

**COMMUNICATION SOURCES USED BY FARMERS FOR  
MARKET INFORMATION**

**THESIS**

**149744**

**Submitted to  
Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola  
in partial fulfilment of the requirements  
for the Degree of**

**MASTER OF SCIENCE  
IN  
AGRICULTURE  
(EXTENSION EDUCATION)**

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## DECLARATION OF STUDENT

I hereby declare that the experimental work and its interpretation of the Thesis entitled "**COMMUNICATION SOURCES USED BY FARMERS FOR MARKET INFORMATION**" or part thereof has neither been submitted for any other degree or diploma of any University, nor the data have been derived from any thesis / publication of any University or scientific organization. The source of materials used and all assistance received during the course of investigation have been duly acknowledged.

Place : Nagpur

Date : 22/07/2008



(Bhilawade Deepak Subhash)

Enrolment No. EE -1247 ✓

## CERTIFICATE

This is to certify that thesis entitled "**COMMUNICATION SOURCES USED BY FARMERS FOR MARKET INFORMATION**" submitted in partial fulfilment of the requirement for the degree of "**Master of Science in Agriculture (Extension Education)**" of Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola is a record of bonafide research work carried out by **Bhilawade Deepak Subhash** under my guidance and supervision.

The subject of the thesis has been approved by the Student's Advisory Committee.



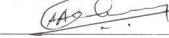

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## **Acknowledgements**

I feel immense pleasure and have great opportunity to express my heartiest sense of gratitude, indebtedness towards my honourable guide Dr. D.M. Lanjewar, Professor of Extension Education, College of Agriculture, Nagpur for suggesting the research project, his valuable guidance, keen interest, timely suggestions, sustainable criticism, constructive advice and constant encouragement till the final shape of manuscript.

I express my deepest gratitude to Shri D.N. Bhalekar, Assistant Professor of Extension Education, Dr. A.A. Choudhari, Assistant Professor of Agronomy, College of Agriculture, Nagpur member of advisory committee for their encouragement and helpful suggestions during writing stage of thesis.

I am humbly obligated to Dr. M.M. Damke, Associate Dean, College of Agriculture, Nagpur for providing all necessary facilities during course of investigation.

I wish to express my sincere thanks to Shri L.D. Nagalwade, Associate Professor Extension Education, Dr. M.K. Rathod, Assistant Professor Extension Education, Shri S.L. Devtale, Assistant Professor Extension Education, College of Agriculture, Nagpur for their valuable help throughout my post graduation.

I express sincere thanks to Shri S.G. Thote, Associate Professor, Department of Agricultural Economics and Statistics for their valuable guidance during statistical analysis of my research work.

I express my sincere thanks to all the staff members and employees of Extension Education Section, College of Agriculture, Nagpur.

In the course of study, as I have received precious help from my department colleagues Somesh, Manohar, Satish, Monali, Shilpa, Bharti, Sonali and all the juniors, I am very much thankful to them.

I also express my heartiest thanks to my all friends Prashant, Tushar, Vilas, Bunty, Munna, Kamlesh, Bhausahab, Aniket, Deva, Sunil, Kiran, Manoj, Chandu and all others for giving inspiration for completing entire thesis.

I am immensely thankful to my 160 respondents who helped me in collecting data of this thesis.

I shall be failing in my duty if I do not express my deep gratitude to my beloved grandfather Shri Naminath Bhilawade, father Shri Subhash Bhilawade, mother Sau. Mangal Bhilawade for their love and blessings. I am very grateful to my sisters Dr. Kavita and Dhanshri and very sweet niece Pranjali, whose love and affection has brought the present work to fructification.

At least but not least, I am also thankful to Parag and Facit Xerographers for word processing and computerizing thesis within time.

Above all I bow my head before an almighty God whose blessings gave me the strength to make this thesis a successful venture.

Place : Nagpur

Date : 22/07/08



Bhilawade Deepak Subhash

## Table of Contents

Sr.No.	Particulars	Page
A	List of Tables	i
B	List of Figures	ii
C	List of Abbreviation	iii
D	Thesis Abstract	iv
I	Introduction	1
II	Review of Literature	5
III	Methodology	15
IV	Results and Discussion	24
V	Summary and Conclusions	40
VI	Implications	42
*	Literature Cited	43
*	Vita	
*	Appendix	

(A)

## List of Tables

Tables	Title	Page
1.	Table showing personal, socio-economic and psychological profile of respondents.	25
2.	Showing distribution of respondents according to level of use of information sources for market information.	28
3.	Showing relationship between age and level of use of information sources used by farmers for market information.	29
4.	Showing relationship between education and level of use of information sources used by farmers for market information.	30
5.	Showing relationship between land holding and level of use of information sources used by farmers for market information.	31
6.	Showing relationship between annual income and level of use of information sources used by farmers for market information.	32
7.	Showing relationship between farming experience and level of use of information sources used by farmers for market information.	33
8.	Showing relationship between cosmopolitanness and level of use of information sources used by farmers for market information.	34
9.	Showing relationship between extension contact and level of use of information sources.	35
10.	Showing relationship between socio-economic status and level of use of information sources used by farmers for market information.	36
11.	Showing relationship between economic motivation and level of use of information sources used by farmers for market information.	37
12.	Showing constraints faced by farmers while using information sources for market information.	38
13.	Showing market information needed by the farmers	39

(B)

## List of Figures

Figures	Title	After Page
A.	Map of Ramtek and Kuhi Panchayat Samiti	16
B.	Conceptual Model of the Study	14
1.	Distribution of respondent's according to level of use of information sources used for market information.	28
2.	Relationship between age and level of use of information sources used by farmers for market information.	29
3.	Relationship between education and level of use of information sources used by farmers for market information.	30
4.	Relationship between land holding and level of use of information sources used by farmers for market information.	31
5.	Showing relationship between annual income and level of use of information sources used by farmers for market information.	32
6.	Relationship between farming experience and level of use of information sources used by farmers for market information.	33
7.	Relationship between cosmopoliteness and level of use of information sources used by farmers for market information.	34
8.	Showing relationship between extension contact and level of use of information sources.	35
9.	Relationship between socio-economic status and level of use of information sources used by farmers for market information.	36
10.	Relationship between economic motivation and level of use of information sources used by farmers for market information.	37


(C)

## Abbreviations

Agril.	-	Agricultural
et al.	-	et alidi (and other)
Extn. Educ.	-	Extension Education
Fig.	-	Figure
ha.	-	Hectare
i.e.	-	That is
J.	-	Journal
Rev.	-	Review
Rs.	-	Rupees
Univ.	-	University
Unpub.	-	Unpublished
Viz.	-	Videlicet (namely)

(D)

THESIS ABSTRACT

- a. Title of thesis : **COMMUNICATION SOURCES USED BY FARMERS FOR MARKET INFORMATION**
- b. Full name of student : **Bhilawade Deepak Subhash**
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College of Agriculture, Nagpur.
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- e. Year of award of degree : 2008
- f. Major discipline : Extension Education
- g. Total number of pages in the thesis : 46
- h. Number of words in the thesis abstract : 239
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## ABSTRACT

Market information is an important facilitating function in the agricultural marketing system. It facilitates marketing decisions, regulates the competitive market process and simplifies marketing mechanisms. Regular, timely and reliable market information is needed by farmers in planning, production and marketing, as well as by other market participants in arriving at optimal trading decisions. On a large scale it is possible through use of communication sources. To know the effect of communication sources, the present study on "communication market information" was undertaken.

A proportionate sample of 160 farmers from 10 villages in Ramtek and Kuhi Panchayat Samities was drawn. The data were collected through structured pre-tested interview schedule. The data were tabulated, analyzed and interpreted.

The socio-economic characteristics of farmers indicate that, majority of the farmers were 36-50 years group, had up to SSC education level possessed small land holding, had an annual income 19,000/- to 40,300/- belonged to low medium socio-economic status category. It was also found that majority of the farmers had low farming experience, had high medium cosmopolitaness, had low medium extension contact and low medium economic motivation.

Regarding the use of information sources used by farmers for market information, majority of the farmers belonged to low medium category.

Among the selected characteristics education, annual income, farming experience, socio-economic status were significantly related and cosmopolitaness, extension contact, economic motivation were highly significant were age and land holding were negatively significant with use of information sources for market information.

## Chapter I

# INTRODUCTION

### Background information

Business refers to any activity undertaken for getting maximum profit from the means of production but agriculture business experience by means of farmers as a non-profitable activity. In the world of modern agriculture and globalization market play a vital role for getting more profit by using wise use of information for trading of goods. In India, farmers work very hard for getting maximum production in available resources, but they do not get expected price for their produce. Consequently, they increase production by using improved production technology of crops, but their profit or income relatively lower. This is due to the non-availability of market or lack of knowledge about market. Trading at proper market can definitely give profit to the farmers.

Market information is an important facilitating function in the agricultural marketing system. It facilitates marketing decisions, regulates the competitive market process and simplifies marketing mechanisms. Regular, timely and reliable market information is needed by farmers in planning production and marketing, as well as by other market participants in arriving at optimal trading decisions. In India, where more than 75 per cent agricultural producers are small and marginal farmers, marketing information service should ideally be available to all. Removal of inter and intra-state restrictions on storage and movement of agricultural production in the country demand existence of complete and accurate marketing information service to farmers to facilitate better realization of prices for the produce marketed. Use of computers can improve the availability and delivery of information in a user friendly manner to farmers.

