

**MARKETING BEHAVIOUR OF PULSES
GROWERS**

THESIS

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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)**

By

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DECLARATION OF STUDENT

I hereby declare that the experimental work and its interpretation of the thesis entitled **MARKETING BEHAVIOUR OF PULSES GROWERS** 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 or 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 : Amravati

Date : 31/05/2012



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CERTIFICATE

This is to certify that the thesis entitled **MARKETING BEHAVIOUR OF PULSES GROWERS** submitted in partial fulfillment 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 **Kad Rupali Ganpat** under my guidance and supervision.

The subject of the thesis has been approved by the student's Advisory committee.

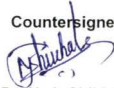
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(C) List of Abbreviations

AEOs	-	Agriculture Extension Officers
Agril.	-	Agriculture
AOs	-	Agriculture Officers
BDOs	-	Block Development Officers
DSAO	-	District Superintending Agriculture Officer
Dr. P.D.K.V.	-	Dr. Panjabrao Deshmukh Ktishi Vidyapeeth
<u>et al.</u>	-	et alia (and associates)
etc.	-	et cetra
Extn. Edun.	-	Extension Education
Fig.	-	Figures
ha	-	Hectare
i.e.	-	That Is
j.	-	Journal
Km	-	Kilometer
M.S.	-	Maharashtra State
Rev.	-	Review
S.D.	-	Standard Deviation
Unpub.	-	Unpublished
VLWs	-	Village Level Workers
Viz.	-	Videlicet (namely)

(D) THESIS ABSTRACT

- a) Title of the thesis : "MARKETING BEHAVIOUR OF PULSES GROWERS"
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THESIS ABSRACT

Market information is an important facilitating function in the agricultural marketing system. It facilitates marketing decisions, regulates the competitive market process and simplifies marketing mechanism. 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 the large scale, it is possible through use of information sources. To know the marketing behaviour, the preset study on "Marketing Behaviour of Pulses Growers" was undertaken.

The specific objectives of the study were ---

1. To study the personal, socio-economic, psychological characteristics of pulses growers.
2. To study the marketing behavior of pulses growers about market.
3. To study the relationship between personal, socio-economic and psychological characteristics of pulses growers with their marketing behavior.
4. To study the problems faced by farmers for seeking information about market.

A proportionate sample of 120 farmers from 10 villages in Chandur Bazar Panchayat Samiti was drawn. The data were collected through structured pretested interview schedule. The data were tabulated, analyzed and interpreted.

The socio-economic characteristics of farmers indicated that majority of farmers were up to 35 years, had up to college level education, possessed

semi- medium land holding, had an annual income of Rs. 3,50,001 and above, belonged to high socio-economic status category. It was also found that majority of farmers had medium farming experience, had medium cosmopolitaness, had medium extension contact, medium market orientation and medium mass media availability.

Regarding the marketing behavior of pulses growers, majority of the farmers belonged to medium category.

Among the selected characteristics education, cosmopolitaness, extension contact, market orientation and mass media availability were positively and significantly related with level of marketing behaviour and age and farming experience had negative and significant relationship with marketing behaviour, whereas land holding and annual income was non-significant with level marketing behaviour.

The major constraints faced by the farmers while using information sources for market information were unavailability market information through internet facility, unavailability of farm publication and records in village, insufficient literature in Marathi language, unavailability of time for reading, extension workers are not available when information is needed, unavailability of electricity.

CHAPTER - I

INTRODUCTION

1.1 Background Information

Communication plays a vital role in dissemination of market information. We are living in an era of information explosion. Everyday innumerable information is generated, synthesized and disseminated. Information technology has revolutionized the transfer of information. Information from any quarter of the world is made available through information technology, thereby changing the wide world in to a global village. Farmers are equally privileged to get informed of farm related information without delay. Underlining the importance of the right for information, the Government of India has stressed that every citizen has the right to get informed.

In this globalization, Indian farmers need to be updated with latest knowledge to complete for global marketing. He must have information like; new methods of cultivation, seeds, pesticides, insecticides, water and nutrient management and marketing of products. The farmers, who access agricultural information, have better chance of succeeding than those who do not access the same.

Business refers to any activity undertaken for getting maximum profit from the means of production, but agriculture business is experienced by means of farmers as a non profitable activity. In the world of modern agriculture and globalization, market play vital role for getting more profit by wisely using information for trading goods. In India, farmers work very hard to 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 remains relatively lower. This is due to 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 mechanism. 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 decision. 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 price 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 seven Union Territories. Almost all of them have their own system of providing marketing information to 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 limited to collecting data on market arrivals and 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 market, farmers require also knowing about the markets requirements in terms of quality, packing, safety standard condition. In the absence of such awareness, their outreach will continue to be restricted to local market place, where intermediaries take away a major share of price.

The environment of markets in our country is fascinating and challenging. They offer large scope an account of their big size and demand base. But, in spite of these, the rural markets pose several complex problems like poor communication and distribution facilities, low literacy level, thinly populated and scattered markets, poor standard of living and socio- economic and cultural backwardness.

Prosperity in rural areas is very much reflected in the buying and consumption habits of rural folk. Their inclination to spend on modern gadgets has increased as a result of their increasing purchasing power. This necessitates an appraisal of the rural marketing environment, which is, no doubt, an outgrowth of various socio- economic and cultural activities. So,

understanding the rural environment for evolving an appropriate and effective marketing strategy is quite essential.

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, composite, innovative and responsive to high tech and IT allocations. There is need to build capacity of each beneficiary group viz. the farmers, market functionaries and other involved in the agricultural marketing activities, undertaking/utilizing marketing research to educate and train farmers in good marketing practices.

FAO's Agricultural Service bulletin 'Promoting Private Sector Involvement in Agricultural Marketing in Africa', observed that although the private sector can under some circumstances, develop effective market intelligence system there may be no incentives for large market traders to share the information they collect as a by-product of their training 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 market intelligence system could remove that barrier. Provision of market information may also reduce any distrust of government by the private sector by making market more transparent. It is likely that the effects in terms of improved arbitrage will be limited; however ass 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 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 price refers. Even if the prices are completely accurate, but they are available to farmers too late for use, it has no any use. Also farmers are able to apply the accurate information made available to them.

Pulses are the integral part of Indian dietary system due to their richness in proteins and other important nutrients. From Vedic period onwards it is well established that vegetarian dietary system is most suited to human body and therefore, Indians add pulses in daily diet as a main source of food.

Nutritionally, pulses fulfill human nutritional requirements for body building and develop a strong body system.

India has the largest area under pulses in the world. A large number of pulse crops like chickpea, urd, mung, lentil and pea are grown in India. Marketing of any agricultural produce requires knowledge about the largest information and demand of particular commodity to which a person deals. It is also true in the case of pulses marketing.

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 diversity into.

1.2 Importance and need of the study

Speedy development of agriculture is vital for the progress of our country for securing maximum food production. It is important to best utilize the available land by putting in to 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 use of information sources in farming communities will help planning communication strategy.

It is necessary to disseminate agricultural, market information and technical knowledge to the farming community. The task can be most effectively performed with the various information sources. Therefore, it was felt necessary to determine the marketing behavior of the pulses growers.

1.3 Objectives

1. To study the personal, socio-economic, psychological characteristics of pulses growers.
2. To study the marketing behavior of pulses growers about market.
3. To study the relationship between personal, socio-economic and psychological characteristics of pulses growers with their marketing behavior.
4. To study the problems faced by farmers for seeking information about market.

1.4 Scope of the study

The outcomes of this study will help to understand the marketing behavior of pulses growers. Findings of the study will serve as guidance to extension workers and media personnel to their strategies for dissemination of agricultural and market information through various media for creating awareness and promoting its use in agriculture market information. It will also be useful for formulating certain extension education programs of the farmers.

1.5 Hypothesis

Farmers need market information for profitable farming.

The available information sources are not utilized to the desired extent by the farmers.

Personal, socio-economic and psychological characteristics of the farmers influence their marketing behavior.

1.6 Limitation of the study

- 1) The study was conducted only in 10 villages which constitute a small section of information sources users (farmers). Time, money and other resources did not permit to cover a larger area than this.
- 2) The findings of the study were based on the opinion expressed by them.
- 3) Since the study was confined to only Chandur Bazar Panchayat Samiti of Amravati district of Maharashtra state, the generalization based on findings would be applicable to this area and other areas having similar conditions.

1.7 Organization of the study

The present research has been presented in five major chapters. In the first chapter of introduction, the statement of the problem under study has been defined and similarly the need for the study has been given.

The second chapter comprises of the review of the past relevant literature and findings of the past research studies conducted in different locations.

Research methods and techniques followed are given in third chapter of methodology.

The findings of the study along with the discussion thereon have been presented in the chapter of results and discussion.

Finally, the fifth chapter contains summary of the result work and implications. This chapter is followed by literature cited and appendices.

CHAPTER - II

REVIEW OF LITERATURE

A. Independent variables

1. Age

Nural Anwar *et al.* (1997) observed that the age of the respondents had higher direct positive effect on the participation of rural youth in agricultural activities.

Veeraiyah *et al.* (1998) revealed that independent variable age had negative and significant relationship with their level of knowledge about recommended critical skill in rain fed cultivation.

Khairnar (2001) reported that 56.92 per cent of farmers were middle age 23.84 per cent of farmers were young where as 19.24 per cent of farmers were old.

Ranganatha *et al.* (2001) found that age of the respondents was having non-significant relationship with the adoption of organic farming practices by farmers.

Shendage (2002) found in his study that age and utilization of information sources showed significant relation.

Shelar *et al.* (2004) observed that out of the respondents farmers 46.46 per cent were middle age group, 32.30 per cent farmers were young age group and 21.30 per cent farmers were in old age group.

Shelar *et al.* (2004) observed that most of the subscriber farmers were in middle age group (36 to 50 years) i. e. Shetakari 60.80 per cent, Baliraja 67.40 per cent and Trombay sheti patrika 55 per cent.

Dagwal (2008) reported that 42 per cent of the respondents were reported to have their age less than 35 years.

Sharma *et al.* (2008) reported that the average age of the respondents was 38.15 years and most of the respondents (55.18 per cent) belongs to middle age group, while 37.93 per cent respondents were young (up to 35 years).

Wankhade *et al.* (2009) reported that one third (40.00 per cent)of the respondents were in young age group, while 30.00 per cent of the respondents each were in middle and old age group.

Rajput *et al.* (2009) found that age of farmer was negatively related with their knowledge of recommended production practices.

Sasane *et al.* (2011) observed that majority (41.66 per cent) of the chili growers belongs to the age group 25 to 35 years, the negatively significant relation observed between age of farmers and their knowledge.

Wagh *et al.* (2011) observed that majority (50.83 per cent) of the respondents belongs to 'middle age' group followed by 'old age' group (26.67 per cent) and 'young age' group (22.50 per cent).

2. Education

Veeraiah *et al.* (1998) observed that education of the respondents had positive and significant relationship with their level of knowledge about recommended critical skills in rain fed groundnut cultivation

Ranganatha *et al.* (2001) found that the education of the respondents was having significant relationship with the adoption level of small farmers.

