# Job satisfaction of agricultural extension workers in the governorates of the northern region of Iraq

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### **ABSTRACT:**

The research aimed to identify the level of job satisfaction of agricultural extension workers in the governorates of the northern region of Iraq, and to determine the correlation between the level of satisfaction of agricultural extension workers in the governorates of the northern region of Iraq and each of the following independent variables: (age, gender, number of years of service in agricultural departments, Ttend towards work in agricultural extension). The research was conducted in the governorates of the northern region of Iraq, represented by (Nineveh Governorate and Kirkuk Governorate), as the research community included all agricultural extension workers in the agricultural directorates and their subdivisions in the northern governorates of Iraq.

The size of the total community reached (215) agricultural employees, distributed over the headquarters of the Directorate and its agricultural divisions, by (122) employees in the Directorate of Nineveh Agriculture and its Extension Center, and(93) employees in the Directorate of Kirkuk Agriculture and the Extension Center. A simple proportional random sample was selected by (80%) of the total community, and thus the final research sample became (172) respondents.

The results of the research showed that the level of satisfaction of agricultural extension workers in the field of agricultural extension work in the governorates of the northern region of Iraq in general is low and tends to average in general. The results also revealed that there is a significant correlation between job satisfaction and each of the studied independent variables: (gender, number of years of service in agricultural departments, the trend towards work in agricultural extension) and the lack of a significant correlation for age.

### Introduction and research problem

Agriculture has been and continues to be the mainstay of the national economy and plays an important role in achieving economic development and the basis for economic growth. A large percentage of the national income is generated from agricultural activities. The development of agriculture is a necessity necessitated by the natural and economic conditions of that country, especially as its population is growing at a faster rate than the growth rate of agricultural production, including developing countries, which are characterized by high population growth rates ranging between (2 and 3%) annually.

The main problem in many developing countries is not limited to their poverty in natural resources, but in the spread of ignorance and the underdevelopment of their human resources. Therefore, the attention of these countries must be focused on building and developing human capital [1]. This requires confronting the problems and obstacles facing the development process. In Iraqi agriculture, it was noted that the most important problems and obstacles facing agricultural production are the prevalence of traditional production methods and the lack of use of agricultural mechanization [2] Because work is a humanitarian activity that may be difficult to control because it is linked to the motives and interests of the individual, individuals are driven by a variety of motives at different times [3]

Job satisfaction is a reflection of the psychological and social situation of agricultural extension workers towards their distress and the suitability of the work environment to achieve their professional and personal needs, and it is one of the indicators of motivation that affect the achievement of the agricultural extension worker and his performance of his work directly, and create a state of satisfaction and raise the morale of agricultural extension workers [4]

The governorates of the northern region of Iraq, currently represented by the governorates of Nineveh and Kirkuk, are important governorates for the production of strategic crops in Iraq, especially wheat, barley and maize crops. In addition, many vegetable crops on which local markets depend throughout the country are produced in these two governorates. [5] Herzberg classified workers into (satisfactory) driving factors that increase the motivation of production and are related to the work itself from a sense of achievement, progress, responsibility, etc., and other factors he called preventive (unsatisfactory) factors related to financial monthly salary, incentives, working conditions and social relations [6]. In light of the frame of reference for scientific studies and research that dealt with the study and analysis, the problem of the study can be highlighted by answering the following research questions:

What is the level of job satisfaction of agricultural extension workers in the northern region of Iraq?

- What is the correlation between the level of job satisfaction of agricultural extension workers in the northern region of Iraq and a number of personal and functional variables for the respondents?

