University of Thi-Qar Journal of agricultural research
ISSN Onlin:2708-9347, ISSN Print: 2708-9339 Volume 12, Issue 1 (2023) PP 99-111
https://jam.utq.edu.iq/index.php/main https://doi.org/10.54174/utjagr.v12i1.242

LEVEL OF EXTENSION METHODS IMPORTANCE FROM THE AGRICULTURAL EXTENSION WORKERS POINT OF VIEW IN SULAIMANI GOVERNORATE

[1]Dlger Salih M. Mohammad, [2]Mohammed Omer Mohammed Sakina

1,2 Department of Agribusiness and Rural Development- College of Agriculture Engineering sciences University of Sulaimani,

[1]*Email: dlger.mahmood@univsul.edu.iq*

[2]*Email: muhammed.muhammed@univsul.edu.iq*

Abstract

The aim of this study was to determine the level of agricultural extension methods importance from the extension workers point of view in Sulaimani governorate, then identify relationship between agricultural extension methods importance with some variables. The population consists of the all agricultural extension workers in agricultural extension directorate of Sulaimani and they were (137) workers, the sample of the research included (106) respondents representing nearly (%77) of the population, taken by a simple sampling random method. Questionnaire was prepared to collect the data. The results showed that the level of importance of extension methods were high tends to medium, group extension methods occupied the first rank in the level of importance of extension methods. Farm visit paragraph occupied the first rank in the individual method, then field demonstration paragraph occupied the first rank in the group method finally extension campaigns paragraph occupied the first rank in the mass method. The results also showed there is a significant relationship between the level of importance and each of the following variables (Previous training, Exposure to sources of the agricultural information. Attitude towards agricultural extension. Job satisfaction). While not significant relationship between the level of importance of extension methods and the other variables.

The researchers recommended pay attention to energizing their programs through agricultural extension methods, and Focusing on activating the group method, Agricultural extension department should pay attention for the workers to participate in training courses.

Key words: Agricultural Methods, Individual Method, Group Method, Mass Method

I. INTRODUCTION

Sustainability and productivity of the agricultural sector worldwide largely depend on the quality and effectiveness of Agricultural extension services (Kimaro et al 2010, p27). Agricultural extension also plays an essential role in agricultural development that needs concerted efforts for the development of both human and material resources and organizing them in a manner that achieves the desirable goals of this development (Masso & Saleem 2020, p322). Agricultural extension is a "system that help the farmers to easier access their organizations and other market actors to knowledge, information and

University of Thi-Qar Journal of agricultural research
ISSN Onlin:2708-9347, ISSN Print: 2708-9339 Volume 12, Issue 1 (2023) PP 99-111
https://jam.utq.edu.iq/index.php/main https://doi.org/10.54174/utjagr.v12i1.242

technologies (Christoplos 2010, p1), to help farmers solve their day to day agricultural problems, it Transfer agricultural research recommendations to farmers to improve their analytical ability and communication skills to help them in their farming and farming related activities (Bruin and Meerman 2001, p46), for improving productivity, farmers' welfare and household nutritional status (Fabiyi 2015, p75).

The major aim of agricultural extension activities is to communicate relevant and useful information to the end users to encourage them to adopt that which will eventually lead to increase in agricultural production (Okunade and Oladosu 2006, p282).

Agricultural extension can only be done through a communication medium, the right communication process is the core of successful agricultural extension work in particular and rural development in general (Masso & Saleem 2020, p322). Disseminating new findings and technologies to rural farmers remain a promising strategy for increasing agricultural productivity. The new idea must arrive to farmers' farms and homes through effective extension methods, (Ekoja 2003, p21), starting with individual then group methods and extends them to the methods of mass communication Seen through the press, radio and television (Al-Hamouli and others 2019, p125). Because of the difference between the rural people's needs, habits, customs, values, attitudes, way of life and their problems (Al-Muzari etal 2012, p74), multiple and diversified extension methods should be used, to ensure that every member of farmers' audience is affected by ideas and new agricultural technologies communicated (Al-Mashhadani and others 2017, p1). because of the importance of agricultural extension also extension methods and because of the lack of previous researches revealing the reality of the importance of agricultural extension methods in Sulaimani governorate, from this point of view, the research problem was identified through the following research questions:

