



Participation level of agricultural employees in the preparation and implementation of agricultural extension programs in the agricultural divisions which associated with the Agriculture Directorate of Nineveh Governorate, Iraq

Ahmed Awad Talb Altalb ^{1*}, Hafsa Fatah Hadi ¹

¹ Department of Agricultural Extension and Technology Transfer, College of Agriculture and Forestry, University of Mosul, IRAQ

*Corresponding author: ahmed_altalb@uomosul.edu.iq

Abstract

This research aims at determining agricultural employers in preparing and executing agricultural guidance programs in agricultural units (divisions) of Nineveh agricultural administration in general, as well as the correlation between the participation of agricultural employee in preparing and implementing agricultural programs and their independent variables. The results showed a moderate participation of agricultural workers in preparing and carrying out agricultural guidance programs and as well as the results showed significant correlation between the employees participation and following independent variables, (age, academic achievement, desire to agricultural extension, years of work in agricultural sector), also the results showed that the following items came first for agricultural guidance programs (participate in preparing the necessary activities to realize set goals, participate in putting plans of agricultural guidance programs, and participate in carrying out agricultural guidance programs). The researchers recommend enhancing agricultural workers in agriculture division in preparing and executing agricultural guidance programs through training.

Keywords: agricultural, employers, extension programs, divisions

Talb Altalb AA, Hadi HF (2020) Participation level of agricultural employees in the preparation and implementation of agricultural extension programs in the agricultural divisions which associated with the Agriculture Directorate of Nineveh Governorate, Iraq. Eurasia J Biosci 14: 4743-4748.

© 2020 Talb Altalb and Hadi

This is an open-access article distributed under the terms of the Creative Commons Attribution License.

INTRODUCTION

Agricultural development is one of many cornerstones in develop and growth of economy of countries around the globe due to its impotence in national economy on the one hand and its direct come to its food security on the other hand as well as its direct relation in development and achieving socio- economic changes countries (Shareef 2013, AL-Hiyali 2010). Agricultural development in Arab countries the basis in preparing executing inclusive plans of socio – economic development duel the importance of agricultural sector in the majorities of these countries, agricultural sector is a key source of Iraq's national income, an important element of trade, providing food. Thus the development of sector is fundament to set industrial rising important events agriculture itself (Affana 2010). Material includes all scientific, technician aspects resulting for researches and studies relevant to agricultural production in its botanic a animal sectors. Human element with his capabilities, abilities and skills the effective tool that utilize all aspects of material side in a way that achieves

agricultural development (Al. Hiyali 2012; Al.Ajili 2013; Al.Maamour 2002; Ghothaib 2014; Al.Dawoodi 2003). Taken that developing human resources in must to enhance Agriculture production quality and quantity all previous and present developing ply necessitates the participation of agricultural workers and develop to abilities to achieve agricultural guidance plays a major rule in agricultural development calls for uniting all efforts to develop human and material resource carry the responsibility of the ultimate use of available material.

Thus, he must be well trained to play his rule efficiently (Abdulwahab, 1994; AL- Talib 2013).One of the important issues is the decentrality agricultural guidance, affirming the participation of agricultural guides in agricultural guidance programs, motivate them to participate effectively in planning guidance efforts, activities and programs (AL-Majid, 2017). Al levels of agricultural guidance organization must participate in

Received: December 2019

Accepted: April 2020

Printed: October 2020

planning and executing these activities and programs (Al-Hiyali, 2005). So qualifying agricultural workers and enrollment in agricultural guidance programs is one elements of success of agricultural guidance program (Al-Samawi 2004:214, Arif 2010). Planning these programs is an important means, participant may learn a lot through them participation in gathering facts about rural society, analyses them, define the prominent troubles as well as participation in all planning, executing and evaluative steps of guidance programs through which way of thinking. Planning guidance program is a statement current status, handle technical problems of agricultural production. Planning guidance program is done by specialized persons working in agricultural guidance (Nanactal 2007, Abbas etal 2009).

Given this fact developed and developing communities pays more attention to the performance of working agricultural employees and joining them in all agricultural programs. Cuming at developing countryside, achieve integrated rural development (Bakri 2004). The current state of implementing agricultural guidance programs in Iraq in general and Nineveh in particular points the vague nature of these programs as well as ignorance and lack of participation of agricultural employees. The state administration of agricultural guidance and cooperation in Iraq to raise the performance and participation of employees along with their toward work as well as positive and related to work, work condition and their in hand facilities. The contribution of agricultural workers effected with many factors related to their qualification, training, experiences, ages and the nature of their jobs, how their employers view their services and their will to continue with this job (AL-Rimawo 1998). Thus the researcher wanted to conduct this research to know the level of participation agricultural workers in agricultural guidance programs in Nineveh.