India has 28 States and 7 Union Territories. Almost all of them have their own system of providing market information to the farmers. However, these prevailing systems are mostly based on conventional methods due to which communication of information to target groups usually gets delayed losing its relevance. The system is also limited to collecting data on market arrivals and prices on transactions in the regulated market yards and disseminating through various media like radio,

newspapers, blackboard display and public address system at market places. In order to access larger markets, farmers require also to know about the market requirement in terms of quality, packing and safety standards and conditions. In the absence of such awareness, their outreach will continue to be restricted to local market places where intermediaries take away a major share of the price.

Agricultural Marketing in the country is witnessing major changes owing to liberalization and globalization of markets. In this context, agriculture has to be market driven, more cost effective, competitive, innovative and responsive to high tech and IT applications. There is a need to build capacity of each of the beneficiary group viz. the farmers, market functionaries and others involved in the agricultural marketing activities. Undertaking/utilizing marketing research to educate and train farmers in 'Good Marketing Practices' and providing for development of service appropriate to local requirements to transform information emanating from various sources in a simple and practically useful manner is considered need of the hour.

FAO Agricultural Services bulletin 'Promoting Private Sector Involvement in Agricultural Marketing in Africa' observes that although the private sector can, under some circumstances, develop effective market intelligence systems, there may be no incentives for large market traders to share the information they collect as a by-product of their trading activities with others. In fact, they may see it as giving away market advantage. Lack of market knowledge may be seen as a barrier to entry and government provision of a market intelligence system could remove that barrier. Provision of market information may also reduce any distrust of government by the private sector, by making markets more transparent. It is likely that the effects in terms of improved arbitrage will be limited, however, as arbitrage is more often prevented by lack of finance or cost of transport, rather than simple lack of information.

Accuracy, availability, applicability and analysis are the four "A"s of market information. If Marketing Information Service is to have any meaning for farmers the information they provide must be accurate and farmers must understand to which

product, quality, etc., the prices refer. Further, even if prices are completely accurate, they are of much use if they are only available to farmers too late for them to use effectively. Thirdly, farmers need to be able to apply the accurate information made available to them. This requires knowledge of how to convert prices they receive from the Marketing Information Service into a realistic price at their local market or farm gate.

Finally, farmers need long-term data, which has been analyzed in such a way that they can make decisions about when to plant and harvest and what new crops to diversify into.

### **Importance and need for study** ✓

Speedy development of agriculture is vital for the progress of our country for securing maximum crop production. It is important to best utilize the available land by putting into scientific practice with the latest method of crop husbandry. But this depends on the availability of scientific information and guidance on all aspects of agriculture in an easily digestible form. An understanding of nature and extent of use of communication sources in farming communities will help planning communication strategy.

It is necessary to disseminate agricultural information and technical knowledge to the farming community the task can be most effectively performed with the various communication sources. Therefore, it was felt necessary to determine the communication sources used by farmers for market information.

### **Objectives of the study** ✓

1. To study the socio-economic, psychological and communication profile of the farmers.
2. To study the use of communication sources by the farmers for seeking information about market.
3. To study the relationship between socio-economic, psychological and communication characteristics of farmers and use of communication sources for market information.

4. To study the need and constraints faced by farmers while seeking information about market.

### **Hypothesis**

1. Farmers need market information for profitable farming
2. The available information sources are not utilised to the desired extent by the farmers.
3. Personal, situational and socio-economic characteristics of farmers influence the extent of use of market information sources by them.

### **Scope and limitations**

The outcome of this study could help to understand the communication sources used by farmers for market information.

Findings of the study would serve as guidance to extension workers and media personnel to plan their strategies for dissemination of agricultural information through various media for creating awareness and promoting its use in agriculture market information. The inference drawn from the study would help the agriculturist and extension workers to understand the indicators or trends prevailing among farmers regarding use of communication sources for market information and it would contribute in formulating certain extension education programmes of the farmers.

Being a student's research study had to be carried out within the limitations. The findings of this study are based on the opinions expressed by the farmers hence, the objectivity of data would be limited to their real and objective opinion. Since, the study has been confined to only one district of Maharashtra state, the generalizations based on the findings may be applicable to this areas and other areas with similar condition. The generalizations drawn are based on the responses of only 160 farmers and as much would have limited applications.

## Chapter II

### REVIEW OF LITERATURE

In the process of research one has to consult the published documents i.e. books, scientific journals, reports, etc., related to subject. Review of literature is one of the important aspects in the research process because it acts as a torch bearer for the new researcher. Through review, the researcher comes to know about the methods, procedures and techniques used as well as the outcome of previous research studies. It provides clues and guides the researcher in the process of research findings on the related subject possessing more or less similar characteristics. However, the review of literature directly as well as indirectly related to the present study has been made to give an account of previous research studies pertaining to the variables under study. The review of literature is presented in two parts in this chapter.

First part deals with importance of information sources in agriculture. Second part deals with factors affecting use of information sources by the farmers.

#### Part I

##### Use of Information Sources for Agriculture

Kalantri and Lanjewar (1986) indicated that newspaper is an important channel for agricultural communication. The information published through newspaper is reliable to farmers and it is encouraging indication that farmers try to seek agricultural information through newspaper.

Patel *et al.* (1993) found that Rural Agricultural Extension Officers proved to be the most common and important source of information to both categories of villages i.e. progressive and less progressive villages. Mass media channels like radio, television and newspaper were utilized by majority of the farmers of progressive villages, while interpersonal channels like relatives and neighbours were used by majority of less progressive villagers.

Solanke and Kadam (1993) observed that the first rank was given by the farmers to Agricultural Assistants/Village Extension workers (T and V) in obtaining farm information about recommended practices of different crops. Second, third, fourth and fifth ranks were offered by the farmers to the Agricultural Extension Officers, progressive farmers/local leaders, newspapers/agricultural magazines and neighbours/friends/relatives respectively. Meetings, radio film, television and demonstration were ranked sixth, seventh and eighth, respectively.

Kanungo *et al.* (1994) reported that contact farmers frequently received information about practices through VLWs, mass media and other extension activities.

Sharma *et al.* (1995) revealed that the Rural Agriculture Extension Officer was the most important source of information of the contact farmers.

Shinde *et al.* (1997) observed that most of the contact farmers were always keeping contact with VLWs as a major source of information input.

Gupta *et al.* (1998) observed that majority of the contact farmers (87.50%) received information regarding improved agricultural technology from Rural Agricultural Extension Officers, followed by progressive farmers (43%) and ratio (22.5%).

Swamakur and Agrawal (1999) reported Rural Agricultural Extension Officers, progressive farmers, agricultural scientists and friends were the most popular sources among the farmers. Demonstration, Television and Radio were most effective channels. The Agricultural Extension Officer was the most credible source for the farmers and demonstrations were the most credible channel for the farmers.

Singh *et al.* (2003) observed that farmers used sources like progressive farmers, friends, neighbours, relatives and fellow farmers most frequently, whereas advisory letters, farmer's tours, agricultural exhibitions and demonstrations were least frequently used for acquisition of farm technology.

Abdul Hai *et al.* (2003) reported that, to make farming communities better informed in the use of any innovation, the extension worker requires communication

device that can overcome the barriers of illiteracy and tradition which are predominant among the resource poor farmers and drive home the message effectively.

Abdul Hai *et al.* (2003) concluded that interpersonal information sources like neighbours and relatives and radio among mass communication channel were being utilized by majority of the respondents. Group discussion followed by Kisan mela, farm visit and cattle shows were being frequently used by extension workers for dissemination of improved livestock production technology.

Agrawal (2003) found that marketing information system has to provide information accurate and farmers must understand to which product, quality, etc.

Dhankar (2003) observed that market information system was most effective to increase the bargaining capacity of local leaders, who became aware of prices at various market places and saw many different alternative markets.

Bimyeer (2005) revealed that use of information sources was undoubtedly necessary for reaching out to grass root communities, timely delivery of information in remote locations and providing more analytical and value adding contents to entrepreneurs.

## Part II

### Factors Affecting Use of Information Sources for Market Information

#### i) Age

Lal (1972) observed negative relationship of age of the farmers with the communication behaviour.

Deshpande and Trifale (1984) reported that non-institutional sources were mostly utilized by the respondents who were old, institutional source were mostly utilized by the respondents who were middle age, whereas media were mostly utilized by the respondents who were young.

Khonde (1985) stated that age as independent variable was significantly related with the information sources at the final decision stage whether used or not. He also mentioned that young farmers made more use of formal, personal source before arriving at final decision.

Brason *et al.* (1985) observed that television was readily accepted by the young farmers as a source of information.

Bajaj *et al.* (1990) observed that relationship between age and extent of use of information was statistically significant.

## ii) Education

Ambasta (1974) reported significant relationship of education with information output behaviour of farmers.

Deshpande and Trifale (1984) stated those non-institutional sources were mostly used by illiterate farmers while institutional source were mostly used by educated farmers for seeking information.

Panjabi (1990) observed that education was not significantly related with the information seeking behaviour of small farmers.

## iii) Land Holding

Lal (1972) found a significant and positive relationship of size of holding with the communication behaviour of farmers.

Doiphode (1973) observed that monthly magazines were used as source of information by only 20.19 per cent of small farmers.