# **Research Objectives: The research** aimed at:

1- Identifying the level of job satisfaction of agricultural extension workers in general
2-The descending order of job satisfaction areas according to their importance
3- Identifying the correlation between the level of job satisfaction of agricultural extension workers and all the following variables: - (age, number of years of service, gender, Ttend towards extension work)

### **Research importance**:

The importance of job satisfaction for extension agricultural workers is highlighted by the topics that should be the subject of research and study from time to time for those interested in extension development at work for various reasons. What the individual is currently satisfied with may not satisfy him in the future, and also for the impact of the individual's satisfaction with change in the stages of his life. What is not currently satisfactory may be satisfactory in the future. There is no doubt that the study of job satisfaction is a comprehensive evaluation process that covers all aspects of work. Job satisfaction is only a compilation of the psychological, physiological and environmental conditions that surround the employee's relationship with his colleagues and superiors and correspond to his personality, which makes him honestly say that I am happy with my work. Therefore, it can be said that the importance of this research is clear through the following: [7]

1- It is expected to fill a gap in the field of job satisfaction studies for agricultural extension workers in the field of extension work due to the lack of studies that addressed this topic in terms of limits and variables.

2- Considering this study as a step that can contribute to urging officials to formulate policies and plans that help in the proper selection and development of the performance of agricultural extension workers, maintaining them and enhancing their level of performance in the northern governorates of Iraq.

3 - Gives lighting to those interested about the most important ways to deal with

workers in agricultural extension and stimulate their motivation.

4.Assisting the worker in agricultural extension in changing his negative motives towards work to reach a higher level of achievement.

5. Job satisfaction increases the productivity and efficiency of the agricultural extension worker
6- Job satisfaction helps the commitment of the worker in agricultural extension on a full-time basis and perform his work in the best way

### 3.1. Statistical hypotheses:

1- There is no significant correlation between the level of job satisfaction of agricultural extension workers and age
2- There is no significant correlation between the level of job satisfaction of agricultural extension workers and the number of years of service.

3- There is no significant correlation
between the level of job satisfaction of agricultural extension workers and gender.
4- There is no significant correlation
between the level of job satisfaction of agricultural extension workers and the trend towards work.

### **4.1. Procedural Definitions:**

**1- Job satisfaction:** It is the expression of the positive feelings and trends carried by the agricultural extension worker in the northern governorates of Iraq (Nineveh and Kirkuk ) to reach the state of integration with their jobs . Through the achievement of social, economic, psychological and professional goals, it is one of the indicators of motivation, which affects its achievement and performance of its work directly.

2- Agricultural extension workers: They

are graduates of preparatory schools, institutes, colleges and higher certificates in the field of agriculture working in the Directorate of Agriculture of Nineveh and Kirkuk and their agricultural divisions, as well as extension centers in these two governorates, who provide educational services to farmers regardless of their specialties, whether agricultural extension or other agricultural specialties.

**3- Agricultural extension work**: It is all the tasks assigned to agricultural extension workers and employees that they communicate to farmers and apply them in practice and work.

### 4- Governorates of the Northern

**Region**: These are the Iraqi governorates that are located in the north of Iraq, which are currently represented by the governorates of Kirkuk and Nineveh. The governorates of the Kurdistan Region have been excluded as they are managed by the Kurdistan Regional Government directly. **Keywords:** 

Job satisfaction, agricultural extension, governorates of the northern region

### Materials and Methods of Work

Research methodology

Use the descriptive approach to achieve the objectives of the research, as this approach is appropriate in reaching detailed data and facts about the needs of the target at a certain time [8]and then these data and facts were classified, processed and carefully analyzed, to reach comprehensive and accurate results and generalizations about the phenomenon in question [9]

Research Community and Sample

The research was carried out in the governorates of the northern region of Iraq (namely the governorates of Nineveh and Kirkuk) on the Directorate of Agriculture of Nineveh Governorate and its agricultural divisions (31) agricultural divisions in addition the extension center of to Nineveh Governorate. The research was also carried out in the Directorate General of Agriculture in the city of Kirkuk and its agricultural departments (15) divisions, in addition to the extension center of Kirkuk Governorate. The research community included all agricultural employees in Nineveh Governorate (68) employees working in agricultural extension and (54) employees working in the extension center Thus, the total number of (122) employees in the Directorate of Agriculture of Nineveh and its affiliated divisions as well as the extension center, as well as the research community included all agricultural employees in the province of Kirkuk and the total number of (93) employees working in agricultural extension, including (49)Agricultural employees working in the Center, and Extension (44) employees working in agricultural extension in the Agriculture Directorate of of Kirkuk Governorate and its affiliated agricultural divisions, and thus the total size of the research community is (215) agricultural employees working in agricultural extension distributed to the directorates and agricultural divisions of Nineveh Governorate and Kirkuk Governorate and their extension centers For them, a simple proportional random sample was selected by (80%) of the total population, so the final research sample is (172) respondents, as shown in Table (1) and Table (2).

