agriculture system so many tools and technologies are being used for maximum productivity and in a short period of time. Farmers' proper knowledge about the seeds, breeding, fertilizer, irrigation system etc. has made them thrice times profitable from the same land. So proper information plays an important role in recent days farming. In the present survey an attempt has been made to identify the sources and areas of information need of the farmers community in rural areas of Deogaon block of Balangir district and their approaches towards setting up of Village Community Information Centres (VCIC). The survey is a questionnaire based pilot survey which has revealed the age group and educational qualification of the farmer, their preferred sources of information, main areas of information needs, recommendations in establishment of village community information centres etc.*

**Keywords:** Information, Information Access Pattern, Village Community Information Centre, Networking, Automation

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## 1. Introduction

Agriculture is the most important source of Indian economy. More than 70 percent of the people depend upon agriculture. Mostly the people residing in rural India are highly dependent on it. Agriculture not only comprises agronomy, Soil Science, Plant breeding, entomology, horticulture, Plant pathology, agricultural economics and agricultural engineering, but also it has come to include the food science, food technology, nutrition science, fisheries, animal and veterinary sciences, rural sociology,

ecological and environmental management and agricultural waste utilization. So, it is a complex subject. The importance of Indian agriculture lies in sharing with national income, employment and opportunities, expanding agricultural supplies, providing raw materials to industries, food supplies, market for industrial products and communication with international trade.

In recent years the government action has expanded for farmers. Government has undertaken so many special programmes like Small Farmers Development Agency (SFDA), Marginal Farmers and Agricultural Labour Development Agency (MFAL), National Rural Employment Programme (NREP), Jawahar Rojgar Yojana (JRY), Jawahar Gram Samridhi Yojana (JGSY) etc. for the development of the farmers.

Similarly, in the state of Odisha, so many research organizations are working for the development of the agricultural systems as well as farmers. Application of new tools and technologies and continuous research in the agricultural sector has changed the past scenario of agriculture. The organizational setups like Central Rice Research Institute (CRRI) at Cuttack; Rice Research Station, OUAT, BBSR; Fresh Water Aquaculture Research and Training (FWART), Kausalyaganga; Regional Plant Resources Centre (RPRC), Bhubaneswar; Regional Research Station, Chipilima, Sambalpur; Krishi Vigyan Kendra (KVK), Bhubaneswar etc. have actively engaged themselves for agricultural research and development in the state. The main objectives of these organizations and setups are to reach the rural farmers with the recent agricultural inventions and technology. But, some questions stand before all the things going on for the development of the rural agriculture and farming are that, whether the farmers residing in villages are getting the proper information they need? Is there any information centre working at village level? Do the govt. officials reach to the farmers regularly? Needless to say that government is not doing anything to reach the village farmers, even various media of mass communications, such as Radio and Television have been actively engaged in broadcasting and communication of the agricultural information and scientific-know-how of cultivation of various fields to farmers living in remote villages. In Orissa the regional centres of All India Radio (AIR) and Doordarsan (DD) broadcast and telecast a number of programmes carrying agricultural messages, such as “Chasarhal” (Agricultural News), “Ama Chasa Basa” (our agriculture) and Doordarsan and other regional channels telecast a few interesting programmes such as “Pallishree”, “Annadata”, “Krushi Duniya” etc. which carry valuable information regarding agriculture and farming.

So reaching out the farmers in villages is a great challenge. Proper information plays an important role in everyone’s life and mostly in the cases of a farmer it is highly needed to develop their skill in farming and selling their crops. More numbers of village community information centres need to be established to provide information to the village farmers. It can help the village farmers in skill development, how to cultivate the land, awareness on plant diseases, purchasing quality seeds, selling crops in reasonable price, generating self employment etc. Village community information centres can conduct exhibitions and demonstrations on using of fertilizers, multiple cropping, soil and water conservation, animal husbandry and dairying, fisheries, forestry, agricultural marketing etc. It provides materials to farmers for various types of agriculture and for increasing their knowledge in the agricultural field.

