

Study Obstacles and Problems of Agriculture Extension Training Courses from Extension Workers Points of View : A Case Study of Dezful, Iran

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Abstract: This study examined the obstacles and problems of agriculture extension training courses from extension workers point of view of participating in the extension training courses Dezful. This study relied upon a descriptive methodology, using survey as the instrument. The statistical population in this study consisted of 50 extension workers. That given the small statistical population, were studied all of them. The instrument was a researcher-made questionnaire. The results show that these courses the faced with problems and obstacles such as; use of uniform methods of educational for teaching educational content courses, lack of time-fitness in courses with volume and content offered in courses, lack of easy access of farmers to educational content courses, low literacy level of farmers, lack of time-fitness in courses with time conditions of farmers, lack of importance of respect for the opinions of farmers in the holding courses, lack of timely awareness of the holding courses, lack of using of incentives, the thinking and vision of traditional in the farmers. Other research findings indicate that is significant difference at $P \leq 0.05$ between the views of male extension workers and female extension workers about obstacles and problems of time-place and motivational. Also no significant difference between the views of male extension workers and female extension workers about obstacles and problems of educational and content in the extension courses held.

Key words: Training; agricultural extension; agricultural extension training courses; extension workers; Dezful.

1. Introduction

The basic condition for prosperity and development in any society is the development of human capital and development of human capital will not be achieved unless with training (Bouyle,2004,p31).So training in different levels can lead to progress and development in all aspects of society and to move the engine of development into with power and quickly(Zamanipour,2008,p106).Training can increase productivity power of farmers and enable them to take advantage of scientific and technology advances and increase its production rate(Malasy,2003,p5). In other words agricultural education and extension have been geared to harness the modern science and technology for higher productivity and production (NAAS,2005,p8). In the process of agricultural development the training and agriculture extension as a central mechanism considered and this role has done in many countries to respond appropriately(Shakouri,2006,p38). Roling and Kaimowitz propose that extension should focus on 'overall livelihood enhancement' in order to realise rural people's full potential. They continue that traditional agricultural intervention may not service the

needs of non-landed rural people, and extension needs to be responsive to the changing needs of rural people (Fulton et al, 2003,p13).

Leagans believes that the agriculture extension is as a major channel for technology transfer to farmers and as an important factor to increase agricultural production and development (Gholiniya & Zarefiyan, 2004, p116). So can be say agricultural extension is the function of providing need-and demand-based knowledge in agronomic techniques and skills to rural communities in a systematic, participatory manner, with the objective of improving their production, income, and (by implication) quality of life, in other words, extension is essentially education and it aims to bring about positive behavioral changes among farmers (Khan, 2005,p115). New approaches to extension emphasize three elements: 1) strategies to develop Agricultural Innovation Systems, 2) pluralism of service providers, and 3) extension services should be demand-driven (Anandajayasekeram et al, 2008). Thus specific goals of agricultural extension training can be summarized in the following cases:

- To develop an understanding of agriculture and its importance to family and nation
 - To provide a background for further studies in agriculture
 - To create awareness of the role of agriculture in industrial and technological development
 - To enhance understanding of the role of technology and industrialization in agricultural development
 - To promote consciousness of health-promoting activities in agricultural production (Vandenbosch, 2006,p34).
- Agricultural extension is taking a new dimension because of a global movement for reforming the national extension systems in developing countries that started late in the twentieth century. Agricultural extension, administration and supervision is a special field of general agricultural extension of agricultural that will help you situate the subject among other developmental efforts and to appreciate the educational and scientific nature of the discipline (Samuel, 2005,p2). So its application in agriculture, the development of useful and practical knowledge in agriculture, motivate and changes in behavior is a traditional agricultural society (Singh, 2000,p53). In connection with the agriculture extension and training it is said that agriculture extension and training is imperative for adult farmers and will be considered the main pillars of the agriculture in the world (Mathur, 1992,p46).