Table	e (1): Shows the research community and san	ple in the Directorate	e General of Agriculture					
	in the city of Nineveh and its agricultural departments							

in the city of Nineveh and its agricultural departments									
NO	Directorate, divisions and agricultural centers affiliated to it	Overall Community Size	Sample size 80						
1	Extension Center in Nineveh Governorate	54	43						
	Nineveh Agriculture Directorate and its affiliate	ed divisions, whose tota	l number is (68)						
1	Directorate Center Division	12	10						
2	Hamdaniyah	2	2						
3	Africa West Division	1	1						
4	Al-Ayadiyah Division	1	1						
5	Alqosh	1	1						
6	Division of the Center	2	2						
7	Bartella	2	2						
8	Bashiqah.	1	1						
9	Tal Afar First Division	1	1						
10	Tal Afar Second Division	4	3						
11	Tall Kayf	3	2						
12	Hammam Al-Alil.	1	1						
13	Hamidat Division	1	1						
14	Zammar	3	2						
15	Al-Baaj ()	3	2						
16	Al-Shura	1	1						
17	Al Sheekhan	1	1						
18	Qahtaniyah	1	1						
19	Qayyarah Division (Center)	4	3						
20	Qayyarah Division 2	3	2						
21	Kairouan###	3	2						
22	Al-Kuwair Division	1	1						
23	Al-Mouhallabiya	1	1						
24	Nimrod	1	1						
25	Tal Abtah	3	2						
26	Rabia	1	1						
27	Sinjar	1	1						
28	meaning of mafi fayda	3	2						
29	Wana Division	3	2						
30	Deepakah Division	1	1						
31	Makhmour	2	2						
	Total	68	54.4%						

\* (According to the letter of the Department of Statistics in the Directorate of Agriculture Nineveh on (8/10/2024)).

# Table (2) : Shows the research community and sample in the Kirkuk Agriculture Directorate and its agricultural divisions

NO	Directorate, divisions and agricultural centers affiliated to it	Overall Community Size	Sample size 80
	Extension Center in Kirkuk Governorate	49	39
	Kirkuk Agriculture Directorate and	its affiliated divisions (4	44)
1	Division of the Center	16	13
2	Al-Hwaijah	3	2
3	Zab	1	1
4	Al-Abbasi Division	3	2
5	Al-Rashad	4	3
6	Riyadh Division	4	3
7	Sergnar Division	1	1
8	Al-Dibs	3	2
9	Yaiji Division	1	1
10	rendezvous	1	1
11	Taza	3	2
12	Lilan Division	1	1
13	Altun Bridge	2	2
14	Daquq	1	1
	Total Degrees	44	35

\* (According to the letter of the Department of Statistics in the Directorate of Agriculture Kirkuk on (22/10/2024).

Thus, the final size of the research sample was as shown in the following table (4):

Table (3) Final size of the research sample							
NO	District Name	Total sample size:	Sample size				
1-	Nineveh Agriculture Directorate and its	68	55				
	affiliated divisions						
2-	Nineveh Agricultural Training and	54	43				
	Extension Center						
-3	Kirkuk Agriculture Directorate and its	44	54.4				

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affiliated people		
4. Kirkuk Agricultural Training and Extension	49	39
Center		
Total	215	172

### 4.3. Search Tool:

The questionnaire was used as a data collection tool. The questionnaire consists of a set of questions sent by mail or delivered by hand to the persons selected for the subject of the study to register [10] The questionnaire was prepared for the subject of the research and the initial paragraphs of the questionnaire related to the subject of the research were drafted with reference to scientific sources, previous studies and some publications on the Internet, as well as through some personal interviews with a number of employees working in the research area, as well as some discussions with professors specialized in the subject from the Faculty of Agriculture, University of Tikrit. The questionnaire consisted of three parts, as follows: Part I: It included the independent variables related to agricultural employees, namely (age, gender, number of years of service, nature of work, workplace, Ttend towards extension work). These variables were measured as follows:

**1- Age:** It was measured by the number of years of age of the respondent at the time of data collection.

**2- Gender:** This variable was measured through the following levels: (2) male and (1) female.

4. **Number of years of service:** Measured by the number of years of actual service of the respondent to data collection

5- Work in Agricuitat extension: The trend towards the counseling work of the

respondents was measured through (12) paragraphs , and the alternatives to the response were (agree, neutral, disagree), and the following weights were allocated to them (3,2,1) respectively for positive expressions, and to reflect the estimates of the negative paragraphs, and thus the values that each respondent can obtain range from (12) as a minimum to (36) as a maximum numerical value, and the score is representative of the trend towards counseling work.

Part Two: This part was measured by preparing a job satisfaction scale consisting of four areas to measure the job satisfaction of agricultural extension practitioners in the governorates of the northern region of Iraq. The scale consisted of (70) paragraphs. These paragraphs were distributed into (4) areas, namely: (satisfaction with the extension job and its tasks ,satisfaction with salary and material incentives, satisfaction with the work environment, satisfaction with the career progression in the institution). The number of paragraphs in each area reached (14, 20, 19, 17) respectively. In front of each paragraph were (4) alternatives to measure job satisfaction, which are (very satisfied, satisfied, neutral, dissatisfied, very dissatisfied) and the numerical values were given to them (5,4,3,2,1) respectively. As shown in Table No. (4).

scale							
NO	Fields	Number of					
		paragraphs					
1	The first area (satisfaction with the extension function	14					
	and its tasks)						
2	The second area (satisfaction with salary and material	20					
	incentives)						
3	Area 3 (Work Environment Satisfaction)	19					
4	The fourth area (satisfaction with the career progression	17					
	in the institution)						
Total	—The assessment of hip stability involves four major	70					
	areas:						

## Table (4) shows the number of fields and the number of paragraphs for the job satisfaction scale

### **Data collection**

After collecting the data for the initial test on (24/10/2024) and after ensuring the clarity of the questions for the independent factors and the paragraphs of the scale and modifying some of them and ensuring the stability of the paragraphs of the scale for the dependent worker, the form was ready to collect the final data, and it was distributed to the sample of 172 respondents, and the data was collected during the period (5/11/2024 - 29/12/2024).

### **Results and Discussion**

The results were discussed according to the research objectives and as follows:

**1.4. Objective 1: Identify the level of job** satisfaction of agricultural extension workers in general

The results revealed that the highest value obtained by the respondents for job

Statistical methods

After completing the information collection, the data were audited, copied and placed in tables organized according to the research objectives, analyzed using the statistical analysis program (Version 16 SPSS) in which the following statistical methods were used ( range , standard deviation , Pearson , Spearman, zen percentile)

satisfaction was (300) and the lowest numerical score was (149), with an average of (236,83) and a standard deviation of (28,87) on a scale of the highest (350) and the lowest (70). The respondents were divided into (3) categories using the range function, and the highest percentage of the moderate category appeared, followed by the low category, as shown in Table (5)

extension workers in general								
NO	NO Categories		Number Percentage					
1 Low (149- 198)		98	56.99	262				
2 Medium (199- 249)		57	33.13	222				
3 High (250- 300)		17	9,88	135				
	Total	172	100%					
A 100.07								

 Table (5) Distribution of respondents according to the level of job satisfaction of agricultural extension workers in general

S,d 28,87

It is noted from Table(5) that the largest percentage of respondents (56,99%) belongs to the low category and the lowest percentage of 9.88% at the high category of job satisfaction. Therefore, the level of job satisfaction for agricultural extension workers in the governorates of the northern region of Iraq can be low to medium , and the reason for this may be the lack of interest of the responsible authorities in agricultural extension workers and the lack of

### X´= 236,83

support for them in exchange for the work performed by agricultural extension workers in northern Iraq.