In the present survey Deogaon block of Balangir district has been covered for a pilot study for setting up village community information centres for farmers of Odisha. A total numbers of 15 villages with 380 farmers were covered under the study. The study has carried out under two main aspects i.e. i) views and opinions regarding agricultural information seeking pattern, preferred areas of information seeking, etc. and their attitudes towards setting up village community information centres through questionnaire and interview and ii) infrastructure required.

## **2. Literature Review**

Islam and Islam (2008) in their study “Community Information Centres: A Step to Bring Connectivity of the Rural Communities in Bangladesh” tried to identify the information facilities of rural communities in Bangladesh explored how CIC can be strap up to promote development rural communities in Bangladesh. Lwoga, Stilwell, and Ngulube (2011) in their study demonstrated that the knowledge and information needs, and information seeking patterns of farmers were location specific. The major sources of information for farmers were predominantly local (neighbours, friends and family), followed by public extension services. Bachhav (2012) in his study “Information Needs of the Rural Farmers: A Study from Maharashtra, India: A Survey” revealed the information needs of the farmer community in rural areas. The study conducted through a survey method which revealed 71(40.58%) farmers requires daily information for various agriculture works. It is also found that the first preferred sources of the information of the farmers are colleague or fellow farmers following by newspapers and Government office. Elly and Silayo (2013) stated in their study “Agricultural Information Needs and Sources of the Rural Farmers in Tanzania: A Case of Iringa Rural District” that 70 percent of farmers’ information needs is about crop and livestock husbandry, marketing, funding options

and value addition. Traditional and interpersonal means of communication remain the most reliable sources of information among rural farmers if the situation remains unabated now and in the near future.

Sharma (2013) revealed in his study “A study on uses of Public Library/ Community Information Centres by the Farmers in Madhya Pradesh” that there was no public library available for most of the farmers in their own locality. Library facility was available only for 137 (34.25%) farmers whereas 263 (65.75%) were deprived of such a facility. Further the survey focused on the relevancy of community information centre and public library to avail the necessary information regarding agricultural practices by farmers and diffusion mode of new technology and methodology developed in research lab to farmers with importance communicator between agricultural laboratory and farmer’s field. Ndinde and Kadodo (2014) in their paper “The Role of Community-Based Information Centres in Development: Lessons for Rural Zimbabwe” highlighted developmental issues initiated by different community-based information centres elsewhere in the world and in Zimbabwe. Also the paper has traced to provide a framework for establishing these centres in rural Zimbabwe for the purpose of providing everyone with useful, practical information for their developmental activities.

Sharma (2014) in his study attempted to reveal the most satisfactory mode to get required information by farmers. Data reveals that elders/family members 337, 84.25% and friends/neighbours/relatives 209, 52.25% are common sources of information for farmers. This indicates that farmers rely on their friends or relative to get farming information. It has been found that maximum farmers get below average satisfaction through meetings, field days and agriculture tours. Again the study reveals that these sources of information are less effective for empowerment of farmers in agricultural sector. Radio and Television are two important and effective sources for information to farmers under mass contact.

### **3. Objective of The Study**

The main objectives of the present survey for setting up of Village Community Information Centre (VCIC) is that, it will be a place to render agricultural information to the rural farmers through different information sources. It will connect to the rural farmers community to their required sources of information and modern technology via internet and mass media. Even, there will be a live interactive session between agricultural experts, government officials with the rural communities, to reach out their agricultural information needs.

- To identify the age-group and educational qualification of the farmers community engaged in farming in the rural areas of Odisha,
- To ascertain the day to day agricultural information needs of the rural farmers,
- To determine the sources on which they depend and the communication media they adhere for,
- To identify the different areas in which they require information frequently,
- To make awareness among the farmers community about the facility and available information services of public library/ community information centres,
- To elicit farmers attitude towards setting of village community information centres, and to suggest infrastructure & requirements for setting up this.