1. What is the level of agricultural extension methods importance from the agricultural extension workers of view in Sulaimani governorate in general?
2. What is the level of agricultural extension methods importance from the agricultural extension workers of view in Sulaimani governorate in each methods?
3. What are the relationship between the level of agricultural extension methods importance and some of the personal and functional variables of the?

Research objectives:

1. Determine the level of agricultural extension methods importance from the agricultural extension workers of view in Sulaimani governorate in general.
2. Determine the level of agricultural extension methods importance from the agricultural extension workers of view in Sulaimani governorate in each methods.
3. Identify the relationship between the level of agricultural extension methods importance and some of the personal and functional variables of the.

University of Thi-Qar Journal of agricultural research
ISSN Onlin:2708-9347, ISSN Print: 2708-9339 Volume 12, Issue 1 (2023) PP 99-111
https://jam.utq.edu.iq/index.php/main https://doi.org/10.54174/utjagr.v12i1.242

II. MATERIALS AND METHOD

Descriptive approach was used to conduct this study taking in consideration the following spans:

1. **Research Area**: This research conduct in agricultural extension directorate of Sulaimani spread over 10 agricultural sections and departments.

2. **Research Population**: the research population involved all workers in agricultural extension directorate including (132) workers spread over 10 agricultural sections and departments, the sample of the research included (106) respondents representing nearly (%80) of the population, taken by a simple sampling random method.

Data collection tools: Data were collected by questionnaire through the face to face interview , consist of two part: The first part included some personal and functional variables (Age, Gender, Educational ,Specialization, Job Title, Duration of service**,** Duration of the agriculture extension service, Previous training, sources of information, Attitude towards agricultural extension, Job satisfaction. Second part included (33) items of agricultural extension methods to determining the level of importance of the agricultural extension methods, divided into three methods (individual extension methods, group extension methods, and mass extension methods. Five alternatives were assigned to each item as an indicator to determine the level of importance of agricultural extension methods (Un important, A little important, medium important, Very important). Validity of the questionnaire was conducted by presenting the questionnaire to a number of specialists in the methods of media, psychology and agricultural extension. Also reliability of the questionnaire was accounted through the exploratory sample of 30 respondents by using the Alpha-Cronbach method and the reliability coefficient reached (0.935). After final modifications, the questionnaire was used to collect data from the research sample. Finally, The software SPSS ver22 was used for data analysis.

III. RESULTS AND DISCUSSION

1. To identify the level of agricultural extension methods importance in general, the Respondents has been classified according to the level of their importance degree of the extension methods in to three categories. It appears from table (1) that 52%of the workers indicated that total estimate of the extension methods importance were high.

Table (1) Distribution of respondents according to the level of importance of extension methods

Level of importance	Categories	Frequency	%	X
Low	(66 – 98)	8	7.55	83.13
Medium	(99 – 131)	42	39.62	118.86
High	(132 – 164)	56	52.83	142.32
Total		106	100%	

N = 106 X = 128.56 S.D = 19.21

University of Thi-Qar Journal of agricultural research
ISSN Onlin:2708-9347, ISSN Print: 2708-9339 Volume 12, Issue 1 (2023) PP 99-111
https://jam.utq.edu.iq/index.php/main https://doi.org/10.54174/utjagr.v12i1.242

This may be due to the increased knowledge of agricultural extension workers in Sulaimani governorate regarding educational instructional situations, in addition to their resort to various information sources such as books and other publications, and their use of modern technological means such as the Internet to gain new information about extension methods and their importance in agricultural extension work, transfer of information and techniques, diversity Training courses for agricultural extension workers and giving them sufficient information on the most important extension methods. This result is consistent with the finding of (Al- Harbawi 2009, p48) and (Jassam, and al-jumaily 2021, p 47). But is not consistent with the finding of (Al-Mashhadani etal 2017, p4).

