

CERTIFICATE-I

This is to certify that the thesis entitled, “**A study on Privatization of Agricultural Extension Services as perceived by Members of Farmer’s Co-operative Seed Societies in Rewa Distt. (M.P.)**” submitted in partial fulfilment of the requirement for the degree of MASTER OF SCIENCE in AGRICULTURE (Extension Education) of Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur (M.P.) is a record of the bonafide research work carried out by **Mr. Kamla Kant Parouha** under my guidance and supervision. The subject of the thesis has been approved by the Student’s Advisory Committee and the Director of Instructions.

No part of the thesis has been submitted for any other degree or diploma (Certificate awarded etc.) or has been published/published part has been fully acknowledged. All the assistance and help received during the course of the investigation has been duly acknowledged by him.

Place: Rewa

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CERTIFICATE - II

This is to certify that the thesis entitled “**A study on Privatization of Agricultural Extension Services as perceived by Members of Farmer’s Co-operative Seed Societies in Rewa Distt. (M.P.)**” submitted by **Mr. Kamla Kant Parouha** to Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur in partial fulfilment of the requirements for the degree of **MASTER OF SCIENCE** in **AGRICULTURE** in the **Department of Extension Education**, College of Agriculture, Rewa (M.P.) has after evaluation been approved by the Student’s Advisory Committee after an oral examination of the same.

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ACKNOWLEDGEMENT

The author of this manuscript expresses his deep sense of adoration towards the omniscient and almighty “God” who gave him this opportunity of doing M. Sc. (Ag) Extension Education.

It is a moment of great pleasure to put in record my heartfelt gratitude and indebtedness to honorable Guide and Chairman of my Advisory Committee Dr. R. A. Sathwane Professor and head Department of Agriculture extension education, College of Agriculture, Rewa for her helpful and illuminating guidance, invaluable counsel, constrictive criticism, constraint inconstant encouragement and generous help throughout the course of this investigation and for its proper presentation in the form of the thesis.

I am highly obliged to the members of my Advisory Committee namely, Dr. Sanjay Singh (T.A. KVK), Dr. N. Khan Professor of Department Agri. Economics & Farm Management & Dr. A. K. Jain Department of statistics for their generous help, valuable suggestions, and necessary help provided during the course of present investigation.

I express my heartfelt thanks to Dr. M.S. Baghel, Dean, College of Agriculture, Rewa (M.P.) for his encouragement and giving direction.

I express my most cordial thanks to all the Staff members of the Deptt. of Ext. Edu., Dr. A. S. Chouhan Professor of Ext. Edu.,

College of Agriculture, Rewa for his unique help giving direction for the success of this study.

I am especially thankful to my father Shri S. S. Parouha and mother Smt. Nanni bai for rendering me necessary help and emotional support. May elder sister Meena Tiwari and younger sister Reena Tiwari, and all my relatives for their love and affection which always inspired me to achieve this success. May Elder brother Shri Arvindra Parouha, Mr. Rarvindra Parouha.

The unceasing encouragement and moral support accorded by my friend Ku. Priya Gupta (Horticulture M.Sc. (Ag.) throughout the period of the research work will ever refresh in my mind.

I appreciate and express my cordial thanks to college us friends Mr. Sandeep Gautam, Mr. Arunpal, Mr. Basant Rahandale, Mr. Sunil Yadav, Mr. Shyamanand Bagri, Mr. Manish Bagri, Mr. Avdesh Gaur, for their friendly co-operation and encouragement my research work.

I express my special thanks to Dr. A. P. Tiwari Sir (ret. Profecer ext. edu. Collage of agriculture Rewa) for all time help me.

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CONTENTS

Number	Title	Page
1	INTRODUCTION	1-4
2	REVIEW OF LITERATURE	5-15
3	RESEARCH METHODOLOGY	16-33
4	PRESENTATION OF DATA	34-69
5	MAIN FINDINGS & DISCUSSION	70-75
6	SUMMARY, CONCLUSIONS AND SUGGESTIONS	76-83
7	REFERENCES	84-91
8	APPENDICES	i-vi

List of Tables

Number	Title	Pages
3.1	List of selected block and number of respondent from the members of farmers' co-operative seed societies	17
3.2	List of selected villages and number of respondent from the members of farmers' co-operative seed societies	18
4.1	Distribution of the respondents according to their age	34
4.2	Distribution of respondents according to their caste	35
4.3	Distribution of respondents according to their education level	35
4.4	Distribution of respondents according to their social participation	36
4.5	Distribution of respondents according to their size of family	36
4.6	Distribution of respondents according to their operational land holding	37
4.7	Distribution of respondents according to their occupation status	37
4.8	Distribution of respondents according to their annual income	38
4.9	Distribution of respondents according to their farming experience	38
4.10	Distribution of respondents according to their Information management behavior	39
4.11	Distribution of respondents according to their mass media use	39

4.12	Distribution of respondents according to their use of source of information	40
4.13	Distribution of respondents according to their Trainings obtained	40
4.14	Distribution of respondents according to their Decision making	41
4.15	Distribution of respondents according to their Innovativeness	41
4.16	Distribution of respondents according to their Economic motivation	42
4.17	Perception of respondents regarding privatization of agriculture extension services	43-45
4.18	the mean score of different components of private agricultural extension services	47
4.19	Distribution of respondents according to their Perception of regarding privatization of agriculture extension services	47
4.20	Association between age and extent of Perception of members of farmers co-operative seed societies regarding privatization of agriculture extension services	48
4.21	Association between caste and extent Perception of members of farmers co-operative seed societies regarding privatization of agriculture extension services.	49
4.22	Association between education and extent of Perception of members of farmers co-operative seed societies regarding privatization of agriculture extension services	50
4.23	Association between social participation and extent of Perception of members of farmers co-operative seed societies regarding privatization of agriculture extension	51

	services.	
4.24	Association between size of family and extent Perception of members of farmers co-operative seed societies regarding privatization of agriculture extension services	52
4.25	Association between operational land holding and extent of Perception of members of farmers co-operative seed societies regarding privatization of agriculture extension services	53
4.26	Association between occupation status and extent of Perception of members of farmers co-operative seed societies regarding privatization of agriculture extension services.	54
4.27	Association between annual income and extent of Perception of members of farmers co-operative seed societies regarding privatization of agriculture extension services	55
4.28	Association between Farming experience and extent of Perception of members of farmers co-operative seed societies regarding privatization of agriculture extension services	56
4.29	Association between Information management behavior and extent of Perception of members of farmers co-operative seed societies regarding privatization of agriculture extension services	57
4.30	Association between Mass media use and extent of Perception of members of farmers co-operative seed societies regarding privatization of agriculture extension services.	58
4.31	Association between Use of sources of information and	59

	extent of Perception of members of farmers co-operative seed societies regarding privatization of agriculture extension services	
4.32	Association between Training obtained and extent of Perception of members of farmers co-operative seed societies regarding privatization of agriculture extension services	60
4.33	Association between Decision making and extent of Perception of members of farmers co-operative seed societies regarding privatization of agriculture extension services	61
4.34	Association between Innovativeness and extent of Perception of members of farmers co-operative seed societies regarding privatization of agriculture extension services	62
4.35	Association between Economic motivation and extent of Perception of members of farmers co-operative seed societies regarding privatization of agriculture extension services	63
4.36	The association between personal, socio – economic, communicational and psychological characteristics of the members of farmers' co-operative seed societies	65
4.37	Relationship between the personal, socio – economic, communicational and psychological characteristics of the members of farmers' co-operative seed societies	66
4.38	The constraints faced by the members on private agricultural extension services.	68
4.39	the suggestions for enhancing the utility in availing the benefits of private agricultural extension services	69

List of Figure

Fig. Number	Title	Pages (in between)
1	Distribution of the respondents according to their age	34-35
2	Distribution of respondents according to their caste	35-36
3	Distribution of respondents according to their education level	35-36
4	Distribution of respondents according to their social participation	36-37
5	Distribution of respondents according to their size of family	36-37
6	Distribution of respondents according to their operational land holding	37-38
7	Distribution of respondents according to their occupation status	37-38
8	Distribution of respondents according to their annual income	38-39
9	Distribution of respondents according to their farming experience	38-39
10	Distribution of respondents according to their Information management behavior	39-40
11	Distribution of respondents according to their mass media use	39-40
12	Distribution of respondents according to their use of source of information	40-41

13	Distribution of respondents according to their Trainings obtained	40-41
14	Distribution of respondents according to their Decision making	41-42
15	Distribution of respondents according to their Innovativeness	41-42
16	Distribution of respondents according to their Economic motivation	42-43
17	Ranking of different services aspects components of private agricultural extension services.	47-48
18	Perception of members of farmer's co-operative seed society	47-48

VITA

The author of the thesis, Kamla Kant Parouha was born on 01 March, 1987 at Village +,Post Syamardanda, Tehsil- Gunour, Distt.- Panna(M.P.). He passed his High School Certificate Examination (10+2) from S.H.S. School Devendra Nagar Panna (M.P.) in the year 2002. He passed his Higher Secondary School Certificate Examination (10+2) from Govt. B.H.S. School, Devendra Nagar Panna (M.P.) in the year 2004

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INTRODUCTION

With growing population in India, Food Security has taken utmost national importance. Constitutional enactment of Food Security is in place. Food, coming from agricultural production, thereby increased agricultural productivity, has component of technological researches and transferring technological advances to the farmers by agricultural extension system. It has been rightly said that research without extension is lame while extension without research is sterile.

Researches in agricultural extension have shown that earlier agricultural extension, viewed as a public good, has been financed by the public sector in most countries (Dinar, 1996). In recent past, financial burden on government disappoint performance of public extension and opportunities in global free market economy calls for structural and functional adjustment with cost effective and demand driven approach (Saravanan, 1999). It is, further, revealed that while the farmers were aware and utilized private agricultural extension services. For effective and efficient need fulments farmers' occupation, their annual income, socio-economic status, level of inspiration, has a significant association with the attitude of the farmers. However, the public extension performance in many developing countries, including India, is not upto the expectation of farming community. Agricultural extension services in India are mostly funded and delivered by the public system and government is very much reluctant in huge financial investment for public extension.

The growing commercialization of agriculture treats the extension as a new income generating economic input. The extension expert suggests that extension should be 'demand driven' and 'cost effective' and proposes to privatize the public extension system. Here, it is noteworthy that development emphasis is public private partnership (ppp) mode which is a participatory approach having focus on 'inclusive' growth and development. This includes agricultural development. Heitherto private extension has been being attempted through agri-business companies, farmers' organizations and

farmers' co-operative, mass media and information technology, nongovernment organizations (NGOs) and agricultural consultancies. According to Saravanan " Private agriculture extension services refer to the services rendered in the area's of agriculture and allied aspects by extension personnel working in the private agencies or organizations, for which farmers are expected to pay fee and it can be viewed as supplementary or alternative to public extension services".

Seed is a single one of the biggest inputs used in agriculture and increases in production. Looking to so much importance of seed, farmers' co-operative seed societies have come into existence in Rewa division of M.P. Seed grower farmer association has been established on regional basis in a mutually added co-operative sector named as 'farmer co-operative seed society' with a view to developing farmers' participatory approach in seed production, and develop the effective local supply system for quality seed. It is well-known fact that most of the private agencies/ organization dealing with such as seed, fertilizer, pesticide etc are disseminating agricultural information in large number of villages since past few years. Earlier to the farmers for obtaining more production and productivity of crops and other enterprises.

Therefore, it was worthwhile whether the private agencies provided the information on agriculture extension services are preferred by the members of societies for obtaining the profits. Based on these lines it was felt necessary to assess the perception towards utility of privatization of agricultural extension services among the members of farmer's co-operative seed societies. Keeping this in background of facts an investigation on the topic entitled "A study on Privatization of Agricultural Extension Services as perceived by Members of Farmer's Co-operative Seed Societies in Rewa Distt. (M.P.)" was undertaken with the following objectives.

1. To study the personal, socio- economic, communicational and psychological characteristics of the members of farmers' co-operative seed societies.

2. To assess the perception towards on private agricultural extension services among the Members of Farmers' co-operative seed societies.
3. To determine the extent of association between personal, socio-economic, communicational and psychological characteristics of the respondents and their perception regarding private agricultural extension services.
4. To enlist the constraints faced by the members on private agricultural extension services.
5. To find out the suggestions for enhancing the utility in availing the benefits of private agricultural extension services.

SCOPE AND LIMITATION OF THE STUDY

Agricultural extension activities have been recognized as one of the most important activities in agricultural production. Its scope increases when the same is related to seed production. Here in this study, farmer's co-operative seed society have given their response in relation to privatization of agricultural extension. As we know development now is in public private partnership (PPP) mode here again private extension services will be given more importance because they have better reach to the intirier areas. The data of this study with their finding reveal new approaches and pave the way for making the requirement of extension strategies for 21 century. In this study working of governmental agricultural extension agencies have been critically reviewed and their short coming can be removed with the help of private extension services. There are suggestions given by the farmers which can make agricultural extension programme stronger. The scope of this study is further extended to planners, policy makers and executives of agricultural production programmes.

Organization of the study

The present investigation is presented in six chapters. Chapter I of the study attempts to focus the need of the study with background,

objectives, scope and limitation of the study i.e. Introduction. Chapter II includes the review of literature related to the study. Chapter III elaborates the methodology, sampling and technique of data collection & its analysis and operationlization of variables with their measurement. Chapter IV deals with the presentation and description of data for the purpose of study. Chapter V deals with the main findings and discussions and the last chapter concerned with the summary, conclusions and suggestions of the study.

Limitations of the study

A closer look at the design, tools and the sample of the study reveals a number of limitations. This should be kept in mind in case, one want to generalize the findings. These limitations are as the following -

1. The findings of the study are limited to only farmers living in the Rewa block.
2. The major limitation of the investigation is that the significant portion of the findings is based on the expressed responses of the respondents on the basis of recall memory with no written records for verification.
3. The selection of variables is rather arbitrary though based on relevant logic, past research findings and judgment of the subject matter experts.

REVIEW OF LITERATURE

This chapter presents the finding of the past research work related to present problem on going through the research journals, articles, documents, approved theses, books and magazines in order to keep update information and it has been presented according to following manner.

- Concept of privatization of agricultural extension services.
- Personal, socio – economic, communicational and psychological Characteristics of the members of farmers' co-operative seed societies.
- Perception towards on private agricultural extension services among the Members of Farmers' co-operative seed societies.
- Extent of association between personal, socio–economic, communicational and psychological characteristics of the respondents and their perception regarding private agricultural extension services.
- Constraints faced by the members on private agricultural extension Services.
- Suggestions for enhancing the utility in availing the benefits of private agricultural extension services.

2.1 Concept of privatization of agricultural extension services

Kumar and Singh (1991) conducted a study on use of plant protection measures by farming family of various size and found that private agencies were more effective than government cooperative sector agencies in encouraging the implementation of plant protection measures.

Bloome (1993) indicated that private extension involves any personnel in the private sector which delivers advisory services in the areas of agriculture and is seen as an alternative to public extension.

Van Dan Ban and Hawkins (1996) said that farmers are expected to share the responsibility for the agricultural extension services and pay all or part of the cost.

Rivera (1997) reports the term "privatization" means a full transfer of ownership, usually by way of sale from government to private entity. However, the term is often broadly conceived to efforts by countries to decentralize artificially design their extension system.

Saravanan (1999) termed "privatization of agriculture extension service as to the service rendered in the area of agriculture and allied aspects by extension personnel working in the private agencies or organization for which farmers are expected to pay fee and it can be viewed as supplementary or alternative to public extension.

2.2 Personal, socio – economic, communicational and psychological characteristics of the members of farmers' co-operative seed societies.

Narayan Gowda (1978) reported that the University of Agricultural Sciences (UAS) extension system has served more percentage of high educated farmers (42 per cent) as compared to few such clients (18%) in case of the Karnataka State Department of Agriculture (KSOA). But if we considered medium level education category, the KSDA has served more percentage of such farmers (56 per cent) as against 32 per cent in the case of the UAS clientele. As for farmers with low educational level were, considered, the percentage of farmers served by the KSDA was almost the same.

Himantharaju (1984) reported that 66.67 percent contact farmers had high level of education, 62 percent of them had low size of land holding and 55.33 percent of contact farmers had high level of innovation proneness.

Suresha (1987) reported that 56.66 per cent of small contact farmers had high innovation proneness and 43.37 per cent of contact farmers had low innovation proneness in Tumkur district of Karnataka.

Narayanswamy (1988) reported that 78.3 percent of contact farmer had high education, whereas 21.7 percent of contact farmers had low education in Bangalore district of Karnataka State.

Patel (1996) found that 47 per cent of the potato producers had medium and large size of land holding, respectively. The potato producers with small and marginal land holding were 19 per cent and 10 per cent, respectively.

Saravanan (1999) reported that majority of respondents were from middle age group, had higher secondary level of education, low farm experience, medium socio economic status, medium level of psychological characters and medium to high level of communicational characteristics.

Sharma et al. (1999) reported that majority of trained farmers belonged to general caste, followed by other backward classes group.

Singh (2000) revealed that forty percent (40%) of the paddy growers belonged to the middle age group.

Chaudhary et al. (2001) found that annual income had highly significant and positive correlation with extent of adoption regarding improved rice technology.

Chandra et al. (2002) observed that more than fifty percent of the farmers growing paddy belonged to the middle age group.

Mankar et al. (2000) revealed that impact of training was much effective and helpful in the adoption complex practices of crop production.

Raghu et al. (2003) concluded in a study on effectiveness of training on knowledge that majority of the respondents belonged to middle age group.

Shashidhar (2003) in his study revealed that 42.44 per cent of respondents belonged to medium level of income (Rs. 1 – 2 lakhs) and in low income category, 30 per cent of respondents were noticed, whereas 27.70 per cent of the farmers belonged to high income group.

Raghunandan (2004) reported that 45.00 percent of the respondents (45.33%) belonged to the middle age group, followed by old age (36.25%) and young age group (18.75%), respectively.

Shinde (2004) concluded that higher percentage of respondents growing soybean were higher level of economic motivation.

Verma and Jana (2004) found that half of the farmers growing paddy belonged to middle age group.

Barodia (2005) concluded that maximum number of vegetable growers was having large size of land holding and high economic motivation.

Bhatt (2005) concluded that more than fifty percent (53%) of the paddy farmers belonged to the middle age group (36-55 years).

Ram (2005) observed that maximum percentage of respondents had medium to high source of information.