Deshpande and Trifale (1984) revealed that non-institutional sources were mostly utilized by small land holders. Institutional source were mostly utilized by medium land holders and media were mostly utilized by large size owners.

Bajaj and Nayak (1985) observed that the farmers having large land holding had higher access towards acquisition of farm information.

Gogoi (1986) reported positive and significant correlation between land holding and information seeking pattern of farmers.

#### **iv) Annual Income**

Kanungo *et al.* (1994) found positive and significant correlation between annual income and communication behaviour of the farmers.

Borkar and Chaudhari (2000) reported that little more than one fourth (28.6 per cent) of the newspaper reading farmers were categorized in high income group.

Thakre (2003) found no significant relationship between annual income and communication behaviour of farmers.

#### **v) Cosmopolitaness**

Kharche (1972) observed that cosmopolitaness of the farmers was significantly associated with the use of the agricultural information that means more cosmopolite group used more literature for getting information.

Bajaj and Nayak (1985) revealed that the cosmopolitaness contributed significantly to greater use of information sources.

Gogoi (1986) revealed that there was significant correlation between cosmopolitaness and the information seeking behaviour of the farmers.

Patel *et al.* (1993) found that cosmopolitaness had significant association with the communication source utilization pattern of the farmers.

#### **vi) Extension Contact**

Hetekar (1990) found highly significant relationship between the extension contact of farmers and their information seeking pattern. It was also noted that

information sought by the farmers increased as these contact with extension agency increased.

Dupte (1994) revealed that the small farmers who were having low extension contact reported least credibility about source of information. On the other hand, the maximum number of respondents from high extension contact group were found to be using more number of information sources.

#### **vii) Farming Experience**

Deshpande and Trifale (1984) observed that non-institutional sources were mostly utilized by the farmers who had more experience in farming, institutional sources were mostly utilized by the farmers who had adequate experience in farming and the media were mostly utilized by the respondents who had inadequate experience in farming.

Bajaj and Nayak (1985) found that there was no significant association between the farming experience and extent of use of information sources.

Dhapke (1986) reported that farming experience of contact farmers had no relationship with their information gain and its utilization.

Wattamwar *et al.* (1994) observed that majority of the contact farmers had farming experience between 13 to 26 years.

#### **viii) Socio-economic Status**

Gurumukhi (1981) stated that high socio-economic status level farmers were inclined to utilize more media for the utilization, followed by medium and low socio-economic status level of farmers, respectively.

Chaudhari (1983) reported that socio-economic status had shown strong positive association with source of information and radio exposure.

### ix) Economic Motivation

Lal (1972) reported positive and significant relationship between economic motivation and communication behaviour of farmers.

Murthy and Singh (1974) reported perception of economic system had highly significant and positive correlation with communication behaviour of farmers.

Thakur and Sinha (1989) reported that economic motivation had positive relationship with socio-economic development of farmers.

### Communication Sources for Market Information

Desai and Rao (1983) reported that demonstration was used as a source of information by participant farmers, they contacted the Gramsevak as personal source of information. The next sources reported to be consulted by the participant farmers for agricultural information were Agricultural Extension Officers, neighbours and friends, Radio was listened by almost half of the farmer in both groups, however, very few newspaper for getting agricultural information.

Bajaj *et al.* (1984) observed that important sources used by the farmers in order of preference were relatives, neighbours, friends, meeting, farm magazines, local leaders, P.S. officers, Gramsevak and Radio.

Rai and Choubey (1985) indicated that communication sources which the farmers utilized for seeking information to the greater extent were neighbours, friends, relatives, village leaders, Panchayat Chairman, Village level workers. Regarding the use of communication channels by the farmers, they further reported that Radio was the important one, followed by printed material, demonstration, newspapers, field visits, film show, exhibitions and meeting.

Sanoria *et al.* (1985) observed that the average farmers used of information channels like radio, exhibition, field days, fairs, VLW's tours, demonstration, Agricultural Dept. Officials film, shows, company agents to a greater extent while friends, relatives, neighbours and local leaders were less used.

Kamble and Shinde (1988) concluded that the personal sources of information were mostly sought by the farmers. In fact mass media need to be used at awareness stage, to speed up the communication. Study clearly revealed that farmers still rely more on extension worker for information regarding farm technology. The study suggested that the competency of these personnel must be improved through constant training.

Panjabi (1989) observed that farmers gave top priority to VLWs as a source of information while Agriculture Supervisor and Scientists were placed second and third. The other sources like neighbours, progressive farmers, friends and village leaders were utilized by small number of farmers and were placed at IV, V, VI and VII in the rank order, respectively. Similarly the majority of the farmers utilized radio, demonstration and were placed I, II and III rank order, respectively.

Shrupali (1991) noticed that 83.60 per cent of the respondents used mass media like radio. Whereas, with respect to newspaper it was only 6.40 per cent.

Girase and Desai (1993) observed that among the sources of information, the village extension worker (T and V) was most credible and referred to by as many as 70 per cent of contact farmers. The sources of minikit/adaption trial-cum-demonstration were used by the next largest percentage of contact farmers (50.00%) for getting useful agricultural information. Leaflet and pamphlets did not prove to be much credible, since these had been consulted by the lowest proportion of contact farmers.

Patel *et al.* (1993) in their study of communication source utilization pattern amongst the farmers reported that mass media channels like radio, television and newspaper were utilized by majority of the farmers of progressive village.

Bhopale and Thakare (1994) concluded that by and large, the farmers utilized the personal source of seeking the farm information namely neighbours/friends, progressive farmers and extension worker working at village level whereas the impersonal source mostly used by them were group discussion, demonstration and field visit.

✕ Das and Sharma (1998) found that 45.85 per cent of the respondents were medium category, followed by 39.58 per cent were in low category of use of sources of information and only 14.58 per cent of the respondents belonged to high category of use of source of information.

∞ Kashem and Hossain (2000) reported that almost 46 per cent of the T.V. viewing farmers opined that T.V. was an important source of agricultural information. It implies that television is playing a significant role in the rural areas in diffusion of technical and various aspects of agriculture.

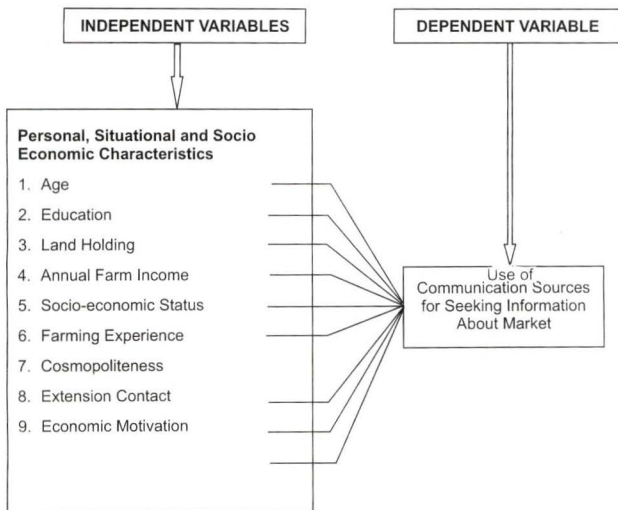
➤ Kadam (2002) revealed that most of the respondents, 48.33 per cent were in medium category of use of source of information sources 36.67 per cent had low use of source of information and only 15.00 per cent had high level use of source of information.

➤ Khumbhar (2003) revealed that half of the respondents (50 per cent) were in medium category of use of source of information. Whereas 26.67 per cent of the respondents were high category of use of source of information while 23.33 per cent of the respondents were in low category of use of source of information.

➤ Shinde (2005) revealed that most of the respondents reported 46.67 per cent medium level use of source of information, followed by 30.00 per cent of the respondents who had low use of source of information.

### **Conceptual Model of Study**

The conceptual model based on hypothesis and review of literature is presented on next page.



**Fig. Conceptual Model of the Study Paradigm illustrating the hypothesised association between independent and dependent variables.**

## Chapter III

### METHODOLOGY

Research methodology deals with the description of the research methods and procedures used in present study. Detailed methodology was developed for studying various aspects in line with the specific objectives and has been explained in this chapter.

Considering the importance of research methodology, it has been divided into relevant sub-sections, so as to enable logical presentation as definitions, concepts, methods, procedures and techniques used for present study. The chapter is described with relevant details under following heads.

- I. Locale of the study.
- II. Methods of sampling
- III. Preparation of schedule
- IV. Measurement and categorization of variables
- V. Pretesting of schedule and collection of data.
- VI. Data processing and statistical analysis.

#### **I. Locale of the Study**

The present study entitled "Communication sources used by farmers for market information," was undertaken in Ramtek and Kuhi Panchayat Samiti of Nagpur District.

Ramtek is 50 km and Kuhi is 40 Km away from Nagpur city. Ramtek Panchayat Samiti comprises of 156 Villages where as Kuhi Panchyat Samiti comprises of 186 villages. According to 2001 census, the total population of both Panchayat Samities is 146518 and 126316, respectively.

## II. Method of Sampling

### I. List of Selected Villages in Ramtek and Kuhi Panchayat Samities

Sr.No.	Ramtek Panchayat Samiti	Kuhi Panchayat Samit
1.	Mansar	Akoli
2.	Borda	Chitapur
3.	Pimpricha	Paradi
4.	Devpur	Takali
5.	Giodhan	Develi Kala

The list of villages was obtained from the office of the respective Panchayat Samiti, further, 5 villages were selected from each i.e. Ramtek and Kuhi Panchayat Samiti .In order to get the representative sample, random sampling method was adopted, total 10 villages selected for the present investigation.

