



EXTENSION METHODS USED WITH OLIVE CROP FARMERS IN NORTH SINAI GOVERNORATE, EGYPT

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Abstract

The success of the Agricultural extension work depends on choosing the best and most effective methods according to the farmer's needs and the educational situation. This research aimed to identify extension methods used by agricultural extension staff with olive farmers in North Sinai Governorate, and farmer's preference for these methods, Research data were collected through personal interviewing questionnaire with 100 respondents representing 25% of the total olive farmer in the village of Meriah from October to December 2015. Results showed that 47% of respondents fall in the Middle age group, 51% of them had an Intermediate education qualification, 87% were Part-time agricultural workers, The degree of social participation for the majority of respondents (76%) was low, And Only 37% of respondents had a positive attitude towards agricultural. In the forefront of extension methods used by agricultural extension, was farm visit (53%), followed by group meetings (25%), while the least methods used was by extension workers were Organize harvest day (5%) and Conducting practical demonstration experiments (5%), and about the farmers' preference for these methods were as follows: Farm visits came in the first place, followed by group meetings with the farmers, conducting practical demonstration experiments, office visits, supplying the farmers with publications, Followed by the use of guide posters, and the field day was ranked in the last order of these methods. In the end we can say that agricultural extension usage of these methods by agricultural extension with olive farmers was weak as the vast majority of these farmers were not exposed to any of these methods during the past year, and this reflecting the lack of use of these methods by agricultural extension, which requires from the extension system to focus on the use of these methods as channels for the transmission of extension messages in the future treatment with olive growing, Moreover, agricultural extension in its future plans should be concerned with the methods preferred by farmers and these methods are Farm visits, group meetings, and conducting practical demonstration experiments So that it can achieve the objectives of the extension communication.

Keywords : Extension, Farmers, Methods, North Sinai, Olive.

Introduction

The agricultural sector is one of the most important sectors in the Egyptian economy. This sector contributed 14.5% of the GDP in 2014. The value of agricultural production in this year amounted to LE 283.5 billion (The General Authority for Information, 2016), Agriculture is one of the most economically viable sectors for employment. In 2013, the number of workers in the agricultural sector reached 6.7 million, representing 28% of the total workforce in Egypt. (World Bank, 2016.) The successive economic and social development plans aimed to achieve a comprehensive, balanced and stable development to catch up with international and regional developments and to cope with the increase in population. Therefore, the state turned to agricultural development both vertically and horizontally, especially the horizontal development in the new and newly reclaimed desert areas. (Information and Decision Support Center in El Arish: 2015).

Although this Governorate has a comparative advantage in the production of some crops such as olive crop, which generates a distinct economic return, whether marketed locally or exported, as North Sinai is the largest regions of the Arab Republic of Egypt in terms of area planted with olives, this area in 2012 About 43468 feddans) 17590.8 hectares) However, this governorate occupies the twentieth place for the productivity of this crop. (Agricultural Economics Bulletin, 2013)

Agricultural extension and advisory services play an important role in agricultural development and can contribute to improving the welfare of farmers and other people living in rural areas (Anderson, 2007), Extension workers' main job is to educate the rural people which can be enhanced

considerably if the latest agricultural technologies are communicated to the farmers through an efficient extension method. (Amir *et al.*, 2013).

Extension methods are the tools of the extension workers. Extension teaching methods may be defined as the devices used to create situations in which communication can take place between the extension worker and learner, Research studies have conclusively shown that the adoption of innovation is positively related to the combinations of different extension teaching methods, at different stages of learning. (PGDAEM, 2007)

The choice of a channel or extension teaching method generally depends on the number and location of the target audience and the time available for communication. They are categorized as individual, group and mass methods. Each of the methods has both advantages and limitations. The extension agent has to choose a particular method or combination of methods according to the needs of the situation (PGDAEM, 2007) To provide successful programming, Extension educators must develop useful messages and choose the appropriate channel or method of communication for reaching a target audience (Peisher, 1992). That is why Agricultural education, information and skill development are the main concerns of agricultural extension agencies (Farooq *et al.*, 2007) Researchers confirm that effectiveness of a method depends upon selecting the right method, at the right time However; different extension methods have been effective, in different situations and at different levels in adoption process. (Blaine, 2005).