2. Identify the level of agricultural extension methods importance for each methods (individual, group and mass) methods.

Each of the aspects of extension methods and were classified according to the level of their importance of extension methods into three categories as shown in the following table:

Table (2) Distribution of the respondents according to the each extension methods

Methods	Levels of importance	Categories	Frequency	%	$\bar{X}$	S.D
Group	Low	(29-42)	7	6.61	57.45	8.33
	Medium	(43-56)	27	25.47		
	High	(57-70)	72	67.92		
	Total		106	100%		
Mass	Low	(22-34)	16	15.09	44.59	9.12
	Medium	(35-47)	40	37.74		
	High	(48-60)	50	47.17		
	Total		106	100%		
Individual	Low	(13-20)	12	11.32	26.49	4.29
	Medium	(21-28)	57	53.77		
	High	(29-36)	37	34.91		
	Total		106	100%		

The data in table (2) shows that the level of importance of individual extension methods is medium tending to rise. But the level of importance of both group and mass extension methods is high tending to medium.

For the purpose of comparison between the three methods of agricultural extension methods, the researcher used the equation of weight percentage in the statistical means. The results showed the order of those methods as shown in the following table:

University of Thi-Qar Journal of agricultural research
ISSN Onlin:2708-9347, ISSN Print: 2708-9339 Volume 12, Issue 1 (2023) PP 99-111
https://jam.utq.edu.iq/index.php/main https://doi.org/10.54174/utjagr.v12i1.242

Table (3) Order aspects of the extension methods according to the weights percentage values

Extension methods	$\bar{X}$	Over the theoretical degrees methods	Weights percentage	Rank
Group	57.45	29-70	82.07	1
Individual	26.49	13-35	75.69	2
Mass	44.59	22-60	74.32	3

The data in table (3) shows that the level of importance of group extension methods ranked the first rank, with weight percentage of 82.07%. This result is attributed to the large and effective influence of group methods in extension education which is facilitate contact with large numbers of farmers. This was followed by individual extension methods with weight percentage 75.69%, while the mass extension methods came at the lowest rank with weight percentage 74.32%. This result can be interpreted by the lack of information and high experience by extension workers about different mass methods and the inconsistency of some methods with the educational levels of farmers in rural areas, such as experience and illiterate farmers. This result is not consistent with the finding of (Al- Harbawi 2009, p49).

Third: Ranking the paragraphs of each method according to their levels of importance through the weight percentage. The paragraphs were ordered depending on the level of importance from the highest to the lowest level in accordance with the weights percentage.

1. Individual extension methods: as shown in table (4**)** farm visits method is the most important method between the individual extension methods with weight percentage 95.4%, the reason for this may be that by farm visits the agents build up knowledge of the area, and of the kinds of problems which farmer face, and arouse general interest among the farmers and stimulate their involvement in extension activities. This result is consistent with the finding of (Al-Mashhadani etal 2017, p4) , and (El-Salsili etal 2006, p10). While the method of personal letters came in last with weight percentage 55.8% the reason for this may be that there is no available delivery service or the high illiteracy rate in the countryside of Kurdistan. This result is consistent with the finding of (Al- Harbawi 2009, p50).

Table (4) Order of the paragraphs of individual extension methods according to the value of weights percentage

Individual extension methods	$\bar{X}$	S.D	Weight percentage %	Ranks
Farm Visits	4.77	0.48	95.4	1
Office visits	4.22	0.78	84.4	2
Telephone Calls	3.96	0.98	79.2	3
Home Visits	3.92	1.00	78.4	4

University of Thi-Qar Journal of agricultural research
ISSN Onlin:2708-9347, ISSN Print: 2708-9339 Volume 12, Issue 1 (2023) PP 99-111
https://jam.utq.edu.iq/index.php/main https://doi.org/10.54174/utjagr.v12i1.242