Saravanan and veerabhadraiah (2005) found that agricultural consultancies clientele had high level of education, annual income, farm size, irrigation intensity, innovation proneness and extension service commitment. Whereas, NGOs clientele had low level of education, annual income, marginal and small farm size. The Farmers' Contact Centers and Agri-

Business Firms clientele had medium level of annual income, farm size and low level of extension service commitment.

Mahovia (2006) concluded that maximum respondents were having only farming as their main occupation.

Dhakad (2006) reported that majority of FLD farmers were practicing farming as their main occupation.

Adhikari (2007) revealed that majority of rice growers were from middle age group.

Chobaitker (2007) revealed that majority (36.67%) of cole growers were having medium income.

Patidar (2007) found that higher percentage (59.17%) of respondents belonged to medium annual income group

Jadhao (2008) reported that higher percentage of respondents had high economic motivation.

Rakesh (2008) found that the result of the present study showed that nearly seventy percent of the respondents (68.33%) belong to middle age group (36-55 years). About 42.34 per cent of the respondents had 12 years and above farming experience and more than sixty per cent (60.83%) of them were dependent on farming as their main occupation. This implies that the respondents had relatively venture some age, sufficient education and better farming experience.

Rakesh (2008) found that more than half of the respondents (53.33%) had medium decision making ability followed by higher percentage of the respondents had high inovatiness and high economic motivation.

Daver (2009) reported that the majority of respondents belonged to middle age group.

Iske (2009) observed in his study that majority 50.00 per cent respondents' belonged to medium annual income group

Mande and Thombre (2009) revealed that majority of respondents had nuclear type of family with medium family size.

Lokhande (2010) revealed that maximum percentages (53.34) of tomato growers were having medium income.

Raghuwansi (2010) concluded that higher percentage of the soybean growers i.e. 41.67 per cent had medium income.

Itawdiya (2011) found that higher percentage (52.22%) of respondents belonged to high mass media use group.

Jatav (2011) found that the higher percentage respondents had high level of training obtained.

Rai (2011) found that the respondents i.e. 44.17 percent had medium size of family.

2.3 Perception towards on private agricultural extension services among the Members of Farmers' co-operative seed societies.

Van den Ban and Hawkins (1996) stated that farmers were expected to share the responsibility for private service and pay all or part of the cost.

Saravanan et al (2000) found that farmers were aware and utilized private agricultural extension service (PAES) Occupation annual income, farm size socio- economic status, level of aspiration and extension agency contact, Psychological characteristics of farmer aware of PAES had significant association with attitude.

Saravanan and Gowda (2000) found that the overwhelming majority of progressive farmers were aware of PAES (91.67%). progressive farmers utilized PASS (96.67%) and a majority of scientists (67.50%) had a favorable

attitude In contrast to this. 70% of extension personnel had least favorable altitude.

Saravanan and Veerabhadraiah (2003) Public extension performance in many developing countries including India is not up to the expectation of farming community further, in recent years, many governments are very reluctant in shoulder huge financial investment for public extension.

Kumar and Reddy (2004) found that the majority of the farmers had realized the advantages of privatization in technological services, providing information on post harvest technology providing information on growth regulators etc.

Rakesh (2008) found that more than 70 per cent of respondents believed that private agencies provide service quickly and systematically, they teach new techniques with interest and solve problems in right time. Followed by 73.00 percent respondents agreed that private agencies serve better than government agencies, and they show close rapport with respondents. Similarly with regard to marketing aspects 63.40 percent of respondents agreed that private agencies provided better market and 51.60 per cent agreed that they also procured the produce from farmer's field to avoid transportation burden. These might be the reasons for high favorableness' of farmers towards privatization.

Rakesh (2008) found that the least favourable attitude of farmers toward PAES might be due to the consideration that small and marginal farmers were not willing to pay for agricultural services. The other possible reason for this might be that these private agencies mainly concentrated their services to horticulture and plantation crops and not on field crops.

Bawa et al (2009) found that 41.3% of the respondents (farmers) strongly agreed about privatization and commercialization of extension service can improve delivery, while 42.3% agreed that privatization and commercialization of extension service can help farmers to have greater

access to farm inputs. Majority (90.8%) of the respondents (extension agents) agreed that privatization will improve efficiency and effectiveness of the extension agents, while 50% of them agreed that privatization can improve extension delivery.

Bawa et al (2009) found that there was a significant relationship between respondent's perception of privatization and commercialization. It was recommended that it should reach an agreement on how to subsidize it. Similarly, age, gender and educational level of the respondents should be considered when planning and organizing for the privatization of the extension services.

Jiyawan et al (2009) found that Privatization of Agricultural Extension Services has become essential in our country to increase the competitiveness among service providers and in turn to give justice to our farmers. Nevertheless, at the same time, it requires great caution about problems and constraints emerging due to privatization. The extension service provided by small-scale Agri-business agencies has to be streamlined and monitored by proper legislation.

Hosseini et al (2012) found that prioritizing of the most important practices for supplying private extension services was farmer's extension organizations, private consultants and allocating subsidy to the farmers.

2.4. Associations between personal, socio-economic, communicational and psychological characteristics of the respondents and their perception regarding private agricultural extension services.

Reddy and Reddy (1977) observed that personal and socioeconomic characteristics were associated with the attitudes of farmers towards crop loan system

Ghosh et al., (1981) found that age, education, land holding, socio-economic status and mass media exposure were not significantly associated with attitude of farmers towards Intensive Agricultural Research System.

Sinha et al, (1983) reported that age, economic motivation were found significant association where as scientific orientation, farm size, were non-significantly associated with attitude of contact farmers towards Training and Visit system.

Vasoya et al, (1983) revealed that contact farmers attitude towards T & V system was not significantly associated with age, size of land holdings, annual Income, socio-economic status, whereas, education extension contact, meet media exposure had significant and positive association with attitude of contact farmers,

Viju and Pillai (1988) observed that economic motivation and annual income of the farmers was significantly associated with the attitude of farmers towards farming.

Naik (1994) found that farming experience was not significantly associated whereas farm size and annual income were significantly associated with their attitude of farmers towards seed supplying agencies.

Suresh Kumar (1997) found that scientific orientation, economic motivation, innovation process were significantly associated, where as farm size was not significantly associated with the attitudes of farmers towards privatization.

Meti (1998) reveals that economic motivation, annual income, mass media exposure were significantly associated but age, farming experience, extension participation, innovation process were not significantly associated with attitude of farmers towards Improved Agricultural Technology.

Sarvana R. (1999) reported that personal, socio-economic psychological and communication characteristics of progressive farmers aware of privatization were significantly associated with their attitude of farmers towards privatization extension services.

Hanchinal (2000) reported that personal, economic, social characteristics were significantly associated with the attitude of farmers towards privatization of agricultural extension services.

2.5 Constraints faced by the members on private agricultural extension Services.

Sharma (1996) analysed the problems faced by farmers in adoption of mustard practices and reported that lack of technical knowledge, high cost of fertilizers and seed and production measures were the main constraints in increasing the production of mustard.

Thyagarajan and Vasantkumar (1998) reported in case of biological constraints that lack of quality seeds was the most important constraint mentioned by 48 percent of the respondents, heavy pest and disease incidence reported by 42.67 % of the respondents, non-availability of high yielding varieties suited to different climatic conditions (42%), followed by lack of suitable technology and variety (39%), inadequate irrigation water (34.33%) and high cost seeds (20.67%).

Njoroge et. al. (1999) concluded that setting up village level seed enterprises will be an effective strategy to open up new opportunities to able adequate quality seed to farmers. The need to involve the barriers stakeholders including farmers, breeders, non - government organization and the private sector in the overall implementation plan is proposed.

Banerjee and Talukdar (2001) reported that lack of infrastructure facilities like transport and communication created problem in expanding the

business and information sources also create the hindrances in making contact with users while women handle enterprises.

Kamla and Raju (2003) reported that 37.50 per cent respondents expressed the problem of transport facility. They further reported that lack of knowledge and skill were perceived as a problem by about 30 per cent respondents.

Shukla et al (2009) stated that technological and socio economic limit were found in adoption of vermin compost (97.1 %), difficulties in storage and use in field (96.40 %), and lack of knowledge about production technology (95.80%) were the major constraints.

Manjul et al. (2010) revealed that the constraints face were, lack of availability of sufficient raw material, lack of technical know-how regarding production of vermi wash and lack of financial support to expand the production.

Bagri (2011) found that major constraints experienced by the respondents were complexity of seed certification process (59.2 %), lack of information about loan and subsidy (55.2 %), seed storage problem (52.8 %), non availability of agriculture information timely (49.6 %), and marketing problem (47.2 %).

2.6 Suggestions for enhancing the utility in availing the benefits of private agricultural extension services.

Kugbei & Gregg, (2005) suggested the village - based seed system as an effective approach for delivering quality seed to farmers, and for improving yields and income of farming households.

Rakesh (2008) suggest that the All most all private agencies focusing on small area, mainly concentrating on all aspects of horticultural crops, diseases and pest control measure, most probably concentrate on big famers.

The private agencies might not be concentrate on small and marginal farmer rainfed areas, issues like environment and human resource development .from the finding of this investigation it was found that Technological aspect made privatization services more popular in the study area. Through it is obvious that total privatization may not be possible in farming community. Therefore, time demand for establishment of public-private linkage agency to facilitate services to all farming community at reasonable services cost, to monitor the work and to get the proper feedback. Based on investigation finding the comprehensive modal for privatization was developed.

Bagri (2011) reported that the major suggestions offered by the respondents have been arranged in descending order on the rank basis as seed certification process should be made simple and easier (64.8 %), there should be timely availability of loan (58.4 %), seed storage facilities should be available nearby village (54.4 %), timely availability of seed and other inputs (45.6 %), more information should be provided about improved seed and seed production.

RESEARCH METHODOLOGY

This chapter deals with the methods and procedures designed for planning and conducting the research study. It deals with information about the study area, hypothesis, variables and their measurement, methods and the procedures used for collection of data for the purpose of study. It also illustrates the tools and methods used for the analysis of data. This chapter is divided into the following sub-heads:-

1. Location and general information of the study area
2. Research design
3. Sampling technique used
4. Operationlization of variables
5. Source of data collection
6. Method of data collection
7. Statistical analysis of the data
8. Hypotheses

1. Location and general information of the study area

Rewa district of M.P., lies between 24'18 and 25'12 north latitudes and 81'2 and 82'18 east longitudes in the north-east of the division of the same name. The district is bounded on the north and east by the state of Uttar Pradesh, in the south Sidhi district and in the west with Amarpatan and Raghurajnagar Tehsheel of Satna district. In shape the district can be compared to an isosceles triangle, with its base along the Satna border and the two longer arms converging towards Mauganj in east. It has geographical area of 561606 hectares. The population of the district on the basis of 2011 census is 2,363,744. The climate of city Rewa some time changes to extremes. In summer, the temperature can vary from the lowest of 22°C to the maximum of more than 45°C. In winter the minimum temperature falls even up to 3°C. Average rainfall is 890 mm per year. Usually first monsoon shower comes in between end of June to early July.

2. Research Design

The design of research is most important and crucial aspect of the research methodology. It is the entire process of planning and carrying out the research. To seek the answers for the research question, a descriptive research design was used in the investigation because it is a sort of fact-finding operation with adequate interpretation. It clearly states the characteristics of the particular situation of group or individuals. In this design the variables are to be known.

3. Sampling technique used

The sample of the present study was selected by stratified sampling method. The various stages of the sample were as -

- (i) Selection of block
- (ii) Selection of villages
- (iii) Selection of respondents

(i) Selection of the block

The present study was carried out in Rewa district. Rewa block was selected on the basis of having maximum number of farmer's cooperative seed societies as compared to other block in Rewa district.

Table - 3.1 List of selected block of members of Farmers co-operative seed societies in Rewa District (M.P.)

S.N.	Block	Total No. of Societies	Total No. of Members
1	Rewa	12	692
2	RaipurKarchuliyan	11	189
3	Hanumana	10	239
4	Gangeo	10	168
5	Teonther	7	141
6	Sirmaur	4	70
7	Naigadhi	4	47
8	Mauganj	4	134
9	Java	1	20
	TOTAL	63	1700

(ii) Selection of the villages

A list of 9 villages of Rewa block was prepared on the basis of maximum number of farmer's cooperative seed societies. From this list 9 villages with maximum number of co-operative seed societies were selected. The Rewa block comprises of 692 members of farmer's co-operative seed societies in 12 villages. Out of which 5 villages have been selected purposively on the basis of higher number of members in co-operative seed societies. The villages were Amiliki, Gadokhar, Vihra, Padokhar, and Rahat.

Table - 3.2: List of selected villages, number of respondents for privatization of agricultural extension services and selected respondents from each village.

S.N.	Village	Total No. of Members	No. Of Members/ respondents selected
1	Amiliki	250	56
2	Gadokhar	110	24
3	Vihra	87	19
4	Padokhar	50	11
5	Rahat	45	10
	Total	542	120

(iii) Selection of the respondents

After the selection of the villages, a village wise list of members of co-operative seed societies was prepared. From each selected village, societies, members have been selected through proportionate random sampling method to make a sample size of 120 respondents. Thus, finally the sample consisted of 120 respondents.

4. Operationlization of the variables

Social scientists hold the view that there exists a gap between theory and empirical research. The theorists use conceptual variables that are formulated at high level of abstraction. Most of the social scientists attempt to solve measurement problems by operationally defining the conceived variables and then by either using available measures or by designing one' own measure.

A number of terms and variables have been used in the present study with specific meaning. Obviously these terms require operationlization.

(A) Independent variables

1. Age

It refers to actual age of the respondents in completed years, i.e. chronological age of the respondent. The actual age was recorded as told by the respondents at the time of interview. Thus, data obtained were grouped into following three age-groups.

S. No.	Categories	Age-Groups (years)
1.	Young	21-35
2.	Middle	36-50
3.	Old	Above 51

2. Caste

The caste refers to an individual's ritual caste in which he was born. The respondents were grouped into the following four categories on the basis of their caste.

S. No.	Categories	Weightage
1.	Schedule Caste & Schedule Tribe	1
2.	Other Backward Caste (O.B.C.)	2
3.	General	3

3. Education

It refers to the ability or inability to read and write and number of classes of the formal education passed by the respondents. The scale developed by Trivedi and Pareek (1963) was used with slight modification as under.

S. N.	Categories	Education	Weight age
1.	Up to primary	Up to primary	1
2.	Up to middle	Up to middle	2
3.	High school	Up to high school	3
4	above High school	above High school	4

4. Social Participation

It refers to the degree or extent of involvement of an individual in formal and informal social organization at village, block or district level. A list of these organizations was prepared with the help of the village prior to collection of data. The scores assigned for member and office bearer were 1 and 2 respectively. The degree of involvement and frequency of participation in an organization was measured with the allotment of scores 1, 2, 3 for yearly, quarterly and monthly, respectively. The sum of scores of membership and frequency of participation represents a degree of social participation of a respondent. The respondents were further classified into the following three categories on the basis of maximum and minimum scores obtained by them.

S. No.	Category	Score range
1.	Low	Up to 10
2.	Medium	11-15
3.	High	Above 15

5. Family size

It refers to the total number of family members living together in the home. It was categorized into three groups as follow:

S.No.	Category	Weight age
1.	Small (Up to 4 members)	1
2.	Medium (5-7 member)	2
3.	Large (Above 7 member)	3

6. Land holding

The size of land holding refers to total number of hectares of lands under cultivation possessed by an individual. For quantitative measurement of the operational land holding was classified into three categories.

S.No.	Category	Weight age
1.	Small (Up to 4 hectare)	1
2.	Medium (4 to 7 hectares)	2
3.	Large (Above 7 hectares)	3

7. Occupational status

Occupation means the kind of work done by the member in the family for earning their livelihood. Only that kind of work was under taken through which the family earned their livelihood. The respondents were categorized into three occupational groups as.

S. No.	Category	Weight age
1.	Agriculture	1
2.	Agriculture & labour	2
3.	Agriculture & allied activity	3

8. Annual Income

It refers to the total income of the respondents and his family obtained from farming & subsidiary occupation and other sources. The respondents were classified into three categories on the basis of the following range of income.

S. No.	Categories	Weight age
1.	Low (Up to Rs. 1,00,000)	1
2.	Medium (Rs.1,00,000 to 1,50,000)	2
3.	High (Above Rs 1,50,000)	3

9. Farming experience

Farming experience refers to the experience of the respondents in farming and was measured in year. The farming experience has been considered in the study as major factor and classified in to the three categories as under:-

S. No.	Category	Score
1.	Low (Up to 3 years)	Up to 6
2.	Medium (3.1 to 5 years)	7 - 9
3.	High (Above 5 years)	Above 9

10. Information management behavior

After evaluation, the scientific farm information by the individual farmers, he may lead to its storage/preservation for future use. The information preservation behavior of the farmers has been operationally defined as the activities performed by individual farmers for storage/preservation of the obtained practices sustainable livelihood diversification for future reference. An index was developed to measure the information management behavior of the respondents. The index consisted of seven items. The index respondents of the respondents against recorded on 3 point continuum scale as always, some time and never with the scores 3,2 and 1 respectively. The scores of all the items were summed up to obtain the information management behavior index of an individual respondent. This was quantified by using the scale developed by Bhople (1995).

The respondents were then categorized into three categories as follows.

S. No.	Category	Score range	Weight age
1	Low	Up to 5	1
2	Medium	6 – 8	2
3	High	Above 8	3

11. Mass Media used

It is the extent to which an individual is exposed to message and information coming through various mass media like radio, television, newspaper etc. A three continuum scale was used with the score 2, 1, 0 to the frequency of exposure to different media as often, some time and never respectively.

On the basis of maximum and minimum total mass media exposure scores obtained by the respondent, they were classified into following three categories:

S. No.	Categories	Score range
1.	Low	(1 to 6)
2.	Medium	(7 to 11)
3.	High	(Above 11)

12. Source of information

It is the extent to which individual gets latest agricultural information from various extension / communication sources i.e. RAEO, ADO/SADO, scientists, SMS etc. A three-point continuum scale was used to ascertain the extent of source of information of the respondents.

Weightage was given to the extent an individual used a particular source of communication for getting agricultural information. The scores allotted were to the frequency of contact with different sources were 2, 1, 0 for often, some time and never respectively.

Farmers were categorized into the following three groups on the basis of the total scores obtained by the respondents.