Since the Extension methods used in the extension work directly affect the effectiveness of its efforts and programs, therefore, the staff of the Extension agencies should know the

advantages and limitations available from these methods (Welson & Gallup, 1954), So that they can make the appropriate instructional decisions to be used in each project, and how to combine them so that they can achieve the goals effectively to save time, effort and money (David, 1974). The use of more than one extension method increases the educational impact of these methods as Mosher mentioned that there is rarely one satisfactory attempt using a single method. The extension service often needs to use more than one method in a single batch and quickly. If one of these methods fails in its effect, another method may be used instead. This makes the educational work to the fullest. (Mosher, 1978)

Therefore, this study aims at identifying the extension methods used by the agricultural extension staff of North Sinai Governorate and the preference of farmers for these methods. As The success of the agricultural work depends on choosing the best and most effective methods according to the farmer's needs and the educational situation.

Purpose of the study

The Objectives of the study were to:

1. Describe the Characteristics of respondents and Their Farms.
2. Determine extension methods used by agricultural extension staff with olive crop farmers in North Sinai Governorates.
3. Identify the preferred extension methods that respondents find most useful in receiving information about olive crop.

Materials and Methods

This research is based on Descriptive Research, which is considered one of the most appropriate and most widely used methods in the study of human and social phenomena; this research was conducted in North Sinai governorate. Due to the large area of the governorate, the largest center has been selected in terms of area cultivated with olives. The center of Bir al-Abd, (9818 feddans) (Table 1). The same criterion was chosen for the largest village in this center (Al Meria village), with a total area of 1310 feddans (530.14 hectares) for the year 2015 (agricultural Administration in Bir al-Abd, July 2015). The research consists of all the olive

crop farmers registered by the village agricultural cooperative association (400 respondents), And because of the difficulty of collecting data from all the holders Due to security conditions and problems in the governorate, A simple random sample was selected, Based on what some statisticians mentioned about the appropriate size of the sample if we want to choose a simple random sample with a high degree of accuracy from homogeneous study community, the sample is appropriate size of 23% (Kheder, 2016) , Therefore, the researcher chose a simple random sampling of 23% of the total farmers in the village, (92 farmers) that were increased to 100 farmers To facilitate the conduct of statistical analysis. Data collection tool was a questionnaire, the field data were collected from October to December 2015 through a personal interview with the respondents.

Table 1: olive areas in North Sinai Governorate for the 2013/2014 season

Center (district)	Olive area (feddans)	Center (district)	Olive area (feddans)
Arish	7607	Bir al-Abd	9818
Sheikh Zwaid	4930	alhasana	1390
Rafah	6296	Nikhil	547
Total	30588		
Fruitful area	16939		

Source: agricultural Administration in Bir al-Abd, July 2015.

Results and Discussion

Results

First: Description of the Research Sample

Characteristics of Participating Farmers and Their Farms summarized in Table 2 showed that 47% of respondents fall in the Middle age group (38 to 51) years, 51% of them had an Intermediate education qualification, 87% were Part-time agricultural workers , 44% of them had Agricultural area planted with olives 2 feddans and more, 52% of them had Average productivity 2 tons and more, The degree of social participation of the majority of farmers respondents (76%) was low, The distance between the farm and agricultural extension centers was less than 5 km for 89% of respondents. And Only 37% of respondents had a positive attitude towards agricultural extension. (Table 2)

Table 2 : Characteristics of Participating Farmers and Their Farms

Characteristics		N	%	Mean	Std.
Age	Young (< 38year)	28	28		
	Middle (38 to 50 year)	47	47	44.5	9.5
	Old (> 50 year)	25	25		
Education	Illiterate	22			
	Primary Education	8			
	Intermediate	51			
Farm work time	University	19			
	Full-time	13			
	Part-time	87			
Agricultural area planted with olives	Less than feddan	30		1.7	1.3
	feddan - less than 2 feddans	26			
	2 feddans and more	44			
Average productivity	Less than a ton	4			