Deshmukh (2003) observed significant relation between level of education and average time spent on viewing television by rural women.

Shelar *et al.* (2004) observed that majority of farmers 49.40 per cent were having secondary education, followed by primary education level 24.40 per cent and 18.60 per cent farmers were observed to be degree holder.

Shelar *et al.* (2004) observed that most of the subscriber farmers of all the farm magazines were degree holder i. e. Shetakari 64.50 per cent, Baliraja 64.40 per cent and Trombay sheti patrika 56.10 per cent.

Dagwal (2008) reported that there was positive relationship between education and mass media utilization stating that increase in educational standard was followed by increasing mass media utilization.

Sharma *et al.* (2008) found that 44.83 per cent of fish farmers had education up to high school while 20.69 per cent were either graduates or above. Family education of majority of respondents (73 per cent) was either medium or low level.

Rajput *et al.* (2009) reported that the education was positively and significantly related with their knowledge of recommended production practices of chilli.

Wankhade *et al.* (2009) observed that equal number (27.50 per cent) of the respondents were educated up to post graduate and high school level, equal no of (15.00) of them were educated up to college and middle school level. Whereas 12.50 per cent, 2.50 per cent of respondents were illiterate and educated up to primary education respectively.

Sasane *et al.* (2011) reported that more than half (58.33 per cent) farmers had secondary and higher education. There was significant relation between education and knowledge level.

Wagh *et al.* (2011) observed that 58 per cent of cotton growers had 'medium' level of education. There was significant relationship between education and utilization of information sources.

3. Land holding

Bhonde (2000) reported that the agricultural programme and their utility to rural people did not depend on big or small land holding.

Ranganatha *et al.* (2001) observed that the land holding of the respondents was having non-significant relationship with the adoption of organic farming practices by farmers.

Shelar *et al.* (2004) observed that 48.3 per cent respondent farmers having 2 - 4 hectare land, it was followed by 30.4 per cent farmers having total land above 4 hectare.

Shelar *et al.* (2004) observed that majority of subscriber farmers of Shetkari magazine were small farmers (48.70 per cent), in case of Baliraja magazine almost same trend was observed, majority of subscriber farmers of Baliraja magazine were small farmers (39.40 per cent).

Dagwal (2008) reported that there was a significant relationship between land holding and mass media utilization. It means, more land holding, more mass media utilization.

Sharma *et al.* (2008) found that 75 per cent farmers had small pond holding (1.1 to 5.99 acres), while other 19 per cent pond owners possessed marginal pond holding.

Wankhade *et al.* (2009) found that 75.00 per cent of the respondents had medium size of land holding while, 20.00 per cent of them had marginal size of land holding and only 5.00 per cent of respondents had small size of land holding.

Rajput *et al.* (2009) reported that land holding was positively and significantly related with their knowledge of recommended production practices of chilli.

Wagh *et al.* (2011) observed that 38.33 per cent of farmers had 'medium' size of land holding and there was significant relationship between land holding and utilization of information sources.

Sasane *et al.* (2011) reported that 51.66 per cent of farmers had land holding less than 1.00 hacter. There was significant relationship between land holding and knowledge level of farmers.

4. Annual income

Shelar *et al.* (2004) observed that 51.30 per cent of respondent famers were medium income group (Rs. 15000 – 45000) it was followed by 26.70 per cent farmers having high income group that is above Rs. 45000.

Shelar *et al.* (2004) observed that majority of the subscriber farmers of the farm magazines were having annual income above Rs. 39000. In case of Baliraja, 68.90 per cent and in case of Shetakari 49.40 per cent farmers were in the high income group.

Ajaykumar *et al.* (2006) found that there was positive but non significant relation between annual income and information input behaviour of wheat growers in irrigated tract of Haryana.

Wankhade *et al.* (2009) observed that 47.50 per cent of respondents had annual income in the range between Rs. 50000 to 100000. 27.50 per cent of the respondents had annual income up to Rs. 50000 and 15.00 per cent of the respondents had annual income in the range between 100000 to 150000. Only 10.00 per cent of the respondents had annual income above 150000/-.

Rajput *et al.* (2009) found that annual income was positively related with their knowledge of recomended production practices.

Sasane *et al.* (2011) observed that 35.00 per cent of chilli growers had annual income of 150000/-. There was significant relation between annual income and knowledge level of farmers.

Wagh *et al.* (2011) Reported that nearly 32 per cent of farmers had annual income Rs. 200001 and above.

5. Cosmopolitaness

Nural Anwar *et al.* (1997) observed that cosmopolitaness had direct negative effect on participation of rural youth in agricultural activities.

Veeraiah *et al.* (1998) revealed that the cosmopolitaness had positive and significant relationship with their level of knowledge about recommended critical skills in rain fed groundnut cultivation.

Khairnar (2001) found that cosmopolitanism was positively related with attribute which was responsible for increasing viewing utility. It stated that utility of agricultural programme will increase if rural farmer increase their extension contact can better use of information from agricultural programme.

Shelar *et al.* (2004) reported that the majority of subscriber farmers of Shetkari were having medium cosmopolitanism i. e. 40.50 per cent followed by Baliraja 47.70 per cent and Trombay sheti patrika 40.40 per cent. Very few farmers in all three margins were having low cosmopolitanism.

Dagwal (2008) reported that higher the cosmopolitanism, higher was the mass media utilization

Chavan *et al.* (2011) observed that positive and significant relationship of cosmopolitanism with use of information sources for marketing.

6. Extension contact

Veeraiah *et al.* (1998) observed that the extension contact of the respondents had positive and significant relationship with their level of knowledge about recommended critical skills in rain fed groundnut cultivation.

Wane (2000) observed that the extension contact was positive and significant correlation with adoption of cultivation Practices.

Jaiswal (2001) evident that the level of extension contact was significantly related with extent of adoption of soybean production technology.

Sagwal and Malik (2001) observed that respondents extension contact were found positively and significantly correlated at 0.05 level of probability with over all knowledge of the respondents about cultivation practices.

Chawane (2002) concluded that extension contact positively influenced the knowledge and adoption of soil and rain water management.

Ambhore (2006) found that majority of the respondents (47.33 per cent) kept extension contact to a moderate extent.

Dagwal (2008) found that there was positive and significant relationship between extension contact and media utilization.

Sharma *et al.* (2008) reported that the level of extension contact the vast majority was either low or medium. Only 8.63 per cent respondents were having high extension contact.

Rajput *et al.* (2009) observed that extension contact of farmer was positively and significantly related with their knowledge of recommended production practices.

Chavan *et al.* (2011) observed that level of extension contact had positive and significant relationship with use of information sources for marketing.

Ingale (2011) observed that nearly half of the respondents (52.00 per cent) were grouped in medium level of extension contact.

Kale *et al.* (2011) reported that the cent per cent (100.00 per cent) of the selected farmers having low extension contact level in Purna command area in Vidarbha region of Maharashtra.

Wagh *et al.* (2011) reported that more than 55 per cent of farmers have 'medium' extension contact and it has significant relation with utilization of information sources.

7. Farming experience

Khaldakar (1997) observed that farmers having low farming experience of have high information seeking behavior. Whereas farmers of medium and high farming experience have medium information seeking behavior.

Borude (1998) observed that two third (63.34 per cent) of sugarcane growers had medium, while 19.33 per cent and 17.33 per cent of respondents had small (up to 7 years) and high (above 23 years) level of sugarcane farming experience, respectively.

Ranganatha *et al.* (2001) found that the farming experience of the respondents was having non-significant relation with the adoption of organic farming practices by farmers.

Shendage (2002) observed that most of the respondents in all the three categories had shown medium credibility of information sources.

Thakare (2002) found that the relationship of information seeking behavior with the farming experience of orange cultivation is non- significant.

Sharma *et al.* (2008) reported that the maximum number of farmers (84.49 per cent) had started fish farming just 7 year ago. About 14 per cent respondents were doing fish farming for more than 8 years.

Chavan *et al.* (2011) found that level of farming experience had non-significant relation with use of information sources for marketing.

8. Market orientation

Wankhede (1996) found that majority of respondents (57.33) had market orientation to moderate extent. He further found that the market orientation was positively and significantly relationship with knowledge and adoption of onion cultivation practices.

Waman *et al.* (1998) observed that significant and positive relationship between adoption and recommended onion production technology and management orientation including market orientation.

Chavan *et al.* (2011) observed that the market orientation of farmers have positive and significant relation with use of information sources for marketing.

Sorate (2011) found that majority per cent of respondents (71.00 per cent) were observed under medium level of market orientation category.

9. Mass media availability

Shendage (2003) observed that the nearly 2/3rd of respondents indicate that T.V., radio and agricultural demonstration were most available to farmers.

Shepherd (2003) reported that every farmer listened to the price broadcast on the radio, television is becoming increasingly available and in many countries even the poorest farmers have access.

Gupta *et al.* (2004) observed that more than 90 per cent respondents reported that on TV there is casual availability, more than 94 per cent casual availability in case of radio for agricultural information.

Tayade (2006) observed that (60.00 per cent) respondents had medium level of sources of information followed by 23.33 per cent and 16.67 per cent who had low and high use of sources of information respectively.

Kashid (2008) reported that 44.16 per cent of respondents were in high category of sources of information followed by 39.17 per cent and 16.67 per cent of them having medium and less access to sources of information respectively.

Dagwal (2008) found that the high mass media availability with positive and significant relationship with mass media utilization.

Pawar (2010) found that television, radio and news paper were easily available, where as other print media were not available to the respondents.

B. Dependent Variable

Marketing behavior

Sagwal and Malik (2001) observed that majority of the respondents consulted sources of information was friends (75 per cent) followed by neighbour (63 per cent), agricultural scientists (36 per cent), ADO / VEW (31 per cent) shopkeepers Dealer (25 percent) and Panchayat members (6 per cent).

Manohari (2002) observed that majority of the respondents indicated that they were using friends, neighbors and local leaders as their main source of information. Most of the triable farmers had never used information sources like sub assistants and agricultural officers. Negligible amount of farmers are utilizing news paper and information material as their source of information.

Gupta *et al.* (2003) observed that 86.93 per cent farmers in sugarcane and agri- horti livestock production system contact their neighbours, 79.33 per cent farmers in agri- horti livestock production system consult friends and 95.33 per cent farmers in sugar cane based production contact relatives for seeking information on agriculture.

Gaikwad (2005) observed that majority of the farmers (67.34 per cent) had medium level of exposure to various sources of information for getting the information about onion cultivation practices. Few of the farmers were found to be either keeping low (21.33) or more contacts (11.33 per cent) with various information sources of acquiring information about onion cultivation practices.

Deshmukh *et al.* (2007) revealed that 69.06 per cent of the respondents fall under medium sources of information.

Jadhav (2008) show that the two third of the respondents (66.67 per cent) have utilized the medium level of sources of information, followed by 20.00 per cent of the respondents have utilized high level of source of information less percentage of the respondents i. e. 13.33 per cent have utilized low level of sources of information.