Social networks	3.53	1.197	70.6	5
Informal meetings	3.30	1.21	66.00	6
Personal letters	2.79	1.20	55.8	7

2. Group extension methods: As shown in table (5) method demonstrations are the most important method between the group extension methods with weight percentage 95.00%, the reason for this may be that the method demonstration gives the extension worker extra assurance that recommendation is practical and furnishes local proof of its advantages and it also increases confidence of learners in extension worker and his recommendations. While the rural theater method came in last rank with weight percentage 65.4%. Because most of extension workers didn't know so much about rural theater method, also this method require some especial skill such as acting that make it not easy to extension workers to depend upon it as an effective method their work. This result is not consistent with the findings of (Al- Harbawi 2009, p5).

Table (5) Order of the group extension methods according to the values of weights percentage

Group Extension methods	X	S.D	Weight percentage %	Rank
Method demonstrations	4.75	0.48	95.00	1
Result demonstrations	4.54	0.69	90.8	2
Training courses	4.43	0.73	88.6	3
Extension lectures	4.39	0.78	87.8	4.5
Extension meetings	4.39	0.67	87.8	4.5
Extension symposiums	4.18	0.87	83.6	6
Extension seminars	4.17	0.77	83.4	7
Seasonal field day	4.14	0.99	82.8	8
Extension tours	3.97	1.04	79.4	9
Annual field day	3.95	1.00	79.00	10
Extension conferences	3.91	0.90	78.2	11
Workshops	3.76	1.03	75.2	12
Extension cinema	3.58	1.15	71.6	13
Rural theater	3.27	1.20	65.4	14

University of Thi-Qar Journal of agricultural research
ISSN Onlin:2708-9347, ISSN Print: 2708-9339 Volume 12, Issue 1 (2023) PP 99-111
https://jam.utq.edu.iq/index.php/main https://doi.org/10.54174/utjagr.v12i1.242

3. Mass extension methods: As shown in table (6) the most important mass extension method was Extension campaigns with the weight percentage 81.60%, because while extension workers using this method they can focusing all attention on a particular problem with a view to stimulate the widest possible interest in a community. While the Agricultural newsletters came in the last rank with weight percentage 63.00%, because of illiteracy problem between rural people make the extension workers didn't look to this method as an interesting method. This result is not consistent with the findings of (Al- Harbawi 2009, p 52) and (Al-Mashhadani etal 2017, p5).

Table (6) Arranging the paragraphs of mass extension methods according to the value of weights percentage

Mass Extension methods	X^-	S.D	Weight percentage %	Rank
Extension campaigns	4.08	1.06	81.60	1
Rural television programs	4.04	0.86	80.80	2
Agricultural exhibits	3.87	1.02	77.40	3
Extension posters	3.86	1.00	77.20	4
Internet	3.84	1.15	76.80	5.5
Rural radio programs	3.84	1.08	76.80	5.5
Extension news releases	3.70	0.98	74.00	7
Agricultural Magazines	3.66	0.99	73.20	8
Circular speeches	3.52	1.12	70.40	9
News paper	3.50	1.08	70.00	10
Extension museums	3.43	1.15	68.60	11
Agricultural newsletters	3.15	1.19	63.00	12

4. Fourth objective: Determine the relationship between the level of agricultural extension methods importance with some variables:

1. Age: Table (7) shows the majority of the respondents (%47) are within the category (25- 40) years , simple correlation coefficient of Pearson was used to fine the relation between the level of extension methods importance and the age. The calculated is 0.014, is less than the table value, this mean not significant relationship between them. It means the level of importance of extension methods didn't affect by the difference in ages of respondents because most agents of different ages have been exposed to limited sources of information on the importance of different methods and they use the same methods as before for their extension works. This result is consistent with the finding of (Masso & Albasso,2022, p24) but is not consistent with the finding of (Okunade, 2007, p 286).