Goals of Research

- 1- Know the level of participation of agricultural workers in agricultural division in preparing and making agricultural guidance programs in their units of agricultural administrate of Nineveh in general.
- 2- Know the level of participation of agricultural workers preparing agricultural guidance programs.
- 3- Determine the level of their participation (employees) in executing for agricultural guidance programs in the agriculture units.
- 4- Find the correlation between employees participation (employees) in preparing executing these programs and the independent variables of the research.
- 5- Arranging of research items according to mean of each item.

Steps of Research

First: Research sample and community

Research included all agricultural workers in agricultural units in Nineveh governorate, with the

number (186 employee) representing community of the research. A simple random sample was taken (50% of total society). Final sample was (93) from all the units of Nineveh districts and subverts.

Second: Design data collector (questionnaire)

To Collect research data, the researchers used questionnaire as a tool after consulting experts specialized in agricultural guidance and planning of guidance programs after revive of previous researches and references, the tool consisted of. two parts.

1. Included data regarding agricultural workers (age, sex, academic achievement, specialization, will to work in agricultural guidance, year of experience).

2. A scale assessing level of participation of agricultural worker in agricultural guidance programs. The scale measures two aspects (preparing guidance programs – 15 items) and (execution of these programs).

Third: Measuring workers participation in preparing and execute guidance program (dependent variable)

Level of participation of agricultural workers was calculated using a scale with 5 alternatives (participate heavily. 5degrees) participate greatly (4), moderately (3), rarely (2)and never (1). These alternatives were the answer of each item. Through the answers of question each item, we get total degree representing level of participation of agricultural workers in preparing and executing agricultural guidance program.

Fourth: Stability of Seale (reliability or Reliability of the scale was verified using partial ret ailment method reading (0.9).

Fifth: Data Collection: Data were collected from agricultural workers in the units of agricultural in Nineveh using questionnaire designed to collecting data. The data collected from 10/11/2019 till 25/12/2019.

Sixth: Data Analysis: After Collecting data, they were written, category and analyzed using the following statistical tools: percentage, rapidity, range, simple Pearson conjunction factor, class correlation factor of spearman.

RESULTS AND DISCUSSION

1. Identify the level of agricultural workers in agriculture units in preparing and executing agricultural extension program in Nineveh governorate in general: The results showed that the highest (actual response) of agricultural workers in the agricultural units about the research items was (130) and the least (35) with a mean of (72). Respondents were divided (The respondents have been divided) in to three categories using (range) as follows in **Table 1**.

According to **Table 1** that the highest percentage of responders fall in moderate category (68-100) registering 50% meaning that agricultural workers

Table 1. Dividing employees in to categories according to their participate in preparing and executing agricultural guidance programs in general

Categories	Number	Percentage %
Low (35-67)	20	21
Moderate (68-100)	50	54
High (101-132)	23	25
Total	93	100

Table 2. Dividing respondents into categories according to their level of participation in preparing agricultural extension programs

Categories	Number	Percentage %
Low (40-68)	23	25
Moderate (69-97)	45	48
High (98-126)	25	27
Total	93	100

Table 3. Categorizing workers according to their participation level in executing extension programs

Categories	Number	Percentage %
Low (25-37)	18	20
Moderate (38-51)	45	48
High (52 -65)	30	32
Total	93	100

participated moderately in preparing and executing agricultural guidance programs in agriculture units in Nineveh governorate through the participation of workers in programs and activities held in all rural of Nineveh to help farmers due to the workers information in this field.

2. Determine the level of participation of agricultural workers in preparing agricultural guidance programs:

Data analysis showed that the highest value of researches in their answers was (127) and the lowest (40) with a mean of (78). Researches were divided into three categories using (range) as show in **Table 2**.

Table 2 shows the highest rate of researches was in moderate (69-97) reach (48%) indicating that level of participation of agricultural workers of units is moderate in preparing guidance programs. Researches had a high level of participation in preparing all activities of agricultural guidance programs in their units in Nineveh.

3. Identify the level of participation of agricultural workers in the agriculture units in executing agricultural extension programs:

The results showed that the highest value of respondents on items was (63) and the lowest (1) with a man of (44). Workers were distributed into categories as show in **Table 3**:

Table 3 shows that the highest rate of respondents was fall in moderate category (38-51) with a ration of (48%) meaning that the level of participation of agricultural workers in their units in executing guidance programs is moderate. (This result may be because that workers in agriculture)in Nineveh governorate have expert and ability to execute stages of agricultural guidance program in all asp of work in agricultural guidance due to their knowledge and experience in implementing agricultural guidance programs.