S. No.	Categories	Score range
1.	Low	(1 to 6)
2.	Medium	(7 to 12)
3.	High	(Above 12)

13. Trainings obtained

Training obtained is the process by which desired knowledge, skill, attitude and idea are included and reinforced in an organism. Basic purpose of training is to improve the efficiency of making decisions. It involves imparting knowledge and development of skills and habits. Operationally, training has been defined in this study as a kind of learning process where

selected group of individuals undergo learning experience to internalize the skill, resulting in the modification of behavior towards specific job performance. The respondents have been divided into the following three categories depending upon the number of seed village programme trainings attended by them selves. The respondents were categorized into three groups as bellow:

S. No.	Categories (Training attended)	Score range
1.	Low (Up to 2 trainings)	1
2.	Medium (3-4 trainings)	2
3.	High (5 and above trainings)	3

14. Decision making

Decision making refers to the cognitive process of reaching a decision. It can be regarded as the mental processes (cognitive process) resulting in the selection of a course of action among several alternative scenarios. However, studies have shown that most people are much poorer at decision making than they think every decision making process produces a final choice. Decision making means reaching to a conclusion as to what should be done to solve or accomplish a particular problem or a task.

To measure the decision making pattern related to agricultural activities thirteen items viz. decision making in crop selection, variety selection, field preparation etc. were considered. Responses were recorded on 3 point continuum as completely, partially and never against each item with the scores 3, 2, and 1 respectively. The decision making score of the respondents were worked out by adding the scores obtained in respect of each item together. The respondents were categorized in to the following three categories on the basis of maximum and minimum obtained scores:-

S. No.	Categories	Score range
1.	Low	Up to 18
2.	Medium	19-21
3.	High	Above 21

15. Innovativeness

Innovation proneness refers to the degree of mental preparedness to perceive the recommended technology. Those farmers who perceive any innovation immediately are called more innovative and those who perceive after sometime are called as less innovative. In brief innovation proneness of those farmers who are always in search of innovations or new ideas related to agricultural technologies for applying it to their field are considered as high. On the contrary innovation proneness is considered as low in case of such respondents who do not take much interest in agricultural innovations. A three point's continuum was used to measure the innovation proneness. The scores assigned for expressions of respondents against each statement were 3, 2, 1 for often, some time and never. The total score of each respondent was calculated and the respondents were categorized into the following categories on the basis of the maximum and minimum scores obtained by them.

S. No.	Categories	Score range
1.	Low	(Upto 6)
2.	Medium	(7 - 9)
3.	High	(Above 9)

16. Economic motivation

McClelland (1961) defined economic motivation as a social value that emphasizes a desire for the excellence of an individual to attain a sense of personal accomplishment. It is operationally defined as the desire for excellence of dairy farmers to attain a sense of his personal accomplishment. The instrument consisted of nine statements. Each statement had three options with the scores 3,2 and 1 respectively economic motivation. On the basis of maximum and minimum total economic motivation scores obtained by the respondents they were classified into following three categories:

S. No.	Categories	Score range
1.	Low	Up to 12
2.	Medium	13 - 15
3.	High	Above 15

(B) Dependent variable

1. Perception of members of farmer's co-operative seed societies regarding privatization of agricultural extension services.

In the present study Perception of farmers towards Privatization of Agricultural Extension Service agencies (PAESA) was taken as dependent variable. In the present investigation, perception is operationally defined as personal interpretation of respondents about the utility of aspects of private extension services. Perception of farmers was measured with the help of scale developed by Hanchinal S. N. (1990). It was prepared in consultation with agricultural scientists, extensionists and extension officers. The scale consisted of fifty two statements which were grouped under six different services as technological services, inputs services, marketing services,

institutional services, extension services, enterprise services respectively. Out of fifty two selected statements thirty one were positive and remaining twenty one statements were negative. These statements were arranged alternatively to avoid response bias. Responses were recorded on five point continuum of agreement and disagreement as followed by Likert (1932) in his 'summated rating techniques' of Perception measurement. The five -point continuum as strongly agree, agree, undecided, disagree, strongly disagree and were given 5, 4, 3, 2, and 1 scores, respectively. The reverse of the scoring was used for negative statements. The obtained total perception score range was from 109 to 224. The total score explains the Perception of farmers towards Privatization of Agricultural Extension Service agencies (PAESA). On the basis of maximum and minimum scores obtained by the respondents they were categorized into the following three categories-

S. No.	Degree of Perception	Score range
1.	Fully agree	109-148
2.	Partially agree	149-187
3	Not agree	Above 187

Hence, the total number of 52 respondents had obtained maximum scores upto 224 whereas 29 respondents had obtained minimum score upto 109.

5. Sources of data collection

The following sources were used for the purpose of data collection.

(i) Primary data

The researcher collected the primary data personally by interviewing the selected respondents with the help of structured and pre - tested interviews schedule.

(ii) Secondary data

The secondary data were obtained from the various government offices and publications.

6. Method of data collection

An interview schedule was designed for collecting the relevant information of selected variables. The data were collected personally with the help of pre tested interview schedule. The researcher personally contacted the respondents. They were assured that the information given by them would be kept confidential and it would only be used for the academic purposes.

7. Statistical analysis of data

Data collected were qualitative as well as quantitative. The quantitative data were interpreted in terms of percentage and qualitative data were tabulated on the basis of approved categorization method as described earlier, the following statistical techniques were used in the study.

Chi-square test

The association of different attributes of respondents with their utilization pattern about indigenous technical knowledge was tested by chi-square test (χ^2). For this purpose the following formula was used

$$\chi^2 = \sum \frac{(O_i - E_i)^2}{E_i} \text{ With d.f. } (r - 1) (c - 1)$$

Where,

o =	observed frequency
e =	Expected frequency
Σ =	Summation over all differences
r =	Number of rows
c =	Number of columns
d.f. =	Degree of freedom

The extent of association was calculated by using Pearson's contingency coefficient 'C' formula

$$C = \sqrt{\frac{t^2}{t^2 + N}}$$

Where,

t^2 : Value of chi-square

N: total number of observation

C: Co-efficient of association

For practical explanation of the extent of association, the contingency co-efficient of association values were interpreted as -

- (i) 0.00 to 0.20 (negligible association)
- (ii) 0.21 to 0.40 (fair association)
- (iii) 0.41 to 0.60 (good association)
- (iv) Above 0.60 (excellent association)

Correlation analysis

The relationship of selected independent variables was ascertained with the help of Pearson's product moment correlation coefficient, the value of correlation coefficient have been worked out by using the following formula.

$$r_{xy} = \frac{COV(X.Y)}{\sqrt{(V(x) \times V(y))}}$$

Where,

r_{xy} = Correlation coefficient between x and y.

$COV(X.Y)$ = Co-variance between x and y

$V(x)$ = Co-variance between x and y

σ^2 = Variance of x and $V(y)$ = Variance of y.

8. Hypotheses -

On the basis of objectives and variables incorporated the study, the following null hypotheses were formulated for the study.

1. There is no association between age of respondents and their perception regarding privatization of agricultural extension services.
2. There is no association between caste of respondents and their perception regarding privatization of agricultural extension services.
3. There is no association between educational level of respondents and their perception regarding privatization of agricultural extension services.
4. There is no association between social participation of respondent farmers and their perception regarding privatization of agricultural extension services.
5. There is no association between size of family of respondents and their perception regarding privatization of agricultural extension services.
6. There is no association between land holding of respondents and their perception regarding privatization of agricultural extension services.
7. There is no association between occupation status of respondents and their perception regarding privatization of agricultural extension services.
8. There is no association between annual income of respondents and their perception regarding privatization of agricultural extension services.
9. There is no association between farming experience of respondents and their perception regarding privatization of agricultural extension services.
10. There is no association between information management behavior of respondents and their perception regarding privatization of agricultural extension services.

11. There is no association between mass media use of respondents and their perception regarding privatization of agricultural extension services.
12. There is no association between use of source of information of respondents and their perception regarding privatization of agricultural extension services.
13. There is no association between training obtained of respondents and their perception regarding privatization of agricultural extension services.
14. There is no association between input decision making of respondents and their perception regarding privatization of agricultural extension services.
15. There is no association between innovativeness of respondents and their perception regarding privatization of agricultural extension services.
16. There is no association between economic motivation of respondents and their perception regarding privatization of agricultural extension services.

PRESENTATION OF DATA

This chapter deals with the analysis and interpretation of the data. The data were collected from a sample of 120 Members of farmer's co-operative seed societies through a well-structured interview schedule. The data were processed and analyzed in line with the objectives of the study.

This chapter has been presented under the following sections:

1. To study the personal, socio – economic, communicational and psychological characteristics of the members of farmers' co-operative seed societies.
 2. To assess the perception towards on private agricultural extension services among the Members of farmer's co-operative seed societies.
 3. To determine the extent of association between personal, socio–economic, communicational and psychological characteristics of the respondents and their perception regarding private agricultural extension services.
 4. To enlist the constraints faced by the members on private agricultural extension services.
 5. To find out the suggestions for enhancing the utility in availing the benefits of private agricultural extension services.
- 1. Personal, socio – economic, communicational and psychological Characteristics of the members of farmers' co-operative seed societies.**

Table 4.1: Distribution of the respondents according to their age

S.No.	Age group (Years)	Number of respondents	Percentage
1.	Young	28	23.33
2.	Middle	55	45.83
3.	Old	37	30.83
Total		120	100

The data in Table 4.1 exhibit that out of 120 respondents, the majority of the respondents i.e. 45.83 percent belonged to middle age group, where as 30.83 percent were from old age group, and remaining 23.33 percent were from young age group.

Table 4.2: Distribution of the respondents according to their caste

S.No.	Caste category	Number of respondents	Percentage
1.	SC & ST	21	17.5
2.	OBC	47	39.16
3.	General	52	43.33
Total		120	100

The data of Table 4.2 indicate that out of 120 respondents the majority i.e. 43.33 percent belonged to general category, 39.16 percent were found to be in other back word category, 17.5 percent belonged to schedule caste & schedule tribe.

Table 4.3: Distribution of the respondents according to their level of education

S.No.	Education Level	Number of respondents	Percentage
1.	Up to primary	23	19.16
2.	Up to middle	20	16.66
3.	High school	28	23.33
4.	above High school	49	40.83
Total			100

The data of Table 4.3 indicate that out of 120 respondents the majority i.e. 40.83 percent was found to be educated up to high secondary & above level, 23.33 percent were found to be educated up to high school, 19.26

percent were educated up to primary and above level and remaining 16.66 percent were educated up to primary level.

Table 4.4: Distribution of the respondents according to their social participation

S.No.	Categories	Number of respondents	Percentage
1.	Low	24	20.00
2.	Medium	35	29.16
3.	High	61	50.83
Total		120	100

The data in Table 4.4 depict that out of 120 respondents the majority i.e. 50.83 percent had high level of social participation, 29.16 percent had medium, while 20 percent had low level of social participation.

Table 4.5: Distribution of the respondents according to their size of family

S.No.	Size of family	Number of respondents	Percentage
1.	Low	31	25.83
2.	Medium	52	43.33
3.	High	37	30.38
Total		120	100

The data in Table 4.5 depict that out of the 120 respondents the majority i.e. 43.33 percent had medium size of family, 30.38 percent had high, while only 25.83 percent possessed low size of family.

Table 4.6: Distribution of the respondents according to their operational land holding

S.No.	Land holding	Number of respondents	Percentage
1.	Small	16	13.33
2.	Medium	41	34.16
3.	Large	63	52.50
Total		120	100

The data in Table 4.6 depict that out of the 120 respondents the majority i.e. 52.50 percent had large size of land holding, 34.16 percent had medium, while only 13.33 percent possessed small size of land holding.

Table 4.7: Distribution of the respondents according to their Occupation

S.No.	Occupational status	Number of respondents	Percentage
1.	Agriculture	55	45.83
2.	Agriculture & labor	34	28.33
3.	Agriculture & other	31	25.83
Total		120	100

The data of Table 4.7 indicate that out of 120 respondents, the majority i.e. 45.83 percent belonged to farming agriculture occupation group, 28.33 percent belonged to agriculture & labor occupation group and remaining 25.83 percent belonged to agriculture & other occupation group.

Table 4.8: Distribution of the respondents according to their annual income

S. No.	Annual income	Number of respondents	Percentage
1.	Low	21	17.50
2.	Medium	58	48.33
3.	High	41	34.16
Total		120	100

The data of Table 4.8 indicate that out of 120 respondents the majority i.e. 48.33 percent belonged to medium annual income group, 34.16 percent belonged to high annual income group and remaining 17.50 percent belonged to low annual income group.

Table 4.9: Distribution of the respondents according to farming experience

S.No.	Farming experience	Number of respondents	Percentage
1.	Low	26	21.66
2.	Medium	44	36.66
3.	High	50	41.66
Total		120	100

In the Table 4.9.the data indicate that the majority of the respondents i.e. 41.66 percent were from high farming experience group, while 26.66 percent respondents medium farming experience whereas 21.66 percent were from low farming experience group.

Table 4.10: Distribution of the respondents according to their Information management behavior

S.No.	Information management behavior	Number of respondents	Percentage
1.	Low	33	27.50
2.	Medium	38	31.66
3.	High	49	40.83
Total		120	100

The data in the Table 4.10 revealed that out of 120 respondents the majority of the respondents i.e. 40.83 percent of respondents had high level of information management behavior, 31.66 percent had medium level of information management behavior, whereas only 27.50 percent were having low information management behavior.

Table 4.11: Distribution of the respondents according to their mass media

S. No.	Decision making	Number of respondents	Percentage
1.	Low	33	27.50
2.	Medium	38	31.66
3.	High	49	40.83
Total		120	100

The Table 4.11 provides the information regarding mass media sources of information used by the respondents. The data indicate that the majority of the respondents i.e. 40.83 percent used mass media to high extent, while 31.66 percent respondents used mass media to medium extent whereas 27.50 percent used mass media to low extent.

Table 4.12: Distribution of the respondents according to their preference in use of sources of information

S. No.	Use of source of information	Number of respondents	Percentage
1.	Low	24	20.00
2.	Medium	41	34.16
3.	High	55	45.83
Total		120	100

The data in the Table 4.12 revealed that out of 120 respondents the majority of the respondents i.e. 45.83 percent of respondents had high level of preference in use of source of information, 34.16 percent had medium level of use of source of information, whereas only 20.0 percent had low preference in Use of source of information.

Table 4.13: Distribution of the respondents according to their training obtained

S.No.	Training obtained	Number of respondents	Percentage
1.	Low	30	25.00
2.	Medium	38	31.66
3.	High	52	43.33
Total		120	100

The data of table 4.13 indicate that out of 120 respondents the majority i.e. 43.33 percent belonged to high number of training obtained group, 31.66 percent belonged to medium and remaining 25 percent belonged to low number of training obtained group.

Table 4.14: Distribution of the respondents according to decision making

S.No.	Decision making	Number of respondents	Percentage
1.	Low	25	20.83
2.	Medium	49	40.83
3.	High	46	38.83
Total		120	100

The data of Table 4.14 indicate that out of 120 respondents the majority i.e. 40.83 percent belonged to medium number of decision making group, 38.83 percent belonged to high and remaining 20.83 percent belonged to low number of decision making category.

Table 4.15: Distribution of the respondents according to their innovativeness

S.No.	Innovativeness	Number of respondents	Percentage
1.	Low	20	16.66
2.	Medium	40	33.33
3.	High	60	50.00
Total		120	100

The data in the Table 4.15 revealed that out of 120 respondents the majority of the respondents i.e. 50 percent of respondents had high level of innovativeness, 33.33 percent had medium level of Innovativeness, whereas only 16.66 percent were having low Innovativeness.

Table 4.16: Distribution of the respondents according to their Economic motivation

S.No.	Economic motivation	Number of respondents	Percentage
1.	Low	25	20.83
2.	Medium	36	30.00
3.	High	59	49.16
Total		120	100

The data in the Table 4.16 revealed that out of 120 respondents the majority of the respondents i.e. 49.16 percent of respondents viewed about economic motivation high, 30 percent medium economic motivation whereas only 20.83 percent expressed low economic motivation.

2. The perception towards private agricultural extension services among the Members of Farmers' co-operative seed societies.

As mentioned earlier the perceptions of the respondents on privatization of agricultural extension services have been assessed separately. The perceptions of the respondents regarding the each aspect of privatization of agricultural extension services components have also been worked out.and depicted in table 4.17

Table 4.17: Perception of members of farmer's co-operative seed societies regarding different service aspects of privatization of agriculture extension services.

S. N.	Different services aspect Statement	Total score	Mean score	Perception index	Rank
A	TECHNICAL SERVICE				
1	Provide important tech Services easily	400	3.33	66.66	II
2	Use all suitable communication techniques	305	2.54	50.83	VI
3	Don't be able to solve the problem of farmers	303	2.52	50.50	VII
4	Introduce new techniques	266	2.21	44.33	XII
5	Farmers don't believe in those technical advice which provide PAESA	264	2.20	44.00	XIII
6	Don't provide information related to the seed production	207	1.72	34.50	XV
7	Don't provide the information about land & agricultural climatic regions	249	2.07	41.50	XIV
8	Don't provide the hazard programme	300	2.50	50.00	VIII
9	Provides information about intercropping	308	2.56	51.33	V
10	Does not give the information about use of growth regulators	311	2.59	51.83	IV
11	Provides information about IPM	372	3.10	62.00	III
12	Provides information about the technologies after harvesting	293	2.44	48.83	XI
13	Give information about crop rotation	298	2.48	49.66	IX
14	Provides information about hybrid seed	402	3.35	67.00	I
15	Don't give information of IPNM	297	2.47	49.50	X
	Average mean score of perception		2.54		
B	INPUT SERVICE				
1	Help to provide seed, fertilizers, and chemical	530	4.41	88.33	I
2	Increase the cost of input	485	4.04	80.83	II
3	Carried input to the farmers home	402	3.35	67.00	V

4	Don't Provide the input material for the crop demonstration	368	3.06	61.33	VIII
5	Give information on variety of seed crops	360	3.00	60.00	IX
6	Don't Supply plantation inputs	425	3.54	70.83	IV
7	Supply of weedicides	465	3.80	77.50	III
8	Provide good quality of seed	399	3.32	66.50	VI
9	Give information of biological seed	380	3.16	63.33	VII
10	Don't Provide the input related organic seed treatment	248	2.06	41.33	X
Average mean score of perception			3.38		
C	MARKETING SERVICE				
1	Provide good marketing facility	211	1.75	35.16	V
2	Don't give the information about seed grading	250	2.08	41.66	IV
3	Provide suitable as balance a services	252	2.09	42.00	III
4	Give the information about marketing price or rate	150	1.25	25.00	VI
5	Don't give the information about seed contamination	400	3.33	66.66	II
6	Interfere with mediators	412	3.43	68.66	I
Average mean score of perception			2.32		
D	INSTITUTIONAL SERVICE				
1	Provides seed storage facilities.	416	3.46	69.33	I
2	Provides subsidies and incentives	266	2.21	44.33	V
3	Don't help for provide loan	233	1.90	38.83	VI
4	Don't give the information of crop insurance	367	3.05	61.16	III
5	Give the loan on minimum (low) interest	342	2.85	57.00	IV
6	Provide information of seed production from various institutions	405	3.37	67.50	II
Average mean score of perception			2.81		
E	EXTENSION SERVICES				
1	Distribute literature related to seed production	459	3.82	76.50	II
2	Organize the meeting, field visit and tour	462	3.85	77.00	I
3	Organize the training camp	387	3.22	64.50	V
4	Don't organize sangosti	414	3.45	69.00	IV
5	Don't Organize the farmers fair	458	3.81	76.33	III

6	Provides information timely through newspaper, television, radio etc.	225	1.87	37.50	IX
7	Provides information in mobile phone	330	2.75	55.00	VII
8	Don't organize crop demonstration	316	2.63	52.66	VIII
9	Present importance of new techniques in local condition	383	3.19	63.83	VI
Average mean score of perception			3.17		
F	ENTERPRISE SERVICE				
1	Providing information on technological infrastructure	203	1.69	33.83	IV
2	Don't provides information on Seed production enterprise services	198	1.65	33.00	V
3	Don't give the information about dairy, goatry, and sheepkeeping	241	2.00	40.16	I
4	Provide information related to horticulture	205	1.70	34.16	III
5	Supply of seed and planting materials	196	1.64	32.66	VI
6	Provides information about Seed processing unit	207	1.71	34.50	II
Average mean score of perception			1.73		
Overall mean score of perception			2.65		

Table 4.17 depicted perception of the members of farmer's co-operative seed societies regarding different service aspects of privatization of agriculture extension services.