Gender: the results appeared most of the respondents are male, simple correlation coefficient of Pearson was used to fine the relation between the level of extension methods importance and the gender. The calculated is 0.013, is less than the table value, this mean not significant relationship between them. It may be attributed that both sexes are assigned the same work,

University of Thi-Qar Journal of agricultural research
ISSN Onlin:2708-9347, ISSN Print: 2708-9339 Volume 12, Issue 1 (2023) PP 99-111
https://jam.utq.edu.iq/index.php/main https://doi.org/10.54174/utjagr.v12i1.242

or there is no specialized work for men and women. This result is consistent with the finding of (Masso & Albasso, 2022, p24)

Educational level: the results indicated that the most of the workers (36.79%) in the studied area are university graduates. Spearman brown was used to fine the relation between the level of extension methods importance and the educational level. The calculated is 0.011, is less than the table value, this mean not significant relationship between them. It may be attributed the use of extension methods is a comprehensive work, regardless of the different educational levels.This result is not consistent with the findings of) Okunade, 2007, p 286) and (Hosseini 2011, p10).

Specialization: Table (7) shows the majority of the respondents (76%) are not specialized in agricultural extension. Simple correlation coefficient of Pearson was used to fine the relation between the level of extension methods importance The calculated is 0.083, is less than the table value, this mean not significant relationship between them. It may be attributed all specializations do extension work, and all specializations use extension methods. This result is not consistent with the finding of (Saleem and Al- Naqash. 2011, p 6)

Job Title: the results indicated that the most of the workers (62%) among the job titles are the agricultural extension, the agricultural engineer, and the head of the agricultural agents. Spearman brown was used to fine the relation between the level of extension methods importance and the job title . The calculated is 0.090, is less than the table value, this mean not significant relationship between them. It may be attributed all employees, regardless of their job titles, work as a common entity or group

Service duration : Table (7) shows the majority of the respondents (56%) are within the category of (1-11) service duration . Simple correlation coefficient of Pearson was used to fine the relation between the level of extension methods importance and service duration. The calculated is 0.024, is less than the table value, this mean not significant relationship between them. This result is consistent with the finding of (Masso & Albasso,2022, p24)

Extension service duration : Table (7) shows the majority of the respondents (52%) are within the category of (1-7) service duration . Simple correlation coefficient of Pearson was used to find the relation between the level of extension methods importance and service duration. The calculated is 0.033, is less than the table value, this mean not significant relationship between them. This result is not consistent with the finding of (Saleem and Al- Naqash. 2011, p 6) and (Jassam, and al-jumaily 2021, p 50)

Previous training: the results appeared most of the respondents (59%) are non-participation in training courses , simple correlation coefficient of Pearson was used to fine the relation between the level of extension methods importance and previous training. The calculated is 0.118, is more than the table value, this mean significant relationship between them. This result is consistent with the findings of (Jassam, and al-jumaily 2021, p 51). But is not consistent with the findings of (Abassi and Al-Harbawi 2012, p 12) and (Hosseini2011, p10).

Sources of information: the results appeared most of the respondents (67%) are within the category of (29 – 39) medium of exposure to information sources , simple correlation coefficient of Pearson was used to fine the relation between the level of extension methods importance and the source of information . The calculated is 0.353, is more than the table value, this mean a significant relationship between them

. Attitude towards agricultural extension: the results appeared most of the respondents (57%) are within the category of (44 - 51) neutral attitude , simple correlation coefficient of Pearson was used to fine the relation between the level of extension

University of Thi-Qar Journal of agricultural research
ISSN Onlin:2708-9347, ISSN Print: 2708-9339 Volume 12, Issue 1 (2023) PP 99-111
https://jam.utq.edu.iq/index.php/main https://doi.org/10.54174/utjagr.v12i1.242

methods importance and the source of information . The calculated is 0.262, is more than the table value, this mean a significant relationship between them. This result is consistent with the finding of (Saleem and Al- Naqash. 2011, p 6) and (Jassam, and al-jumaily 2021, p 51).

