

Administrative reasons for farmers' reluctance to attend agricultural extension activities in the Nineveh Directorate of Agriculture and its affiliated divisions

Aws Ragheb Hashim¹, Abdal Aziz Hameed Midhss Aljubory²

Agriculture Extension.& Technology Transfer Department, College of Agric& Forestry,
University of Mosul. Iraq,
abdalazizhm@uomosul.edu.iq¹ aws.ag486@student.uomosul.edu.iq²

Abstract

The aim of this study was to identify the administrative reasons that drive farmers to refrain from attending agricultural extension activities. It also sought to examine the correlation between the levels of reasons for farmers' reluctance to attend extension activities organized by the Nineveh Directorate of Agriculture and its affiliated divisions, and each of the following variables: gender, age, educational level, ownership of a means of transportation, engagement in non-agricultural work, living standard, willingness to learn new things, type of agricultural work, and health status. The study specifically focused on the administrative reasons behind this reluctance. A descriptive analytical methodology was used, supported by a field questionnaire involving a sample of farmers. The results revealed that the reluctance is due to a combination of personal, economic, social, organizational, and educational factors. Among the most prominent were the lack of incentives, weak coordination, and insufficient awareness. The findings indicated a significant overall reluctance among farmers to attend extension activities in the Nineveh Directorate of Agriculture, with a level described as moderate tending toward low. The administrative reasons varied in their degree of influence. A statistically significant correlation was found between the levels of reluctance and two variables: educational level and ownership of a means of transportation. Other variables did not show a significant correlation, possibly due to factors such as Type II error or sample selection bias. The researcher provided several key recommendations to the Nineveh Directorate of Agriculture, including: Reorganizing extension programs according to a clear and coordinated schedule, with effective prior notification to farmers. Improving administrative communication between extension agencies and farmers through modern tools such as text messages or mobile applications.

Keywords: Farmers' reluctance - extension activities- agricultural extension-

INTRODUCTION:

Agricultural extension serves as a crucial link between scientific research and farmers, aiming to transfer the latest agricultural practices and support rural development. Despite the importance of extension activities, some farmers refrain from attending them. This has prompted the researcher to study the reasons—particularly administrative ones—that hinder effective participation in these urgent activities (Al-Layla, 1988: 10). The main tasks of agricultural extension workers involve bringing about positive behavioral changes in individuals by conveying research findings and modern agricultural practices to the beneficiaries in a clear and simple manner and implementing them in the field. Agricultural extension agencies interact with a broad and diverse group of farmers who differ in their social, economic, psychological, and cognitive characteristics. Therefore, it is essential to use appropriate methods and tools to deliver information and knowledge to all categories of farmers (Al-Sabbagh, 1998: 28). Agricultural extension also plays a vital role in working with the rural family as a production and consumption unit and as a key pillar in agricultural extension and a foundational structure of society. It serves as a starting point for any change within it. Thus, extension targets key family members: the man—as the main producer, the woman—as his partner and manager of consumption, and rural youth who contribute to production and development (Al-Rawi & Abdul-Baqir, 12). Furthermore, agricultural extension plays an important role in organizing agricultural activities to educate and

train farmers through training courses, meetings, and seminars. These aim to equip farmers with the necessary knowledge in all agricultural fields based on their requests and needs, thereby filling the knowledge gap. Such training activities include: (Field visits, experimental farms, meetings and lectures, workshops and training courses, awareness publications, media campaigns, agricultural exhibitions, open field days, agricultural competitions, personal consultations, collaboration with educational institutions, community participation.). However, some farmers refrain from attending these activities due to various reasons, including a lack of knowledge, which in turn leads to a lack of experience and a decline in the cultivation of economic crops factors that contribute to their reluctance. The problem addressed in this study stems from the noticeable absence of some farmers from meetings, events, and activities held by the Nineveh Directorate of Agriculture, with no clear understanding of the reasons behind this absence (Al-Rawi & Abdul-Baqir, 12). The research problem lies in the reluctance of a number of farmers to attend extension activities organized by the Nineveh Directorate of Agriculture and its affiliated agricultural units. This negatively impacts the effectiveness of agricultural knowledge transfer and the development of production. The study aims to identify the **administrative reasons** behind this reluctance and propose **practical solutions** to address them. This research is particularly significant due to the importance of agricultural extension activities in educating and training farmers across various specializations. It helps identify the necessary extension measures to be implemented, enhances opportunities for agricultural awareness, and allows for assessment of the success or failure of programs. Moreover, it ensures continuity and avoids setbacks in the programs and activities run by the Directorate of Agriculture in Nineveh. It contributes to maintaining the quality of extension programs, avoiding the loss of available resources, discovering and developing local leadership, and persuading farmers of the value of extension activities—thus increasing their willingness to participate. It also helps define the type of work to be done, distinguish between major and minor issues, and plan programs that coordinate the efforts of extension workers. Ultimately, it ensures that achievements are justified and backed by valid reasons (Al-Layla, 1988: 10).