### **4. Scope & Limitations**

The present survey persist within the ambit of the following scope and limitations,

- By subject matter the survey is limited to the survey of the information need and seeking of the agricultural community and their attitudes towards setting up of village community information centres only.
- By population the survey has constituted to the gents farmers only and not to the female farmers.
- By geographical jurisdiction the survey has covered to the selected 15 numbers of villages of Deogaon block of Balangir district only.

## 5. Hypothesis

Hypothesis formulated for the present study are;

- People with lower educational qualification might have engaged in farming as the profession has no social status.
- Farmers awareness about the latest technology adopted in farming are less as they don't have this facilities.
- Farmers might have preferred informal sources of agricultural information, rather than formal sources.
- Establishment of village community information centres will increase awareness on latest technology used in farming and scientific agriculture.

## 6. Methodology

In the present survey, questionnaire method has been adopted to collect information from the respondents who are geographically scattered over the area of Deogaon block, Balangir district of Odisha. Keeping in mind the objectives of the study, a well structured questionnaire has been distributed among the respondents in person and farmers followed by observations and interview with the respondents as and when became necessary. A total of 420 questionnaires were distributed among the well known farmers of the 15 numbers of villages of the block. Out of 420 only 380 numbers of questionnaires were returned and with this 90% of received questionnaires, data were analyzed for the final results.

## 7. Data Analysis & Interpretation

### 7.1 Analysis of Data Received From Respondents

#### 7.1.1 Demographic presentation of the Respondents

Number of questionnaires distributed	Number of filled in questionnaires obtained	Percentage of responses (%)
420	380	90.40%

Table 1. Demographic presentation of the respondents

Table 1 depicts the numbers of questionnaires distributed to the respondents in the survey. It is seen that out of 420 numbers of questionnaires distributed among the farmers a total of 380(90.4%) farmers have responded to it and only mere percentages of 40(9.6%) farmers have not responded. However, the response rate is quite encouraging to fulfil the objectives of the survey.

#### 7.1.2 Age wise distribution of the Respondents

AgeGroup	Frequency of Response (n=300)	Percentage (%)
Below 18	7	1.84
18- 25	52	13.68
26-35	89	23.42
36-45	102	26.84
46-55	66	17.37
56-65	47	12.37
66-75	17	4.47

Table 2. Age wise distribution of Farmers

The above table exhibits the age wise distribution of farmers' community of Deogaon block and reveals that the farmers start working before the age of 18 and continues up to the age of 75. Maximum 102(26.84%) numbers of farmers remain engaged in the agriculture within the age group of 36-45 followed by 89(23.42%) farmers between the ages group 26-35 and 52(13.68%) farmers between the age group 18-25 engage themselves in farming. The study further shows that only 7(1.84%) farmers work below the age 25 and 17(4.47%) farmers work above the age 66 and above. So, the high time of a farmer to be engaged in farming is identified as the age group of 26 to 65.

### 7.1.3 Educational Qualification of the Farmers

Educational Qualification	Frequency of Response (n=380)	Percentage (%)
Illiterate	35	9.21
Under Matric	231	60.79
Matriculate/ 10th	67	17.63
Intermediate/ +2	42	11.05
Graduation & above	5	1.32

Table 3. Educational Qualification of the Farmers

The educational qualification of the respondents in the survey has revealed that majority of the farmers are Under Matric qualification. Out of 380 respondent farmers were selected from different villages of Deogaon block, highest 231(60.79%) farmers are Under Matric educational qualification and 67(17.63%) farmers are Matriculate. Only a few numbers of 5(1.32%) farmers had their educational qualification as Graduation and above and 35(9.21%) farmers are astonishingly illiterate.