Kaur *et al.* (2009) reported that the majority 32.50 per cent of farmers used private companies as a sources to receive information regarding crops, followed by 23.75 per cent of farmers who looks this information from DOH, Ludhiana.

Todasam (2009) observed that nearly two third (73.33 per cent) of the respondents utilized medium category

Divekar (2010) concluded that majority (77.50 per cent) of the women respondents had used medium sources of information followed by 15.83 per cent of the respondents who had used low sources of information and 6.67 per cent of them had high access to sources of information.

Pawar (2010) observed that more than half of the respondents always utilize radio, TV, news paper.

Gaikwad and Khalanche (2011) observed that 64.40 per cent of the respondents sericulturists had medium level of rational marketing behavior, whereas 18.90 per cent and 16.70 per cent of them had low and high level of rational marketing behavior, respectively.

Constraints

Nayak (2000) the study revealed that the major constraints faced by ber growers in adoption of improved cultivation practices were lack of knowledge about market information, budding and grafting (81.66 per cent) followed by use of improved seedlings (77.66 per cent).

Nirmal Kumar (2003) revealed that among the problem faced by the respondents, the language used in broadcast/telecass is difficult to understand was a major constraint, followed by short-duration of time for broadcasting/telecassing (46.47 per cent). The 47.17 per cent respondents felt that programme once broadcast/telecass were not repeated and the timing were not suitable (41.83 per cent). However, about one third of them reported that due to short duration of programme, it was difficult to note down the important information and also recall the information.

Chavan (2011) found that 87.50 per cent respondents were not satisfied about the availability of market information through internet facility. It is also too costly and not available in village. Availability of farm publication and records about market information was insufficient as reported by 77.50 per cent respondents. Another major constraint reported by 59.17 per cent of respondents was unavailability of time for reading literature.

CHAPTER - III

METHODOLOGY

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

Considering the importance of research, it has been divided into important sub-sections, so as to enable logical presentation as definition, concepts, methods, procedures and techniques used for the present study. This chapter describes relevant details under following heads.

- Locale of the study
- Methods of sampling
- Method of interviewing
- Collection of data
- Measurement and categorization of variables
- Data processing and Statistical analysis

3.1 Local of the study

The present study entitled, "Marketing behavior of pulses growers" was undertaken in Chandur Bazar Panchayat Samiti of Amravati district.

Amravati district lies between 20⁰-32 and 21⁰-46 north latitude and 76⁰-37 and 78⁰-27 east longitude. It occupies an area of 12,626 square kilometer. Amravati district consists 14 tahsils.

3.1.1 Research design

The exploratory design of social research was used for research study.

3.2 Methods of sampling

3.2.1 Selection of villages

Table 1: List of Selected Villages in Chandur Bazar Panchayat Samiti

Sr. No.	List of villages	Sr. No.	List of villages
1	Shirajgaon band	6	Karajgaon
2	Chincholi kale	7	Surali
3	Belora	8	Nanori
4	Bramhanwada thadi	9	Vani
5	Shirajgaon kasba	10	Belkheda

The list of villages was obtained from the respective Panchayat Samiti. Further, 10 villages were selected from Chandur Bazar panchayat samiti. In order to get the representative sample, random sampling method was adopted, total 10 villages were selected for the present investigation.

3.2.2 Selection of respondents

The list of farmers of selected villages was prepared with help of Agricultural assistants and 12 farmers from each village were included in the sample. In all, total sample consisted of 120 respondents.

3.3 Method of interviewing

3.3.1 Preparation of interview schedule

An interview schedule consisting of various items concerned with the objectives of the study was developed for respondent farmers. Necessary precautions were taken such as simple language, so as to get desired responses from the respondents. The schedule was prepared in local (Marathi) Language. The schedule contained questions related to personal

चांदूर बाजार तहसिल
जिल्हा - अमरावती.



क्र.सं.	संघातील	जंकेस	संघातील	जंकेस
१	पुणे जिल्हा मोगरवे	—	११	पांडुर तलाव
२	कच्छी तलाव	—	१२	सुधार
३	गडकी तलाव	—	१३	भारुकी तलाव
४	पुणे शिबीर तलाव	वा. शि. इ.	१४	दाक व लाव
५	वज्र तलाव	वा. शि. इ.	१५	कायस्थ
६	कोडक तलाव	वा. शि. इ.	१६	गाव
७	नगर तलाव	वा. शि. इ.	१७	विद्यामंदीर
८	चित्री तलाव	—	१८	तरी
९	लघुमीय तलाव	—	१९	शिरीष
१०	पोलीस तलाव	वा. शि. इ.		
	शिक्षण तलाव	वि. शु.		

Fig No. B. Map of Chandur Bazar Panchyat Sami

and social economic characteristics and questions related to information sources used by the farmers for marketing. The necessary changes were made in this schedule. Then it was finalized. The required number of copies of schedule was prepared.

3.4 Collection of data

The data for study were collected by personal interview of the respondents with the help of pre-tested structured interview schedule at their home and their responses were considered for the purpose of the present study. Necessary help from the village level personnel was obtained.

3.5 Measurement and categorization of independent and dependant variables

A. Independent variables

1. Age

The chronological age of the respondents in year of investigation considered for this purpose. Categorization of respondents 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

(Mean =40.98, S.D. =12.91)

2. Education

It refers to formal schooling passed by an individual respondent from school to university degree.

Sr. No.	Education	Standard
1	Illiterate	No education
2	Primary school	1 th to 4 th
3	Middle school	5 th to 7 th
4	High school	8 th to 10 th
5	College	Above 11 th

3. Land holding

It refers to the total land possessed by the respondents in hectares at the time of interview.

Respondents according to land holding were categorized on the basis of Indian Government norms in following manner.

Sr. No.	Category	Land Holding(ha)
1	Marginal	0.01 to 1.0
2	Small	1.01 to 2.0
3	Semi-medium	2.01 to 4.0
4	Medium	4.01 to 10.0
5	Large	10.0 and above

(Mean =3.39, S.D. =2.23)

4. Annual income

Conceptually, it refers to the gross annual earning of the respondents from all available sources. Operationally, in present study gross income in rupees received by the respondents and his family members, from all sources during 2009-10 year was considered. For further analysis, the actual income earned by the respondent and his family members from all sources was considered as score. The categorization of the respondents on the basis of their annual income was done on the basis of their actual income by equal interval method.

Sr. No.	Categorization	Income range (in rupees)
1	Low	Up to 180000
2	Medium	180001 to 360000
3	High	Above 360000

(Mean =112083.33, S.D. =99948.69)

5. Farming experience

It refers to numbers of years for which the farmer is working on his farm. For this, teacher made scale was used.

The score was given as a non-experience – zero, one year – 1, two year – 2, three year – 3, four year - 4 and so on. The categorization was done in the following manner on the basis of mean \pm S.D.

Sr. No.	Category	Score
1	Low	Up to 6
2	Medium	7 to 29
3	High	30 and above

(Mean =17.68, S.D. =11.32)

6. Cosmopolitanness

It is the degree to which an individual is oriented outside his social system.

The extent of respondent's contact with selective sources was recorded at three levels viz. Always, Sometime and Never with 2, 1 and 0 scores, respectively. After summation of total score, the respondents were categorized into following manner on the basis of mean \pm S.D.

Sr. No.	Category	Score
1	Low	Up to 5
2	Medium	6 to 9
3	High	10 and above

(Mean =6.93, S.D. =1.59)

7. Extension contact

It refers to the frequency of contact with extension worker and extension agencies by the respondents. For this, teacher made scale was used.

The extent of respondent's contact with selective sources was recorded a three level, viz. Always, Sometime and Never with 2, 1 and 0 score respectively. The categorization of respondents was done on the basis of equal interval method in to three categorization i. e. high, medium and low.

Sr. No.	Category	Score
1	Low	8 to 11
2	Medium	12 to 15
3	High	16 and above

(Mean =12.82, S.D. =2.24)

8. Market orientation

It refers to the degree to which respondent is oriented toward efficient use of market produce as a major component of farm management.

It was measured with the help of scale developed by Samanta and Ray (1981) and the categorization of market orientation were done on the basis of mean+ S. D.

In this scale there are six statements, positive and negative statements are mix together retaining at the sometime more or less psychological order of the statements.

Sr. No.	Category	Score
1	Low	Up to 26
2	Medium	27 to 29
3	High	30 and above

(Mean =27.6, S.D. = 1.91)

9. Mass media availability

It is defined as the type of mass media available with pulses growers/ farmers i.e. radio, TV, news paper. agricultural magazines, internet, leaflets etc.

List of mass media access was prepared and respondents were asked to state about the availability of the mass media access. The list included were TV, radio, news paper, leaflets, agricultural publications etc. and other Facilities. The respondents were asked to state about the availability of mass media access in terms of three point namely Always, Sometimes and Never by assignity score of 2,1 and 0 respectively and were categorized on the basis of mean +- S. D. as given below.

Sr. No.	Category	Score
1	Low	Up to 9
2	Medium	10 to 12
3	High	13 and above

(Mean =10.24, S.D. = 1.52)

B. Dependent variables

Marketing behavior

The marketing behaviour will be conceptualised as attitude to select, secure, use and dispose of farm products by the farmers satisfy to their needs.

Marketing behaviour explores the nature of buyers psychology and its influence up on buying behaviour in the context of marketing.

It is defined as utilization of various information sources which include personal localite, personal cosmopolite and interpersonal communication sources viz. progressive farmers, relatives, extension workers etc. mass communication sources for purpose of seeking information about market.

The information sources were included in schedule and respondents were asked to give response on 3 alternatives i.e. Always, Sometime and Never with 2, 1 and 0 score, respectively. They were categorized in to following manner.

Sr. No.	Category	Score
1	Low	Up to 19
2	Medium	20 to 24
3	High	25 and above

(Mean =21.96, S.D. =2.48)

INDEPENDENT VARIABLES

DEPENDENT VARIABLE



Fig. C: Conceptual Model of the study.

Measurement of constraints

Constraints are the factors that limit the use of information sources and hence these cannot be overlooked. In present study constraints found during use of information sources by the farmers were recorded and frequencies and percentage to each of them were worked out.

3.6 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. The entire schedules were numbered serially to facilitate the work of tabulation and analysis. These entire schedules 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 a percentage for giving care and better expression of the data. The analysis was mainly directed towards keeping in the view the objectives of the study.

3.6.1 Statistical methods used

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

I. Mean:

Mean was calculated by sum of all score and dividing by number of respondents.

The formula was as follows,

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

Where,

\bar{X} = Mean

ΣX = Sum of respondents

n = No. of respondents

II. Standard deviation

It was calculated by following formula.

$$S.D. = \sqrt{\frac{\Sigma(X_i - \bar{X})^2}{N}}$$

Where,

S.D. = Standard deviation

X_i = No. of variables

\bar{X} = Mean

N = No. of Times variable observed

III. Co-efficient of correlation

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

$$r = \frac{\Sigma(X - \bar{X})(Y - \bar{Y})}{\sqrt{\Sigma(X - \bar{X})^2 \Sigma(Y - \bar{Y})^2}}$$

Where,

r = Coefficient of correlation

X = Score of independent variables

\bar{Y} = Score of dependent variable

\bar{X} = Mean of independent variable

Y = Mean of dependent variable

IV. 't' Test :

The significance level of correlation coefficient was calculated by using 't'-test.