Characteristics		N	%	Mean	Std.
	Ton - less than 2 tons	44		1.94	0.4
	2tons and more	52			
Farm experience in olive cultivation(Years)	Less than 16 years old	52			
	.16- Less than 27 years	29		17.6	8.8
	27 Years and over	19			
Organizational participation	Low participation (Up to 6)	76	76		
	Medium participation (6-10)	21	21	3.4	2.2
	High participation (>10)	3	3		
Altitude towards agricultural extension	Negative (less than 17 degree)	33			
	A neutral (17 - less than 24 degree)	30		20	6.4
	Positive (24 degree and more)	37			
The farm distance from the agricultural extension office	Less than 5 km	89			
	5- Less than 8 km	8			
	km and above 8	3			

Source: collected and calculated from the questionnaire form

Second: extension methods for respondents

According to the data presented in Tables 3, a number of extension methods were used with farmers in the previous year to Data collection According to the respondents In the forefront of these methods, the extension's agent visit to their farms (53%), followed by group meetings by (25%), Followed by the supply them with agricultural publications by 13%, While the least methods used was by extension

workers were harvest days (5%) and Conducting practical demonstration experiments (5%), while the field day was not organized, and the telephone communication was not used as a method During the last year, In general, These results indicate that the use of these methods by agricultural extension workers was weak. The vast majority of these farmers were not exposed to any of these methods during the last year.

Table 3: Extension methods used with olive farmers

	Extension Methods	Have used	Have not used	% have used
1	Farm visits	53	47	53
2	Office calls	8	92	8
3	Telephone calls	0	100	0
4	Posters	8	92	8
5	Group meetings	25	75	25
6	publications	13	87	13
7	Field days	0	100	0
8	harvest days	5	95	5
9	practical demonstration experiments	5	95	5

Source: collected and calculated from the questionnaire form

Third: Respondents preference of extension methods

The farmers' preference for these methods differed, Results in Fig:1 showed that Farm visits came in the first place, followed by group meetings with the farmers, then conducting practical demonstration experiments, when posters, and field days was ranked in the last order of these methods in terms of the preference degree.

Source: collected and calculated from the questionnaire form

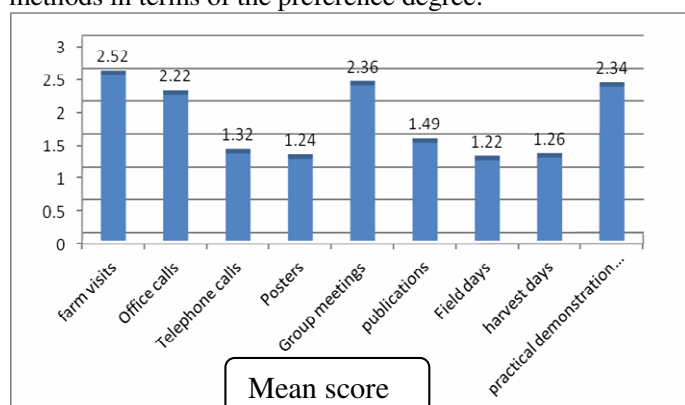


Fig. 1 : Preferred Extension methods by respondents

Discussion

Results indicate that the use of these methods by agricultural extension workers was weak. The vast majority of these farmers were not exposed to any of these methods during the last year

Except for field visits, the use of agricultural extension of these methods was very weak, reflecting the lack of use of these methods by agricultural extension, which requires from the extension system to focus on the use of these methods as channels for the transmission of extension messages in the future treatment with olive growing, Moreover, agricultural extension in its future plans should be concerned with the methods preferred by farmers and these methods are Farm visits, group meetings, and conducting practical demonstration experiments So that it can achieve the objectives of the extension communication.

Conclusion

A number of extension methods were used with olive farmers in the previous year to collect data. The most prominent of these methods were farmers mentioned: the farm visits, followed by the extension meetings with the farmers, then Supply farmers with agricultural publications. In general, these results indicate that the use of these methods by agricultural extension with the farmers was weak as the vast majority of these farmers were not exposed to any of these methods during the past year.

The farmers prefer these methods respectively: field visit, extension meetings, conducting practical demonstration experiments, office visit, and then supplying the farmers with the guidance publications. So that to provide successful programming, Extension workers must develop useful messages and choose the appropriate channel or preferred method of communication for reaching a target audience and achieve the objectives of the process of extension communication.

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