However in the present century and especially in third world countries including Iran agriculture extension is faced with serious problems such as; development of low agriculture extension due to lack of support services, a large population of farmers, poor compliance of extension with the objectives of farm management, lack of appropriate training to extension workers, poor management, lack of support of extension workers, lack of programs defined (Adams, 2007,p9). Extension services in Iran have sought to develop competence of farmers so that they may have better control over their farming systems. The approach of extension system towards agricultural development is to help and empower farmers to discuss, recognize and define their needs and encourage them to involve in diverse programs to satisfy their needs. The extension system is in operation in all parts of the country encompassing about 52000 villages having 23 million people. It has five major levels of administration, i.e., national, provincial, township, district and Dehestan levels (Fami, 2006,p117). Despite held annually the agriculture extension courses in different parts of Iran by the organization of agriculture extension (Shamsaei & Ghaderi, 2007,p20). But the results of different studies have shown that these courses were not successful. Perhaps one reason for this low success in disregard practitioners, policy makers and planners to education and extension to the extension workers points of view participating in these courses. Considering that extension workers are as provider the content of educational to the farmers and have awareness of the issues and problems facing this courses, so valuing to opinions them and to involve them in designing of future courses can help to eliminate the obstacles and problems these courses and improve quality and quantity them in the future. The given holding annually extension courses in the city of Dezful, in this study we tried to study obstacles and problems of agriculture extension training courses from extension workers points of view participating in the extension training courses Dezful city.

1.2 Purpose of research

The Purpose of this study is to survey obstacles and problems of agriculture extension training courses from extension workers points of view participating in the extension training courses Dezful in 2010.

1.3 Research Questions

1. What are the educational problems?
2. What are the problems of time - place?
3. What are problems of content?
4. What are problems of motivation?
5. Are there any significant difference in the views of views of male extension workers and female extension workers?

2. Methodology of Research

2.1 Research method

In this study the researcher sought to describe the objective, real and systematic study of problems agricultural extension courses from extension workers points of view, so this study relied upon a descriptive methodology, using survey as the instrument.

2.2 Statistical society

The statistical society in this study was all extension workers participating in the agricultural extension courses Dezful city in 2010 that consisted of 50 people.

2.3 Volume of sample and method of sampling

In this study to select volume of sample given the small statistical population, were studied all of them.

2.4 The device of gathering data

For gathering data we used researcher-made questionnaire with 34 questions that first 7 questions are relating to the first research question and 8 questions are the second research question and 8 questions are relating to the third research question and 11 questions are relating to the fourth research question.

2.5 Validity of the device

For determining validity of device we give several forms of questionnaire to the supervising and consultant extension experts and after gathering their views we do necessary corrections on the questionnaire.

2.6 Reliability of the device

For determining reliability of device we use Alfa method of Chronbach, so we present 20 samples of question to the people and after gathering and analyzing data we concluded that reliability coefficient is equal to 0.85 and is demonstrator of high reliability of device.

2.8 The method of analyzing data

By doing the research for analyzing data we use statistical software SPSS ; we study frequency indexes, percentage, average, standard deviation, in descriptive dimension and t-test, KMO coefficient, factor analysis in deductive dimension.

3. Research findings

The results are presented in the tables as follows:

Table (1) - descriptive studying members of sample based on the variable of gender

Gender extension workers	Frequency	Percent of frequency
Male	40	80.0
Female	10	20.0
Total	50	100.0

3.1 First research question:

Table (2) - responding percent of extension workers and KMO coefficient about obstacles and problems of educational in the extension courses