Formula for 't'-test.

$$'t' \text{ test} = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$$

Where,

r = Correlation coefficient

n = No. of variables

If 't' calculated value was more than table value at 0.05 and 0.01 level of probability at (N-2) degree of freedom, the relationship was considered to be significant and if it was less than table value, relationship was considered to be non-significant.

CHAPTER - IV

SOCIO-ECONOMIC STATUS OF AMRAVATI DISTRICT

It is proposed here to outline some of the main socio-economic features of Amravati district. This helps in providing the background for the proper assessment and understanding of the studies in the course of investigation. The economic returns from the cultivation of various crops are mainly influenced by the climatic conditions, rainfall and type of soil. Study of crop enterprise therefore needs to be undertaken in the light of agro-climatic conditions of the study area.

4.1 Location

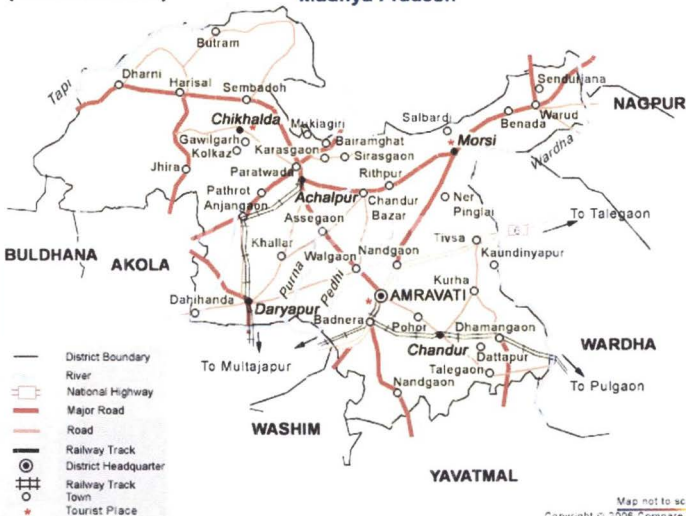
Amravati district lies between 20° - 32° and 31° - 46° north latitude and 76° - 37° and 78° - 27° east latitude. It occupies an area of 12,212 square kilometers. Amravati district consists 14 tahsils, viz. Amravati, Bhatkuli, Achalpur, Nandgaon Khandeshwar, Morshi, Anjangaon Surji, Daryapur, Chandur Bazar, Chandur Railway, Tiosa, Chikhaldara, Warud, Dharni and Dhamangaon (Rly).

4.2 Boundaries

There is boundary of the Baitul district of Madhya Pradesh on north side, Yavatmal district on south, Wardha district on east side and Akola district on west side of the Amravati district. The district boundaries along the Tapi river on the north-west from the point 1.6 km. north-west of Bhokhar-Bardi village, as far as the village Khand and to a distance beyond it, deviates to the south of the river upto point 3 km. east of the village Kat-Kumbha. The river Wardha forms the entire boundary of the district. The boundary on the west stretches along the foot of the Satpudas.

AMRAVATI (Maharashtra)

Madhya Pradesh



4.3 Area and Population

The district covers an area of 12,212 square kilometers, of which rural and urban area is 11952.2 and 259.8 square kilometers, respectively. It accounts for 3.97 per cent area of Maharashtra state. The population of Amravati district was 26,07,460 out of which 17,07,581 was the population of rural area and 8,99,879 was the population of urban area. Out of it, males were 1345 thousand and women were 1262 thousand. The female to male ratio was 940 hovering density 213 and population of Amravati taluka from rural area was 128682 and from urban area 549510 our which 351067 are male and 327125 are female.

4.4 Climate and rainfall

The climate of the district remains very hot in summer and cold in winter. The temperature in the month of May is generally high. Average maximum and minimum annual temperature of the district is 31.1°C and 21.3°C, respectively. Summer and winter seasons are sometimes extreme.

Amravati district falls in medium and assured rainfall zone of Maharashtra state having an average annual rainfall of 635.85 mm. The rainy season spreads over June to September. There was no regularity in rainfall during last few years. Amravati district receives 74 per cent of the rainfall from the south-west monsoon. There are occasional showers in the cold weather also.

4.5 Topography and Soil

Amravati district is rich in fertile black cotton soil and alluvial soil. The richest tracts are found in the valleys of Purna and Wardha rivers. This soil swells considerably due to addition of water and dries up with cracks on losing the moisture. The pH of the soil is 7.5 to 8.5 besides the Wardha and Purna river, so the tract is fertile. The central part of Amravati is also having fertile soils. Near the hills on southern border, shallow and inferior soil determinates.



4.6 Land Utilization Pattern

The total geographical area of the district is 1221 thousand hectares and net sown area is 57.40 per cent of the total geographical area, gross cropped area is 68.72 per cent of the total geographical area. The land utilization pattern of Amravati district is presented in Table 3.

Table 2 : Land utilization pattern in Amravati district.

Sr. No.	Particular	Area (ha)	Percentage of total area
1	Total geographical area	1221000	100.00
2	Land under forest	317000	25.96
3	Land not available for cultivation	100000	8.18
a	Land put to non agricultural use	60000	4.91
b	Barren and uncultivable land	40000	3.27
4	Land not cultivable other than barren land	54000	4.41
a	Permanent pasture and other grazing land	20000	1.64
b	Land under miscellaneous tree crops	29000	2.37
c	Cultivable waste	5000	0.40
5	Fallow land	55000	4.49
a	Current fallow	30000	2.45
b	Other fallow	25000	2.04
6	Net area sown	700975	57.40
7	Area sown more than once	203000	16.66

8	Gross cropped area (kharif+Rabi +Sum.)	839092	77.64
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(Source : District-wise Statistical Information of Maharashtra, D.S.A.O., Amravati 2010-2011)

4.7 Crop Rotation

The Chinese proverb 'change your kind of crop rather than land' indicates the importance of crop rotations. To maintain the fertility status of the soil by improved method, crop rotations are essential for a farmer. Cotton, soybean and jowar are the three important crops grown in kharif season in the district. Mung, urid, rice, tur, and groundnut are also grown on fairly large scale. Wheat is an important rabi crop grown in the area, gram also common in rabi season. The crop rotations commonly followed in the district are as follows.

Hy. Jowar	-	Gram	-	Cotton
Cotton	-	Mung	-	Wheat
Cotton	-	Hybrid Jowar	-	2 years rotation
Soybean	-	Gram		

4.8 Cropping Pattern

Cropping pattern of Amravati district reveals that sorghum, soybean, cotton are important crops and occupies a leading position in the cropping pattern of Amravati district.

Table 3 : Cropping pattern of Amravati district and taluka.

Sr. No.	Crop Sown	Amravati District		Amravati Taluka	
		Area (ha)	Percentage to gross cropped area	Area (ha)	Percentage to gross cropped area
A	Kharif				
1	Paddy	4330	0.51	00	0.00
2	Jowar	49113	5.85	7000	10.80
3	Bajara	205	0.02	20	0.03
4	Maize	1402	0.16	7	0.01
5	Other cereals	4600	0.54	00	0.00
6	Tur	102147	12.17	9100	14.04
7	Mung	37085	4.41	2200	3.39
8	Udid	3694	0.44	315	0.48
9	Other kharif pulses	473	0.05	00	0.00
10	Groundnut	763	0.09	30	0.04
11	Sesamum	205	0.02	50	0.07
12	Sunflower	105	1.20	00	0.00
13	Soybean	317623	37.85	33100	51.09
14	Cotton	179415	21.38	7600	11.73

B	Rabi				
1	Gram	82499	9.83	2700	4.16
2	Wheat	49037	5.84	1450	2.23
3	Other rabi pulses	1378	0.16	15	0.02
4	Safflower	2054	0.24	00	0.00
5	Linseed	00	00.00	00	0.00
6	Sesamum	00	0.00	00	0.00
7	Sunflower	10115	1.20	05	0.007
8	Mustard	05	0.005	00	0.00
9	Other rabi oilseed crops	00	00.00	65	0.10
C	Summer				
1	Summer groundnut	902	0.10	100	0.15
2	Sunflower	00	00.00	00	0.00
3	Mung	211	0.025	15	0.02
4	Maize	00	0.00	00	0.00
D	Annual				
1	Sugarcane	280	0.03	17	0.02
2	Area under fruit crops	24775	2.95	1315	2.03
3	Vegetables	681	0.08	47	0.07

(Source : D.S.A.O, Amravati, 2010-2011)

4.9 Irrigation resources

Irrigation facilities are necessary to develop the agriculture and necessary for the economic development. Rivers, wells, bandharas and minor projects are the main sources of irrigation in the district.

Table 4 : Source - wise area under irrigation

Sr. No.	Sources	Area (ha)
1	Surface irrigated area	2340
2	Wells	44700
3	Irrigation through other sources	15329
4	Total area under irrigation	59829
5	Net sown area	700975
6	Percentage of irrigated area to net sown area	8.53%

Total irrigation projects in Amravati district

Major	1
Medium	4
Minor	65
Total	70

Area under irrigation in Amravati taluka:-

Geographical area	:-	220858.65 ha.
Net area sown	:-	59422 ha.
Gross cropped area	:-	64775 ha.
Total area under irrigation	:-	3380.82 ha.

Net sown area ; - 59422 he.

Percentage of irrigated area to net sown area :- 5.68 %

(Source : Socio-economic review and district statistical abstract of Amravati district, 2010-2011)

4.10 Input supply

The inputs like seed, manures, fertilizers, insecticides, pesticides etc. are required by the farmers. Quality seeds can be made available to the farmers through number of Agro Service Centers, established in Amravati district. MSSC and other private seed companies have been making arrangement for the supply of quality seeds of flowers, vegetables and food grains. Panchayat Samiti and Co-operative Societies also provide the farm inputs.

4.11 Marketing and transportation

For the marketing of agriculture products, agricultural market committees are functioning in the district. Thus, out of 14 tahsils, 12 tahsils are having the facilities of regulated market. These marketing committees are connected with roads and are having banking, electricity and other infrastructure facilities. Amravati city is connected to Bombay - Hawrah route at Badnera.

Bullock carts, auto, trucks railways and tractors are main means of transportation of agricultural produce and inputs.

CHAPTER - V

RESULT AND DISCUSSION

The results of present study emerging out after the analysis of collected empirical facts, 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 the study.

The relevant references have also been quoted in support of results of the study. Four parts in line with specific objectives of study are as follows,

- PART-I : First part of study deals with the personal, situational, socio-economic and psychological profile of the respondents.
- PART-II : Second part deals with the level of marketing behaviour of pulses growers.
- PART-III : Third part deals with the relationship between marketing behaviour and selected personal, situational, socio-economic and psychological characteristics of the respondent farmers.
- PART -IV : Fourth part deals with constraints faced by the farmers while using information sources for market information.