Job satisfaction: the results appeared most of the respondents (69%) are within the category of (51 – 60) neutral of job satisfaction , simple correlation coefficient of Pearson was used to fine the relation between the level of extension methods importance and the source of information . The calculated is 0.151, is more than the table value, this mean a significant relationship between them

Table (7) Relationship between the level of importance of agricultural extension methods in Sulaimani governorate with the personal and functional variables

variables	Categories	Frequency	%	Value of *r*
Age	25- 40	47	44.34	
	41-56	41	38.68	0.030
	57& more	18	16.98	N.S
Gender	Male	75	70.75	0.013
	Female	31	29.25	N.S
Educational level	Secondary school	35	33.02	0.011
	Diploma	28	26.42	N.S
	Bachelors	39	36.79	
	High diploma	4	3.77	
Specialization	non-extension	81	76.42	- 0.083
	extension	25	23.58	N.S
Job title	Agricultural extension agent	23	21.70	0.090
	Agricultural engineer	23	21.70	N.S
	Head of agricultural extension agent	22	20.75	
	Head of agricultural engineer	15	14.15	
	Agricultural senior manager	14	13.21	
	Associate head of the agricultural extension agent	7 2	6.60 1.89	

University of Thi-Qar Journal of agricultural research
ISSN Onlin:2708-9347, ISSN Print: 2708-9339 Volume 12, Issue 1 (2023) PP 99-111
https://jam.utq.edu.iq/index.php/main https://doi.org/10.54174/utjagr.v12i1.242

	Senior agricultural extension agent			
Service duration	1-13 A few 14-26 Medium 27-39 Long	56 31 19	52.83 29.25 17.92	0.024 N.S
extension service duration	(1-7) A few (8-14) Medium (15& more) Long	57 38 11	53.77 35.85 10.38	-0.033 N.S
Previous training	Non- participate participate	63 43	59.43 40.57	- 0.118* N.S
Exposure to sources of the agricultural information	(18-28) A few (29-39) Medium (40-50) Large	27 67 12	25.47 63.21 11.32	0.353* N.S
Attitude towards agricultural extension	(36-43) Negative (44-51) Neutral (52-59) Positive	22 57 27	20.76 53.77 25.47	0.262* N.S
Job satisfaction	(41-50) Few (51-60) Neutral (61-70) High	29 69 8	27.36 65.09 7.55	0.151* N.S

IV. CONCLUSIONS

1. The level of extension methods importance by the majority of workers was high. We conclude that the agricultural extension methods are the essence and basis of the extension process and the success of any work depends on communication, including communication elements, the most important of which are agricultural extension methods
2. Group methods occupied the first rank according to their relative importance. We conclude that the group method is one of the most used or the best methods in terms of costs, effort and achieving goals.
3. Farm visit occupied the first rank in individual method. We conclude the farm visit is one of the most important ways to rely on it because it is face to face and has more impact on farmers, while demonstration in group method occupied the first rank, we conclude We conclude the demonstration are one of the most effective methods on farmers, easy to understand and watch, and do not require reading and writing. Finally the extension campaigns occupied the first rank in mass method, we conclude the extension campaign is similar to the farm visits, but in another way, which includes a group of topics and to the farmers' audience.

University of Thi-Qar Journal of agricultural research
ISSN Onlin:2708-9347, ISSN Print: 2708-9339 Volume 12, Issue 1 (2023) PP 99-111
https://jam.utq.edu.iq/index.php/main https://doi.org/10.54174/utjagr.v12i1.242

4. Training affect to the level if extension methods importance, we conclude training leads to an increase in information and skills and their improvement, and thus affects the efficiency of the use of extension methods. Exposure to information sources leads to an increase in the level of experience and knowledge of agricultural extension methods.
5. Attitude towards agricultural extension and job satisfaction affects to the level of extension methods importance. We conclude attitude and satisfaction lead to increase in the desire to work and the sense of responsibility, honesty and sincerity in work

Recommendation:

1. Depending on the results the responsible authorities, especially the agricultural extension department, should pay attention to energizing their programs through agricultural extension methods, because they are the essence of extension work and the line of communication with farmers.
2. Focusing on activating the group method and using it more in the implementation of extension programs
3. Focusing by agricultural extension organizations to farm visit methods considering that it is one of the most important ways that affected farmers, through the preparation of all material and human requirements. As well as focus on creating field demonstration because it is a good method to learn and increase experience by the Agricultural Extension Department.
4. Agricultural extension department should pay attention for the workers to participate in training courses regardless of their age, gender, academic achievement and years of service.