# 2.4. Objective 2: Descending order of research areas

The research areas were arranged in descending order by percentage weight and the results were as shown in Table (6)

Field	Average range	Number of paragraphs	Maximum Degree	Weight percentage	Rank
Area of satisfaction with the career progression in the organization	61,20	17	85	72	1
Job Satisfaction Survey	49-53	14	70	70.75	2
Work Environment Satisfaction Area	65	19	95	68	3
Satisfaction with salaries and material incentives	61,10	20	100	61.1	4

Table (6) Ranking of research areas

Table (6) shows that the field of satisfaction with the career progression in the institution ranked first in the ranking with an average of (61,20), where its percentage weight reached (72), and the reason for this may be that the respondents feel the importance of this field, which means that they receive bonuses and promotions at the time, and the importance of addressing any problems in this aspect significantly, while the field of satisfaction with salaries and material incentives came in the last field because the salary has become regular and the employee receives it at the end of each month and they do not find any difficulty , especially after obtaining a MasterCard for all employees of the Iraqi state.

**3.4. Third Objective:** Identify the correlation between the level of satisfaction of agricultural extension workers in the governorates of the northern region of Iraq and all the following variables:

**1. Age:** The results revealed that the lowest age of the respondents was (24) years and the highest age was (58) years , and with an average of (39,95) respondents were divided

into (3) categories according to this variable and according to the law of the range into (3) categories and as shown in Table (7).

NO	Categories	Num bers	Percentage	Average	rs	t	Moral
1	Young people (24–35) years old	69	40,12	32.84	0.079	1,03	N S
2	Average age (36-47 years)	87	50,58	42,93			
3	Elderly (48–58) years	16	9,30	54,5			
	Total	172	100%				

### Table (7) Distribution of respondents according to age groups.

Table (7) shows that the second age group ranging between (36-47) was the highest percentage (50,58%), while the percentage of the first age group ranging between (24-35) was (40,12%), while the group (48-58) was the percentage (9,30%). It is concluded from the above table that the job satisfaction rate of the third category is higher than the rates of the other categories. Their job satisfaction rate was (54,5) degrees, while the rate of the second category was (42,93) degrees , and the first category was (32,84) degrees. This may be due to the fact that the elderly are more

satisfied than others because of their high work experience. To find the correlation between the two variables, the Pearson coefficient of simple correlation was used, which was (0,079) and the relationship significance test, a parameter (t) was used, which was (1.03), which indicates that there is no correlation between the two variables, so the examination provided that there is no correlation between job satisfaction and age.

**2- Gender:** The respondents were distributed according to gender in two categories and as shown in Table No. (8).

			L		1			
	NO	Categories	Number	Percentage	Average	R	t	Significance
								STAT
	1	Females	29	16,86	221,03			
Ī	2	Males	143	83,14	240	Confidential	3.65	Morale at (0.01)
						29		
		Total	172	100%				

\* \*The moral relationship at the level of 0.01

Table (8) shows that the results of the study indicate that most of the study sample are males and their number is (143) agricultural" guides by a percentage of (83.14%), while the number of females was (29) and a percentage of (16.86%), as it is noted that the percentage of males is more than females, and the rate of job satisfaction for males is higher than the rate of females, so their rate of satisfaction with their work was (240,04) degrees, while the average level of satisfaction of females was (221,03) degrees, and the high rate of job satisfaction for males may be due to the fact that the extension work is suitable for them and through which they can adapt to it, so that they need effort and careless effort, and to find a relationship of attachment with the other people, the relationship of attachment was used (Spearman), which reached  $(0^{**})$ ,

29) and no relationship test was used, a parameter (t), which reached (3,65), which indicates the existence of a correlation between the variable relationship with the level of the alternative relationship (0,01) and thus the hypothesis of the hypothesis [11]

3. **Number of Years of service:** The results of the research showed that the minimum duration of the extension service is (1) year and the longest service is (32) years and the respondents were distributed into (3) categories according to the length of the category and the range and as shown in Table (9).