### 7.1.4 Sources on which farmer community depends

Information Sources	Frequency of Response (n=380)	Percentage (%)	Rank order
Discussion with fellow farmers	312	82.11	1
Social gathering (Church/ Temple etc.)	204	53.68	2
From Govt. officials	159	41.84	3
Through television	84	22.11	4
Public interest advertisement	63	16.58	5
Through radio	39	10.26	6
Others	39	10.26	7
Through news papers	24	6.32	8
Poster/ leaflet	21	5.53	9
Visiting library/ community centre	15	3.95	10

Table 4. Sources on which farmer community depends on their information need

The farmers mostly depend upon the informal sources of information for their agricultural information needs as the data shows that highest 312(82.11%) farmers get their daily agricultural information through discussion with fellow farmers followed by 204(53.68%) farmers get their information through Social gathering and 159(41.84%) farmers get their information from Govt.Officials. Only 15(3.95%) respondents visit library/ community information centres. As the primary objective of the survey

was to view farmers' willingness in setting up a village community information centre, the farmers were asked the reason for not going to the library/ information centres; they replied that the library/ community information centre was not reachable to them. The other information sources like television, public advertisement, radio, news papers have less impact on them.

### 7.1.5 Different Areas on frequently needed information

Needed Information	1	2	3	4	5	Weighted Mean	Ranking Order
Information on disease outbreak	199	181	0	0	0	4.52	1
Training on new varieties Breeds/ farming techniques	230	78	72	0	0	4.42	2
Information about crop husbandry	184	158	38	0	0	4.38	3
Information on inputs availability e.g. fertilizer, seeds etc.	176	105	99	0	0	4.20	4
Information on soil fertility/ suitability	123	209	48	0	0	4.17	5
Loan/ Financial assistance (subsidies)	243	43	36	20	38	4.14	6
Weather related information	75	257	45	3	0	4.07	7
Information about livestock husbandry	132	105	143	0	0	3.97	8
Information about pest management	99	155	104	22	0	3.87	9
Information about contract farming arrangement	89	169	76	46	0	3.79	10
Marketing information (market availability)	101	106	87	65	21	3.53	11
Information on value addition (processing and packaging)	78	79	76	45	102	2.96	12

(Note: 1= Very Important, 2= Important, 3= Neither Important Nor Not Important, 4= Not Important, 5= Not Important at all)

Table 5. Different Areas on frequently needed information

Table 5 depicts the areas of agricultural information needs of the farmers. A five point Likert scale has been used to co-relate the data. The measuring scale used in the study were in decreasing weight age order where, 1= Very Important, 2= Important, 3= Neither Important Nor Not Important, 4= Not Important, 5= Not Important at all. Data shows that information on outbreak of disease is the top area of their information seeking with 4.52 weighted mean. Similarly training of new varieties breeds/farming techniques ranks second top rated information seeking area of the farmers with 4.42 weighted mean. Other top rated areas are information about crop husbandry at third top ranked area with 4.38 weighted mean and information on inputs availability i.e. fertilizer, seeds etc. with 4.20 weighted mean. The farmers are very active and conscious in every area of the agricultural information seeking.

### 7.1.6 Farmers' attitude towards Village Community Information Centres (VCIC)

Table 6 reveals farmers' attitude towards village community information centres. A two point Likert scale has been used to elicit farmers' opinion in establishment of VCIC. Data shows that only 14.74% farmers have VCIC in their villages/ area, 73.42% farmers have heard about the VCIC, only 17.89% farmers have visited VCIC, 63.16% farmers are aware about the VCIC and 93.16% farmers have agreed in the establishment of VCIC in their villages/ local area.