The list of farmers of selected villages was prepared with the help of Agri. Assistant and it was arranged alphabetically. After doing this, selection was made by n<sup>th</sup> number method and 16 farmers from each village were included in the sample. In all total sample, consisted of 160 respondents.

### III. Preparation of Schedule

An interview schedule consisting of various items concerned with the objectives of study was developed for the respondent farmers. Necessary precautions were taken to keep language simple so as to get desired responses from the respondents. The schedule was prepared in local (Marathi) language. The schedule contained questions related to personal and social economic and psychological characteristics and questions related to use to communication sources by them. Exploratory research design of social research was used to conduct the study.





- सूची -**
- गावठाण क्षेत्र
  - पंच. स. मंडळ व. क्षेत्र
  - ग्रामपंचायत
  - गावठाण
  - शेत
  - Selected Villages

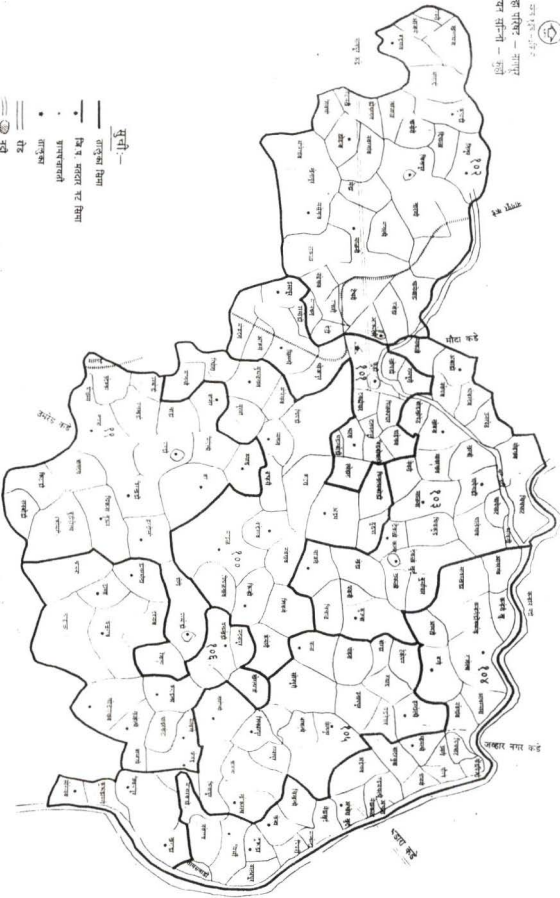


Fig. (B) Map of Kuhi Panchayat Samiti

#### IV. Measurement and Categorization of Independent and Dependent Variables

##### A. Independent Variables

###### 1] Age

Refers to the chronological age of respondents at the time of interview expressed in terms of completed years. Categorization of respondent was done on the basis of stages of age. It was categorized as under

Sr.No.	Age	Years
1.	Young	Up to 35 years
2.	Middle	36 to 50 years
3.	Old	51 and above

###### 2] Education

It refers to the years of formal schooling undertaken by the respondent measured in years of schooling completed.

On the basis of their educational qualification following categories were formed.

Sr.No.	Education Status	Standard
1.	Illiterate	No schooling
2.	Primary School	1 <sup>th</sup> to 4 <sup>th</sup> Std.
3.	Up to S.S.C	5 <sup>th</sup> to 10 <sup>th</sup> Std.
4.	H.S.S.C and above	11 <sup>th</sup> and above

###### 3] Land holding

It refers to the total land possessed by respondent. On the basis of land holding, the respondents were categorized into following groups.

Sr.No.	Land Holding Category	Land (Ha)
1.	Marginal	Up to 1
2.	Small	1.01 to 2
3.	Medium	2.01 to 5
4.	Big	5.01 and above

#### 4] Annual income

It refers to the gross annual income in thousand rupees of the farmers from all sources in a year. It is categorized one the basis of mean  $\pm$  standard deviation as under.

Sr.No.	Categories	Range (in thousands)
1.	Low	Up to 18000
2.	Low medium	18001 to 40300
3.	High medium	40301 to 62500
4.	High	62501 and above

( $\bar{X}$  = 40260; SD = 22270)

#### 5] Farming experience

It refers to number of years in which the farmer is working on his farm. The categorization was done on the basis of mean and standard deviation.

Sr.No.	Categories	Income Range
1.	Low	Upto 5
2.	Low medium	6 to 16
3.	High medium	16 to 25
4.	High	25 and above

( $\bar{X}$  = 14.99; SD = 10.27)

#### 6] Cosmopolitaness

It is the degree to which an individual is oriented his outside his social system. Scale developed by Nandapurkar (1980) was used the categorization was done on the basis of mean and S.D.

Sr.No.	Categories	Range
1.	Low	Up to 1
2.	Low medium	2 to 3
3.	High medium	4 to 5
4.	High	6 and above

( $\bar{X}$  = 3.86; SD = 1.80)

## 7] Extension contact

Extension contact of respondents refers to extent of contact with extension agencies.

The list of all possible extension workers concerned with dissemination of information was perused. The selected farmers were then asked to indicate the frequency with which they consulted the extension worker for seeking agricultural information mostly related to information sources for market information. The scores of the listed extension personnel were summed up and this sum total was indicative of extension contact score for a particular farmer. On the basis of mean and standard deviation, the farmers were categorized as mentioned below.

Sr.No.	Categories	Score Range
1.	low	Up to 2
2.	Low Medium	2.1 to 3
3.	High Medium	3.1 to 5
4.	High	5.1 and above

( $\bar{X}$  = 4.18; SD = 1.94)

## 8] Socio- economic status

The socio-economic status refers to the position of the individual farmer and his family occupied with reference to the prevailing average standard of cultural position, income, material possession and participation in group activities of community.

The scale developed by Thakre (1994), was used to measure socio-economic status. In this scale score of each respondent was obtained by summing of score of all items in the scale.

The respondents were categorized in four socio-economic categories on the basis of minimum obtainable score and class interval.

Sr.No.	Categories	Score Range
1.	Low	Up to 18
2.	Low medium	19 to 26
3.	High medium	27 to 34
4.	High	35 and above

( $\bar{X}$  = 25.64; SD = 7.13)

#### 9] Economic motivation

Economic motivation is operationally defined as occupational success in terms of profit maximization, relative value placed by farmers on economic yield

Respondents were categorized on the basis of mean and standard deviation.

Sr.No.	Categories	Score Range
1.	Low	Up to 12
2.	Low medium	13 to 17
3.	High medium	18 to 22
4.	High	23 and above

(Mean = 16.78; S.D. = 4.08)

#### Measurement of Dependent Variable

Communication sources for seeking information about market -

It is defined as utilization of available communication sources which include personal localite and personal cosmopolite, interpersonal communication sources viz.,

progressive farmers, relatives, extension workers etc. mass communication sources for purpose of seeking information about market.

Use of communication sources was measured on the basis of 4 point continuum i.e. always, sometimes rarely and never with the scores 3, 2, 1, 0, respectively. Use of communication sources was categorized low, low-medium, high medium and high on the basis of minimum and maximum scores.

Sr.No.	Categories	Score Range
1.	Low	Up to 32
2.	Low medium	33 to 46
3.	High medium	47 to 59
4.	High	60 and above

#### v) Pretesting of schedule and collection of data

The schedule was pretested before finalizing in order to correct the mistakes and short fall to ensure the clarity, validity and practicability of the schedule. Necessary modifications were incorporated in the schedule whenever felt necessary after pretesting.

The data were collected by the researcher himself from the sampled respondent by conducting personal interviews with the help of interview schedule prepared for this purpose.

#### vi) Data processing and statistical analysis

After collection of data, entries in the schedule were checked for completeness, consistency, eligibility and uniformity in the nature of responses. All the schedules were numbered serially to facilitate the work of tabulation and analysis. All these schedules were edited carefully and then the data were categorized and tabulated. Data were tabulated in different tables and the frequencies were worked out. The frequencies were converted into percentage for giving better and clear expression of the data. The analysis was mainly directed towards keeping in view the objectives of the study.

### Statistical Methods Used

The statistical methods used in this study were percentage, mean and standard deviation for the purpose of categorization. The significance of relationship between dependent variable and independent variable was tested with the help of co-efficient of correlation.

#### i) Mean

Mean was calculated by summing all the individual scores and dividing it by the number of cases. The formula was

$$\bar{X} = \frac{\sum X}{N}$$

Where

$\bar{X}$  = The arithmetic mean

$X$  = Score of 'X' series

$N$  = No. of cases

$\Sigma$  = The Greek Latin word denotes "summation of"

#### ii) Standard Deviation

Standard deviation is a measure of variability calculated around mean. The usual symbol for "S.D." is the Greek letter " $\sigma$ " sigma.

$$\sigma = \frac{\sqrt{N \sum X^2 - (\sum X)^2}}{N}$$

Where

$\sigma$  = Standard deviation

$\sum X^2$  = Sum of square of 'X' series

$(\Sigma X)^2$  = Square of summation of 'X' series

N = Number of respondent

### iii) Co-efficient of Correlation

The technique was used to find out the relationship between two variables, following formula was used for computation of 'r' value.

$$r = \frac{\Sigma XY - N(MX)(MY)}{\sqrt{[\Sigma X^2 - N(MX)^2][\Sigma Y^2 - N(MY)^2]}}$$

Where

r = Co-efficient of correlation

X = Score of independent variable

Y = Score of dependent variable

$\Sigma XY$  = Sum of product of X & Y Series

$\Sigma X^2$  = Sum of square of 'X' series

$(\Sigma Y^2)$  = Sum of square of 'Y' series

N = Total number of cases

MX = Mean of 'X' series

MY = Mean of 'Y' series

## Chapter IV

### RESULTS AND DISCUSSION

The results of present study emerging out after the analysis of collected empirical facts, the results with appropriate discussion have been presented in this chapter.