The individual service aspect of privatization of agriculture extension related to technical service aspect concerned it was found that the highest mean perception score was 3.35 in providing information about hybrid seed, and lowest mean perception score was 1.72 in respect to do not provide timely information related to the seed production by co-operative seed societies.

As regard the Input services was concerned mean perception score (4.41) was found highest in respect to help to provide seed, fertilizers, and

chemical, whereas lowest mean perception score (2.06) was related to do not provide input material such as organic seed treatment.

As far as marketing services was concerned the mean perception (3.43) score was highest in interfere with mediators, and lowest mean perception score 1.25 was related to give the information about marketing price or rate.

As regards institutional services, mean perception score (3.46) was highest in providing seed storage facilities and lowest mean perception score (1.90) was related to do not help for providing loan.

As far as extension services was concerned mean perception score (3.85) was highest in distributing literature related to seed production, and lowest mean perception score (1.87) was related to do not organize crop demonstration.

Regarding enterprise service, the highest mean perception score (2.00) was related to do not give the information about dairy, goatry, and sheep keeping and lowest mean perception score (1.64) was related to supply of seed and planting materials.

Hence it could be concluded that the average mean perception score (3.38) of input service aspect followed by (3.17) of extension service aspect and score (2.81) of institutional service aspect were found to be higher in comparison to overall average mean perception score (2.65) in relation to various service aspects of privatization of agriculture extension services. Whereas, the average mean perception score (2.54) of technical service aspect, The score (2.32) of marketing service aspect and score (1.73) of enterprise service aspect were found to be lower in comparison to overall average mean perception score of various service aspects of privatization of agriculture extension services.

Table 4.18 Ranking of different services aspects components of private agricultural extension services

S.N.	Services aspects	Perception index	Mean perception score	Rank
1	Technological service	50.83	2.54	IV
2	Input service	67.00	3.38	I
3	Marketing service	46.52	2.32	V
4	Institutional service	56.36	2.81	III
5	Extension service	63.59	3.17	II
6	Enterprise service	34.72	1.73	VI
Overall mean score of perception			2.65	

In the Table 4.18 depicted the ranking of the different services aspect components of private agricultural extension services, it is evident that the aspect of input service had the highest mean perception score (3.38), having rank Ist followed by extension service (3.17) with the rank IInd, institutional service (2.81) ranked IIIrd, technological services (2.54) ranked IVth, marketing service (2.32) ranked Vth and enterprise service (1.73) with rank VIth.

Table 4.19: Distribution of the respondents according to their perception of privatization of agricultural extension services

S.No.	Perception	Number of respondents	Percentage
1.	Fully agree	29	24.16
2.	Partially agree	39	32.50
3.	Not agree	52	43.33
Total		120	100

The data presented in the Table 4.19 depict that out of 120 respondents the majority of the respondents i.e. 43.33 percent had highly favourable perception, 32.50 percent had moderately favourable perception whereas only 24.16 percent had unfavourable perception on privatization of agricultural extension services conducted by Rewa block.

(3) Association between personal, socio–economic, communicational and psychological characteristics of the respondents and their perception regarding private agricultural extension services.

Table 4.20: Association between age and perception of members of farmer’s co-operative seed societies regarding privatization of agriculture extension services

Age Group	Perception						Total	
	Unfavourable		Moderately favourable		Highly favourable			
	No.	%	No.	%	No.	%	No.	%
Young	8	28.57	11	39.28	9	32.14	28	23.33
Middle	11	20.00	15	27.27	29	52.72	55	30.83
Old	10	27.02	13	35.13	14	37.83	37	45.83
Total	29		39		52		120	100

$t^2 = 3.870$, non significant at 5% level with 4 d.f.

The data of Table 4.20 indicate that out of 28 respondents of young age group, the majority i.e. 39.28 percent belonged to moderately favorable perception, followed by 32.14 percent highly favorable perception, and only 28.57 percent showed unfavorable perception.

In case of the 55 respondents of middle age group, the majority i.e. 52.72 percent belonged to highly favorable perception followed by 27.27 percent moderately favorable perception and 20 percent belonged to unfavorable perception.

In case of remaining 37 respondents 37.83 percent belonged to highly favorable perception, followed by 35.13 percent moderately favorable perception and 27.02 percent unfavorable perception.

When the χ^2 test was applied to the data the calculated χ^2 value 3.870 was found to be non significant at 4 d.f. and 5 percent level.

Hence the null hypothesis may be accepted and it could be concluded that there was no significant association between age and privatization of agricultural extension services.

Table 4.21: Association between caste and perception of members of farmer's co-operative seed societies regarding privatization of agriculture extension services.

Caste	Perception						Total	
	Unfavourable		Moderately favourable		Highly favourable			
	No.	%	No.	%	No.	%	No.	%
S C & ST	7	33.33	9	42.85	5	23.80	21	17.50
O.B.C.	9	19.14	17	36.17	21	44.68	47	39.16
General	13	25	13	25	26	50	52	43.33
Total	29		39		52		120	100

$t^2 = 5.42$, non significant at 5% level with 6 d.f.

Table 4.21 shows that out of 21 respondents who belonged to schedule caste and schedule tribe category, the majority i.e. 42.85 percent had moderately favourable perception, 33.33 percent had unfavourable perception and only 23.80 percent showed highly favourable perception.

As regards 47 respondents who belonged to OBC, the majority i.e. 44.68 percent had highly favourable perception, 36.17 percent had moderately favourable perception where as only 19.14 had unfavourable favourable perception.

Out of 52 respondents who belonged to general caste category, the majority i.e. 50 percent had highly favourable perception, 25 percent had moderately favourable perception where as only 25 had unfavourable perception.

When the χ^2 test was applied to the data, the calculated χ^2 value 5.42 was found to be non significant at 6 d.f. and 5 percent level.

Hence the null hypothesis may be accepted and it could be concluded that there was non-significant association between caste and privatization of agricultural extension services.

Table 4.22: Association between education and perception of members of farmer's co-operative seed societies regarding privatization of agriculture extension services

Education	Perception						Total	
	Unfavourable		Moderately favourable		Highly favourable			
	No.	%	No.	%	No.	%	No.	%
Up to Primary	12	52.17	6	26.08	5	21.73	23	19.16
Up to Middle	5	25	5	25	10	50	20	16.66
High school	6	21.24	11	39.28	11	39.28	28	23.33
Above High school	6	12.24	17	34.69	26	53.06	49	40.83
Total	29		39		52		120	100

$t^2 = 15.40$ significant at 5 % level with 6 d.f.

Table 4.22 shows that out of 23 respondents who were educated upto Primary, the majority i.e. 52.17 percent had unfavourable perception, 26.08 percent moderately favourable perception, and only 21.73 percent were having highly favourable perception.

Out of 20 respondents belonging educated upto middle, the majority i.e. 50 percent had highly favourable perception, 25.00 percent had moderately favourable perception whereas 25.00 percent had unfavourable perception.

As regards 28 respondents who were educated upto high secondary school, the majority i.e. 39.28 percent belonged to moderately also highly favourable perception and 39.28 percent moderately favourable perception, and 21.24 percent had unfavourable perception.

In case of 49 respondents who belonged educated upto higher secondary and above education level category, the majority i.e. 53.06 percent belonged to highly favourable perception followed by 34.69 percent moderately favourable perception, and 12.24 percent had unfavourable perception.

When the χ^2 test was applied to the data the calculated χ^2 value 15.40 was found to be significant at 6 d.f. and 5 percent level.

Hence the null hypothesis may be rejected and it could be concluded that there was significant association between education and privatization of agricultural extension services.

Table 4.23: Association between social participation and perception of members of farmer’s co-operative seed societies regarding privatization of agriculture extension services.

Social Participation	Perception						Total	
	Unfavorable		Moderately favourable		Highly favourable			
	No.	%	No.	%	No.	%	No.	%
Low	10	41.66	8	33.33	6	25.00	24	20.00
Medium	6	17.14	12	34.28	17	48.57	35	19.16
High	13	21.31	19	31.34	29	47.54	61	50.83
Total	29		39		52		120	100

$t^2 = 6.36$, non significant at 5% level with 4 d.f.

Table 4.23 shows that out of 24 respondents who had low level of social participation, the majority i.e.41.66 percent had unfavourable moderately favourable perception, 33.33 percent moderately favourable perception, and only 25.00 percent showed highly favourable perception.

Out of 35 respondents who had medium level of social participation, the majority i.e 48.57 percent had highly favourable perception, 34.28 percent

had moderately favourable perception and 17.14 percent had unfavourable perception.

As regards 61 respondents who had high level of social participation, the majority i.e 47.54 percent had highly favourable perception, 31.34 percent had moderately favourable perception, where as only 21.31 had unfavourable perception.

When the χ^2 test was applied to the data the calculated χ^2 value 6.36 was found to be non significant at 4 d.f. at 5 percent level.

Hence the null hypothesis may be accepted and it could be concluded that there was non-significant association between social participation and privatization of agricultural extension services..

Table 4.24: Association between size of family and perception of members of farmer’s co-operative seed societies regarding privatization of agriculture extension services

Size of family	Perception						Total	
	Unfavourable		Moderately favourable		Highly favourable			
	No.	%	No.	%	No.	%	No.	%
Small	7	22.58	12	38.70	12	38.70	31	25.83
Medium	11	21.15	22	42.30	19	36.53	52	43.33
Large	11	29.72	5	13.51	21	56.75	37	30.38
Total	29		39		52		120	100

$t^2 = 8.95$, non significant at 5% level with 4 d.f.

Table 4.24 shows that out of 31 respondents who had small size of family, the majority i.e. 38.70 percent had highly favourable perception, & 38.70 percent moderately favourable perception, and only 22.58 percent showed unfavourable perception.

Out of 52 respondents who had medium size of family, the majority i.e. 42.30 percent had moderately favourable perception, 36.53 percent had highly favourable perception whereas only 21.15 percent had unfavourable perception.

As regards 37 respondents who belonged to having large size of family, the majority i.e. 56.75 percent had highly favourable perception, 29.72 percent had unfavourable perception where as only 13.51 had moderately favourable perception.

When the χ^2 test was applied to the data the calculated χ^2 value 8.95 was found to be significant at 4 d.f. and 5 percent level.

Hence the null hypothesis may be rejected and it could be concluded that there was significant association between size of family and privatization of agricultural extension services.

Table 4.25: Association between operational landholding and perception of members of farmer's co-operative seed societies regarding privatization of agriculture extension services

Operational landholding	Perception						Total	
	Unfavourable		Moderately favourable		Highly favourable			
	No.	%	No.	%	No.	%	No.	%
Small	5	31.25	5	31.25	6	37.50	16	13.33
Medium	16	39.02	15	36.58	10	24.39	41	34.16
Large	8	12.69	19	30.15	36	57.14	63	52.50
Total	29		39		52		120	100

$t^2 = 14.12$ significant at 5% level with 4 d.f.

Table 4.25 shows that out of 16 respondents who had small operational landholding, the majority i.e.37.50 percent had highly favourable

perception, 31.25 percent moderately favourable perception, and only 31.25 percent showed unfavourable perception.

Out of 41 respondents who had medium size of operational land holding, the majority i.e. 39.02 percent had unfavourable favourable perception, 36.58 percent had moderately perception whereas only 24.39 percent had highly favourable perception.

As regards 63 respondents who had large operational land holding, the majority i.e. 57.14 percent had highly favourable perception, 30.15 percent had moderately favourable perception where as only 12.69 had unfavourable perception.

When the χ^2 test was applied to the data, the calculated χ^2 value 14.12 was found to be significant at 4 d.f. and 5 percent level.

Hence the null hypothesis may be rejected and it could be concluded that there was significant association between operational land holding and privatization of agricultural extension services..

Table 4.26: Association between occupational status and perception of members of farmer's co-operative seed societies regarding privatization of agriculture extension services

Occupational status	Perception						Total	
	Unfavourable		Moderately favourable		Highly favourable			
	No.	%	No.	%	No.	%	No.	%
Agriculture	5	9.09	21	38.18	29	52.72	55	45.83
Agriculture & labour	16	47.05	8	23.52	10	29.41	34	28.33
Agriculture& other occupation	8	25.80	10	32.25	13	41.93	31	25.83
Total	29		39		52		120	100

$t^2 = 16.62$, significant at 5% level with 4 d.f.

Table 4.26 indicates that out of 55 respondents who were practicing belonged to agriculture occupation alone, the majority i.e. 52.72 percent showed highly favourable perception, 38.18 present showed moderately favourable perception and only 9.09 present were having unfavourable perception.

Out of 34 respondents who were practicing agriculture & labour, the majority i.e. 47.05 percent exhibited unfavourable perception, 29.41 percent showed highly favourable perception and 23.52 percent showed moderately favourable perception.

As regarding 31 respondent belonging to the agriculture & other occupational group, the majority i.e. 41.93 percent had highly favourable perception, 32.25 percent showed moderately favourable perception, where as 25.80 percent showed unfavourable perception.

When the χ^2 tests were applied to the data the calculated χ^2 value 16.62 was found to be significant at 4 d.f. and 5 percent level.

Hence the null hypothesis may be rejected and it could be concluded that there was significant association between occupational status and privatization of agricultural extension services.

Table 4.27: Association between annual income and perception of members of farmer's co-operative seed societies regarding privatization of agricultural extension services

Annual Income	Perception						Total	
	Unfavourable		Moderately favourable		Highly favourable			
	No.	%	No.	%	No.	%	No.	%
Low	7	33.33	8	38.09	6	28.57	21	17.50
Medium	16	27.58	24	41.37	18	31.03	58	48.33
High	6	14.63	7	17.07	28	68.29	41	34.16
Total	29		39		52		120	100

$t^2 = 16.13$, significant at 5% level with 4 d.f.

Table 4.27 shows that out of 21 respondents who had low level of annual income, the majority i.e. 38.09 percent had moderately favourable perception, 33.33 percent had unfavourable perception and only 28.57 percent showed highly favourable perception.

Out of 58 respondents who had medium level of annual income, the majority i.e. 41.37 percent had moderately favourable perception, 31.03 percent had highly favourable perception where as only 27.58 percent had unfavourable perception.

As regards 41 respondents who had high level of annual income, the majority i.e. 68.29 percent had highly favourable perception, 17.07 percent had moderately favourable perception, whereas only 14.63 had unfavourable perception.

When the χ^2 tests were applied to the data the calculated χ^2 value 16.13 was found to be significant at 4 d.f. and 5 percent level.

Hence the null hypothesis may be rejected and it could be concluded that there was significant association between annual income and privatization of agricultural extension services.

Table 4.28: Association between trainings obtained and perception of members of farmer's co-operative seed societies regarding privatization of agriculture extension services

Farming experience	Perception						Total	
	Unfavourable		Moderately favourable		Highly favourable			
	No.	%	No.	%	No.	%	No.	%
Low	8	30.76	12	46.15	6	23.07	26	21.66
Medium	12	27.27	8	18.18	24	54.54	44	34.16
High	9	18	19	38	22	44	50	44.66
Total	29		39		52		120	100

$t^2 = 10.73$, significant at 5% level with 4 d.f.

Table 4.28 shows that out of 26 respondents who had low level of Farming experience, the majority i.e. 46.15 percent had moderately favourable perception, 30.76 percent had unfavourable perception and only 23.07 percent showed highly favourable perception.

Out of 44 respondents who had medium level of Farming experience, the majority i.e. 54.54 percent had highly favourable perception, 27.27 percent had unfavourable perception where as only 18.18 percent had moderately favourable perception.

As regards 50 respondents who had high level of Farming experience, the majority i.e. 44 percent had highly favourable perception, 38 percent had moderately favourable perception, where as only 18 present had unfavourable perception.

When the χ^2 tests were applied to the data the calculated χ^2 value 10.73 was found to be significant at 4 d.f. and 5 percent level.

Hence the null hypothesis may be rejected and it could be concluded that there was significant association between Farming experience and privatization of agricultural extension services.

Table 4.29: Association between Information Management Behavior and perception of members of farmer's co-operative seed societies regarding privatization of agriculture extension services.

Information management behavior	Perception						Total	
	Unfavourable		Moderately favourable		Highly favourable			
	No.	%	No.	%	No.	%	No.	%
Low	5	22.72	7	31.81	10	45.45	22	18.33
Medium	16	37.20	8	18.60	19	44.18	43	35.83
High	8	14.54	24	43.63	23	41.81	55	48.83
Total	29		39		52		120	100

$t^2 = 9.86$, significant at 5% level with 4 d.f.

Table 4.29 shows that out of 22 respondents who had low level of Information management behavior, the majority i.e. 45.45 percent had highly favourable and perception, 31.81 percent had moderately favourable perception and only 22.72 percent showed unfavourable perception.

Out of 43 respondents who had medium level of Information management behavior, the majority i.e.44.18 percent had highly favourable perception, 37.20 percent had unfavourable perception where as only 18.60 percent had moderately favourable perception.