Part I

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

In this part of the study, distribution of some selected characteristics of farmer's are presented. The selected variable includes personal, situational, socio-economic and psychological characteristics of farmers.

Table- 5: Table showing personal, socio-economic and psychological profile of respondents.

Sr. No.	Profile	Number (N=120)	Percentage
1.	Age		
	Young	50	41.66
	Middle	43	35.83
	Old	27	22.50
2.	Education		
	illiterate	1	0.83
	Primary education	4	3.33
	Middle education	5	4.17
	High school	28	23.33
	College	82	68.33
3.	Land Holding		
	Marginal	14	11.66
	Small	29	24.16
	Semi Medium	43	35.83
	Medium	33	27.50
	Large	1	0.83
4.	Annual Income		
	Low	97	80.33
	Medium	20	16.66
	High	3	2.5

5.	Farming experience		
	Low	26	21.66
	Medium	73	60.83
	High	21	17.50
6.	Cosmopolitaness		
	Low	25	20.83
	Medium	89	74.16
	High	6	5.00
7.	Extension Contact		
	Low	37	30.83
	Medium	70	58.33
	High	13	10.83
8.	Market Orientation		
	Low	22	18.33
	medium	88	73.33
	High	10	8.33
9.	Mass Media Availability		
	Low	25	20.83
	Medium	88	73.33
	High	7	5.83

The age profile of respondents shows that 41.66 per cent respondents were from young age group and 35.83 per cent respondents were in middle age group whereas 22.50 per cent respondents were in old age group.

The education profile of respondents show that, 68.23 per cent of respondents having college level and 23.33 per cent respondents were in high school level whereas 4.17 per cent respondents having middle education and only 3.33 and 0.83 per cent of respondents were having primary education and illiterate respectively.

The land holding profile of respondents observed that 35.83 per cent of the farmers had semi-medium size of holding, followed by 27.50 per cent of respondents were possessing medium size of land holding and 24.16 per cent

of respondents were in small size of land holding, whereas only 11.66 and 0.83 per cent of respondents from marginal and large land holding category, respectively.

The annual income profile of respondents shows that majority (80.33 per cent) of respondents had low annual income. 16.66 per cent of respondents had medium annual income while 2.50 per cent of respondents had high annual income.

The farming experience profile of respondents showed that majority of respondent (60.83 per cent) had medium farming experience whereas 21.66 per cent of respondents were in low farm experience, while only 17.50 per cent of respondents possessed high farming experience.

The cosmopolitaness profile of respondents showed that majority of respondents (74.16 per cent) had medium level of cosmopolitness whereas 20.83 per cent of respondents had low level of cosmopolitness and only 5.00 per cent of respondents belonged to high category of cosmopolitness.

The extension contact profile of respondents showed that majority of respondents (58.33 per cent) had medium extent of extension contact, whereas 30.83 per cent of respondents were in low extension contact group, while only 10.83 per cent of respondents possessed high extent of extension contact.

The market orientation profile of respondents showed that majority of respondent (73.33 per cent) had medium market orientation and 18.33 per cent respondents had low market orientation, whereas 8.33 per cent of respondents were in high market orientation.

The mass media availability profile of respondents showed that majority of respondents (73.33 per cent) had medium mass media availability, whereas 20.83 per cent of respondents had low mass media availability, while only 5.83 per cent of respondents had high mass media availability.

Part II
Level of Marketing Behaviour of Pulses Growers

Table- 6: Distribution of Respondent's According to Level of Marketing Behaviour of Pulses Growers

Sr. No.	Level	Number	Percentage
1.	Low	16	13.33
2.	Medium	88	73.33
3.	High	16	13.33

It is observed from findings presented in Table-6 that, 73.33 per cent of farmer had medium and 13.33 per cent of pulses growers had low level of marketing behaviour, and 13.33 per cent of pulses growers had high level of marketing behaviour.

It is evident from the findings that majority of pulses growers had medium level of marketing of marketing behaviour.

Gaikwad (2011) also observed that 64.40 per cent of the respondents sericulturists had medium level of rational marketing behaviour, whereas 18.90 per cent and 16.70 per cent of them had low and high level of rational marketing behaviour, respectively.

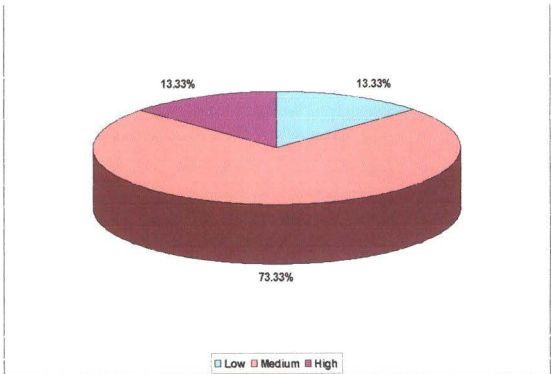


Fig. 1: Distribution of respondents according to level of Marketing Behaviour

Part III

Relationship between level of marketing behaviour and selected personal, situational, socio-economic and psychological characteristics

In this part of study, results regarding relationship between marketing behaviour and some selected characteristics are presented. The selected variables included personal, situational, socio-economic and psychological characteristics of pulses growers.

I. Age

Table- 7: Relationship between Age and level of Marketing Behaviour of Pulses Growers.

Sr. No.	Age	Level of Marketing Behaviour			Total
		Low	Medium	High	
1	Young (18 To 35)	3 (6.00)	41 (82.00)	6 (12.00)	50 (41.66)
2	Middle (36 To 50)	4 (9.30)	33 (76.74)	6 (13.95)	43 (35.83)
3	Old (51 and above)	9 (33.33)	14 (51.85)	4 (14.81)	27 (22.50)
	Total	16	88	16	120

$r = -0.3314$

$t_{cal} = 3.8149^{**}$

Figures in parentheses indicate percentages.

(**Significant at 0.01% level significance)

The data from Table-7 showed that majority (82.00 per cent) of respondents from young age group showed medium level of marketing

behaviour. Also from middle age group of the pulses growers, majority (76.74 per cent) showed medium level of marketing behaviour, whereas from old age group, 51.85 per cent of respondent possess medium level of marketing behaviour.

From above table, it could be observed that age of respondents had negative and significant relationship with the level of marketing behaviour.

Wankhade *et al* (2009) also reported that one third (40.00 per cent) of the respondents were in young age group, while 30.00 per cent of the respondents each were in middle and old age group.

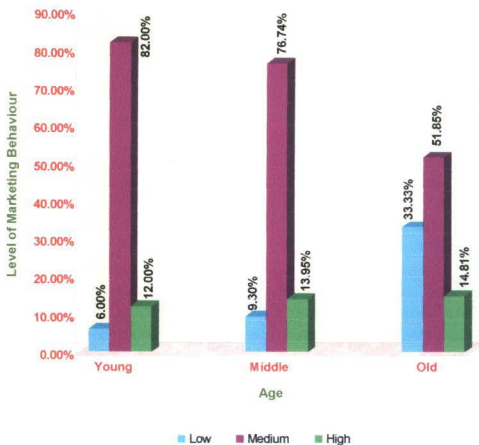


Fig. 2 Relationship between age and level of marketing behaviour of pulses growers

II. Education:

Table- 8: Relationship between Education and level of Marketing Behaviour.

Sr. No.	Education	Level of Marketing Behaviour			Total
		Low	Medium	High	
1	Illiterate	1 (100.00)	0 (0.00)	0 (0.00)	1 (0.83)
2	Primary education	3 (75.00)	1 (25.00)	0 (0.00)	4 (3.33)
3	Middle school	3 (60.00)	1 (20.00)	1 (20.00)	5 (4.16)
4	High school	6 (21.43)	19 (67.85)	3 (10.71)	28 (23.33)
5	College	3 (3.65)	67 (81.71)	12 (14.63)	82 (68.33)
	Total	16	88	16	120

$r = 0.4656$

$t_{cal} = 5.7134^{**}$

Figures in parentheses indicate percentages.

(**Significant at 0.01% level significance)

The data from Table-8 showed that 81.71 per cent of respondents from college category showed medium level of marketing behaviour and 67.85 per cent of respondents from high school level possessed medium level of

marketing behaviour, whereas 75.00 per cent from primary education category of education showed low level of marketing behaviour.

The above table also indicated positive and significant relationship between education and marketing behaviour of pulses growers.

The data indicates that marketing behaviour increases with increase in education level. Thus, the education of the farmers helps to increase the marketing behaviour.

These findings are supported by findings made by Wagh (2011) who observed that 58 per cent of cotton growers had 'medium' level of education. There was significant relationship between education and utilization of information sources.

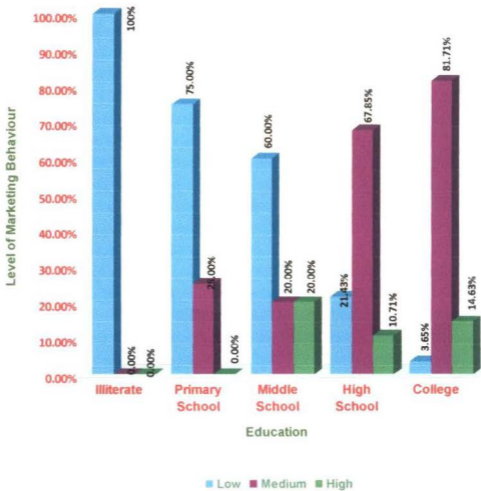


Fig. 3: Relationship between education and level of marketing behaviour of pulses growers

III. Land Holding:

Table- 9: Relationship between Land holding and level of Marketing Behaviour of Pulses Growers.

Sr. No.	Land Holding	Level of marketing behaviour			Total
		Low	Medium	High	
1	Marginal (0.01 to 1 ha)	3 (21.43)	8 (57.14)	3 (21.43)	14 (11.66)
2	Small (1.01 to 2.0 ha)	5 (17.24)	21 (72.41)	3 (10.34)	29 (24.16)
3	Semi-Medium (2.01 to 4.0 ha)	5 (11.62)	33 (76.74)	5 (11.62)	43 (35.83)
4	Medium (4.01 to 10.0 ha)	3 (9.09)	26 (78.78)	4 (12.12)	33 (27.50)
5	Large (10.01 and above)	0 (0.00)	0 (0.00)	1 (100)	1 (0.83)
	Total	16	88	16	120

$r = 0.1767$

$t_{cal} = 1.9497$ (N. S.)

Figures in parentheses indicate percentages.

(N. S. at 0.05 % level significance)

The Table-9 observes that majority of respondent i.e. 78.78 per cent of farmers from medium size land holding group possessed medium level of marketing behaviour and 76.74 per cent of respondent pulses growers from semi-medium land holding group also possessed medium level of marketing

behaviour whereas 72.41 per cent of respondents from small group of land holding had medium level of marketing behaviour.

Majority (57.14 per cent) of respondents from marginal land holding group were in medium level of marketing behaviour and 100 per cent from large land holding group were in high level of marketing behaviour.

The above table indicated non-significant relationship between land holding and marketing behaviour.