The collected data were suitably organized, scored and classified into different classes, tabulated and analyzed in accordance with the objectives of study. The findings of present study are presented in four parts, in line with the objectives of study.

First part of deals with the personal, socio-economic and psychological profile of respondents.

Second part deals with the level of use of information sourced used by farmers for market information.

Third part deals with the relationship between use of information source and selected personal, situational, socio-economic and psychological characteristics of respondent farmers.

Fourth part deals with constraints faced by farmers while use of information source for market information and their market information needs.

## Part I

## Personal, Socio-economic and Psychological Profile of Respondents

Table 1. Table showing personal, socio-economic and psychological profile of respondents.

Sr. No.	Profile	Number (n=160)	Percentage
1.	<b>Age</b>		
	Young	54	33.75
	Middle	65	40.62
	Old	41	25.63
2.	<b>Education</b>		
	Illiterate	15	9.37
	Primary School	35	21.88
	Up to SSC	76	47.5
	HSSC and above	34	21.25
3.	<b>Land Holding</b>		
	Marginal	60	37.50
	Small	75	46.87
	Medium	16	10.00
	Big	09	5.63
4.	<b>Annual Income</b>		
	Low	20	12.50
	Low Medium	74	46.25
	High Medium	36	22.35
	High	30	18.90
5.	<b>Farming Experience</b>		
	Low	76	47.5
	Low-medium	20	12.5
	High-medium	19	11.88
	High	45	28.12

Sr. No.	Profile	Number (n=160)	Percentage
6.	<b>Cosmopolitaness</b>		
	Low	18	11.25
	Low-medium	52	32.5
	High-medium	56	35.00
	High	34	21.25
7.	<b>Extension Contact</b>		
	Low	8	5.00
	Low-medium	58	36.25
	High-medium	58	36.25
	High	36	22.5
8.	<b>Socio-economic Status</b>		
	Low	36	22.5
	Low-medium	51	31.88
	High-medium	54	33.75
	High	19	11.87
9.	<b>Economic Motivation</b>		
	Low	19	11.88
	Low-medium	81	50.33
	High-medium	45	28.12
	High	15	9.37

The age profile of respondents shows that 40.62 per cent respondents were from middle age group and 33.75 per cent respondents were in young age group whereas 25.63 per cent respondents were in the old age group.

The education profile of respondents shows that, 47.5 per cent were educated up to SSC and 21.88 per cent having education primary school. Whereas 21.25 per cent education HSSC and above and only 9.37 per cent respondents were illiterate.

The land holding profile of respondents shows that, 46.87 per cent were possessed small land holding and 37.5 per cent were marginal land holding whereas the medium were 10.00 per cent and only 5.62 per cent had big land holding.

Annual income profile of respondents shows that, 46.25 respondents were from low medium annual income 22.35 per cent respondents from high medium income level. Whereas 18.90 per cent respondents from high annual income level and only 12.5 per cent respondents from low annual income level.

The farming experience profile of respondents shows that, 47.5 per cent respondents had low farm experience and 28.12 per cent were high farming experience. Whereas 12.5 per cent respondents had low medium farm experience and only 11.88 per cent respondents were high medium farm experience.

The cosmopolitanism profiles of respondents shows that, 35.00 per cent respondents were from high medium and 32.5 per cent respondents from low medium level of cosmopolitanism whereas 21.25 per cent respondents were from high and only 11.25 per cent respondents were from low level of cosmopolitanism.

The extension contact profile of respondents shows that, 36.25 per cent respondents were from high medium and 36.25 per cent respondents were from low medium level of extension contact. Whereas, 22.5 per cent respondents had high and only 5.00 per cent respondents were from low extension contact.

The socio-economic profile of farmer shows that, 33.75 respondents were high medium and 31.88 per cent respondents were from low medium socio-economic status. Whereas, 22.5 per cent respondents had low and only 11.87 per cent respondents were high socio-economic status.

The economic motivation of respondents shows that, 50.33 per cent respondents were from low medium and 28.12 per cent respondents had high medium economic motivation level. Whereas 11.88 per cent respondents from low and only 9.37 per cent respondents had high economic motivation level

## Part II

## Level of Use of Information Sources Used by Farmer for Market Information

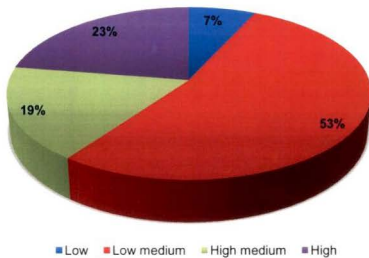
Table 2. Showing distribution of respondent's according to level of use of information sources used for market information.

Sr. No.	Level	Number	Percentage
1.	Low	11	6.88
2.	Low medium	85	53.12
3.	High medium	28	17.5
4.	High	36	22.5

It is observed from findings presented in table 2 that, 53.12 per cent of farmers had low medium and 22.5 per cent of farmers had high level of use of information sources. Whereas 17.5 per cent of farmers had high medium and only 6.88 per cent of farmers had low level of use of information sources for market information.

It is evident from the findings that majority of farmers had low-medium level of use of information sources for market information.

Das and Sharma (1998) also found that 45.85 per cent of the respondents were medium category, followed by 39.58 per cent were in low category in respect of use of information and only 14.58 per cent of the respondents belonged to high category of use of source of information.



**Fig. 1 : Distribution of respondent's according to level of use of information sources used for market information.**

## Part III

**Relationship between Level of Information Sources and Selected Personal, Situational, Socio-economic and Psychological Characteristics**

## I. Age

**Table 3. Showing relationship between age and level of use of information sources used by farmers for market information.**

Age	n=160	Level of use of information sources			
		Low	Low Medium	High Medium	High
Young	54 (33.75)	3 (5.55)	29 (53.70)	5 (9.25)	17 (31.50)
Middle	65 (40.62)	5 (7.70)	37 (56.92)	14 (21.55)	9 (13.83)
Old	41 (25.63)	3 (7.32)	19 (46.34)	9 (21.95)	10 (24.39)

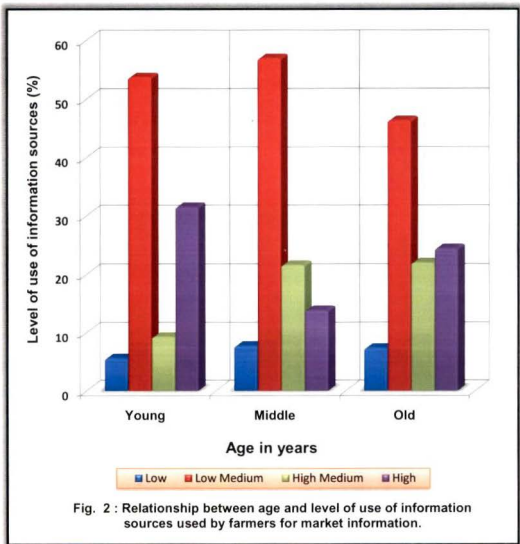
$r = -0.1052$

Not Significant

It is observed from findings presented in Table 3 that, there was no significant relationship between age and level of use of information sources among farmers for market information.

Among the younger age group of farmers 31.50 per cent of farmers had high level of use of information sources. Whereas old age group of farmers had 24.39 per cent of level of use of information sources for market information.

It is evident from the findings that, there was no significant relationship between age and level of use of information sources for market information.



## II. Education

**Table 4. Showing relationship between education and level of use of information sources used by farmers for market information.**

Educational Status	n=160	Level of use of information sources			
		Low	Low Medium	High Medium	High
Illiterate	15 (9.37)	4 (26.66)	11 (73.34)	0 (0.00)	0 (0.00)
Primary School	35 (21.88)	4 (11.42)	28 (80.00)	2 (5.73)	1 (2.85)
Up to SSC	76 (47.5)	3 (3.94)	41 (53.94)	24 (31.60)	8 (10.52)
HSSC and above	34 (21.25)	0 (0.00)	5 (14.70)	2 (5.89)	27 (79.41)

$r = 0.2438^{**}$

\*\* Significant at 0.01 probability level

(Figures in the parenthesis indicate percentage)

It is observed from findings presented in table 4 that, there is significant relationship between education and use of information sources among farmers. The positive correlation indicates that illiterate farmers had low level of use of information sources as compared to literate framers.

Among the HSSC and above group of farmers 79.41 per cent of farmers had high level of use of information sources. Whereas nobody in the illiterate group had high level of use of information sources for market information.

It is evident from the findings that, education influenced the level of use of information sources for market information. Similar findings were observed by Swarnakar *et al.* (1999).