Table 4. Distribution agricultural workers according to their Participation in preparing and executing agricultural guidance program and its relationship with age variable

categories of Age (year)	The number	Percentage %	The value of the simple correlation coefficient Pearson r
Low (26 -36)	28	30	0.374**
Moderate (37 - 47)	33	35	
High (48 -58)	32	35	
Total	93	100	

Table 5. Categorizing respondents according to their participation in planning and executing agricultural guidance programs according to variable and the relation to gender

Categories of sex	The number	Percentage %	The value of Spearman Brown's correlation rs
Male	73	78	0.003
Female	20	22	
Total	93	100	

4. Define the correlation between participation of agricultural workers in agriculture units in preparing and executing extension program and all independent variables of the research such as:

1 – Age: The results showed that the highest age of agriculture employees was (58) and the least was (26) with a mean of (43) years. Respondents were categorized as shown in **Table 4**.

Table 4 show that the highest ratio of respondents fall in moderate category (35%). The results showed moral correlation between the participation of agricultural workers in preparing and executing guidance problems and age variable, the value of the simple correlation coefficient Pearson (r) was (0.374**) it is significant at the level of (0.01) indicating that the age of researches has appositive relation with participation level of worker in preparing and executing agricultural guidance programs due to the experience gained in his expertise years in agricultural units and division.

2- Gender: Agriculture employees were divided in to (males and females) as shown in **Table 5**.

Table 5 shows that the highest rate of agriculture employees are males. Also there is no significant correlation between participation of agricultural workers in planning and executing agricultural guidance programs and sex variables. The value of Spearman Brown's correlation (rs) is (0.003), it is insignificant. Meaning that sex of respondents (males or females) doesn't affect his/her participation in preparing and executing agricultural guidance programs, rather his/her participation dependent on other factors.

3- Academic achievement: Employees were categorized according to their academic achievement as shown in **Table 6**.

Table 6 shows that the highest rate of employees fall in category of Bachelor's degree representing (66%), indicating most respondents are holders of (Bachelor's Degree) in the agricultural units of Nineveh governorate.

Table 6. Distribution of agriculture employees regarding their level of participation in preparing and executing agricultural guidance programs according to their academic achievement and the relation with education achievement

Categories of Academic achievement	The number	Percentage %	The value of Spearman Brown's correlation rs
Preparatory of Agricultural	12	13	0.208*
Agricultural Diploma	14	15	
Bachelor's Degree	61	66	
Graduate Degree	6	6	
Total	93	100	

Table 7. Classification of researches according to participation in prepare and executing guidance programs and its relation to specialization

categories of Specialization	The number	Percentage %	The value of Spearman Brown's correlation rs
specialize in Agricultural Extension	55	59	0.005
Non- specialize in Agricultural Extension	38	41	
Total	93	100	

Table 8. Categorization of agricultural workers according to their desire to the agricultural extension and its relationship to this variable

categories of desire to agricultural extension	The number	Percentage %	The value of Spearman Brown's correlation rs
Desire	60	65	0.208*
I don't desire	33	35	
Total	93	100	

The table also shows a significant correlation between Agriculture employees participation and academic achievement variable. The value of Spearman Brown's correlation (rs) is (0,208*), it is significant at the level of (0.05). It is meaning, the higher academic achievement of employees the more participation he gets in preparing and executing agricultural guidance programs due to knowledge, information and skills acquired through study years of agricultural to topics were taught relative to agricultural extension programs.

4- Specialization: Table 7 shows categorization of researches according to their specialization.

Table 7 shows that the highest rate of respondents was in specialize in agricultural extension (59%). The results showed, there is no significant correlation between agriculture employees participation and specialization variable. The value of Spearman Brown's correlation (rs) (0.005). It is insignificant. Indicating that specialization of agriculture worker doesn't affect his participation in preparing and executing agricultural guidance programs due to studying all topics in his university or not concentrate on agricultural extension in guidance work during study.

5- Desire to agricultural extension: Agriculture workers were categorized into two groups according their desire to the agricultural extension, as shown in Table 8.