These findings are supported by findings made by Gangurde (2003) who revealed that majority of the respondents (57.50 per cent) in medium category of land holding were possessing land between 2.01 to 10 hectare.

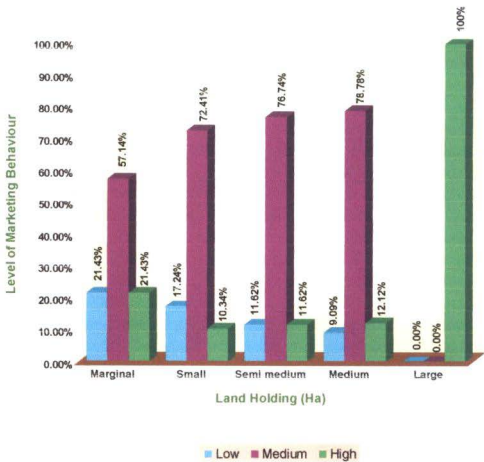


Fig. 4: Relationship between land holding and level of marketing behaviour of puses growers

IV. Annual Income:

Table- 10: Relationship between Annual Income and level of Marketing Behaviour of Pulses Growers.

Annual Income	Level of marketing behaviour			Total
	Low	Medium	High	
Low (Up to Rs. 180000)	15 (15.46)	70 (72.16)	12 (12.37)	97 (80.33)
Medium (180001to 360000)	1 (5.00)	16 (80.00)	03 (15.00)	20 (16.66)
High (360001 and above)	0 (0.00)	2 (66.66)	1 (33.33)	3 (2.50)
Total	16	88	16	120

$r = 0.1723$

$t_{cal} = 1.8995$ (N. S.)

Figures in parentheses indicate percentages.

(N. S. at 0.05 % level significance)

The Table-10 observed that 80.00 per cent of respondents from medium annual income were having medium level of marketing behaviour and 72.16 per cent of respondents from low annual income were having medium level of marketing behaviour, 66.66 per cent of the respondents from high annual income having medium marketing behaviour.

It is observed from Table-10 that there was non-significant relationship between annual income and marketing behaviour.

These findings are supported by findings made by Ajaykumar, *et al.* (2006) who found that there was positive but non significant relation between annual income and information input behavior of wheat growers in irrigated tract of Haryana.

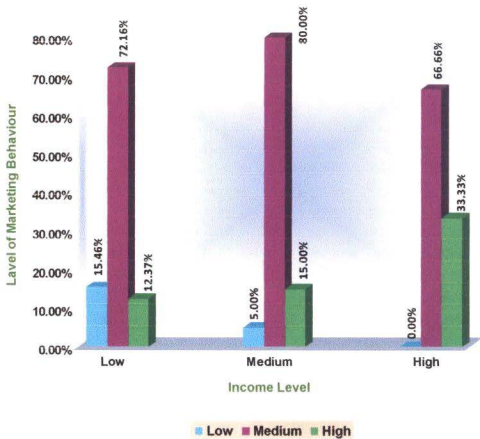


Fig. 5: Relationship between annual income and level of marketing behaviour of pulses growers

V. Farming Experience

Table- 11: Relationship between Farming Experience and level of Marketing Behaviour of Pulses Growers.

Sr. No.	Farming Experience	Level of marketing behaviour			Total
		Low	Medium	High	
1	Low (Up To 5)	4 (15.38)	20 (76.92)	2 (7.69)	26 (21.66)
2	Medium (6 To 29)	5 (6.84)	56 (76.71)	12 (16.43)	73 (60.83)
3	High (30 and above)	7 (33.33)	12 (57.14)	2 (9.52)	21 (17.50)
	Total	16	88	16	120

$r = - 0.2095$

$t_{cal} = 2.3268^*$

Figures in parentheses indicate percentages.

(*Significant at 0.05 % level significance)

Table-11 reveals that 76.92 cent of the respondents from low farming experience possessed medium level of marketing behaviour and 76.71 per cent of respondents from medium farming experience possessed medium level of marketing behaviour. Whereas, 57.14 per cent of respondents from high farming experience were in medium level of marketing behaviour.

It was concluded from above table that level of farming experience had negative and significant relationship with marketing behaviour of pulses growers.

These findings are supported by findings made by Borude (1998) who observed that two third (63.34 per cent) of respondents had medium, while 19.33 per cent and 17.33 per cent of respondents had small (up to 7 years) had high (above 23 years) level of farming experience, respectively.

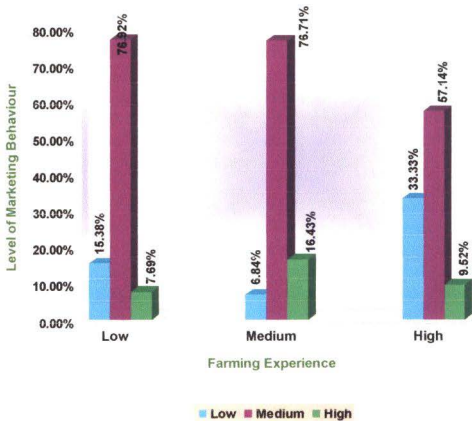


Fig. 6: Relationship between farming experience and level of marketing behaviour of pulses growers

VI. Cosmopolitaness

Table- 12: Relationship between Cosmopolitaness and level of Marketing Behaviour of Pulses Growers.

Sr. No.	Cosmopolitaness	Level of marketing behaviour			Total
		Low	Medium	High	
1	Low (Up to 5)	10 (40.00)	14 (56.00)	1 (4.00)	25 (20.83)
2	Medium (6 to 9)	6 (6.74)	70 (78.65)	13 (14.60)	89 (74.16)
3	High (10 and above)	0 (0.00)	4 (66.66)	2 (33.33)	6 (5.00)
	Total	16	88	16	120

$r = 0.3338$

$t_{cal} = 3.8457^{**}$

Figures in parentheses indicate percentages.

(**Significant at 0.01% level significance)

The Table-12 showed that 78.65 per cent pulses growers from medium group of cosmopolitaness possessed medium level of marketing behaviour and 56.00 per cent pulses growers from low group of cosmopolitaness possessed medium level of marketing behaviour. Also 66.66 per cent of respondents from high group of cosmopolitaness possessed medium level of marketing behaviour.

Finding showed the positive and significant relationship of cosmopolitaness with marketing behaviour.

These findings are supported by findings made by Dobale (2003) who reported that majority of the respondents (59.33 per cent) were grouped in medium level of cosmopolitanism, followed by 21.33 per cent in high level cosmopolitanism and also reported a significant relationship with information seeking behavior of sugarcane growers.

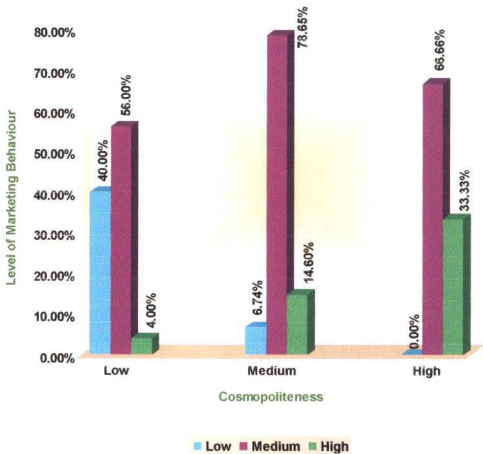


Fig. 7: Relationship between cosmopolitanism and level of marketing behaviour of pulses growers

VII. Extension Contact

Table- 13: Relationship between Extension Contact and level of Marketing Behaviour of Pulses Growers.

Sr. No.	Extension contact	Level of marketing behaviour			Total
		Low	Medium	High	
1	Low (8 to 11)	7	23	7	37
		(18.91)	(62.16)	(18.91)	(30.83)
2	Medium (12 to 15)	9	56	5	70
		(12.85)	(80.00)	(7.14)	(58.33)
3	High (16 and above)	0	9	4	13
		(0.00)	(69.23)	(30.77)	(10.33)
Total		16	88	16	120

$r = 0.5566$

$t_{cal} = 7.2765^{**}$

Figures in parentheses indicate percentages.

(**Significant at 0.01% level significance)

Table-13 reveals that 80.00 per cent of the respondents from medium extension contact possessed medium level of marketing behaviour and 69.23 per cent of respondents from high extension contact possessed medium level of marketing behaviour, whereas 62.16 per cent of respondents from low extension contact were in medium level of marketing behaviour.

It was concluded that level of extension contact had positive and significant relationship with marketing behaviour of pulses growers.

These findings are supported by findings made by Dagwal (2008) who found that there was positive and significant relationship between extension contact and media utilization.

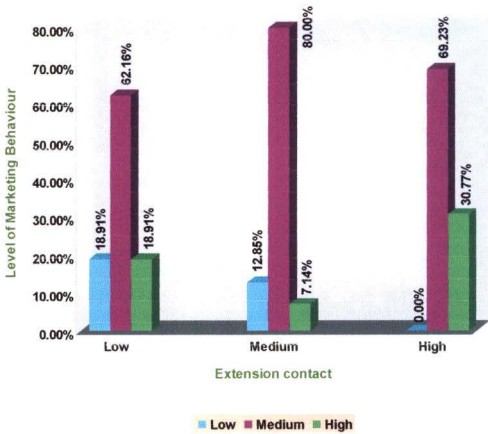


Fig. 8: Relationship between extension contact and level of marketing behaviour of pulses growers

VIII. Market Orientation

Table- 14: Relationship between Market Orientation and level of Marketing Behaviour of Pulses Growers.

Sr. No.	Market Orientation	Level of marketing behaviour			Total
		Low	Medium	High	
1	Low (Up to 26)	8 (36.36)	10 (45.45)	4 (18.19)	22 (18.33)
2	Medium(27 to 29)	5 (5.68)	73 (82.95)	10 (11.36)	88 (73.33)
3	High(30 and above)	3 (30.00)	5 (50.00)	2 (20.00)	10 (8.33)
	Total	16	88	16	120

$r = 0.3605$

$t_{cal} = 4.1974^{**}$

Figures in parentheses indicate percentages.

(**Significant at 0.01% level significance)

Table-14 reveals that 45.45 per cent of the respondents from low market orientation category possessed medium level of marketing behaviour and 82.95 per cent of respondents from medium market orientation category possessed medium level of marketing behaviour and 50.00 per cent of respondents from high market orientation category possessed medium level of marketing behaviour.

From above table, it was concluded that level of market orientation had positive and significant relationship with marketing behaviour.

Waman *et al.* (1998) also observed that significant and positive relationship between adoption and recommended onion production technology and management orientation including market orientation.

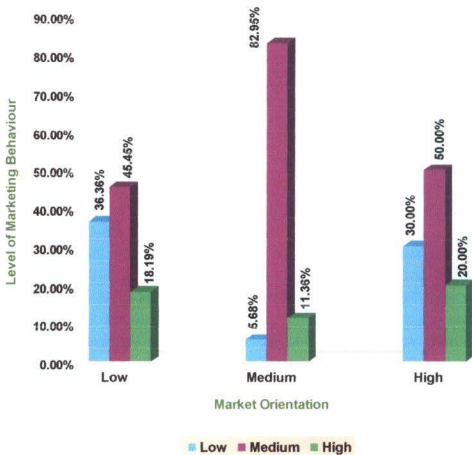


Fig. 9: Relationship between market orientation and level of marketing behaviour of pulses growers

IX. Mass Media Availability

Table- 15: Relationship between Mass Media Availability and level of Marketing Behaviour of Pulses Growers.