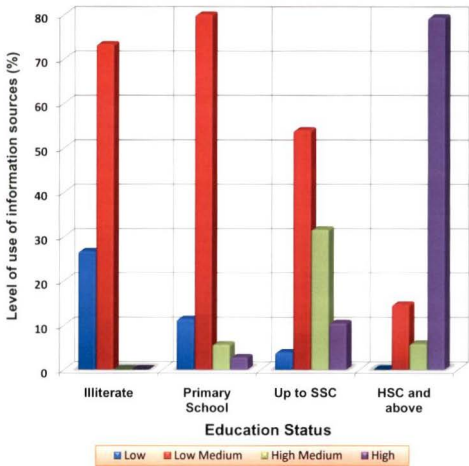


Fig. 3 : Relationship between education and level of use of information sources used by farmers for market information.

### III. Land Holding

**Table 5. Showing relationship between land holding and level of use of information sources used by farmers for market information.**

Land holding	n=160	Level of use of information sources			
		Low	Low Medium	High Medium	High
Marginal	60 (37.50)	1 (1.66)	35 (58.33)	5 (8.33)	19 (31.66)
Small	75 (46.87)	9 (12.00)	40 (53.33)	16 (21.33)	10 (13.33)
Medium	16 (10.00)	1 (6.25)	5 (31.25)	6 (37.5)	4 (25.00)
Large	9 (5.63)	0 (0.00)	5 (55.55)	1 (11.11)	3 (33.25)

$r = -0.0398$

Not Significant

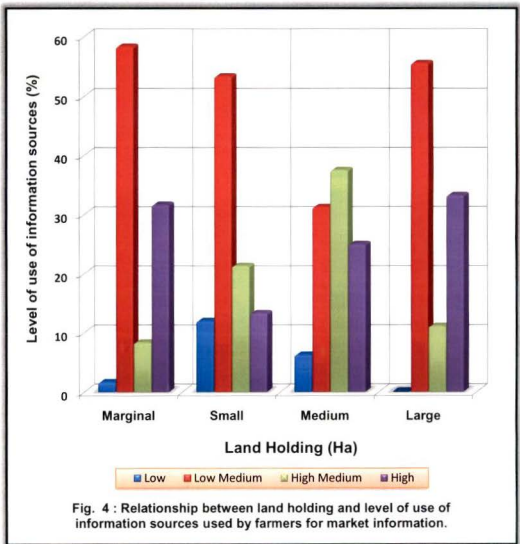
(Figures in the parenthesis indicate percentage)

It is observed from the findings presented in the table 5 that, there is no significant relationship between land holding and level of use of information sources for market information.

Among the big land holding group 33.25 per cent had high level of use of information sources. Whereas among the marginal land holding group of farmers 31.66 per cent of farmers had high level of use of information sources for market information.

It is evident from the findings that land holding has no relationship with level of use of information sources for market information.

Chaudhari *et al.* (1991) also reported that no-significant correlation between the land holding and information utilization behavior of farmers, and hence the findings of the present study are in accordance with the above findings.



#### IV. Annual Income

**Table 6. Showing relationship between annual income and level of use of information sources used by farmers for market information.**

Income levels	n=160	Level of use of information sources			
		Low	Low Medium	High Medium	High
Low	20 (12.5)	1 (5.00)	16 (80.00)	3 (15.00)	0 (0.00)
Low Medium	74 (46.25)	8 (10.81)	45 (60.82)	13 (17.56)	8 (10.81)
High Medium	36 (22.35)	2 (5.55)	21 (58.35)	5 (13.88)	8 (22.22)
High	30 (18.90)	0 (0.00)	3 (10.00)	7 (23.33)	20 (66.67)

$r = 0.2205^*$

\* Significant at 0.05 probability level

(Figures in the parenthesis indicate percentage)

It is observed from the findings presented in the table 6 that, there is significant relationship between annual income and level of use of information sources for market information among farmers. The positive correlation indicates that farmers with low income had low level of use of information sources as compared to higher income group farmers.

Among the high income group of farmers 66.67 per cent had high level of use of information sources. Whereas nobody in the low income group had high level use of information sources.

It is evident from the findings that there was significant relationship between annual income and level of use of communication sources for market information among farmers.

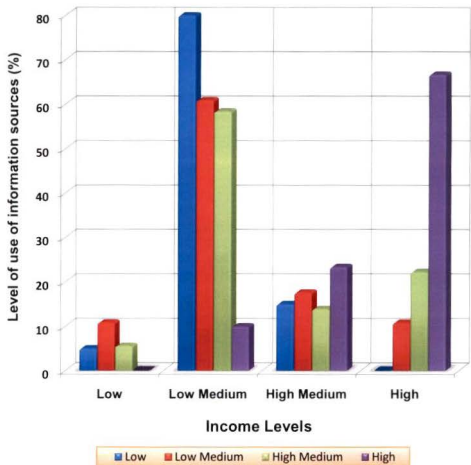


Fig. 5 : Relationship between annual income and level of use of information sources used by farmers for market information.

Bajaj and Nayak (1985) revealed that there was highly significant association between the annual income and the use of information sources by the farmers, and thus this findings lend support to the findings of the present study.

## V. Farming Experience

**Table 7. Showing relationship between farming experience and level of use of information sources used by farmers for market information.**

Category	n=160	Level of use of information sources			
		Low	Low Medium	High Medium	High
Low	76 (47.5)	5 (6.57)	50 (65.78)	8 (10.55)	13 (17.10)
Low Medium	20 (12.5)	1 (5.00)	13 (65.00)	2 (10.00)	4 (20.00)
High Medium	19 (11.88)	1 (5.26)	12 (63.17)	4 (21.05)	2 (10.52)
High	45 (28.12)	4 (8.88)	10 (22.24)	14 (31.11)	17 (37.77)

$r = 0.2194^*$

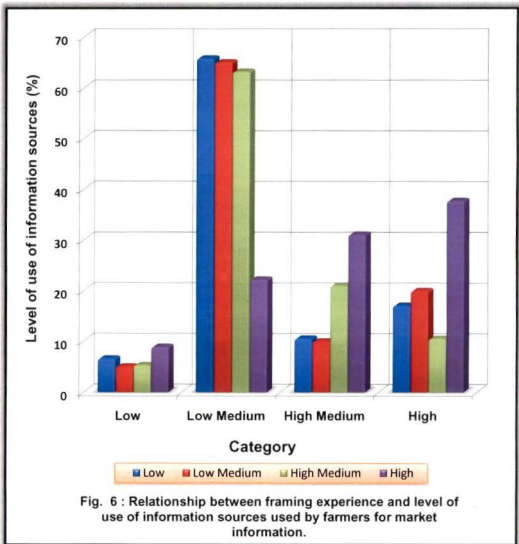
\* Significant at 0.05 probability level

(Figures in the parenthesis indicate percentage)

It is observed from the findings presented in the table 7 that, there is significant relationship between farming experience and level of use of communication sources. The positive correlation indicates that farmers having less farming experience had low level of use of information sources as compared to farmers with more farming experience.

Among the farmers with higher farming experience, 37.77 per cent had high level of use of information sources for market information. Whereas 17.10 per cent farmers with low farming experience had higher level of use of information sources.

It is evident from the findings that farming experience influenced the use of information sources among farmers for getting market information.



## VI. Cosmopolitanness

**Table 8. Showing relationship between cosmopolitanness and level of use of information sources used by farmers for market information.**

Category	n=160	Level of use of information sources			
		Low	Low Medium	High Medium	High
Low	18 (11.25)	6 (33.34)	9 (50.00)	0 (0.00)	3 (16.66)
Low Medium	52 (32.5)	3 (5.76)	47 (90.40)	1 (1.92)	1 (1.92)
High Medium	56 (35.00)	1 (1.78)	27 (48.21)	26 (46.42)	2 (3.59)
High	34 (21.25)	1 (2.94)	2 (5.89)	1 (2.94)	30 (88.23)

$r = 0.7498^{**}$

\*\* Significant at 0.01 probability level

(Figures in the parenthesis indicate percentage)

It is observed from the findings presented in the table 8 that, there is highly significant relationship between cosmopolitanness and level of use of information sources used by farmers for market information. The positive correlation indicates that farmers with low cosmopolitanness had low level of use of information sources.

Among the farmers with higher cosmopolitanness, 88.23 per cent had high level of use of information sources. Whereas only 16.66 per cent of farmers with low cosmopolitanness had higher level of use of information sources.

It is evident from the findings that farmers with higher cosmopolitanness used more information sources for getting market information.

Bajaj and Nayak (1985) revealed that the cosmopolitanness contributed significantly to greater use of information sources. Thus the findings of the present study go to corroborate the above findings.

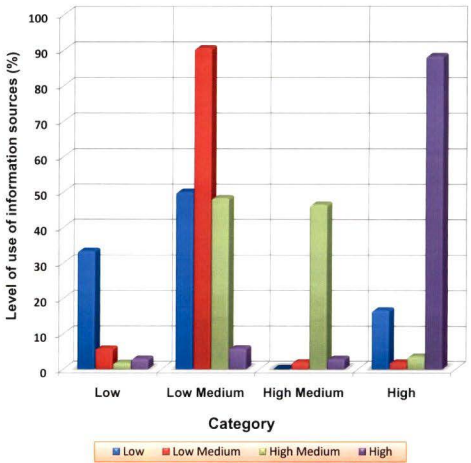


Fig. 7 : Relationship between cosmopolitaness and level of use of information sources used by farmers for market information.