V. REFERENCES

1. Al-Hamouli, A., Manal, F.A., Mahmoud, H.M. (2019). Evaluation of the impact of the agricultural TV program (Wasl link) broadcasted on the Agricultural Agricultural Channel of Egypt and presented to rural people in Kafr El-Sheikh Governorate during the period from 3/30/2017 to 6/30/2017, Journal of Sustainable Agricultural Sciences M 45, G2, 139-125. (Arabic)
2. Al-Mashhadani, A. L., Magd, Z. H., & Keshta, A. E. H. A. (2017). Levels of Use and Importance of Extension Methods and Aids in the Process of Dissemination of Agricultural Technologies in the Republic of Iraq. IOSR Journal of Agriculture and Ve terinary Science, 10(5), 01-06.
3. Bruin, G. C., & Meerman, F. (2001). New ways of developing agricultural technologies: the Zanzibar experience with participatory integrated pest management. Wageningen University.
4. Christoplos, I. (2010). Mobilizing the Potential of Agricultural Advisory Services. Rome: FAO.
5. Ekoja, I. I. (2003). Farmers' access to agricultural information in Nigeria. Bulletin of the American society for information science and technology, 29(6), 21-21.
6. El-Salsili, M. A., Abdel-Gawwad, S. A., & Eid, A. A. (2006). A study of level of using extension methods that used and its relative importance by the extension agents in Qalyoubia Governorate. Annals of Agricultural Science, Moshtohor. Faculty Of Agriculture, Benha University, Egypt, Vol. 44, No. 1.

ISSN Onlin:2708-9347, ISSN Print: 2708-9339 Volume 12, Issue 1 (2023) PP 99-111
https://jam.utq.edu.iq/index.php/main https://doi.org/10.54174/utjagr.v12i1.242

7. F Khalil AL-Abbassi, A. (2012). Comparing the perceived and calculated training need in the field of agricultural extension methods for agricultural extension workers in Ninevah governorate. Mesopotamia Journal of Agriculture, 40(3), 9-15.
8. Hosseini, S. J. F. (2011). Effective Extension Methods in Improving Sustainable Forest Management in Iran. ARPN Journal of Agriculture and Biological Science. Vol 6, No12 .
9. Jassam,H.N and al-jumaily. M. H (2021) The Importance of Electronic Agricultural Extension from the Point of View of Agricultural Extension Workers in the Center of Kirkuk Governorate. Kirkuk University Journal of Agricultural Sciences. Vol 12, No2. Arabic
10. Kimaro, W. H., Mukandiwa, L., & Mario, E. Z. J. (2010, July). Towards improving agricultural extension service delivery in the SADC Region. In Proceedings of the Workshop on Information sharing among extension players in the SADC region (pp. 26-28).
11. Masso, W. Y. A., & Saleem, N. A. A. (2020). The importance of agricultural extension radio programs for farmers in al-qosh, nineveh governorate and its relationship to some variables. Plant Archives, 20 (2), 322-327.
12. Masso, W. Y. A., & Albasso, Z. M. S. (2022). Knowledge Awareness for Agricultural Employees of the importance of using Electronic Agricultural Extension in the directorate of agriculture of Dohuk Governorate. Journal of Kirkuk University for Agricultural Sciences, 13(1).
13. Muzari, W., Gatsi, W., & Muvhunzi, S. (2012). The impacts of technology adoption on smallholder agricultural productivity in sub-Saharan Africa: A review. Journal of Sustainable Development, 5(8), 69.
14. Okunade, E.O. and Oladosu I.O. (2006). Rating of extension teaching methods for training female farmers in Osun state, Nigeria. Proceedings of 10th Annual Conference of Agricultural Extension Society of Nigeria.
15. Okunade, E. O. (2007). Effectiveness of extension teaching methods in acquiring knowledge, skill and - attitude by women farmers in Osun State. Editorial Advisory Board, 4(2), 22.
16. Saleem, N. and Al- Naqash. B.H.A. (2011). Attitudes of agricultural official workers in nineveh agricultural directorates toward the agricultural extension. Agricultural Ext. Dept/College of Agric. And Forestry/Univ. of Mosul, Iraq. Al-Rafdin Agriculture Magazine. Volume (39) No.4. Arabic
17. Tariq, M. S. A. (2009). The Current Usage of Extension Methods by Agricultural Extension Workers in Ninevah Governorate and Relation with Some Variables. University of Mosul, College of Agriculture and Forestry. M.Sc. / Thesis. (Arabic)