NO	Categories	Num	Percent	Average	rs	t	Moral
		ber	age				
1	A few (1–10) years	70	40,70	232,48			Moral at
2	Medium (11-21 years)	78	44,34	238,46	*0,16	2,11	0.05
3	Long (22–32) years	24	13,96	244,25			
	Total	172	100%				

### Table (9) Distribution of respondents by categories of years of service

\* \* The moral relationship at the level of 0.05

Table (9) shows that the percentage of respondents with little service reached (40,70%) with an arithmetic mean of (232,48) degrees and the percentage of respondents from the second category with medium service reached (45,34%) with an arithmetic mean of (238,46) degrees , and the long service category reached (13,96%) with an arithmetic mean of (244,25) degrees , and to find the

correlation relationship between the two variables, the correlation coefficient (Pearson) was used, which reached ( $^*0,16$ ), and to test the significance of the relationship, a parameter (t) was used, which reached (2,11), which indicates a positive correlation at the level of (0.05) between the two variables, and thus we reject the statistical hypothesis and accept the alternative hypothesis stipulated on

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(there is a significant correlation between job satisfaction and the number of years of service, and this result is consistent with what I found [12]

towards **extension Work** (18) and the largest value (35), the respondents were distributed into three categories according to the extent and as shown in Table (10).

### 4. Trend Towards extension Work:

The results of the research showed that the

### lowest numerical score expressing the trend

### Table (10) Distribution of respondents by categories of tendency towards extension Work

NO	Categories	Num ber	Percent age	Average	R	t	Significance level
1	negative(18-23)	26	15,12	233			
2	Neutral(24-29)	84	48,84	236	(~0.14)	1,84	Moral at 0.05
3	Positive(30–35)	62	36,04	239			
	Total	172	100%				

\* \* Indicates that the relationship is moral at the level of (0,05)

Table (10) shows that (26) of the respondents were in the negative category of the trend towards extension Work and represented (15.12%), while (84) of the respondents were in the neutral category of the trend towards extension Work and represented (48.84%), and that (62) of the respondents were in the positive category of the trend towards job satisfaction and represented (36.04%), and for the purpose of revealing whether there is a correlation between the two variables, the correlation coefficient (Pearson) was used, and the correlation parameter score was  $(^{*}0,14)$ , and to test the significance of the relationship, a parameter (t) of (1,84) was used, which indicates a significant correlation at the level of (0.05) between the two variables, and thus we reject the statistical hypothesis and accept the alternative hypothesis stipulated on (there is a significant correlation between job satisfaction and the trend towards job satisfaction), which means that the job satisfaction of the respondents increases with the positive trend towards their work , and this value is consistent with what I found [13]

### **Conclusions:**

1. The results of the research showed that more than half of the respondents fall within the category of low job satisfaction, and it can be concluded from this that the obstacles and challenges revealed by the study affected the satisfaction of workers in agricultural extension in the northern region of Iraq with their jobs, including the lack of an attractive guidance environment suitable for work, and the existence of great difficulties for career progression so that it is difficult for many of them to promote and obtain their financial and career entitlement.

2. The results of the research also showed that the field of job satisfaction with the extension job for agricultural extension workers came first in terms of importance according to percentage weight, and we conclude from this that the job for agricultural extension workers is ahead of the rest of the fields as it constitutes a legal importance for the worker as well as being the gateway to his bright future, so it must be paid attention to by the supreme **Sources:** 

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extension management in order to achieve the professional ambition of the agricultural extension worker in a way that makes him perform his work as best as he can.

**3.** The results of the research showed a significant correlation between the level of job satisfaction and each of the variables (gender, Numberyears of service, trend towards job satisfaction, receiving training). We conclude from this that these variables are important and have a positive impact. Their increase led to an increase in the level of job satisfaction for workers for their extension jobs

4. The results of the study showed that there is no moral correlation between the level of job satisfaction and each variables (age). We conclude from this that the age of the respondents in the event of their increase or decrease is not related to job satisfaction.

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