## VII. Extension Contact

**Table 9. Showing relationship between extension contact and level of use of information sources.**

Category	n=160	Level of use of information sources			
		Low	Low Medium	High Medium	High
Low	8 (5.00)	3 (37.5)	6 (25.00)	0 (0.00)	3 (37.5)
Low Medium	58 (36.25)	4 (6.89)	52 (89.67)	1 (1.72)	1 (1.72)
High Medium	58 (36.25)	0 (0.00)	31 (53.44)	26 (44.84)	1 (1.72)
High	36 (22.5)	4 (11.12)	0 (0.00)	1 (2.77)	31 (86.11)

$r = 0.6295^{**}$

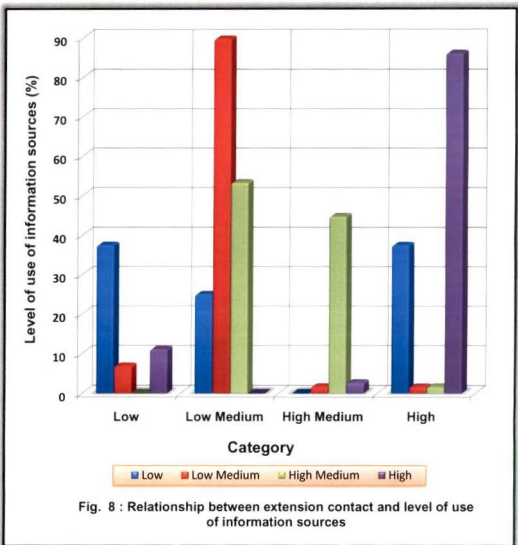
\*\* Significant at 0.01 probability level

(Figures in the parenthesis indicate percentage)

It is observed from the findings presented in the table 9 that, there is highly significant relationship between extension contact and level of use of information sources for market information. The positive correlation indicates that farmers with low extension contact had low level of use of information sources as compared to farmers with higher extension contact.

Among the farmers with high extension contact 86.11 per cent had higher level of use of information sources. Whereas among the farmers with low extension contact 37.5 per cent had high level of use of information sources for market information.

It is evident from the findings that, high extension contact among the farmers was correlated with greater use of information sources among farmers particularly in respect of market information.



### VIII. Socio-economic Status

**Table 10. Showing relationship between socio-economic status and level of use of information sources used by farmers for market information.**

Category	n=160	Level of use of information sources			
		Low	Low Medium	High Medium	High
Low	36 (22.5)	2 (5.55)	29 (80.55)	4 (11.11)	1 (2.79)
Low Medium	51 (31.88)	4 (7.86)	30 (58.22)	12 (23.52)	5 (9.80)
High Medium	54 (33.75)	5 (9.25)	23 (42.59)	9 (16.68)	17 (31.48)
High	19 (11.87)	0 (0.00)	3 (15.78)	3 (15.78)	13 (68.44)

$r = 0.2297^{**}$

\*\* Significant at 0.01 probability level

(Figures in the parenthesis indicate percentage)

It is observed from the findings presented in the table 10 that, there is significant relationship between socio-economic status and level of use of information sources. The positive correlation indicates that low socio-economic status had low level of use of information sources.

Among the farmers with higher socio-economic status ,68.44 per cent had high level use of information sources. Whereas among low economic status farmers, only 2.79 per cent had high level of use of information sources.

It is evident from the findings that high socio-economic status and high level of use of information sources were closely related.

Bajaj and Nayak (1985) observed that there was highly significant relationship between the socio-economic status and extent use of information sources. Thus the findings of the present study are in line with the findings of the above study.

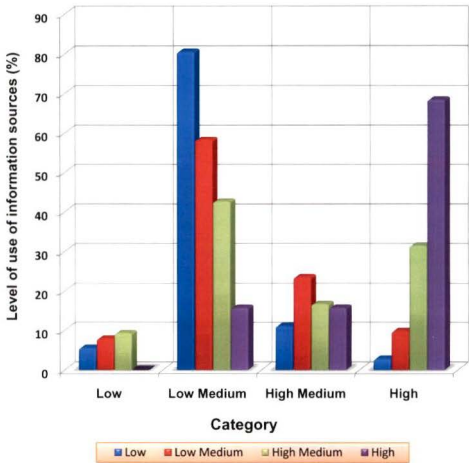


Fig. 9 : Relationship between socio-economic status and level of use of information sources used by farmers for market information.

## IX. Economic Motivation

Table 11. Showing relationship between economic motivation and level of use of information sources used by farmers for market information.

Category	n=160	Level of use of information sources			
		Low	Low Medium	High Medium	High
Low	19 (11.88)	2 (10.52)	16 (84.21)	1 (5.27)	0 (0.00)
Low Medium	81 (50.33)	8 (9.87)	54 (66.66)	19 (23.47)	0 (0.00)
High Medium	45 (28.12)	1 (2.22)	12 (26.67)	7 (15.55)	25 (55.55)
High	15 (9.37)	0 (0.00)	3 (20.00)	1 (6.67)	11 (73.33)

$r = 0.6395^{**}$

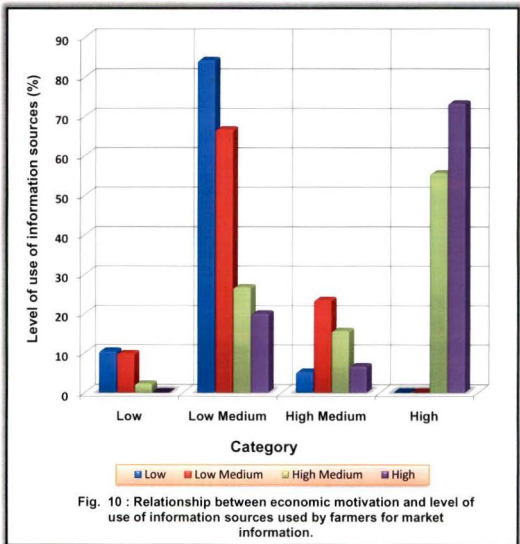
\*\* Significant at 0.01 probability level

(Figures in the parenthesis indicate percentage)

It is observed from the findings presented in the table 11 that, there is highly significant relationship between economic motivation and level of use of information sources for seeking market information. The positive correlation indicates that farmers with higher economic motivation made more use of information sources.

Among the farmers with higher economic motivation 73.33 per cent of farmers had high level use of information sources. Whereas among farmers with low economic motivation nobody had high level of use of information sources.

It is evident from the findings that high economic motivation influenced level of use of information sources among farmers particularly in respect of market information.



## Part IV

## (A) Market Information Constraints

Table 12. Showing constraints faced by farmers while using information sources for market information.

Sr.No.	Constraints	Number (n=160)	Percentage
1.	Financial problem in getting agricultural information	55	34.37
2.	Extension workers are not available when information is needed.	55	34.37
3.	Authenticity of information is not sure.	42	26.25
4.	Insufficient literature in Marathi language	65	40.62
5.	More technical words used in literature and difficulty in proper understanding	85	53.12
6.	Cannot read information due to illiteracy	15	9.37
7.	Publications and records are not available	35	21.87
8.	Electricity problem	45	28.12
9.	Problems are not fully solved in exhibitions	55	34.37
10.	Information in farm publications is theory oriented	90	56.25

Findings indicate that 56.25 per cent respondents were not satisfied about the information available in the farm publication as it was more theoretically oriented. Similarly, use of technical words in the farm literature created difficulties in understanding as expressed by 53.20 per cent respondents.

Availability of literature about market information in Marathi was insufficient as reported by 42.62 per cent respondents. The other major constraints inhibiting the use of information sources for market information were financial problem and non availability of extension workers when required for seeking information. The non availability of electricity acted as constraint in seeking information from media as reported by 28.12 per cent farmers. The correctness of information was sometime doubtful as reported by 26.25 per cent farmers.

## Part V

## (B) Market Information Need

Table 13. Showing market information needed by the farmers

Sr.No.	Information Need	Number (N=160)	Percentage
1.	Need daily information regarding market prices of agriculture produce	55	34.37
2.	Information regarding availability of good market in the local areas	57	35.62
3.	Information about grades and standards of agricultural produce	61	38.12
4.	Market prices in the urban areas	49	30.62
5.	Government subsidies for agriculture marketing	42	26.25
6.	Information of wholesaler in the market	45	28.12
7.	Need for market information in local language	65	40.62
8.	Practical oriented information	90	56.25
9.	Easy to understand and cheaply available	40	25.00
10.	Need local Kiosks in the village to provide market information	64	40.00

It is observed from the findings presented in table 14 that, 56.25 per cent of farmers need practically oriented information. 40.62 per cent farmer needed market information in local language. Whereas 40.00 per cent of farmer needed information Kiosks in the village to provide market information.

It is evident from the findings that, farmer needed market information about market prices and standards of agricultural produce for marketing. They need market information which is readily available in their village at cheaper cost.

## Chapter V

### SUMMARY AND CONCLUSION

The study of communication sources used by farmers for market information was conducted in Ramtek and Kuhu Panchayat Samiti in Nagpur district of Vidarbha region of Maharashtra. The sample consisted of 160 farmers from 10 villages who were selected randomly. The objectives of study were as follows:

1. To study the socio-economic, psychological and communication profile of farmers.
2. To study the use of communication sources by the farmers for seeking information about market.
3. To study the relationship between socio-economic, psychological and communication characteristics of farmers and use of communication sources for market information.
4. To study the constraints faced by farmers while seeking information about market.