Table 9. Distribution of agricultural workers according to their participation and its relation with this variable

Category of work year in agricultural sector	The number	Percentage %	The value of the simple correlation coefficient Pearson r
Low (5 -13)	13	14	0.262**
Moderate (14 -22)	45	48	
High (23 -31)	35	38	
Total	93	100	

Table 8 shows that the highest rate of agricultural workers answers was in category of willing to work in agriculture extension with (65%). Also, apposite significant correlation was found between agriculture workers participation and the desire to agricultural extension variable. The value of Spearman Brown's correlation (rs) (0.208*) significant at the level of (0.05). It meaning that respondents desire urge him to participation planning and executing agricultural guidance programs because persons who desire in a certain job, it makes him do the job good and accurately because desire means job satisfaction.

6 - Years of work in agricultural sector: Results showed that the highest number of work years in agricultural sector was (30), the minimum was (5), a mean of (18). Agricultural workers were categorized according to years of work as shown in Table 9.

Table 9 shows that the highest rate of respondents falls in the moderate category (14-22) reaching (48%). The results showed significant correlation between agriculture workers participation and years of work in agriculture sector. The value of the simple correlation coefficient Pearson (r) (0.262**). It is significant at (0.01) indicating that years of work in agricultural sector increases his knowledge, urge and participation in planning and executing agricultural guidance programs due his experience in working in agricultural sector or his previous years of work in agricultural units and divisions.

5. Arranging research items according to mean of each item:

Table 10 shows that the items which coming first three categories according to employees response representing workers of agricultural units participate in planning and executing agricultural guidance programs, were follows: (participate in necessary activities to realize set goals, participate in making plans of agricultural guidance programs, and Participate in executing plans of agricultural guidance programs), this indicating that agriculture workers participate actively in agricultural activities needed to fill the needs of farmers. Respondents also participate in preparing and making agricultural guidance plans done for the benefit rural sides farmers.

CONCLUSIONS

Given the results above, the researchers found:

- 1- Participation of agricultural workers in agriculture units in making and executing guidance programs is

Table 10. Shows arranging items of agricultural workers participation in planning and executing agricultural guidance programs according to mean of each item

No	Items	Domain	Mean
1-	Participate in necessary activates to realize set goals	Planning agricultural programs	4.5
2-	Participate in making plans of agricultural guidance programs	Planning agricultural programs	4
3-	Participate in executing plans of agricultural guidance programs	Executing guidance programs	3.75
4-	Participate in assessing agricultural guidance	Executing guidance programs	3.60
5-	Participate in goals of agricultural guidance Participate in design of goals of agricultural guidance.	Executing guidance programs	3.50
6-	Participate in member ship of agricultural guidance programs committees	Making guidance programs	3.25
7-	Participate in collecting necessary data for agricultural guidance programs	Making guidance programs	3.20
8-	Participate in putting the bases of agricultural guidance programs	Making guidance programs	3.18
9-	Participate in guidance activities to achieve goals of agricultural guidance programs	Making guidance programs	3.15
10-	Participate in the phase of organizing guidance programs	Making guidance programs	3.10
11-	Participate in the phase of planning guidance programs	Making guidance programs	3.09
12-	Participate in guidance programs allocated for developing farmers abilities	Executing guidance programs	3.08
13-	Participate in guidance programs allocated for developing rural woman capabilities	Executing guidance programs	3.04
14-	Participate in guidance programs allocated for developing rural youths capabilities	Executing guidance programs	3
15-	Participate in guidance programs allocated for developing rural leadership	Executing guidance programs	2.95
16-	Participate in follow-up the execution of guidance programs	Executing guidance programs	2.93
17-	Participate in encouraging farmers to participate in agricultural guidance programs	Executing guidance programs	2.91
18-	Participate in encouraging rural females to participate in agricultural guidance programs	Executing guidance programs	2.88
19-	Participate in encouraging youth to participate in agricultural guidance programs	Executing guidance programs	2.86
20-	Participate in writing reports related to execute guidance programs steps	Executing guidance programs	2.85
21-	Participate in field trips to farmers	Making guidance programs	2.70
22-	Participate in training farmers on agricultural guidance activities to utilize their contribution in guidance programs	Executing guidance programs	2.55
23-	Participate in setting goals of agricultural guidance programs	Making guidance programs	2.50
24-	Participate in preparing scans for the potential areas of guidance programs	Making guidance programs	2.40
25-	Participate in radio agricultural guidance programs	Making guidance programs	2.35
26-	Participate in guidance programs for living stocks	Executing guidance programs	2.30
27-	Participate in preparing guidance programs for poultry	Making guidance programs	1.55
28-	Participate in preparing guidance programs for fish	Making guidance programs	1.50
29-	Participate in agricultural guidance programs in sustainable planting	Executing guidance programs	1.20
30-	Participate in preparing training course for agriculture employees in rural work.	Making guidance programs	1.05

moderate indicating that employees have the knowledge and expert to contribute and participate in making and executing agricultural guidance programs.