<b>Farmers' attitude towards VCIC</b>	<b>Yes (n=380)</b>	<b>No(n=380)</b>
Do you have a VCIC in your village/ area ?	56 (14.74%)	324 (85.26%)
Have you heard about VCIC ?	279 (73.42%)	101 (26.58%)
Have you ever been to VCIC ?	68 (17.89%)	312 (82.11)
Are you aware about the services and facilities provided in VCIC ?	240 (63.16%)	140 (36.84%)
Do you think establishment of VCIC in your village/ local area will be useful for you ?	354 (93.16%)	26 (6.84%)

Table 6. Farmers' attitude towards Village Community Information Centres (VCIC)

## 8. Findings

The followings are the major findings of the present survey;

- Highest 26.84% farmers are within the age group of 36-45. So, the farmers seems to be matured in farming.
- Highest 60.79% farmers belong to Under Matric qualification. So there may be some other reasons of highly qualified people not coming to this profession.
- The farmers mostly depend upon the informal sources of information for their agricultural information needs as the data shows that highest 312(82.11%) farmers get their daily agricultural information through discussion with fellow farmers.
- It is seen that "Information on outbreak of disease" has been identified as top area of farmers' information seeking with 4.52 weighted mean. Other identified areas are "Training of new varieties breeds/farming techniques", "Information about crop husbandry" and "Information on inputs availability i.e. fertilizer, seeds, etc"
- Highest 93.16% farmers have agreed in the establishment of VCIC in their villages/ local area.

## 9. Recommendations

### 9.1 Location

Village Community Information Centres (VCIC) for farmers can be set up in the villages/ rural areas having a total population of not less than 5000. There are two different views regarding location of a community information centre. Remote and isolated place is the most suitable place in opening of a community information centre. The VCIC should be situated in a busy central place of the locality or big village. The place should be easily accessible to the community to be served. The VCIC must be opened in evening also, so that farmers engaged in various occupations can use it after finishing their regular work. The physical planning of a VCIC must be functional. Its exterior should be inviting and interior should be attractive and easily accessible to the users/ farmers to be served. The best use of existing resources, information of a VCIC can be possible only through its competent, sincere and qualified personnel. The staff members should be approachable, courteous, judicious and helpful to the farmers and rural people.

### 9.2 Computer system

A computer system is capable of storing information for longer period of time in minimum space in the electronic readable form. This information is capable of being recalled with ease of outmost speed, as and when warranted. The recent versions of computer can be used like Pc-486, Pentium and dual core with high RAM. Other hardwires like CD/ DVD, Printer etc. can be used.

### 9.3 Internet Link/ Networking

Networking of VCIC is thus very essential for sharing of information. The information centres networks aim at providing materials, information and services by different types of VCIC to the needy users. These VCIC may be in different jurisdictions but agree to serve one another on the same basis as each serves to its own constituents. Networking is a co-operative system of sharing resources among two or more knowledge centres through a formal institutional agreement, common pattern of exchange of information among the centres by the help of communication system.



#### 9.4 Software

The software required for the VCIC will for the following purposes i.e. i) For day to day activities like acquisition, cataloguing, serial control, circulation; ii) For database creation and maintenance; iii) For communication interfaces. So many library management software like E-Granthalaya, Koha, Libsys are available in the market, and any one of which can be used for this purpose.

#### 9.5 Information Sources

The collection of the CIC must be users' oriented. To meet the day to day agricultural information needs of the local community, the CICs have to built up a enriched library collection consisting of Information News Letters, House Bulletins, Trade and Product Bulletin, Trend Reports, Technical Digests, Newspapers, Magazines, Online Databases, Audio-visuals etc.

#### 9.6 Manpower Requirement

There is a strong need of trained manpower in CICs for taking care of the information resources as well as serve right information to the users coming to the CICs. For smooth operation of the CICs one trained personnel with other supporting staff are required.

### 10. Conclusion

As the survey is a pilot study of a rural Odisha and consisting of only 380 farmers, the results may not be applicable to all areas of the state, still it open out doors for the establishment of village level community information centres for rural farmers. In comparison to research and programmes carried out by the government for the farmers, they (farmers) are not getting these facilities because of unavailability of VCIC or modern technologies. The village community information centre can help them better for training on new varieties Breeds/ farming techniques, information about crop husbandry, new seeds & cultivation, marketing of agricultural products etc.

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