University of Thi-Qar Journal of agricultural research
ISSN Onlin:2708-9347, ISSN Print: 2708-9339 Volume 12, Issue 1 (2023) PP 99-111
https://jam.utq.edu.iq/index.php/main https://doi.org/10.54174/utjagr.v12i1.242

مستوي اهمية طرق الارشاد الزراعي في محافظة السليمانية من وجهة نظر العاملين بالارشاد الزراعي

[1]دلكير صالح محمود ، [2]محمد عمر محمد سكينة

[1،2] قسم إدارة الأعمال الزراعية وتنمية المناطق الريفية ، كلية علوم الهندسة الزراعية ،جامعة السليمانية

المستخلص:

استهدف هذا البحث إلى تحديد مستوى أهمية طرق الإرشاد الزراعي من وجهة نظر المرشدين الزراعيين في محافظة السليمانية ، ثم التعرف على العلاقة بين أهمية طرق الإرشاد الزراعي مع بعض المتغيرات. شمل مجتمع البحث من جميع المرشدين الزراعيين بقسم الارشاد الزراعي في محافظة السليمانية وكانوا (137) عاملاً ، وقد اشتملت عينة البحث على (106) مبحوثا تمثل ما يقرب (77٪) من مجتمع البحث ، بطريقة العينة العشوائية البسيطة . تم إعداد استبيان لجمع البيانات. أظهرت النتائج أن مستوى أهمية طرق الإرشاد كان عاليًا ، واحتلت الطريقة الجماعية بالمرتبة الأولى في الاهمية النسبية . احتلت فقرة الزيارة المزرعية بالمرتبة الأولى في الطريقة الفردية ، ثم احتلت فقرة الايضاحات الحقلية بالمرتبة الأولى في طريقة الجماعية ، وأخيرًا احتلت فقرة الحملات الإرشادية بالمرتبة الأولى في الطريقة الجماهيرية . كما أظهرت النتائج وجود علاقة معنوية بين مستوى اهمية طرق الارشاد الزراعي وكل من المتغيرات التالية (التدريب السابق ، التعرض لمصادر المعلومات الزراعية ، الاتجاه نحو الإرشاد الزراعي ، الرضا الوظيفي). بينما لا توجد علاقة معنوية بين مستوى أهمية طرق الإرشاد الزراعي والمتغيرات الأخرى.أوصى الباحثون بضرورة الاهتمام بتنشيط برامج قسم الارشاد الزرعي من خلال تفعيل طرق الإرشاد الزراعي ، والتركيز على تفعيل الطريقة الجماعية، و على إدارة الإرشاد الزراعي الاهتمام بالعاملين للمشاركة في الدورات التدريبية.

الكلمات الافتتاحية: طرائق الإرشاد الزراعي، الطريقة الفردية ، الطريقة الجماعية ، الطريقة الجماهيرية.