- 2- Those agricultural employees are able and willing to contribute in making and executing agricultural guidance programs.
- 3- Workers participation in guidance programs was good.
- 4- Independent varieties (age, sex, academic achievement, desire to agricultural guidance, and

years of work in agricultural sectors) played a big role in participation of agriculture employees in making and executing agricultural guidance programs.

RECOMMENDATIONS

Researchers recommend to enhance participation of agricultural work in planning and executing agricultural guidance programs through training courses on how prepare and execute agriculture guidance programs.

REFERENCES

- Affana, Lamis Mohammed Mahmoud Abdulraoof (2010).of sustainable development of cultivated lands west bank. To governorate as a case in point.M.A. Thesis National AL-Najah in Nables, Palestine.
- AL- Dawoodi, S. Ameen (2003). Pedagogical and training requirements for Al-Taameem governorate farmers regarding use and main to axis irrigation spray devices and its relation to some variables. M.A.Thesis, college of agriculture and forestry.Mosul University.P.2.
- AL- Hiyali, D. Dhiyae H. Mohammed (2012).Training Knowledge needs for irrigated wheat farmers in Bijidistrict in Salaheldeen governorate and its Correlation with some. Variables.M.A.Thesis. Agriculture College Tikrit University.
- AL- Khalidi, M. Salman (1997). Experience state administrate in management field. Manager magazine.No (71).Vol. 13. Amman Jordanian Hashimit kingdom p 249.
- AL- Majid K. and Firas I. Irhayem and Mohammed S. (2017). Level of agricultural guidance in program of transferring agricultural techniques in Tikrit district / Salah governorate. Tikrit University magazine for agricultural sciences a special issue of the events of 6th academic Conference for agricultural sciences.
- AL-Ajili, A. Sigar A. (2013).Guidance needs for bee raiser M.A. Thesis. Agricultural guidance and economy. Agriculture College Tikeit University.

- AL-Hiyali, M. Ahmed Ch. (2010). Work pressure and its relation to agricultural guidance doing their job in middle regions of M.A. Thesis. Baghdad University.
- Ali – A. Mohammed (1994) Training and developing a scientific approach for efficiency of individuals and corporations. 3rd edition. St management institute, Riyadh. P.23.
- AL-Maamouri, S. Habib M. (2002). Impact of both guidance symposium and explanation by showing the way and Consequencing in developing Knowledge and skills for sheep raiser in AL – Tafseer sector (impel study in AL-Wassama village / Babylon governorate). Ph.D. Treatise. Bagdad University.
- AL-Rimawi, A. Shukri (1998). Analytical study of impulsive and effective factors of job satisfaction for general agricultural guidance in Jordan Journal of agricultural sciences Vol (25) No 2 Jordan. P, 22.
- AL-Samawi, A. Abdulwali (2004). Effect of guided training on post-harvest treatments in the acknowledgment of agricultural guidance in Zubai valley district. Damascus University Magazine for agricultural sciences. No(20), Vol (2) P:214.
- AL-Shareef, R. Sideeq J. (2013) role of agricultural guidance in delivering techniques for farmers. Kinana Online gat.
- AL-Talb, A. Awad T. (2013). Level for agricultural workers in the process of planning guidance programs and relation with some variables in Nineveh governorate. Tikrit Magazine for agricultural sciences 13(2) Agriculture guidance and techniques transference Dept. Collage of agriculture and forestry. Mosul University.
- Arif, J. SAAD, (2010). Agricultural planning and development. 1st edition National library, Hashimit Kingdom of Jordan.
- Bukri, M. bin Salih (2004) comparative study of agricultural guidance performance in agricultural guidance tasks in some areas of kingdom of Saudia Arabic. Al- Exandria magazine for academic exchange Vol. (25), No(2). College of Meteorology, environment and planting d areas, King Abdulaziz University. Jeddch. KSA. P236.
- Ghothaib, A. Ahmed (2013) role of agricultural research facilities in adapting and developing agricultural techniques for farmers in Nineveh governorate and its relation to some variables. Alexandria magazine academic exchange. 34(4) Agricultural guidance and economy Agriculture College. Tikrit University.
- Nana, Bashar Waheed, Darwish Jumaa sheikh and leilah (2007). agricultural guidance. Administrate of univ books and publishing agriculture College. Aleppo University.
- Sharif, M. Omar (2013). level of tomato farmers in district /Salaheldeen governorate awareness with scientific recommendation regarding planting tomato. M.A Thesis University.