As regards 55 respondents who had high level of Information management behavior, the majority i.e. 43.63 percent had moderately favourable perception, 41.81percent had highly favourable perception, where as only 14.54 percent had unfavourable perception.

When the χ^2 tests were applied to the data the calculated χ^2 value 9.86 was found to be significant at 4 d.f. and 5 percent level.

Hence the null hypothesis may be rejected and it could be concluded that there was significant association between Information management behavior and privatization of agricultural extension services.

Table 4.30: Association between Mass media use and perception of members of farmer’s co-operative seed societies regarding privatization of agricultural extension services

Mass media use	Perception						Total	
	Unfavourable		Moderately favourable		Highly favourable			
	No.	%	No.	%	No.	%	No.	%
Low	10	30.30	15	45.45	8	24.24	33	27.50
Medium	8	21.05	14	36.84	16	42.10	38	31.66
High	11	22.44	10	20.40	28	57.14	49	40.83
Total	29		39		52		120	100

$t^2 = 9.81$, significant at 5% level with 4 d.f.

Table 4.30 shows that out of 33 respondents who had low level of Mass media use, the majority i.e. 45.45 percent had moderately favourable perception, 30.30 percent had unfavourable perception and only 24.24 percent showed highly favourable perception.

Out of 3 respondents who had medium level of Mass media use, the majority i.e.42.10 percent had highly favourable perception, 36.84 percent had moderately favourable perception where as only 21.05 percent had unfavourable perception.

As regards 49 respondents who had high level of Mass media use, the majority i.e. 57.14 percent had highly favourable perception, 22.44 percent had unfavourable perception, whereas only 20.40 percent had moderately favourable perception.

When the χ^2 tests were applied to the data the calculated χ^2 value 9.81 was found to be significant at 4 d.f. and 5 percent level.

Hence the null hypothesis may be rejected and it could be concluded that there was significant association between Mass media use and privatization of agricultural extension services.

Table 4.31: Association between use of source of information and perception of members of farmer’s co-operative seed societies regarding privatization of agriculture extension services

Use of Source of information	Perception						Total	
	Unfavourable		Moderately favourable		Highly favourable			
	No.	%	No.	%	No.	%	No.	%
Low	7	29.16	12	50	5	20.83	24	20
Medium	9	21.95	8	19.51	24	58.53	41	34.16
High	13	23.63	19	34.54	23	41.81	55	45.83
Total	29		39		52		120	100

$t^2 = 12.26$, significant at 5% level with 4 d.f.

Table 4.31 shows that out of 24 respondents who had low level of Use of Source of information, the majority i.e. 50 percent had moderately favourable perception, 29.16 percent had unfavourable perception and only 20.83 percent showed highly favourable perception.

Out of 41 respondents who had medium level of Use of Source of Information, the majority i.e. 58.83 percent had highly favourable perception, 21.95 percent had unfavourable perception where as only 19.15 percent had moderately favourable perception.

As regards 55 respondents who had high level of use of source of information, the majority i.e. 41.81 percent had highly favourable perception, 34.54 percent had moderately favourable perception, where as only 23.63 had unfavourable perception.

When the χ^2 tests were applied to the data the calculated χ^2 value 12.26 was found to be significant at 4 d.f. and 5 percent level.

Hence the null hypothesis may be rejected and it could be concluded that there was significant association between source of information and privatization of agricultural extension services.

Table 4.32: Association between trainings obtained and perception of members of farmer's co-operative seed societies regarding privatization of agriculture extension services.

Trainings obtained	Perception						Total	
	Unfavourable		Moderately favourable		Highly favourable			
	No.	%	No.	%	No.	%	No.	%
Low(upto 2 training)	7	23.33	17	56.66	6	20	30	25
Medium(3-4 training)	9	23.68	8	21.05	21	55.26	38	31.66
High (5 & above)	13	25	14	26.92	25	48.07	52	43.33
Total	29		39		52		120	100

$t^2 = 12.73$, significant at 5% level with 4 d.f.

Table 4.32 shows that out of 30 respondents who had attended training upto two training course, the majority i.e. 56.66 percent had moderately favourable perception, 23.33 percent had unfavourable perception and only 20 percent showed highly favourable perception.

Out of 38 respondents who had attended 3 - 4 training course, the majority i.e. 55.26 percent had highly favourable perception, 23.68 percent had unfavourable perception whereas only 21.05 percent had moderately favourable perception.

As regards 55 respondents who had attended 5 & above training course, the majority i.e. 48.07 percent had highly favourable perception, 26.92 percent had moderately favourable perception, whereas only 25 had unfavourable perception.

When the χ^2 tests were applied to the data the calculated χ^2 value 12.73 was found to be significant at 4 d.f. and 5 percent level.

Hence the null hypothesis may be rejected and it could be concluded that there was significant association between trainings obtained and perception privatization of agriculture extension services.

Table 4.33: Association between decision making and perception of members of farmer's co-operative seed societies regarding privatization of agricultural extension services.

Decision making	Perception						Total	
	Unfavourable		Moderately favourable		Highly favourable			
	No.	%	No.	%	No.	%	No.	%
Low	8	32	10	40	7	28	25	20.83
Medium	14	28.57	18	36.73	17	34.69	49	40.83
High	7	15.21	11	23.91	28	60.86	46	38.33
Total	29		39		52		120	100

$t^2 = 9.76$, significant at 5% level with 4 d.f.

Table 4.33 shows that out of 25 respondents who had low level of decision making ability, the majority i.e. 40.00 percent had moderately favourable perception, 32.00 percent had unfavourable perception and only 28 percent showed highly favourable perception.

Out of 49 respondents who had medium level of decision making ability, the majority i.e. 36.73 percent had moderately favourable perception, 34.69 percent had highly favourable perception whereas only 28.57 percent had unfavourable perception.

As regards 46 respondents who had high level of decision making ability, the majority i.e. 60.86 percent had highly favourable perception, 23.91 percent had moderately favourable perception, whereas only 15.21 had unfavourable perception.

When the χ^2 tests were applied to the data the calculated χ^2 values 9.76 was found to be significant at 4 d.f. and 5 percent level.

Hence the null hypothesis may be rejected and it could be concluded that there was significant association between decision making and privatization of agriculture extension services.

Table 4.34: Association between innovativeness and perception of members of farmer's co-operative seed societies regarding privatization of agricultural extension services.

Innovativeness	Perception						Total	
	Unfavourable		Moderately favourable		Highly favourable			
	No.	%	No.	%	No.	%	No.	%
Low	7	35.0	8	40	5	25	20	16.66
Medium	14	35.0	8	20	18	45	40	33.33
High	8	13.33	23	38.33	29	48.33	60	50
Total	29		39		52		120	100

$t^2 = 10.64$, significant at 5% level with 4 d.f.

Table 4.34 shows that out of 20 respondents who indicated low innovativeness, the majority i.e. 40 percent had moderately favourable perception, 35.0 percent had unfavourable perception, while only 25 percent showed highly favourable perception.

Out of 40 respondents who showed medium innovativeness, the majority i.e. 45 percent had highly favourable perception, 35.0 percent had unfavourable perception whereas only 20 percent had moderately favourable perception.

As regards 60 respondents who indicated high innovativeness, the majority i.e 48.33 percent had highly favourable perception, 38.33 percent had moderately favourable perception whereas only 13.33 had unfavourable perception.

When the χ^2 test was applied to the data the calculated χ^2 value 10.64 was found to be significant at 4 d.f. and 5 percent level.

Hence the null hypothesis may be rejected and it could be concluded that there was significant association between innovativeness and privatization of agriculture extension services.

Table 4.35: Association between economic motivation and perception of members of farmer’s co-operative seed societies regarding privatization of agriculture extension services

Economic motivation	Perception						Total	
	Unfavourable		Moderately favourable		Highly favourable			
	No.	%	No.	%	No.	%	No.	%
Low	11	44	5	20	9	36	25	20.83
Medium	8	22.22	9	25	19	52.77	36	30
High	10	16.94	25	42.37	24	40.67	59	49.16
Total	29		39		52		120	100

$t^2 = 10.13$, significant at 5% level with 4 d.f.

Table 4.35 shows that out of 25 respondents who exhibited low economic motivation, the majority i.e. 44 percent had un favourable perception, 36 percent had highly favourable perception and only 20 percent showed moderately favourable perception.

Out of 36 respondents who exhibited medium economic motivation, the majority i.e. 52.77 percent had highly favourable perception, 25 percent had moderately favourable perception whereas only 22.22 percent had unfavourable perception.

As regards 59 respondents who exhibited high economic motivation, the majority i.e. 42.37 percent had moderately favourable perception, 40.67 percent had highly favourable perception whereas only 16.94 had unfavourable perception.

When the χ^2 test was applied to the data the calculated χ^2 value 10.13 was found to be significant at 4 d.f. and 5 percent level.

Hence the null hypothesis may be rejected and it could be concluded that there was significant association between economic motivation and privatization of agriculture extension services

1.Table 4.36: The association between personal, socio – economic, communicational and psychological characteristics of the members of farmers’ co-operative seed societies.

S. No.	Characteristics	t² Value	d.f	c
1.	Age	3.87 ^{Ns}	4	0.14
2.	Caste	5.42 ^{Ns}	4	0.20
3.	Education level	15.40 *	6	0.32
4.	Social participation	6.36 ^{Ns}	4	0.22
5.	Size of family	8.95 ^{Ns}	4	0.25
6.	land holding	14.12 *	4	0.31
7.	Occupation status	16.62 *	4	0.34
8.	Annual income	16.13 *	4	0.33
9.	Farming experience	10.73 *	4	0.26
10.	Information management behavior	9.86 *	4	0.26
11.	Mass media use	9.81 *	4	0.26
12.	Use of Source of information	12.26 *	4	0.26
13.	Training obtained	12.73 *	4	0.29
14	Decision making	9.76*	4	0.27
15	innovativeness	10.64*	4	0.28
16	Economic motivation	10.13*	4	0.28

*** Significant at 5%**

Table 4.37

1. Relationship between the personal, socio – economic, communicational and psychological characteristics of the members of farmers’ co-operative seed societies

S.No.	Attributes	Co-relation coefficient
1.	Age	0.1121
2.	Caste	0.1137
3.	Education level	0.2367*
4.	Social participation	0.1213
5.	Size of family	0.1124
6.	land holding	0.1372*
7.	Occupation status	0.2147*
8.	Annual income	0.2315*
9.	Farming experience	0.2178
10.	Information management behavior	0.2347*
11.	Mass media use	0.2720*
12.	Use of Source of information	0.1621*
13.	Training obtained	0.2184*
14.	Decision making	0.2382*
15.	innovativeness	0.2412*
16.	Economic motivation	0.2921*

Significant at 5%

Table 4.37 depicts the co-relation coefficient values indicating the relationship of personal, socio-economic communicational and psychological attributes of the respondent under privatization of agricultural extension services. The data indicate that the attributes of respondent namely education, operational land holding, occupation, annual income, farming experience, information management behaviour, mass media use, use of source of information, training obtained, decision making, innovativeness, and economic motivation had significant relationship with perception of respondents regarding of privatization of agricultural extension services at 0.05 level of probability. The result also depict that the respondent, age, caste, size of family, social participation did not establish significant relationship with perception of respondents regarding privatization of agriculture extension services. .

(4) Constraints faced by the members on private agricultural extension Services.

The respondents were asked to mention the constraints faced by them in relation to privatization of agricultural extension services. The major constraints faced by them have been presented in Table 4.38

Table 4.38 Constraints faced by the members on private agricultural extension Services.

S.N.	constraints	No. of Respondents	%	Rank
1.	Lack of information about loan and subsidy.	69	55.2	II
2.	Lack of regular guidance and training facilities.	37	29.6	VIII
3.	Lack of contact with scientist.	49	39.2	V
4.	No cooperation with neighbors.	21	16.8	IX
5.	Lack of risk bearing capacity	46	36.8	VI
6.	Lack of soil testing information.	41	32.8	VII
7	Marketing problem.	59	47.2	IV
8.	High cost of input	74	59.2	I
9.	Lack of experts for technical advice	66	52.8	III

The Table 4.38 reveals the constraints experienced by the members of private agricultural extension services. The major constraints were arranged in descending order on the basis of rank order as, complexity of high cost of input (59.2 %), lack of information about loan and subsidy (55.2 %), seed storage problem (52.8 %), lack of experts for technical advice. (49.6 %), and marketing problem (47.2 %).

(5) The suggestions for enhancing the utility in availing the benefits of private agricultural extension services.

The respondents were asked to make suggestions for enhancing the utility in privatization of agriculture extension services. out of many suggestions offered by them the important suggestions have been presented in the Table 4.39

Table 4.39: suggestions for enhancing the utility in availing the benefits of private agricultural extension services

S.N.	Suggestions	No. of Respondents	%	Rank
1.	Frequent field visit of scientist and extension officers.	53	44.16	VI
2.	Timely availability of seed and other inputs.	57	45.6	IV
3.	More information should be provided about improved seed and seed production.	52	41.6	V
4.	There should be timely availability of loan.	73	58.4	II
5.	Government agencies should be involved in marketing.	27	21.5	VII
6.	Seed storage facilities should be available nearby village.	68	54.4	III
7	Strong linkage between public & private extension services.	81	64.8	I

The useful suggestions offered by the respondents have been arranged in descending order on the rank basis as seed certification process should be made simple and easier (64.8 %), there should be timely availability of loan (58.4 %), seed storage facilities should be available nearby village (54.4 %), timely availability of seed and other inputs (45.6 %), more information should be provided about improved seed and seed production.

MAIN FINDINGS & DISCUSSION

The main findings of the study have been presented in line with the objectives of study. The findings are presented under the following sub-heads

1. Personal, socio – economic, communicational and psychological characteristics of the members of farmers' co-operative seed societies.

- 1- The majority of the beneficiary farmers i.e. 45.83 percent were from middle age group. This finding is in line with the finding of Saravanan (1999), Chandra *et al.* (2002) and Daver (2009).
- 2- The majority of the beneficiary farmers i.e. 43.33 percent belonged to the general category. This finding was found similar to the work of Sharma (1999).
- 3- Majority of the beneficiary farmers i.e. 40.83 percent were educated upto higher secondary and above level. Similar result was reported by Narayan Gowda (1978), Himantharaju (1984) and Narayanswamy (1988).
- 4- The majority of the beneficiary farmers i.e. 50.83 percent had high level of social participation.
- 5- The majority of the beneficiary farmers i.e. 43.33 percent had medium size of family. The finding finds support with the work of Mande and Thombre (2009), Daver (2009), Rai (2011) and waskle (2012).
- 6- The majority of the beneficiary farmers i.e. 52.50 percent had the large size of landholding. The present finding is supported by Patel (1996) and Barodia (2005).

- 7- The majority of the respondents i.e. 45.83 percent were practicing agricultural occupation. The work of Dhakad (2006) and Mahovia (2006) supports the present finding.
- 8- The majority of the respondents i.e. 48.33 percent belonged to medium annual income group. The present finding is supported by Lokhande (2010) and Chobitker (2007).
- 9- The majority of the respondents i.e. 41.66 percent belonged to high farming experience group. The work of Rakesh (2008) supports the present finding.
- 10-The majority of the respondents i.e. 48.33 percent belonged to high information management behavior group.
- 11-The majority of the respondents i.e. 40.83 percent were from high mass media use category. This finding is in line with the finding of Itawdiya (2011).
- 12-The majority of the respondents i.e. 45.83 percent were having high use of source of information. Finding finds support with the work of Ram (2005).
- 13-43.33 percent respondents obtained the high extent of training obtained. This finding is supported by Jatav (2011).
- 14-The majority of the respondents i.e. 40.83 percent were having medium decision making level. Finding finds support with the work of Rakesh (2008).
- 15-The majority of the respondents i.e. 50 percent were having high degree of innovativeness. Finding finds support with the work of Rakesh (2008).
- 16-The majority of the respondents i.e. 49.16 percent were from having high economic motivation. Finding finds support with the work of Shinde (2004), Barodia (2005), Jadhao (2008), and Rakesh (2008).

2. Perception of members of farmer's cooperative seed societies regarding different services aspects of privatization agricultural extension services.

(a) The raking of overall mean perception of the total 6 aspects on privatization of agriculture extension services was found 2.65. It could be concluded that the average mean perception score (3.38) of input service aspect followed by (3.17) of extension service aspect and score (2.81) of institutional service aspect were found to be higher in comparison to overall average mean perception score (2.65) in relation to various service aspects of privatization of agriculture extension services. Whereas, the average mean perception score (2.54) of technical service aspect, The score (2.32) of marketing service aspect and score (1.73) of enterprise service aspect were found to be lower in comparison to overall average mean perception score of various service aspects of privatization of agriculture extension services.

(b) Perception towards private agricultural extension services among the member's of farmers' co-operative seed societies.

The majority of the respondents i.e. 43.33 percent had highly favorable perception 32.50 percent had moderately favorable perception whereas only 24.16 percent had unfavorable perception of members of farmer's co-operative seed societies regarding privatization of agriculture extension services conducted by Rewa block.

3. Association between personal, socio-economic, communicational and psychological characteristics of the respondents and their perception regarding private agricultural extension services.

- 1- It was found that the age had no significant association with the perception of members of farmer's co-operative seed societies regarding privatization of agricultural extension services.
- 2- Caste had non-significant association with the perception of members of farmer's co-operative seed societies regarding privatization of agricultural extension services.

- 3- Education had significant association with the perception of members of farmer's co-operative seed societies regarding privatization of agricultural extension services. Similar result was reported by Narayan Gowda (1978), Himantharaju (1984) and Narayanswamy (1988).
- 4- The social participation did not show significant relationship with the perception of members of farmer's co-operative seed societies regarding privatization of agricultural extension services.
- 5- Similarly size of family and Perception of members of farmer's co-operative seed societies regarding privatization of agricultural extension services were not, significantly, associated.
- 6- Similarly landholding and perception of members of farmer's co-operative seed societies regarding privatization of agriculture extension services were significantly associated.
- 7- Significant association has been observed between the occupation of the respondents and their perception of members of farmer's co-operative seed societies regarding privatization of agricultural extension services.
- 8- As for as annual income is concerned, it was found to be significantly associated with the perception of members of farmers co-operative seed societies regarding privatization of agricultural extension services.
- 9- As regards farming experience, it holds a significant association with the perception of members of farmer's co-operative seed societies regarding privatization of agricultural extension services.
- 10- Information management behavior had a significant relationship with the perception of members of farmer's co-operative seed societies regarding privatization of agricultural extension services.
- 11- Similarly mass media exposure was found to be significantly associated with the perception of the respondents. This finding is in line with the finding of Itawdiya (2011).