The summarized findings of the present study are as follows:

1. It was observed from the findings that 53.12 per cent respondents had low medium and 22.5 per cent of respondents had high use of information sources for market information. This was followed by 17.5 per cent respondents from high medium and only 6.88 per cent of respondents had low level of use of information sources for market information.
2. There was no relationship between age and level of use of information sources for market information.
3. The education of farmers had significant relationship with their level of use of information sources for market information.

4. There was no significant relationship between land holding of farmers and their level of use of information sources for market information.
5. There was significant relationship between annual income of farmers and their level of use of information sources for market information.
6. The farming experience of farmers had significant relationship with their level of use of information sources for market information.
7. The cosmopolitaness of farmers had highly significant relationship with their level of use of information sources for market information.
8. The extension contact of farmers had highly significant with their level of use of information sources for market information.
9. There was significant relationship between socio-economic status of farmers and their level of use of information sources for market information.
10. The economic motivation of farmers had highly significant relationship with their use of information sources for market information.
11. The major constraints faced by farmers while use of information source for market information were information in farm publications is theory oriented, insufficient literature in Marathi language, problems are not fully solved in exhibition and extension workers are not available when information is needed.
12. The major market information need by farmer while use of information sources for market information were practical oriented information, need for market information in local language, need local kiosks in the village to provide market information and information about grades and standards of agricultural produce.

## Chapter VI

### IMPLICATIONS

The implications are based on the findings of the study are presented into two parts, i.e. suggestions for future research and action by the extension workers.

#### **I - Suggestions for Future Research**

The independent variables selected for research were personal, socio-economic and psychological characteristics of respondents. The future research workers may take into consideration various constraints faced by the farmers in use of information sources for market information, so that their problems can be solved more effectively by the extension workers. When farmers become aware about various new information sources and its advantages, they will adopt new information sources, researcher should work on more variables along with constraint analysis.

Future extension researches on marketing need to analyze influence of other variables, which are not covered in the present study. The future researchers should also study the reason of non-availability of information sources. Collect the reactions of farmers and understand the bottlenecks it will provide essential feed back with regards to market information.

A study with larger sample on wider area may also be taken up to reach generalization for wider application.

#### **II - Suggestions for Action**

The use of information sources can be increased by arranging various extension programmes for the young farmers and by imparting them proper scientific training through Krishi Vigyan Kendras.

Education showed significant relationship with use of information source. Hence it is necessary to encourage educated farmers to use new information sources for market information

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\*Originals not seen

## VITA

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Sr. No.	Name of Degree awarded	Year in which obtained	Division / Class	Name of awarding University	Subject
1.	S.S.C.	2000	2 <sup>nd</sup>	Kolhapur Board	General
2.	H.S.S.C.	2002	2 <sup>nd</sup>	Kolhapur Board	Science
3.	B.Sc. (Agri.)	2006	2 <sup>nd</sup>	M.A.U., Parbhani	Agriculture

6. **Field of Interest**

- Progressive Farming
- To set up agricultural business for providing employment to rural youth.

Place: NAGPUR

Date: 22/07/08

  
Signature of Student

A: endix I

**INTERVIEW SCHEDULE**

**TITLE OF THESIS : COMMUNICATION SOURCES USED BY FARMERS FOR MARKET INFORMATION**

Name of Student : Bhilawade Deepak Subhash

Schedule :

Name of the farmer :

Village \_\_\_\_\_ Panchayat Samiti \_\_\_\_\_ Dist. \_\_\_\_\_

1. Age \_\_\_\_\_ years

2. Education \_\_\_\_\_ std passed.

3. Land Holding

a) Rainfed \_\_\_\_\_ ha.

b) Irrigated \_\_\_\_\_ ha.

c) Barren \_\_\_\_\_ ha.

d) Total \_\_\_\_\_ ha.

4. Annual Income (Rs.)

a) Main source / occupation \_\_\_\_\_

b) Subsidiary source / occupation \_\_\_\_\_

c) Total

5. Farming Experience

Score

a) No experience (0)

b) 1 - 5 years (1)

c) 6- 10 years (2)

d) 11 - 15 years (3)

e) 16 and above (4)

6. Cosmopolitaness

Sr.No.	Questions	Always	Sometimes	Never
	Score	2	1	0
1.	Did you stay in big city			
2.	How many times you have visited to Tahsil or District place?			
3.	Are you member of any institute?			
4.	Do you visit to any agriculture exhibition in previous season?			
5.	How many times you have visited the following officers? a) Extension Officer b) Agriculture Officer c) Agriculture University Officer d) Veterinary Doctor e) Other district level officer			

7. Extension Contact

Sr.No.	Questions	Always	Sometimes	Never
	Score	2	1	0
	How many times you have visited the following officers? a) Extension Officer b) Agriculture Officer c) Agriculture University Officer d) Veterinary Doctor e) Other district level officer			

8. Economic Motivation

Sr. No.	Questions	Strongly Agree	Agree	undecided	Disagree	Strongly Disagree
	Score	5	4	3	2	1
1.	Who hard works get high profit.					
2.	For getting high income to change in business					
3.	Successful farmer are motivated					
4.	For getting more income, adopt new modern technologies					
5.	Without financial help, you don't setup/settle					

9. Socio-economic status :

A] Occupation:

- i. Agricultural labour (1)
- ii. Cast occupation (2)
- iii. Business (3)
- iv. Agriculture (farming) (4)
- v. Service (Job with monthly salary) (5)

B] Education:

- i. Illiterate (0)
- ii. Can read only (1)
- iii. Elementary (can read and write only) (2)
- iv. Primary School (3)
- v. Middle School (4)
- vi. High School (5)
- v. College (6)

C] Family:

1. Family Type:

- i. Single (1)
- ii. Joint (2)

2. Family Size:

- i. Small (1 to 5 members) (1)
- ii. Medium (6 to 7 members) (2)
- iii. Big (8 and above) (3)

3. Annual income:

- i. Rs. 1,000/- to Rs. 25,000/- (1)
- ii. Rs. 25,001/- to Rs. 50,000/- (2)
- iii. Rs. 50,001/- to Rs. 75,000/- (3)
- iv. Rs. 75,001/- to Rs. 1,00,000/- (4)
- v. Rs. 1,00,001/- to Rs. 1,50,000/- (5)
- vi. Rs. 1,50,001/- to and above (6)

- D] Socio-Political Participation:
- i. No membership (1)
  - ii. Membership of one social organization (2)
  - iii. Membership of more than one social organization (3)
  - iv. Official position (4)
  - v. Wide public leader (5)
- E] Household:
- 1. Type of house
    - i. Shed thatched (stalk frames) (1)
    - ii. Mudwall and thatched (2)
    - iii. Brick wall tiled (3)
    - iv. Concrete house (4)
  - 2. Lighting facility:
    - i. Kerosene lamp (1)
    - ii. Electricity (2)
  - 3. Ownership of house:
    - i. Rented (1)
    - ii. Own (2)
- F] Material Possession:
- i. Plough (1)
  - ii. Iron seed cum fertilizer drill (2)
  - iii. Hoe (3)
  - iv. Spike tooth hoe (4)
  - v. Seedling transplanter (5)
  - vi. Harvester (6)
  - vii. Sprayer (7)
  - viii. Duster (8)
  - ix. Storage iron bin (9)
  - x. Cycle (10)
  - xi. Motor cycle (11)
  - xii. Tractor (12)

G] Information Sources:

- i. Radio (1)
- ii. Newspaper (2)
- iii. Magazine (3)
- iv. Agril. Publications (4)
- v. Gramsevak (5)
- vi. Extension officer (6)
- vii. Agricultural officer (7)
- viii. Progressive farmer (8)
- ix. Scientist from university (9)

H] Animal possession:

- 1. Farm animals (Bullock)
  - i. One pair (1)
  - ii. Two pair (2)
  - iii. Three pair (3)
- 2. Hybrid cow
- 3. Poultry

I] Loans:

- i. Borrowed (1)
- ii. Not borrowed (2)

10. Communication sources used for market information

Sr.No.	Sources	Always	Sometime	Rarely	No
	Score	3	2	1	0
<b>A.</b>	<b>Personal communication sources</b>				
1.	Friends				
2.	Neighbour				
3.	Relatives				
4.	Agriculture Officer				
5.	Gramsevak				
6.	University Scientist				
7.	Local Leader				
8.	Progressive Farmer				
9.	Merchant				
10.	Other				

<b>B.</b>	<b>Group Communication Sources</b>				
1.	Mini Kit				
2.	Demonstration				
3.	Gossip with Villagers				
4.	Group Discussion				
5.	Tour				
6.	Other				
<b>C.</b>	<b>Mass Communication Sources</b>				
1.	Radio				
2.	T.V.				
4.	Agriculture Exhibition				
5.	Agricultural Publication				
6.	Newspaper				
7.	Telephone				
8.	Internet				

11. For agricultural produce which information you need.

1. ....  
.....
2. ....  
.....

12. For getting market information is there any difficulty. Yes / No

If yes

1. For collecting information  
.....  
.....
2. To give to others  
.....  
.....

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