Questions	Extension workers	Scale					Mean	KMO coefficient	Appropriateness of the questions for factor analysis
		Very High	High	Medium	Low	Very Low			
1.Usage of uniform methods of educational for teaching educational content courses by extension workers	Male	12.0	38.0	20.0	10.0	0.0	3.65	0.706	Good
	Female	0.0	14.0	2.0	4.0	0.0	3.5		
2.Encouragement of farmers' to participation in the teaching topics by extension workers	Male	26.0	48.0	6.0	0.0	0.0	4.25	0.443	Unacceptable
	Female	4.0	14.0	2.0	0.0	0.0	4.1		
3.Invite from extension workers outside the Dezful city for teach the courses	Male	0.0	0.0	0.0	22.0	58.0	1.27	0.593	Poor
	Female	0.0	0.0	2.0	4.0	14.0	1.40		
4.Inadequate employment of versed and experienced extension workers about updated agricultural issues	Male	16.0	22.0	38.0	0.0	4.0	3.57	0.590	Poor
	Female	6.0	2.0	12.0	0.0	0.0	3.70		
5.Effect of gender extension workers (male or female) in Quality of teaching	Male	4.0	42.0	28.0	4.0	2.0	3.52	0.740	Good
	Female	0.0	12.0	8.0	0.0	0.0	3.60		
6.Usage of instructional and assistant equipment by extension workers	Male	4.0	20.0	48.0	6.0	2.0	3.22	0.540	Poor
	Female	4.0	2.0	14.0	0.0	0.0	3.50		
7.Duplication of information provided to farmers by extension workers	Male	0.0	2.0	6.0	34.0	38.0	1.65	0.680	Medium
	Female	0.0	0.0	4.0	6.0	10.0	1.70		

The findings in Table(2) shows the highest of response average between male extension workers is in question(2) with average of 4.25 and has been the lowest average in question(3) with average of 1.27. Also

the highest of response average between female extension workers is in question(2) with average of 4.1 and has been the lowest average in question(3) with average of 1.4. Also results of the KMO coefficient for factor analysis of variables shows that between the seven questions the first component of Research the two questions(1,5) are in a good condition of the KMO coefficient.

Table (3) - factor analysis using varimax method and predicted variance by each factor in the first research question

	Factor	variance predicted by each factor	Load factor
1	Use of uniform methods of educational for teaching educational content courses by extension workers	35.537	0.835
2	Effect of gender extension workers (male or female) in quality of teaching	26.244	0.764
Total variance explained by factor		61.761	

Results of the analysis main elements of variables with varimax rotation in the Table(3) shows that indicators of the factor ability was good in the two variable this component. After rotation with varimax method, two factors were the ability to express the variance with values greater than1, that can be said these factors were represent obstacles and problems of educational in the extension courses held. Factors first and second respectively 35.537 - 26.244 and in the total has 61.761 variance.

3.2 Second research question:

Table (4) - responding percent of extension workers and KMO coefficient about obstacles and problems of time - place in the extension courses

Questions	Extension workers	Scale					Mean	KMO coefficient	Appropriateness of the questions for factor analysis
		Very High	High	Medium	Low	Very Low			
1.Time-fitness in courses with time conditions of farmers	Male	2.0	24.0	48.0	4.0	2.0	3.25	0.720	Good
	Female	2.0	6.0	12.0	0.0	0.0	3.50		
2.Fitness courses held with agricultural season	Male	2.0	18.0	56.0	4.0	0.0	3.22	0.527	Poor
	Female	2.0	6.0	12.0	0.0	0.0	3.50		
3.Time-fitness in courses with volume and content offered in courses	Male	0.0	8.0	28.0	44.0	0.0	2.55	0.780	Good
	Female	0.0	4.0	4.0	12.0	0.0	2.60		
4.Fitness courses held with products cultivated in the areas	Male	10.0	58.0	12.0	0.0	0.0	3.97	0.552	Poor
	Female	2.0	10.0	6.0	2.0	0.0	3.60		
5.Courses offered in short and compact format	Male	12.0	52.0	12.0	4.0	0.0	3.90	0.543	Poor
	Female	0.0	10.0	4.0	6.0	0.0	3.20		
6. Tranquility of physical space in training courses	Male	0.0	58.0	22.0	0.0	0.0	3.72	0.516	Poor
	Female	0.0	12.0	8.0	0.0	0.0	3.60		
7. Training space and training facilities of suitable in the courses	Male	2.0	24.0	52.0	2.0	0.0	3.32	0.650	Medium
	Female	2.0	4.0	12.0	2.0	0.0	3.30		
8.Effect the training space and training facilities at the farmers Learning	Male	58.0	18.0	4.0	0.0	0.0	4.67	0.525	Poor
	Female	10.0	8.0	2.0	0.0	0.0	4.40		