Sr. No.	Mass Media Availability	Level of marketing behaviour			Total
		Low	Medium	High	
1	Low (Up to 9)	7	10	8	25
		(28.00)	(40.00)	(32.00)	(20.83)
2	Medium(10 to 12)	7	75	6	88
		(7.95)	(85.22)	(6.81)	(73.33)
3	High(13 and above)	2	3	2	7
		(28.57)	(42.86)	(28.57)	(5.88)
Total		16	88	16	120

$r = 0.5450$

$t_{cal} = 7.0595^{**}$

Figures in parentheses indicate percentages.

(**Significant at 0.01% level significance)

Table-15 reveals that 85.22 per cent of the respondents from medium mass media availability category possessed medium level of marketing behaviour and 42.86 per cent of respondents from high mass media availability category possessed medium level of marketing behaviour.

It was concluded that level of mass media availability had positive and significant relationship with marketing behaviour of pulses growers.

These findings are supported by findings made by Dagwal (2008) who found that the high mass media availability with positive and significant relationship with mass media utilization.

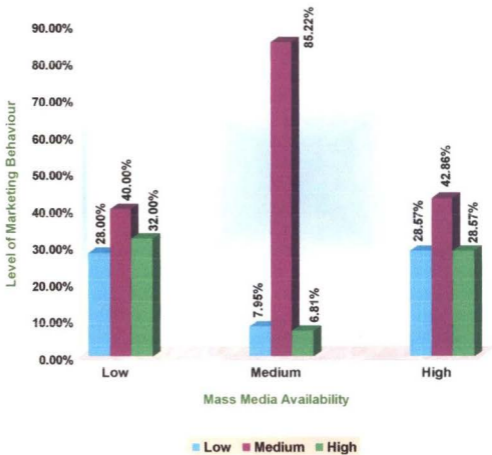


Fig. 10: Relationship between mass media availability and level of marketing behaviour of pulses growers

Relational Analysis

In order to find out the relationship of the selected characteristics of the respondents with their marketing behaviour, correlation coefficient was worked out. The results obtained from the relational analysis have been presented below.

The correlation coefficient of marketing behaviour with personal, psychological, situational and communicational characteristics of respondents has been furnished in Table-16

Table- 16: Coefficient of Correlation of selected characteristics of respondents with their level of marketing behaviour.

Sr. No.	Variables	Marketing behaviour of pulses growers	
		'r'	t _{cal}
1	Age	- 0.3314	3.8149**
2	Education	0.4656	5.7134**
3	Land holding	0.1767	1.9497 N. S.
4	Annual Income	0.1723	1.8995 N. S.
5	Farming experience	-0.2095	2.3268*
6	Cosmopolitaness	0.3338	3.8457**
7	Extension contact	0.5566	7.2765**
8	Market orientation	0.3605	4.1974**
9	Mass media availability	0.5450	7.0595**

N. S. Non-significant

(**Significant at 0.01% level significance)

(*Significant at 0.05 %level significance)

It could be seen from Table -16 that out of nine selected characteristics, two characteristics namely land holding and annual income were found to have positive and non-significant correlation with level of marketing behaviour. Age and farming experience showed negative and significant relationship with level of marketing behaviour.

The table also indicates that education, cosmopolitaness, extension contact, market orientation and mass media availability showed positive and significant correlation with level of marketing behaviour. These findings are supported by findings made by Bhosale (2000), Jadhav *et al.* (2000), Gangurde (2003), Chavan (2011).

The above table also shows that increase in education, cosmopolitaness, extension contact, market orientation and mass media availability of respondents would help to increase in level of marketing behaviour.

Part –IV

Market Information Constraints

The constraints in present study were defined as the difficulties encountered by respondents while using information sources about marketing. Efforts have been made in present study to know the constraints faced by respondents'. Suggestive question and open end questions were asked to farmer to know which constraints they have experienced while using information sources about marketing. After noting all these constraints, they were grouped under different levels and are presented in Table-17.

Table- 17: Constraints faced by the farmers while using information sources for market information.

Sr. No.	Constraints	Number (N=120)	Percentage (100)
1.	Financial problem in getting agricultural market information.	39	32.50
2.	Extension workers are not available when information is needed.	55	45.83
3.	Insufficient literature in Marathi language.	67	55.83
4.	Unavailability of time for reading literature /publication.	71	59.17
5.	Publication and records are not available at village level.	93	77.50
6.	Problem of electricity.	45	37.50
7.	Market information through mobile is not available.	35	29.17
8.	Unavailability of internet facility and its too costly.	105	87.50
9.	Information broadcasted through radio/ television is difficult to understand and not useful for local area	27	22.50

Findings indicate that 87.50 per cent respondents were not satisfied about the availability of market information through internet facility. It is also too costly and not available in village.

Availability of farm publication and records about market information was insufficient as reported by 77.50 per cent respondents. Another major constraint reported by 59.17 per cent of respondents was unavailability of time for reading literature /publication.

From the table, it is also observed that the 55.83 per cent respondents faced constraints like insufficient literature in Marathi language. It was also reported by 45.83 per cent respondents that extension workers are not available when information is needed.

The non-availability of electricity acted as constraint in seeking information from media as reported by 37.50 per cent of respondents. The other constraints inhibiting the use of information sources were financial problem, 32.50 per cent of respondents faced this problem, while 29.17 per cent of respondents reported that market information through mobile is not available. 22.50 per cent of respondents reported that information broadcasted through Radio/ Television is difficult to understand and not useful for local area.

INDEPENDENT VARIABLES

DEPENDENT VARIABLE

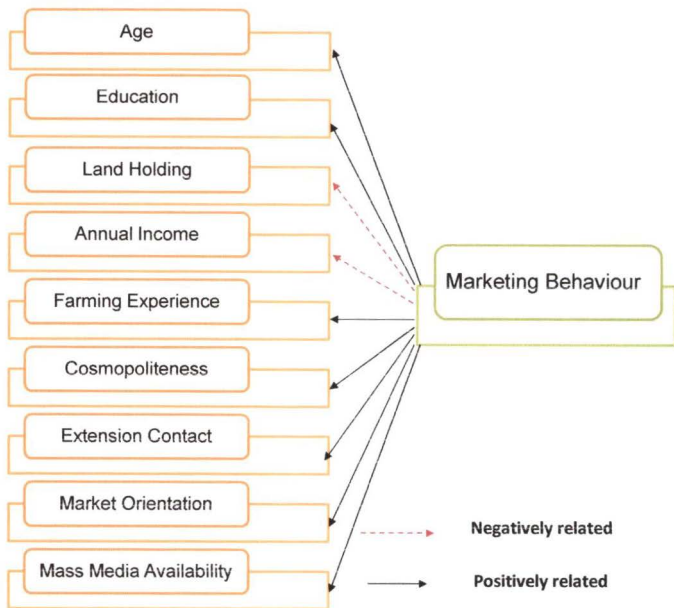


Fig. 11 : Empirical Research Model.

CHAPTER – VI

SUMMARY AND CONCLUSION

The study of Marketing Behaviour of Pulses Growers conducted in Chandur Bazar Panchayat Samiti in Amravati district of Vidarbha region of Maharashtra. The sample consisted of 120 farmers from 10 villages who were selected randomly. The data were collected by personal interview of the farmers with the help of interview schedule.

The main focus of the study was on marketing behavior of pulses growers. Marketing behavior was considered as a dependent variable. Age, education, land holding, annual income, farming experience, cosmopolitaness, extension contact, market orientation and mass media availability were selected as independent variables to explain dependent variable. Correlation analysis was used for ascertaining relationship and significance between dependent and independent variables.

The present study was formulated with following specific objectives:

- To study the personal, socio-economic and psychological characteristics of pulses growers.
- To study the marketing behavior of pulses growers about market.
- To study the relationship between personal, socio-economic and psychological characteristics of pulses with their marketing behavior.
- To study the problems faced by farmers for seeking information about market.

Findings of the study

The summarized findings of the present study are as follows:

1. It was observed from the finding that 73.33 per cent of farmer had medium and 13.33 per cent of farmers had low level of marketing behaviour. Whereas, 13.33 per cent of farmers had high level of marketing behaviour.
2. Statistical analysis of data showed that age of respondents had negative and significant relationship with the level use of information sources for marketing.
3. The education of the farmers had positive and significant relationship with marketing behavior of pulses growers.
4. It was observed from the study that there is non-significant relationship between land holding of farmer and their marketing behavior.
5. Statistically, it was revealed from present study that there was non-significant relationship between annual income and marketing behavior of pulses growers.
6. It was concluded that level of farming experience had non-significant relation with marketing behavior of pulses growers.
7. The correlation analysis showed the positive and significant relationship of cosmopolitnness with marketing behavior of pulses growers.
8. It was concluded that level of extension contact had positive and significant relationship with marketing behavior of pulses growers.
9. Market orientation of farmers had positive and significant relation with marketing behavior of pulses growers.



10. It was concluded that level of mass media utilization had positive and significant relationship with marketing behavior of pulses growers.
11. The correlation analysis yielded that, 73.33 per cent of farmers had medium and 13.33 per cent of farmers had low level of marketing behaviour, Whereas 13.33 per cent of respondents had high level of marketing behaviour. Thus, majority of pulses growers had medium level of marketing behaviour.
12. The major constraints faced by the farmers while using information sources for market information were, unavailability market information through internet facility, unavailability of farm publication and records in village, insufficient literature in Marathi language, extension workers are not available when information is needed, unavailability of electricity and Information in farm literature is theory oriented.

CHAPTER – VII

IMPLICATIONS

The implications are based on the findings of the study and are presented in 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 researchers 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. Researchers should work on more variables along with constraints 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 reasons of non availability of information sources, collect the reactions of the farmers and understand the bottlenecks. It will provide essential feedback with regard to market information.

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

II. Suggestions for action

The marketing behavior can be improved by arranging various extension programmes for the young farmers and by imparting them proper scientific training through Krishi Vigyan Kendra.

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

CHAPTER - VIII

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VITA

1. Name of student : Kad Rupali Ganpat
2. Date of Birth : 09/01/1989.
3. Name of College : Shri Shivaji Agriculture College,
Amravati.
4. Residential Address : At.Post.-Shindawane (Urulikanchan),
Tal. - Haweli, Dist. - Pune,
Pin Code- 412202,
Mobile No: -9960801186.
5. Academic Qualification :

Sr. No.	Name of degree awarded	Year in which obtained	Class	Name of awarding University	Subjects
1	S.S.C.	2004	First	Pune	Marathi
2	H.S.C.	2006	Second	Pune	Science
3	B. Sc. (Agri.)	2010	First	M.P.K.V. Rahuri.	Agriculture and Allied Science

6. Research paper published : Nil
7. Field of interest : To work with full devotion in
Agriculture Field in order to elevate
the living status of rural population in
my country.