12-As regards use of source of information, it holds a significant association with the Perception of members of farmer's co-operative seed societies regarding privatization of agricultural extension services.

13-Trainings obtained were also found having significant association with the perception of members of farmers co-operative seed societies regarding privatization of agriculture extension services..

14- The decision making was significantly associated with the perception of members of farmer's co-operative seed societies regarding privatization of agricultural extension services. Finding finds support with the work of Rakesh (2008).

15-The innovativeness was significantly associated with the perception of members of farmer's co-operative seed societies regarding privatization of agricultural extension services.

16-The economic motivation was significantly associated with the perception of members of farmer's co-operative seed societies regarding privatization of agricultural extension services. Finding finds support with the work of Shinde (2004), Barodia (2005), Jadhao (2008), and Rakesh (2008).

The data also indicated that the attributes of respondents namely education, operational land holding, occupation, annual income, farming experience, Information management behaviour, mass media used, use of source of information, training obtained, decision making , innovativeness , economic motivation, had significant relationship with perception of members of farmers co-operative seed societies regarding privatization of agricultural extension services at 0.05 level of probability. on the contrary, the respondents', age, caste, size of family, social participation did not establish significant relationship with the perception of members of farmer's co-

operative seed societies regarding privatization of agricultural extension services.

4. The constraints faced by the members on private agricultural extension Services.

The major constraints experienced by the respondents were arranged in descending order on the basis of rank order as, complexity of seed certification process (59.2 %), lack of information about loan and subsidy (55.2 %), seed storage problem (52.8 %), non availability of agricultural information timely (49.6 %), and marketing problem (47.2 %).

5. The suggestions for enhancing the utility in availing the benefits of private agricultural extension services.

The useful suggestions offered by the respondents have been arranged in descending order on the rank basis as seed certification process should be made simple and easier (64.8 %), there should be timely availability of loan (58.4 %), seed storage facilities should be available nearby village (54.4 %), timely availability of seed and other inputs (45.6 %), more information should be provided about improved seed and seed production

SUMMARY, CONCLUSIONS & SUGGESTIONS

Earlier agricultural extension viewed as a public good and has been financed by the public sector in most countries (Dinar.1996), In recent past, financial burden on governments, disappointing performance of public extension and opportunities in global free market economy calls for structural and functional adjustment with cost effective and demand driven approach (Saravanan. 1999). The Public extension performance in many developing countries including India is not upto the expectation of farming community. Agricultural extension services in India are mostly funded and delivered by public systems and government is very much reluctant in huge financial investment for public extension.

The growing commercialization of agriculture treats the extension as a new income-generating economic input. The extension experts suggest that extension should be 'demand driven and 'cost-effective, and also propose to privatize the public extension system. These innovative urge the search for alternative extension approach to meet the next millennium needs and challenges.

According to saravanan "Privatization of agricultural extension service refers to the services rendered in the area of agriculture and allied aspects by extension personnel working in the private agencies or organizations, for which farmers arc expected to pay fee and it can be viewed as supplementary or alternative to public extension service".

In Rewa Division of M.P. seed grower farmers associations have been established on regional basis in a mutually aided co-operative sector named as farmers co-operative seed societies with a view to develop farmers participatory approach in seed production, and develop the effective local supply system for quality seed. It is well known fact that most of the private agencies/organizations such as seed, fertilizer, pesticides etc are disseminating agriculture extension information in large number of villages since last few years earlier to the farmers for obtaining more production and productivity of crops & other enterprises. Therefore, it is worthwhile whether the private agencies provided the information on agriculture extension services are preferred by the members of societies for obtaining the profits. However, it is felt necessary to assess the perception towards utility of

privatization of extension services among the members of farmers' co-operative seed societies. Keeping the background of above facts, the present investigation on the topic entitled "A study on privatization of agricultural extension services as perceived by members of farmer's co-operative seed societies in Rewa Distt. (M.P.)" is decided with the following objectives

Objectives-

1. To study the personal, socio – economic, communicational and psychological characteristics of the members of farmers' co-operative seed societies.
2. To assess the perception towards on private agricultural extension services among the members of farmers' co-operative seed societies.
3. To determine the extent of association between personal, socio– economic, communicational and psychological characteristics of the respondents and their perception regarding private agricultural extension services.
4. To enlist the constraints faced by the members on private agricultural extension services.
5. To find out the suggestions for enhancing the utility in availing the benefits of private agricultural extension services.

Selection of the block

The present study was carried out in Rewa district. Rewa block was selected on the basis of having maximum number of farmer's cooperative seed societies as compared to other block in Rewa district.

Selection of the villages

A list of 9 villages Rewa block was prepared on the basis of maximum number of farmer's cooperative seed societies from this list 9 villages with maximum numbers of co-operative seed societies. The Rewa block comprises of 692 members of farmers co-operative seed societies in 12 villages. out of which 5 villages will be selected purposively on the basis of higher number of members in co-operative seed societies. The villages were Amiliki, Gadokhar, Vihra, Padokhar, and Rahat.

Selection of the respondents

After the selection of the villages, a village wise list of members of co-operative seed societies will be prepared. From each selected village, societies, members will be selected through proportionate random sampling method to make a sample size of 120 respondents. Thus, finally the sample will be consisted of 120 respondents.

Independent variable

age, caste, education, social participation, size of family, land holding, occupation, annual income, farming experience, information management behaviour, mass media, used use of source of information, training obtained, decision making , innovativeness , economic motivation.

Dependent variable

Perception of members of farmer's co-operative seed societies regarding privatization of agriculture extension services.

Main findings

Personal, socio-economic, communicational and psychological characteristics of the members of farmers 'co-operative seed societies.

- 1- The majority of the beneficiary farmers i.e. 45.83 percent were from middle age group. This finding is in line with the finding of Saravanan (1999), Chandra *et al.* (2002) and Daver (2009).
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- 4- The majority of the beneficiary farmers i.e. 50.83 percent had high level of social participation.

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- 6- Similarly landholding and perception of members of farmer's co-operative seed societies regarding privatization of agriculture extension services were significantly associated.
- 7- Significant association has been observed between the occupation of the respondents and their perception of members of farmer's co-operative seed societies regarding privatization of agricultural extension services.
- 8- As for as annual income is concerned, it was found to be significantly associated with the perception of members of farmers co-operative seed societies regarding privatization of agricultural extension services.

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- 10- Information management behavior had a significant relationship with the perception of members of farmer's co-operative seed societies regarding privatization of agricultural extension services.
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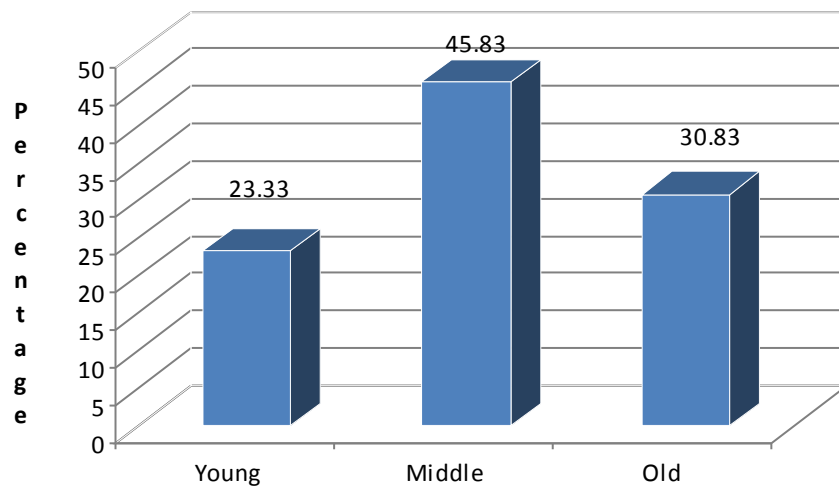


Fig.4.1: Percentage distribution of the respondents according to their age

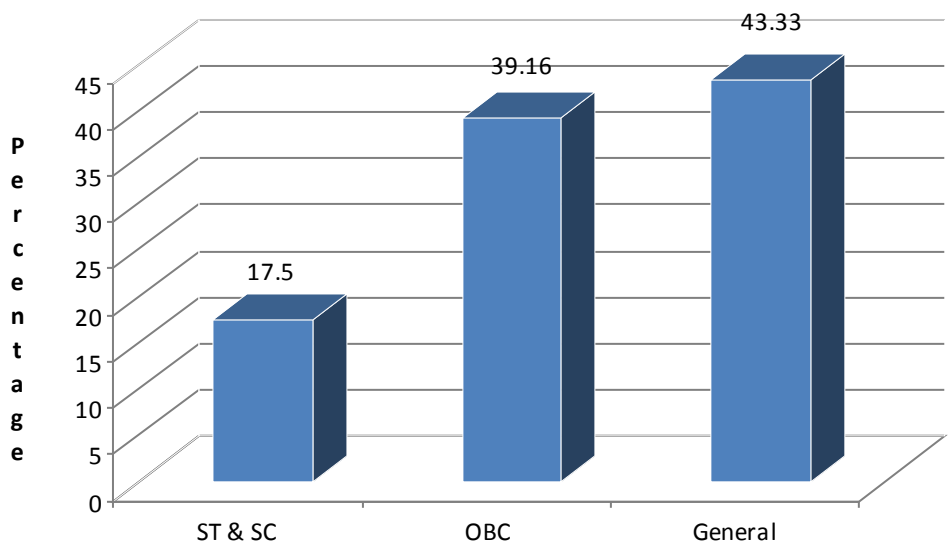


Fig.4.2:Percentage distribution of the respondents according to their cast

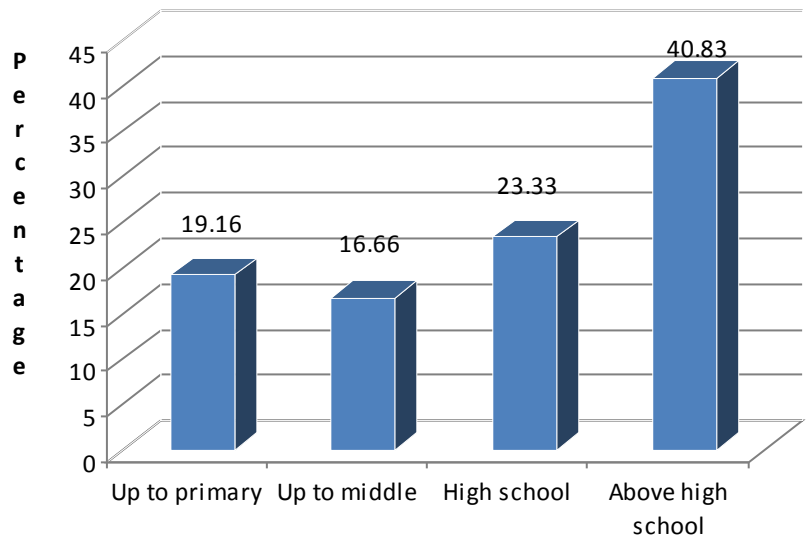
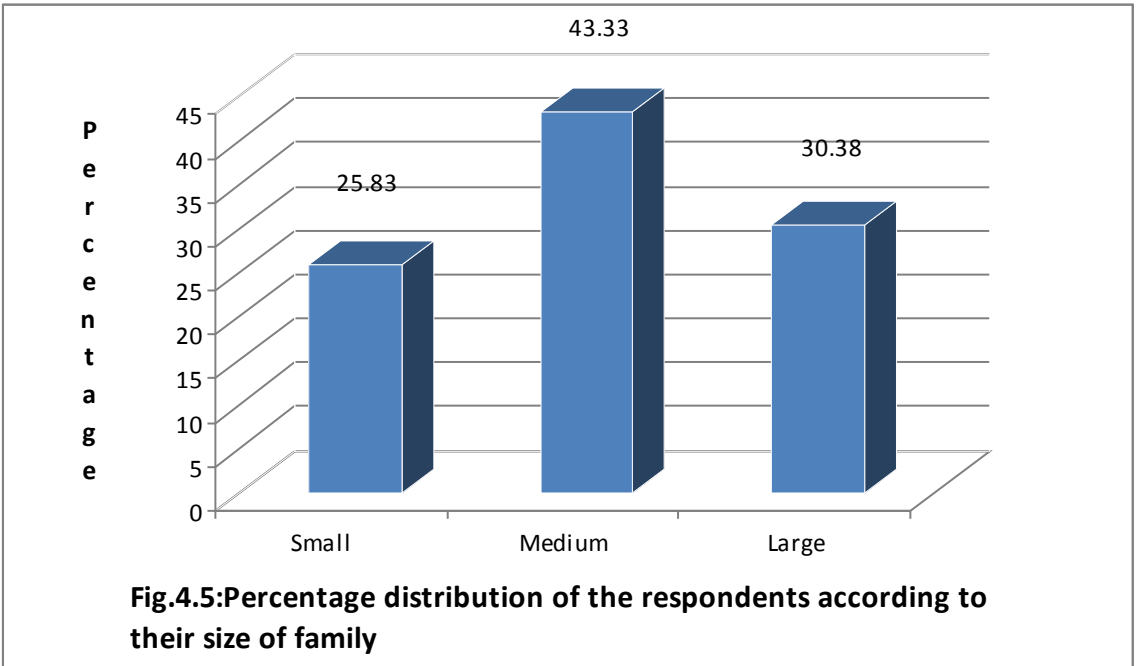
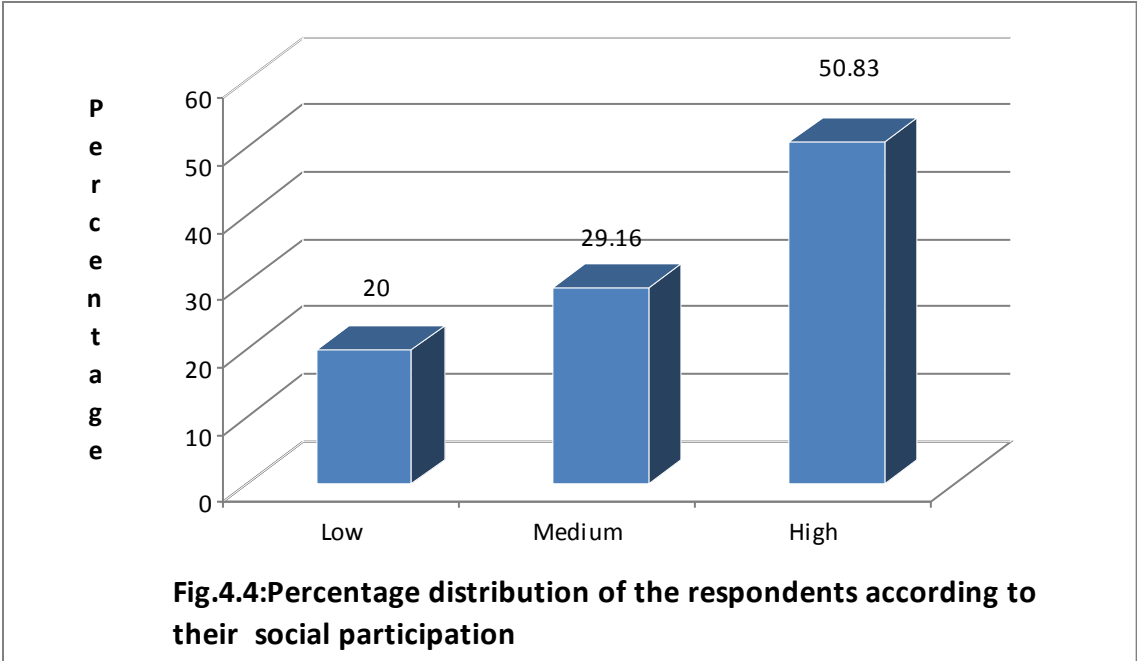


Fig.4.3:Percentage distribution of the respondents according to their level of education



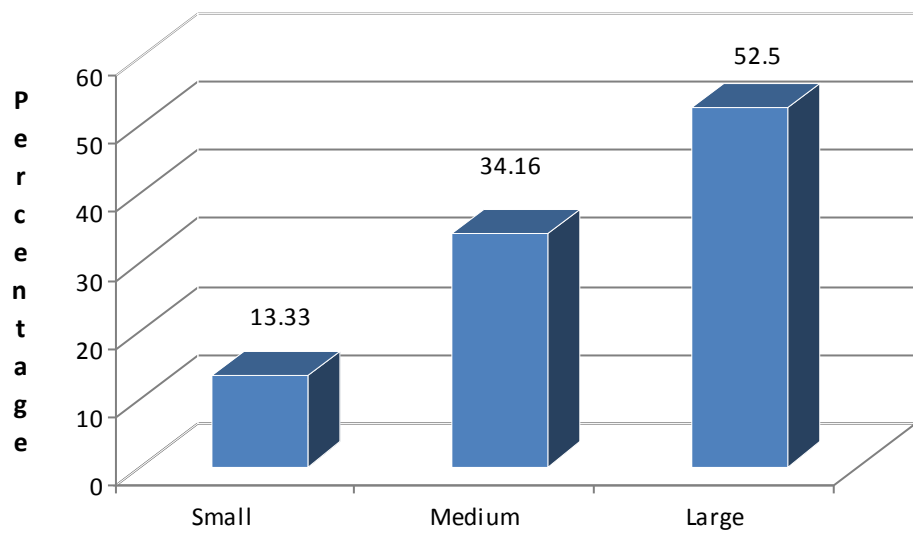


Fig.4.6:Percentage distribution of the respondents according to their land holding

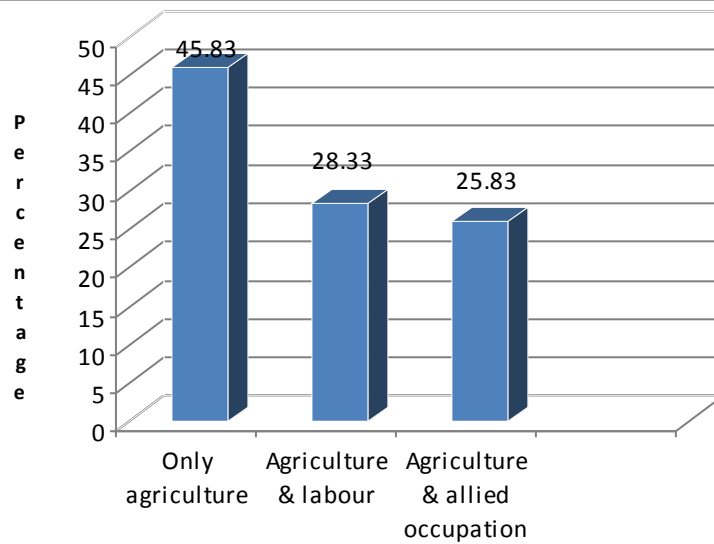


Fig.4.7:Percentage distribution of the respondents according to their occupation status