The findings in Table(4) shows the highest of response average between male extension workers is in question(8) with average of 4.67 and has been the lowest average in question(3) with average of 2.55. Also the highest of response average between female extension workers is in question(8) with average of 4.4 and has been the lowest average in question(3) with average of 2.60. Also results of the KMO coefficient for factor analysis of variables shows that between eight questions the second component of Research the two questions(1,3) are in a good condition of the KMO coefficient.

Table (5) - factor analysis using varimax method and predicted variance by each factor in the second research question

	Factor	variance predicted by each factor	Load factor
1	lack of time-fitness in courses with volume and content offered in courses	20.717	0.864
2	lack of time-fitness in courses with time conditions of farmers	18.757	0.780
Total variance explained by factor		39.479	

Results of the analysis main elements of variables with varimax rotation in the Table(5) shows that indicators of the factor ability was good in the two variable this component. After rotation with varimax method, two factors were the ability to express the variance with values greater than 1, that can be said these factors were represent problems of time-place in the extension courses held. Factors first and second respectively 20.717 - 18.757 and in the total has 39.479 variance.

3.3 Third research question:

Table (7) - responding percent of extension workers and KMO coefficient about obstacles and problems of content in the extension courses

Questions	Extension workers	Scale					Mean	KMO coefficient	Appropriateness of the questions for factor analysis
		Very High	High	Medium	Low	Very Low			
1.Impact the content of training courses on improving knowledge and skills of farmers	Male	48.0	26.0	6.0	0.0	0.0	4.52	0.480	Unacceptable
	Female	12.0	8.0	0.0	0.0	0.0	4.60		
2.lack of appropriate content presented in courses with vocational training needs of farmers	Male	26.0	52.0	2.0	0.0	0.0	4.30	0.672	Medium
	Female	8.0	10.0	2.0	0.0	0.0	4.30		
3.Fitness of the content provided in courses accordance with the literacy level of farmers	Male	2.0	4.0	48.0	18.0	8.0	2.67	0.701	Good
	Female	0.0	6.0	12.0	2.0	0.0	3.20		
4.Fitness the content presented with previous experiences of farmer	Male	8.0	0.0	68.0	4.0	0.0	3.15	0.586	Poor
	Female	4.0	0.0	12.0	4.0	0.0	3.20		
5.Fitness of the content presented with title of courses	Male	2.0	56.0	22.0	0.0	0.0	3.75	0.644	Medium
	Female	0.0	12.0	8.0	0.0	0.0	3.60		
6.Logical connection between the content provided in the current courses with content provided in prior courses	Male	2.0	12.0	50.0	16.0	0.0	3	0.621	Medium
	Female	0.0	2.0	10.0	8.0	0.0	2.70		

7. Provide to educational content courses in the form of informational means such as instructional pamphlets and CDs to the farmers	Male	0.0	6.0	6.0	46.0	22.0	1.95	0.785	Good
	Female	2.0	2.0	0.0	8.0	8.0	2.10		
8. Easy access of farmers to educational content courses	Male	0.0	2.0	2.0	26.0	50.0	1.45	0.768	Good
	Female	0.0	2.0	2.0	6.0	10.0	1.80		

The findings in Table(7) shows the highest of response average between male extension workers is in question(1) with average of 4.52 and has been the lowest average in question(8) with average of 1.45. Also the highest of response average between female extension workers is in question(1) with average of 4.60 and has been the lowest average in question(8) with average of 1.80. Also results of the KMO coefficient for factor analysis of variables shows that between eight questions the third component of Research the three questions(3,7,8) are in a good condition of the KMO coefficient.