Place : Amravati
Date 31/5/2012



Signature of student

Appendix

डॉ. पंजाबराव देशमुख कृषी विद्यापीठ, अकोला श्री शिवाजी कृषी महाविद्यालय, अमरावती विस्तार शिक्षण विभाग

संशोधन प्रकल्प :	एम.एस.सी. (कृषी) संशोधन प्रकल्प
संशोधनाचा विषय :	कडधान्य उत्पादक शेतकऱ्यांची विपननातील वर्तवणुक
संशोधकाचे नांव :	कड रुपाली गणपत

शेतकऱ्यांची सर्वसाधारण माहिती

१. शेतकऱ्याचे नांव :	
२. दुरध्वनी क्रमांक :	
३. गावाचे नांव :	
४. तालुका :	चांदूर बाजार
५. जिल्हा :	अमरावती
६. वय :	वर्षे
७. शिक्षण :	
	अ) अशिक्षित :
	ब) प्राथमिक शिक्षण (१ ली ते ४ थी) :
	क) माध्यमिक शिक्षण (५ वी ते ७ वी) :
	ड) विद्यालयीन शिक्षण (८ वी ते १० वी) :
	इ) महाविद्यालयीन शिक्षण (११ वी व वरील) :

८. एकूण शेती :

अ.क्र.	प्रकार	हेक्टर	
१	अत्याल्प	०.१ ते १.०	
२	लहान	१.०१ ते २.०	
३	अंशतः मध्यम	२.०१ ते ४.०	
४	मध्यम	४.०१ ते १०.०	
५	मोठी	१०.०१ व जास्त	

९. वार्षिक उत्पन्न :

अ) उत्पन्नाचे मार्ग :	१) शेतीमधुन :	रु.
	२) जोडधंदा :	रु.
	३) नोकरी :	रु.
	एकूण :	रु.

१०. शेतीचा अनुभव मागील वर्षापासून

११. आपण खालील ठिकाणी भेटी देता किंवा नाही.

अ.क्र.	ठिकाण	नियमित	कधीकधी	कधीच नाही
१	शेजारील गावास भेट			
२	तालुका ठिकाणास भेट			
३	जिल्हा ठिकाणास भेट			
४	शेजारील जिल्ह्यास भेट			
५	राज्याच्या राजधानीस भेट			
६	दुसऱ्या राज्यास भेट			
७	इतर			

१२. शेतकऱ्याचे विस्तार विभागातील संपर्क :

अ.क्र.	नांव	नियमित	कधीकधी	कधीच नाही
१	ग्रामसेवक			
२	कृषी सहाय्यक			
३	कृषी पर्यवेक्षक			
४	कृषी मंडळ अधिकारी			
५	तालुका कृषी अधिकारी			
६	विस्तार अधिकारी			
७	कृषी विद्यापीठातील शास्त्रज्ञ			
८	बिगर सहकारी संस्था			
९	कृषी सेवा केंद्र			
१०	प्रगतीशील शेतकरी			
११	शेजारी व मित्र			
१२	कृषी उत्पन्न बाजार समिती			
१३	इतर			

१३. बाजाराचे स्थितीज्ञान :

अ.क्र.	विधान	पूर्णतः मान्य	मान्य	निश्चित नाही	अमान्य	पूर्णतः अमान्य
१	बाजार माहिती ही शेतकऱ्याला उपयोगाची नाही.					
२	शेतकऱ्याच्या मालाला प्रतवारी केल्यामुळे चांगला भाव मिळू शकतो					
३	गोंदामामुळे शेतकऱ्याच्या मालाला चांगला भाव मिळण्यास मदत होते.					

४	शेतकऱ्याने आवश्यक साधनसामग्री संबंधीत दुकानातुनच खरेदी करावी.				
५	शेतकऱ्याने त्यांचा माल शेजारच्या बाजारात चांगल्या किंमती करीता विकला पाहिजे				
६	बाजार मागणी नुसार शेतकऱ्याने पिकांची निवड करावी.				

१४. प्रसार माध्यमांची उपलब्धता :

अ.क्र.	प्रसार माध्यमांची उपलब्धता	नियमित	कधीकधी	कधीच नाही
१	कृषी प्रकाशने			
२	वृत्तपत्रे			
३	रेडिओ			
४	दूरदर्शन			
५	दूरध्वनी			
६	इंटरनेट			
७	कृषी प्रदर्शने			
८	चित्रपट			
९	इतर			

१५. विपननासाठी माहिती स्रोतांचा वापर :

अ.क्र.	माहिती स्रोत	नियमित	कधीकधी	कधीच नाही
अ)	वैयक्तिक संपर्क साधने			
१	मित्र			
२	शेजारी			
३	नातेवाईक			
४	कृषी अधिकारी			
५	ग्रामसेवक			
६	विद्यापीठ शास्त्रज्ञ			
७	स्थानिक नेता			
८	प्रगतीशील शेतकरी			
९	दुकानदार			
१०	कृषी सेवा केंद्र			
११	इतर			
ब)	गट संपर्क साधने			
१	प्रात्यक्षिक			

२	गावकऱ्यांशी चर्चा			
३	गटचर्चा			
ॡ	सहली			
ॡ	इतर			
क)	जनसंपर्क स्रोत			
१	दुरदर्शन			
२	रेडिओ			
३	वृत्तपत्रे			
ॡ	कृषी प्रकाशने			
ॡ	कृषी प्रदर्शने			
ॢ	दूरध्वनी / भ्रमणध्वनी			
ॣ	इंटरनेट			

१ॢ. बाजार माहिती मिळवण्याबाबत येणाऱ्या अडचणी :

- | | |
|--|------------|
| १. बाजार माहिती मिळण्याकरीता आर्थिक अडचण आहे का ? | होय / नाही |
| २. ज्या वेळी माहिती हवी असते त्या वेळी विस्तार सेवक उपलब्ध असतात काय ? | होय / नाही |
| ३. मराठी मध्ये साहित्य उपलब्ध आहे का ? | होय / नाही |
| ॡ. वाचण्यासाठी वेळ काढू शकता का ? | होय / नाही |
| ॡ. गावपातळीवर प्रकाशने व माहिती उपलब्ध आहे का ? | होय / नाही |
| ॢ. विजेची अडचण आहे का ? | होय / नाही |
| ॣ. मोबाईल संदेशाद्वारे बाजार माहिती मिळते का ? | होय / नाही |
| ।. गावपातळीवर इंटरनेट सुविधा उपलब्ध आहे का ? | होय / नाही |
| ॥. टी. व्ही. वरील बाजार माहिती आपणास समजते का ? | होय / नाही |
| १०. टी. व्ही. व रेडीओ वरील माहिती स्थानिक गरजेनुसार असते का ? | होय / नाही |
| ११. कृषी साहित्य वापरण्यात भाषेची अडचण येते का ? | होय / नाही |
| १२. इतर | |

Dr. Panjabrao Deshmukh Akola Vidyapeeth, Akola
Shri Shivaji Agriculture College, Amravati
Department of Extension Education

Thesis Title : Marketing Behaviour of Pulses Growers.
Name of Student : Kad Rupali Ganpat

Farmers Information

1. Name of Farmer :
2. Contact No. :
3. Name of Village :
4. Taluka :
5. District :
6. Age :
7. Education
 - a. Illiterate
 - b. Primary Education (1 to 4th Std.)
 - c. Middle School (5 th 7th Std.)
 - d. High School (8 to 10th Std.)
 - e. College (11th and above)
8. Land Holding :
 - a. Marginal - 0.1-1.0 (Ha.)
 - b. Small - 1.01-2.0 (Ha.)
 - c. Semi Medium - 2.01-4.0 (Ha.)
 - d. Medium - 4.01-10.0 (Ha.)
 - e. Large - 10.01 and above
9. Annual Income
 - a. From Agriculture -
 - b. Supplementary Business -
 - c. Service -
 - Total -
10. Farming Experience
From _____ years ago

11. Cosmopolitanism of farmers

Sr. No.	Place	Always	Sometimes	Never
1	Visit to Neighboring Village			
2	Visit to Taluka Place			
3	Visit to District Place			
4	Visit to Neighboring District			
5	Visit to State Capital			
6	Visit to Other State			
7	Others			

12. Extension Contact of farmers

Sr. No.	Place	Always	Sometimes	Never
1	Village Level Worker			
2	Agriculture Assistant			
3	Agriculture Supervisor			
4	Agriculture Circle Officer			
5	Taluka Agriculture Officer			
6	Extension Officer			
7	Agriculture University Scientist			
8	Co-operative Societies			
9	Agriculture Service Centre			
10	Progressive farmer			
11	Neighbors and Friends			
12	APMC			
13	Others			

13. Market Orientation

Sr. No.	Statement	Strongly agree	Agree	Not Conform	Disagree	Strongly Disagree
1	Market information is not useful to farmer					
2	Farmer can get more price by grading their products					
3	Due to godowns farmers get reasonable prices for their produce.					
4	Farmers should purchase useful implements from authorized dealer					
5	Farmer should sell his produce in nearby market for better price					
6	Farmer should select the crop according to market demand					

14. Mass Media Availability

Sr. No.	Mass Media Availability	Always	Sometimes	Never
1	Agriculture Publication			
2	News Papers			
3	Radio			
4	Television			
5	Mobile / Phone			
6	Internet			
7	Agricultural Exhibitions			
8	Movie			
9	Others			

15. Use of Information sources for marketing

Sr. No.	Information Sources	Always	Sometimes	Never
A	Personal Contact			
1	Friends			
2	Neighbours			
3	Relatives			
4	Agriculture Officer			
5	Village Worker			
6	University Scientist			
7	Local Leader			
8	Progressive Farmer			
9	Shopkeeper			
10	Agriculture Service Center			
11	Others			
B	Group Contact			
1	Demonstration			
2	Farmers Discussion			
3	Group Discussion			
4	Farmers Trip			
5	Others			
C	Mass Contact			
1	Television			
2	Radio			
3	Newspapers			
4	Agriculture Publication			
5	Agricultural Exhibitions			
6	Mobile / Phone			
7	Internet			

16. Constraints faced by farmers for seeking information about market

- | | | |
|-----|---|--------|
| 1) | Is there financial problem in getting agricultural market information | Yes/No |
| 2) | Is there extension workers available when information is needed | Yes/No |
| 3) | Is there insufficient literature in Marathi language | Yes/No |
| 4) | Is there unavailability of time for reading literature / publication | Yes/No |
| 5) | Is there publication and records are not available at village level | Yes/No |
| 6) | Is there problem of electricity | Yes/No |
| 7) | Is there marketing information through mobile is not available | Yes/No |
| 8) | Is there unavailability of internet facility at village level | Yes/No |
| 9) | Is there information broadcasted through radio/ television is difficult to understand | Yes/No |
| 10) | Is there information broadcasted through radio/ television is useful for local area | Yes/No |
| 11) | Does you face language problem while using agriculture literature | Yes/No |
| 12) | Others | |