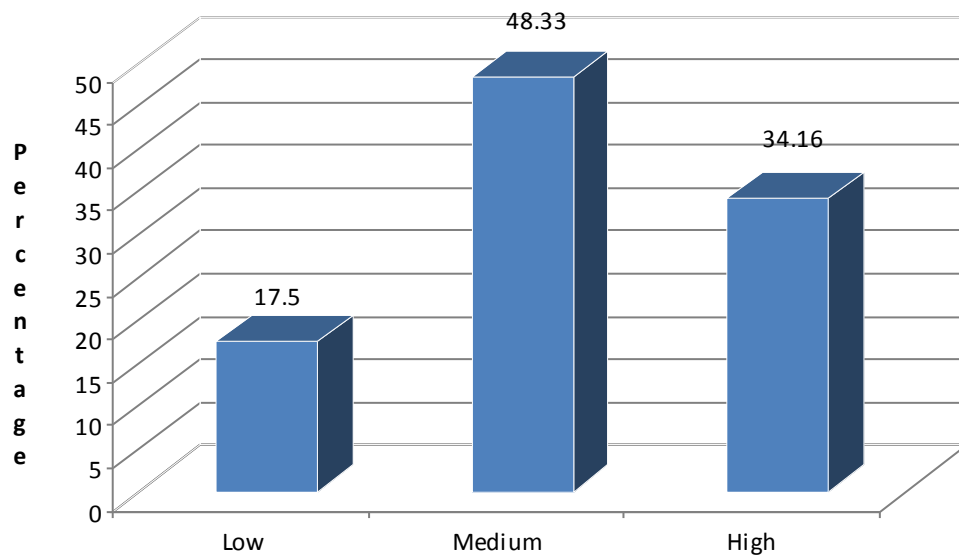


Fig.4.8:Percentage distribution of the respondents according to their annual income

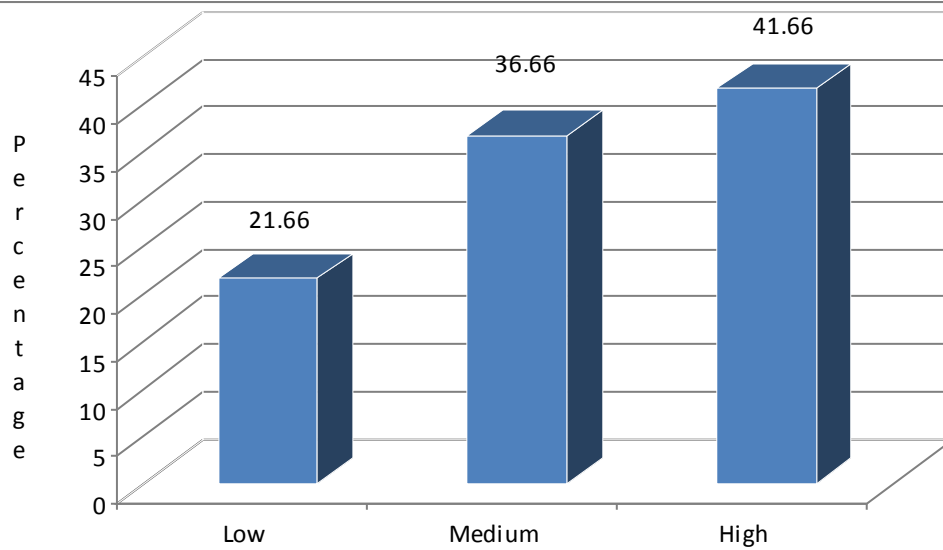


Fig.4.9:Percentage distribution of the respondents according to their farming experience

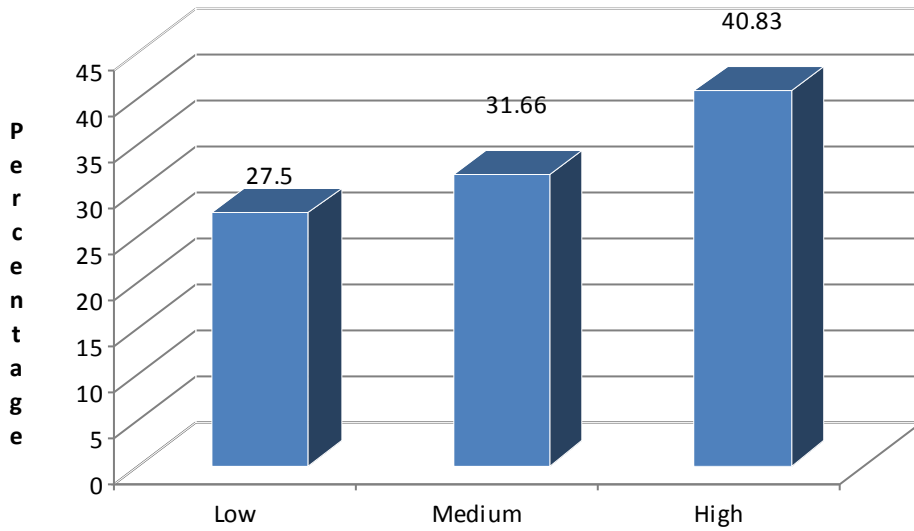


Fig.4.10:Percentage distribution of the respondents according to distance of their information management behaviour

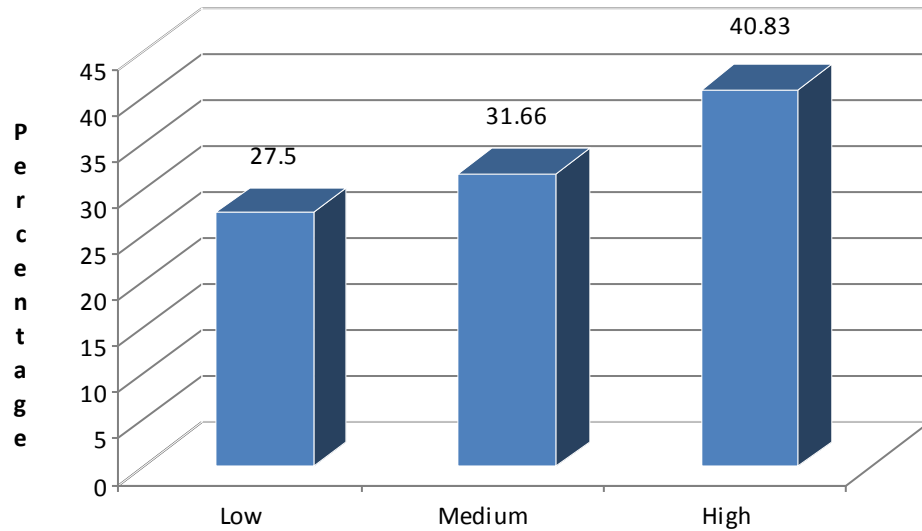


Fig.4.11:Percentage distribution of the respondents according to their mass media use

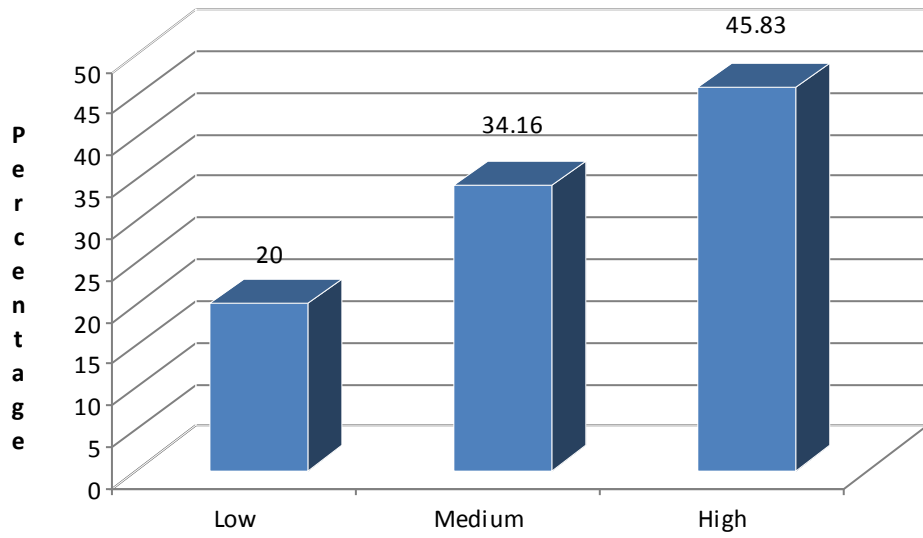


Fig.4.12:Percentage distribution of the respondents according to their source of information

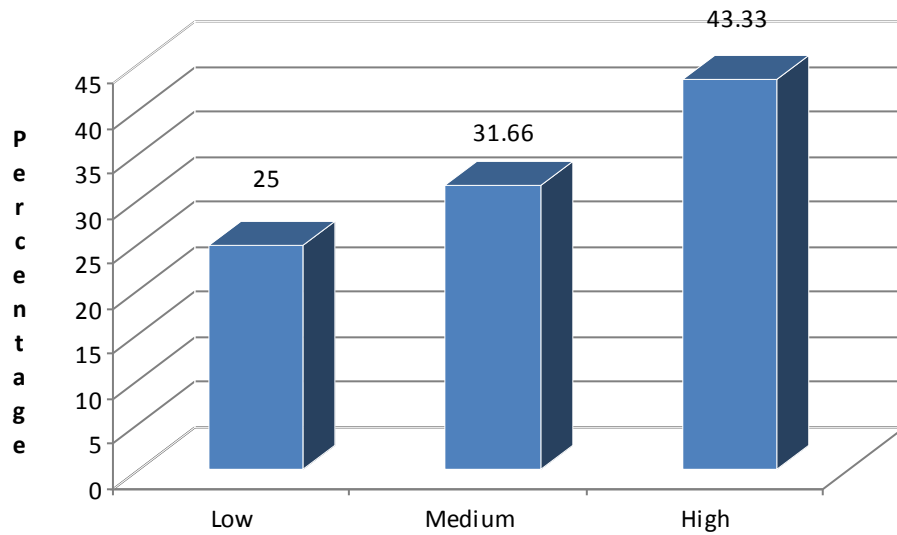


Fig.4.13:Percentage distribution of the respondents according to their training obtained

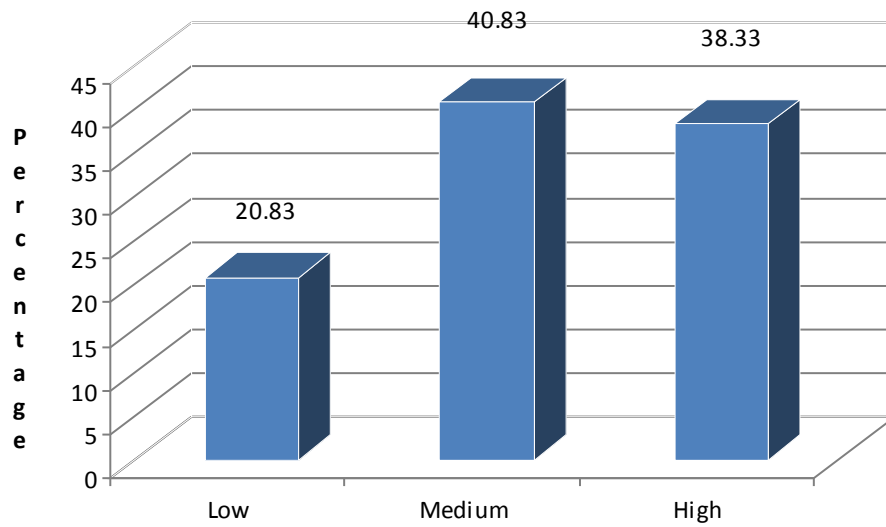


Fig.4.14:Percentage distribution of the respondents according to their decision making

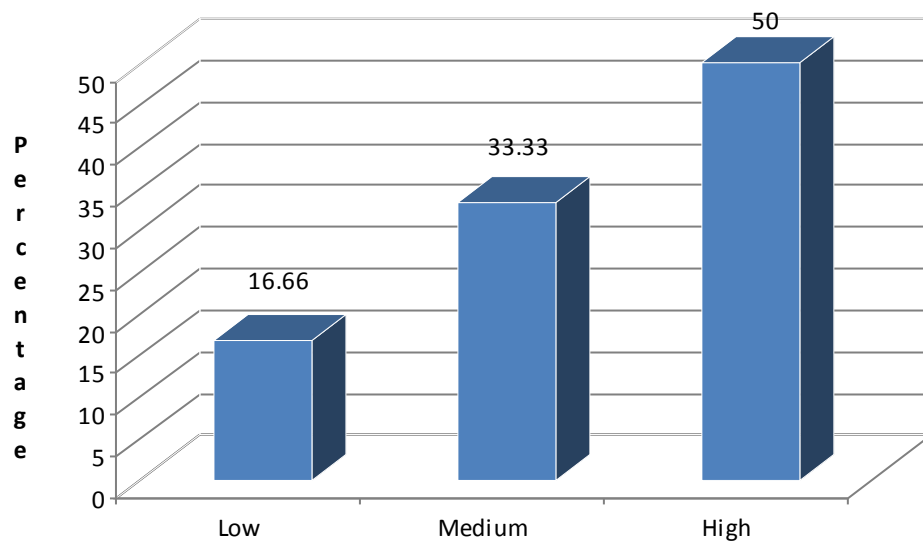


Fig.4.15:Percentage distribution of the respondents according to their innovativeness

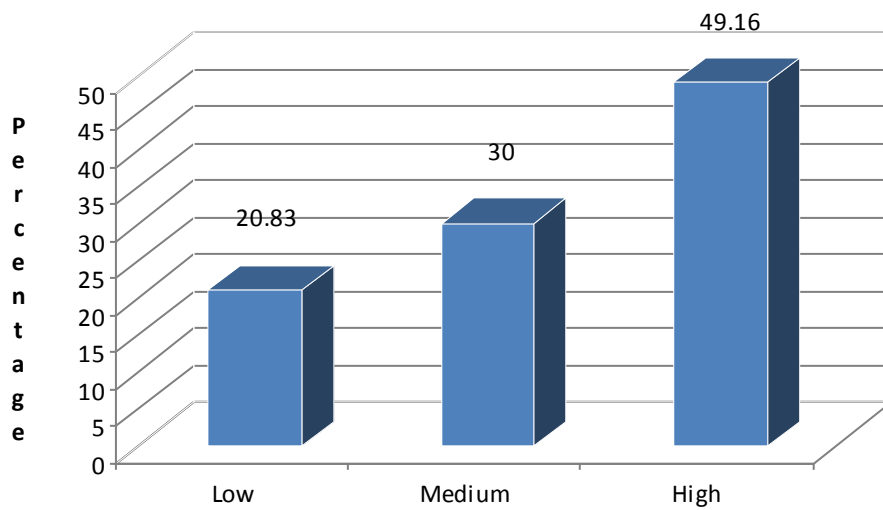


Fig.4.16:Percentage distribution of the respondents according to their economic motivation

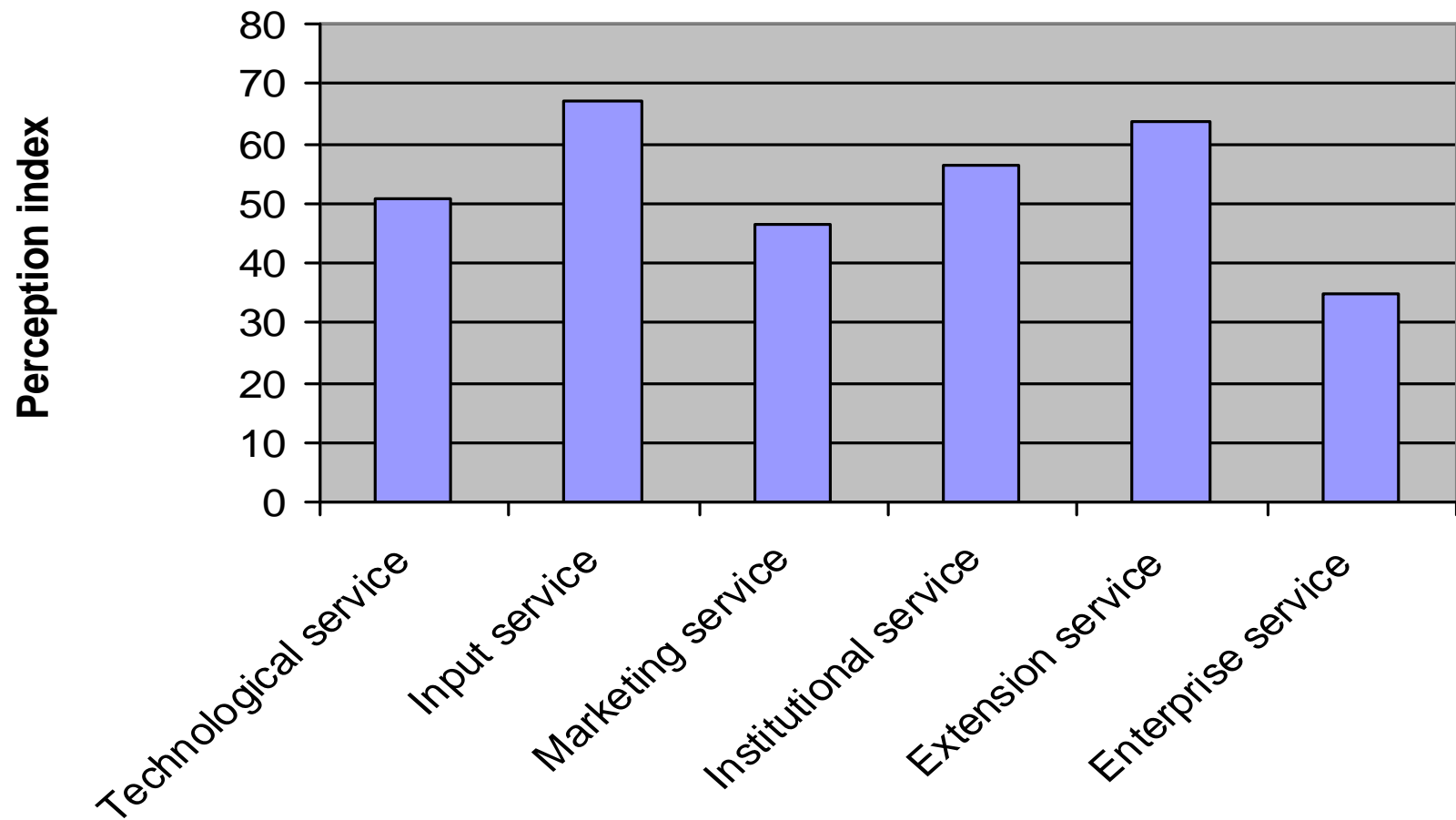


Fig 4.17 Ranking of different services aspects components of private agricultural extension services

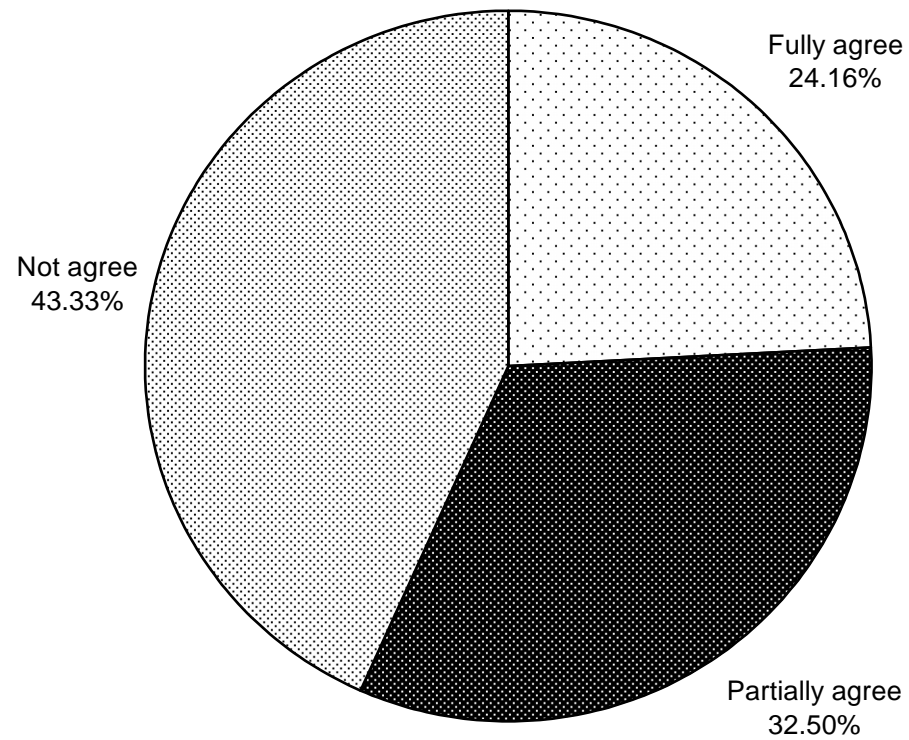


Fig 4.18: Perception of members of farmers cooperative seed society.