Table (8) - factor analysis using varimax method and predicted variance by each factor in the third research question

	Factor	variance predicted by each factor	Load factor
1	Lack of provide to educational content courses in the form of informational means such as instructional pamphlets and CDs to the farmers	34.516	0.870
2	Lack of fitness of the content provided in accordance with the literacy level of farmers	20.411	0.832
3	lack of easy access of farmers to educational content courses	19.770	0.801
Total variance explained by factor		74.697	

Results of the analysis main elements of variables with varimax rotation in the Table(8) shows that indicators of the factor ability was good in the three variable this component. After rotation with varimax method, three factors were the ability to express the variance with values greater than 1, that can be said these factors were represent problems of content in the extension courses held. Factors first, second and third respectively 34.516- 20.411- 19.770 and in the total has 74.697 variance.

3.4 Fourth research question:

Table (9) - responding percent of extension workers and KMO coefficient about obstacles and problems of motivational in the extension courses

Questions	Extension workers	Scale					Mean	KMO coefficient	Appropriateness of the questions for factor analysis
		Very High	High	Medium	Low	Very Low			
1. Impact the participating in courses on job satisfaction of farmers	Male	2.0	20.0	56.0	0.0	2.0	3.25	0.425	Unacceptable
	Female	0.0	10.0	10.0	0.0	0.0	3.50		
2. Impact the use of local dialects for provide content by extension worker in the motivation of farmers for participating in courses	Male	22.0	54.0	0.0	4.0	0.0	4.17	0.710	Good
	Female	6.0	10.0	2.0	2.0	0.0	4		
3. Impact participating in courses on the	Male	12.0	52.0	16.0	0.0	0.0	3.95	0.476	Unacceptable

growth and quality of agricultural products	Female	0.0	12.0	6.0	2.0	0.0	3.50		
4.Impact the importance of respect for the opinions of farmers in the holding courses at encourage farmers to participate in courses	Male	18.0	46.0	16.0	0.0	0.0	4.02	0.750	Good
	Female	6.0	6.0	8.0	0.0	0.0	3.90		
5.Impact participation of farmers in courses at learn new things	Male	24.0	46.0	4.0	6.0	0.0	4.10	0.616	Medium
	Female	4.0	10.0	6.0	0.0	0.0	3.90		
6.Provide of conditions the participating in courses for all farmers	Male	0.0	18.0	60.0	2.0	0.0	3.20	0.369	Unacceptable
	Female	0.0	10.0	10.0	0.0	0.0	3.50		
7.Impact the timely awareness of the holding courses at willingness of farmers to participate in courses	Male	58.0	18.0	4.0	0.0	0.0	4.67	0.768	Good
	Female	12.0	2.0	6.0	0.0	0.0	4.30		
8.Provision of vehicles for creation motivation at farmers to participate in courses	Male	0.0	0.0	8.0	22.0	50.0	1.47	0.499	Unacceptable
	Female	0.0	0.0	4.0	6.0	10.0	1.70		
9.Usage of (personal invitation)for participating of farmers in courses	Male	0.0	0.0	0.0	56.0	24.0	1.70	0.662	Medium
	Female	0.0	0.0	0.0	16.0	4.0	1.80		
10.Usage of incentives such as fertilizer of free for creation motivation at farmers to participate in courses	Male	0.0	0.0	4.0	4.0	72.0	1.15	0.725	Good
	Female	0.0	0.0	0.0	2.0	18.0	1.10		
11.Impact the courses holding at promote of attitudes or creation of new attitudes at farmers	Male	12.0	60.0	6.0	2.0	0.0	4.02	0.389	Unacceptable
	Female	6.0	10.0	4.0	0.0	0.0	4.10		

The findings in Table(9) shows the highest of response average between male extension workers is in question(7) with average of 4.67 and has been the lowest average in question(10) with average of 1.15. Also the highest of response average between female extension workers is in question(7) with average of 4.30 and has been the lowest average in question(10) with average of 1.10. Also results of the KMO coefficient for factor analysis of variables shows that between eleven questions the fourth component of Research the four questions(2,4,7,10) are in a good condition of the KMO coefficient.