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1. अनु. जाति/अनु. जनजाति/पिछड़ा वर्ग/सामान्य

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6	जल ग्रहण क्षेत्र समिति					
7	गैर सहकारी संस्थायें					
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2. सिंचित भूमि..... एकड़

3. असिंचित भूमि..... एकड़,

4. पड़ती भूमि एकड़

7- vi useq; , oa l gk; d 0; ol k; dh tkudkj h na %

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l gk; d 0; ol k;

8- okf"kd vk; % vki ds i fjokj dh foHkUu L=k'ka l s iklr okf"kd vk; fdruh gA

1. खेती से 2. अन्य व्यवसाय से

3. मजदूरी से कुल योग रूपये

9& [krh dk vu#ko&

- अ. आप कितने वर्षों से खेती कर रहे हैं। वर्षों
 ब. आप कितने वर्षों से बीज उत्पादन कर रहे हैं। वर्षों
 स. एक वर्ष में कितनी फसलें लेते हैं।
 द. क्या विविध कृषि अपनाने से रोजगार मिलने की संभावना है।
 इ. क्या बीजोत्पादन लाभकारी है।

हां/नहीं
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10 I ipuk ds mi ; ks ea ykus grq I ipuk dk i xaku fdl i xkj d jrs g& &

ek/; e	ges'kk	dHkh&dHkh	dHkh ugha
1. स्वयं के स्मृति पटल के माध्यम से			
2. नोटबुक या डायरी में लिखकर			
3. साहित्य के रूप में संरक्षण जैसे पत्रिका, कार्यमाला, बुकलेट			
4. समाचार पत्र कटिंग			
5. कम्प्यूटर स्टोरेज डिवाइज में संरक्षित			
6. पारिवारिक सदस्य के माध्यम से			
7. मित्र/पड़ोसी के माध्यम से			
8. रि तेदारों के माध्यम से			
9. अन्य			

11- d'k cht rduhdh I xkh tkudkjh i klr d jrs ds fy; s fdu&fdu tul xkj ek/; eka dk mi ; ks d jrs g& d'k; k n''kk& &

Ø-	L=kr , oa ek/; e dk uke	ges'kk	dHkh&dHkh	dHkh ugha
1	रेडियो			
2	टेलीवीजन			
3	समाचार पत्र			
4	कृषि पत्रिका			
5	प्रक्षेत्र भ्रमण			
6	किसान मेला			
7	प्रदर्शन			
8	इन्टरनेट			
9	चर्चायें			
10	अन्य			

12- vki d'k ; k vU; 0; ol k; I s I xf/kr uohu o mi ; ksx tkudkjh i klr d jrs ds fy; s fdu&fdu L=krka I s I a dZ d jrk g&

Ø-	L=kr dk uke	ges'kk	dHkh&dHkh	dHkh ugha
1	ग्रामीण कृषि विस्तार अधिकारी			
2	वरिष्ठ कृषि विस्तार अधिकारी			
3	कृषि वैज्ञानिक/कृषि विज्ञान केन्द्र			
4	सहकारी समिति के कार्यकर्ता			
5	गैर सहकारी संस्था			
6	प्रगतिशील कृषक			
7	मित्र व रिश्तेदार			
8	निजी आदान के विक्रेताओं से			
9	अन्य			

13- if'k{k.k i klr d jrs I xkh tkudkjh % आपके द्वारा बीज उत्पादन समिति के अतिरिक्त पूर्व में अन्य कोई प्रशिक्षण प्राप्त किया गया है।

Ø	I xfk dk uke	fooj .k
1	प्रशिक्षणों की संख्या	
2	प्रशिक्षण की अवधि	
3	प्रशिक्षण का स्थान	
4	प्रशिक्षण की उपयोगिता पर प्रतिक्रिया	

14- fu.kk yus dh {kerk

निम्नलिखित कार्यों के निष्पादन में आपके निर्णय लेने की क्षमता के बारे में जानकारी

Ø- dFku	I ger	vkf"kd I ger	vl ger
1 कोई भी कृषि तकनीक अपनाने से पहले अन्य लोगों से सलाह लेना आवश्यक है।			
2 अधिक उत्पादन देने वाली किस्मों का बीज उत्पादन करने का स्वयं निर्णय लेते हैं।			
3 कृषि फसल उत्पादन के लिए बैंक से ऋण लेने संबंधित निर्णय स्वयं लेते हैं।			
4 भूमि सुधार के लिए निर्णय लेने में स्वयं सक्षम है।			
5 आप दूसरों की सलाह में वि वास रखते हैं। जिससे आपका काम बेहतर हो।			
6 अन्य लोगों की सलाह पर काम करना कमजोरी की नि ानी है।			
7 कृषि आदान सामग्री क्रय करने का निर्णय स्वयं लेते हैं।			
8 समस्या के समाधान के लिए आप दूसरों से सहायता लेते हैं।			

15- uokpkfj drk

Ø- dFku	I ger	vkf"kd I ger	vl ger
1 मैं बहुत अधिक इच्छुक रहता हूं, नए तरीकों को अपनाने में जो बेहतर खेती के लिए उपयोगी हैं			
2 मुझे लगता है कि नए बीजोत्पादन के तरीके लाभदायक नहीं हैं, इसलिए मैं उन्हें दूसरों के अपनाने तक इंतजार करूंगा			
3 बीजोत्पादन के सुधार प्रयासों के बारे में पूरी जानकारी रखता हूं, और जैसे संभव हो अपनाने का प्रयास करता हूं।			
4 नए बीजोत्पादन के तरीके आसानी से नहीं अपनाए जा सकते इसलिए मैं इन्हें नहीं अपनाता हूं			

16- vkfFkd vfHki j .kk

Ø- dFku	I ger	vkf"kd I ger	vl ger
1 एक किसान को अधिक पैदावार और आर्थिक लाभ कमाने के लिए निजी कृषि विस्तार एजेंसियों से संपर्क करना चाहिए			
2 एक सफल किसान वह है जो निजी कृषि विस्तार एजेंसियों से संपर्क करता है			
3 एक किसान अधिक लाभ कमा सकता है जो किसी भी नई कृषि तकनीकी अपनाने का प्रयास करता है।			
4 एक किसान को अपनी जीविकोपार्जन खेती बजाय नगद फसल को उगाकर आर्थिक लाभ कमाना चाहिए			
5 एक किसान के लिए अपने बच्चों को अच्छी भुर्रुआत देना मुि कल है जबतक की वह आर्थिक सक्षम नहीं होता			
6 एक किसान को अपनी जीविकोपार्जन के लिए कमाना चाहिए लेकिन महत्वपूर्ण बात यह है कि उसे आर्थिक दृष्टि से परिभाषित नहीं किया जा सकता			

[k.M **c**
fo'k'sk tkudkjh

cht mRi kn d'kd l gdkjh l fefr ds l nL; k }kj k futh df'k foLrkj l ok , tfl ; k ds dk; l ds ifr
i R; {khdj .kA

क्र.	कथन	पूर्ण सहमत	आंि क सहमत	तटस्थ	आंि क असहमत	पूर्णतया असहमत
V-	rduldh l ok					
1	निजी विस्तार सेवा एजेंसियां किसानों को आवश्यक तकनीकी सेवा आसानी से उपलब्ध कराती है।					
2	निजी विस्तार सेवा एजेंसियां अपने विस्तार कार्यों में सभी उपयुक्त संप्रेशण तकनीक का उपयोग करती हैं।					
3	निजी विस्तार सेवा एजेंसियां आम किसानों के तकनीकी समस्याओं के समाधान में सक्षम नहीं हैं।					
4	निजी विस्तार सेवा एजेंसियां बीजोत्पादन की नई तकनीकी के उपयोगिता में स्थानीय द ा में कृशकों को अवगत कराती हैं।					
5	किसान उन कृशि तकनीकी सलाह में वि वास नहीं करते जो निजी विस्तार सेवा एजेंसियां उन्हें प्रदान कराती हैं।					
6	निजी विस्तार सेवा एजेंसियां समय पर बीजोत्पादन से संबंधित तकनीकी जानकारी नहीं पहुंचाती, जिसके कारण बीजोत्पादन प्रभावित होता है।					
7	निजी विस्तार सेवा एजेंसियां भूमि तथा कृशि जलवायु क्षेत्र की जानकारी नहीं देती।					
8	निजी कृशि विस्तार सेवा एजेंसियां आपात योजना के बारे में जानकारी नहीं देती।					
9	निजी विस्तार सेवा एजेंसियां अंतरसस्यन (इंटर क्रापिंग) के बारे में जानकारी प्रदान कराती हैं।					
10	निजी विस्तार सेवा एजेंसियां वृद्धि नियमकों के उपयोग बारे में जानकारी नहीं देती।					
11	निजी विस्तार सेवा एजेंसियां पौध संरक्षण और समन्वित कीट प्रबंधन के बारे में जानकारी प्रदान कराती हैं।					
12	निजी विस्तार सेवा एजेंसियां कटाई उपरांत तकनीक के बारे में जानकारी उपलब्ध कराती हैं।					
13	निजी विस्तार सेवा एजेंसियां फसल चक्र के बारे में जानकारी देती हैं।					
14	निजी कृशि विस्तार सेवा एजेंसियां संकर बीज (हाइब्रिड सीड) के बारे में जानकारी प्राप्त कराती हैं।					
15	निजी कृशि विस्तार सेवा एजेंसियां पौध पोशण प्रबंधन की जानकारी नहीं देती हैं।					
Ok	vknu l ok, a					
1	निजी विस्तार सेवा एजेंसियां समय में किसानों को खाद-बीज और रसायन आदि आदान सामग्री उपलब्ध कराने में मदद कराती हैं।					
2	निजी विस्तार सेवा एजेंसियां बीजोत्पादन के लिए आदान सामग्री की लागत को बढ़ा देती हैं।					
3	निजी विस्तार सेवा एजेंसियां आवश्यक आदान सामग्री (इनपुट) को किसानों के घर तक पहुंचाकर उनकी मदद कराती हैं।					
4	निजी विस्तार सेवा एजेंसियां फसल प्रद र्नि हेतु आदान सामग्रियों को समय पर उपलब्ध नहीं कराती हैं।					
5	निजी कृशि विस्तार सेवा एजेंसियां बीज फसल की किस्म के बारे में जानकारी देती है।					

6	निजी कृषि विस्तार सेवा एजेंसियां रोपण सामग्री की आपूर्ति नहीं करती है।					
7	निजी कृषि विस्तार सेवा एजेंसियां खरपतवारना की आपूर्ति करती हैं।					
8	निजी कृषि विस्तार सेवा एजेंसियां अच्छी किस्म का बीज उपलब्ध नहीं कराती हैं।					
9	निजी विस्तार सेवा एजेंसियां जैविक बीजोपचार की जानकारी प्रदान करती हैं।					
10	निजी कृषि विस्तार सेवा एजेंसियां जैविक खेती से संबंधित आदान सामग्री प्रदाय करने में मदद नहीं करती हैं।					
Lk	foi .ku ok, a					
1	निजी विस्तार सेवा एजेंसियां किसानों को अच्छी विपणन सुविधाएं उपलब्ध कराती हैं।					
2	निजी विस्तार सेवा एजेंसियों के द्वारा किसानों को बीज श्रेणीकरण की जानकारी नहीं दी जाती जिससे उनके उत्पादन की अच्छी कीमत नहीं मिलती।					
3	निजी कृषि विस्तार सेवा एजेंसियां किसानों को उचित तौल सुविधा उपलब्ध कराती हैं।					
4	निजी कृषि विस्तार सेवा एजेंसियां बाजार भाव की जानकारी नहीं देती।					
5	निजी कृषि विस्तार सेवा एजेंसियां बीज मिश्रण (संदूशकों) के बारे में जानकारी नहीं देती हैं जिससे किसानों को बीज की अच्छी कीमत नहीं मिलती है।					
6	निजी कृषि विस्तार सेवा एजेंसी किसानों के उत्पादन का उचित मूल्य प्रदान करने हेतु बिचौलियों (दलालों) के साथ हस्ताक्षर करती हैं।					
n	l l Fkkr ok, a					
1	निजी कृषि विस्तार सेवा एजेंसियां बीज भण्डारण की सुविधा उपलब्ध कराती हैं।					
2	निजी कृषि विस्तार सेवा एजेंसियां अनुदान और प्रोत्साहन प्रदान करती हैं।					
3	निजी कृषि विस्तार सेवा एजेंसियां सहकारी बैंकों से ऋण दिलाने में मदद नहीं करती हैं।					
4	निजी कृषि विस्तार सेवा एजेंसियां फसल बीमा के बारे में जानकारी नहीं देती हैं।					
5	निजी कृषि विस्तार सेवा एजेंसियां कम ब्याज पर ऋण देती हैं।					
6	निजी कृषि विस्तार सेवा एजेंसियां बीजोत्पादन से संबंधित विभिन्न संस्थाओं से कृषक को आवश्यक जानकारी उपलब्ध कराती है।					
Q	i d kj ok, a					
1	निजी कृषि विस्तार सेवा एजेंसियां बीजोत्पादन तकनीकी से संबंधित साहित्य का वितरण करती हैं।					
2.	निजी कृषि विस्तार सेवा एजेंसियां बैठक, क्षेत्र भ्रमण एवं पर्यटन का आयोजन करती हैं।					
3	निजी कृषि विस्तार सेवा एजेंसियां किसानों के लिए प्रशिक्षण विवरों का आयोजन करती है।					
4	निजी कृषि विस्तार सेवा एजेंसियां किसान संगोष्ठी का आयोजन नहीं करती हैं					
5	निजी कृषि विस्तार सेवा एजेंसियां किसान मेले का आयोजन नहीं करती हैं।					
6	निजी कृषि विस्तार सेवा एजेंसियां समाचार पत्र , रेडियो टीवी आदि के माध्यम से समय-समय पर बीजोत्पादन की जानकारी देती हैं।					

7	निजी कृषि विस्तार सेवा एजेंसियां बीज उत्पादन से संबंधित जानकारी मोबाइल पर उपलब्ध कराती हैं।					
8	निजी कृषि विस्तार सेवा एजेंसियां फसल प्रदर्शन का आयोजन नहीं करती हैं।					
9	निजी कृषि विस्तार सेवा एजेंसियां नई तकनीकी के महत्व को स्थानीय दूरी (गांव-गांव) में प्रदर्शित करती हैं।					
Xk	m e ok, a					
1	निजी कृषि विस्तार सेवा एजेंसियां तकनीकी बुनियादी सेवाओं के बारे में जानकारी प्रदान करती हैं।					
2	निजी कृषि विस्तार सेवा एजेंसियां बीजोत्पादन उद्यम के बारे में जानकारी नहीं देती।					
3	निजी कृषि विस्तार सेवा एजेंसियां पशुपालन/भेड़, बकरी पालन के बारे में जानकारी नहीं देती हैं।					
4.	निजी कृषि विस्तार सेवा एजेंसियां उद्यानिकी से संबंधित जानकारी उपलब्ध कराती हैं।					
5.	निजी कृषि विस्तार सेवा एजेंसियां बीजोत्पादन प्रक्रिया में आवश्यक उपकरण उपलब्ध कराने में मदद करती हैं।					
6.	निजी कृषि विस्तार सेवा एजेंसियां बीज प्रक्रिया इकाई (सीड प्रोसेसिंग यूनिट) के बारे में जानकारी उपलब्ध कराती हैं।					

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VITA

The author of the thesis, Kamla Kant Parouha was born on 01 March, 1987 at Village +,Post Syamardanda, Tehsil- Gunour, Distt.- Panna(M.P.). He passed his High School Certificate Examination (10+2) from S.H.S. School Devendra Nagar Panna (M.P.) in the year 2002. He passed his Higher Secondary School Certificate Examination (10+2) from Govt. B.H.S. School, Devendra Nagar Panna (M.P.) in the year 2004

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(Kamla Kant Parouha)