Table (10) - factor analysis using varimax method and predicted variance by each factor in the fourth research question

	Factor	variance predicted by each factor	Load factor
1	Impact the timely awareness of the holding courses at willingness of farmers to participate in courses	20.755	0.809
2	Impact the importance of respect for the opinions of farmers in the holding courses at encourage farmers to participate in courses	18.690	0.778
3	Usage of incentives such as fertilizer of free for creation motivation at farmers to participate in courses	16.073	0.759
4	Impact the use of local dialects for provide content by extension worker in the motivation of farmers for participating in courses	14.123	0.747
Total variance explained by factor		69.641	

Results of the analysis main elements of variables with varimax rotation in the Table(10) shows that indicators of the factor ability was good in the four variable this component. After rotation with varimax method, four factors were the ability to express the variance with values greater than 1, that can be said these factors were represent problems of motivational in the extension courses held. Factors first, second,third and fourth respectively 20.755-18.690-16.073- 14.123 and in the total has 69.641 variance.

3.5 Fifth research question:

Table(11)- Comparison average and standard deviation the obstacles and problems of agriculture extension courses held from points of view male extension workers and female extension workers

Research Questions	Male extension workers		Female extension workers		T	P
	Mean	SD	Mean	SD		
1.obstacles and problems of educational	3.25	0.744	3.32	0.738	-1.134	0.132
2. obstacles and problems of time – place	3.34	0.787	3.27	0.608	2.77	0.005*
3. obstacles and problems of content	3.33	0.768	3.38	0.774	-0.746	0.112
4.obstacles and problems of motivational	4.09	0.725	4.01	0.619	2.839	0.011*

The findings in Table (11) shows that T calculated about the first and third research question no significant at level $P \leq 0.05$, So in this question no difference between the views of male extension workers and female extension workers. But in the second and fourth research question the T calculated is significant at $P \leq 0.05$, So in these two questions is difference between the views of male extension workers and female extension workers.

4. Conclusions

The findings of this study using the KMO coefficient and factor analysis the views of extension workers indicate that these courses the faced with problems and obstacles such as;

- Use of uniform methods of educational for teaching educational content courses by extension workers.
- lack of attention to gender extension workers in quality of teaching.
- lack of time-fitness in courses with volume and content offered in courses.
- lack of easy access of farmers to educational content courses.
- lack of time-fitness in courses with time conditions of farmers.
- lack of access to educational content courses in the form of informational means such as instructional pamphlets and CDs.
- Lack of time-fitness in courses with time conditions of farmers.
- Lack of fitness of the content provided in courses accordance with the literacy level of farmers.
- lack of importance of respect for the opinions of farmers in the holding courses.
- lack of timely awareness of the holding courses.
- lack of using of incentives such as fertilizer of free at more willingness of farmers to participate in courses.
- lack of using of local dialects for provide content by extension worker in courses.

Other research findings indicate that is significant difference at level $P \leq 0.05$ between the views of male extension workers and female extension workers about obstacles and problems of time-place and motivational. Reason the significant difference between the views of extension workers about these problems is that the average and standard deviation the views of male extension workers is higher than female extension workers. Also was not observed the significant difference between the views of male extension workers and female extension workers about obstacles and problems of educational and content in the extension courses held. Reason the lack of significant difference between the views of farmers about this problem is that the average and standard deviation the views of male extension workers and female extension workers is almost identical.

According to the results of this study recommended the following proposals:

- In organizing and planning the future course of extension gets more attention to views and opinions of farmers.

- Extension workers for improve the quality of learning to farmers and provide better educational content to them the more use of different methods especially educational films.
- Holding agriculture extension training courses the fitness with time conditions of farmers and also fitness with volume and content offered in courses.
- Using of incentives such as fertilizer and seed of free, free transportation for more willingness of farmers to participate in courses.
- Preparation to educational content courses in the form of informational means such as instructional pamphlets and CDs and distribution between farmers during the courses holding.
- Using of local dialects for provide content by extension worker in courses.
- Provide of content in courses accordance with the literacy level of farmers.

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