Objectives:

1. To identify the administrative reasons that lead farmers to refrain from attending extension activities.
2. To determine the correlation between the degrees of farmers' reluctance to attend extension activities held by the Nineveh Directorate of Agriculture and its branches, and the following variables: Gender- Age - Educational level - Ownership of a means of transportation - Engagement in non-agricultural work - Living standard - Willingness to learn new things - Type of agricultural work - Health status
3. To identify the administrative reasons for farmers' reluctance to attend extension activities held by the Nineveh Directorate of Agriculture and its affiliated divisions.

MATERIALS AND METHODS

Study Methodology:

A descriptive methodology was adopted for this study, as it is considered one of the best and most appropriate approaches. It analyzes the phenomenon as it exists in reality, accurately describes it, highlights its features and characteristics comprehensively, and provides numerical data that reflect its actual magnitude (Abbas, 2012: 74). This methodology aims to analyze and explain the current situation by collecting information on levels, opinions, attitudes, or reactions related to a specific subject or phenomenon (Milhem, 2000: 333). It is regarded as a fundamental tool for uncovering facts in social sciences by applying logical principles that guide thinking towards obtaining confirmed results (Al-Assaf, 1995: 90).

Study Area:

The study was confined to Nineveh Governorate, specifically the Nineveh Directorate of Agriculture and its affiliated divisions, which amount to 31 agricultural divisions.

Study Population and Sample:

The study population consisted of registered farmers in the Nineveh Directorate of Agriculture, totaling 21,450 farmers (according to data from the Nineveh Directorate of Agriculture for the 2024 agricultural season). The appropriate sample size for the study population was determined using the Jotform sample size calculator (a Google-based tool), and the result was cross-verified using the Sekaran table, yielding the same outcome (Al-Abbasi, 2018: 153–154). The sampling method used was stratified random sampling, based on the type of agricultural activity practiced by the farmers in their fields. The sample was drawn using the formula for stratified sampling (see statistical methods section), and from each stratum, the sample was selected using random number tables.

The final sample size reached 377 respondents, who were the subjects of the study.

Study Instrument:

A suitable tool was selected for collecting data from the respondents, as it is considered an effective means for achieving the study's objectives (Milhem, 2000: 317). The tool consisted of a questionnaire administered through personal interviews to ensure accurate and direct responses from the farmers (Al-Sharif, 1996: 123).

The questionnaire consisted of two main parts:

1. **Part One:** Included the independent variables, with questions regarding the farmers' personal characteristics such as: (Gender- Age - Educational level - Ownership of a means of transportation - Living standard - Willingness to learn new things - Type of agricultural work - Health status
2. **Part Two:** Focused on the dependent variable, which is:
 - o Reasons for farmers' reluctance to attend the extension activities organized by the Nineveh Directorate of Agriculture and its affiliated agricultural divisions. This part covered four areas of the dependent variable, each containing statements presented to the farmers to identify the administrative reasons behind their reluctance to attend agricultural extension activities held in Nineveh and its divisions.

RESULT AND DISCUSSION

First Objective: To identify the administrative reasons that lead farmers to refrain from attending extension activities.

The results showed that the actual scores reflecting the administrative reasons for farmers' reluctance to attend the extension activities organized by the Nineveh Directorate of Agriculture and its affiliated divisions ranged between (13–39), with a mean score of (30.12) and a standard deviation of (4.78) on a theoretical scale also ranging from (13–39). The respondents were categorized into three groups using the range equation, as shown in Table 1.

Table 1: Distribution of respondents according to the scores of the second field (Administrative Reasons for Reluctance)

categories average	%	Number	Categories
17.8	2.65	10	Low class(21-13)
726.8	48.81	184	Medium class(30-22)
34.05	48.54	183	high class(39 -31)
	%100	377	Total
$\bar{x} = 30.23$			sd= 4.78

The study revealed that the majority of respondents (97%) believe that the reasons behind farmers' reluctance to attend extension activities are administrative in nature, and are described

as moderate tending toward high. This indicates the presence of administrative accumulations that, while not reaching the level of a crisis, clearly affect farmers' participation in extension activities organized by the Nineveh Directorate of Agriculture and its affiliated divisions. This may be due to the fact that administrative aspects do not provide a supportive or flexible environment for attendance such as bureaucratic procedures, this agree with (Hameed, et.al, 2023). poor coordination in timing and location, or repetitive activities with no clear benefit and poorly planned schedules. These and other factors could contribute to farmers' reluctance and declining interest in participating in extension activities.

Second Objective: To determine the correlation between the scores of the dependent variable (reasons for farmers' reluctance to attend extension activities organized by the Nineveh Directorate of Agriculture and its affiliated divisions in general) and each of the following independent variables: Gender - Age - Educational level - Ownership of a means of transportation.

Gender Variable: The gender variable was divided into two nominal levels (male and female), as shown in Table 2:

Table 2: Distribution of respondents according to the gender variable

decision	(rc) values	χ^2	Total		high class (271-148)		medium class (147-124)		-100) Low class (123)		dependent variable
			%	frg	%	frg	%	frg	%	frg	
acceptance H0	0.139	97.4	93.90	354	91.18	62	91.28	199	95.60	87	Male
			6.10	23	8.82	6	8.72	19	4.40	4	Female
			100%	377	%100	68	100%	218	100%	91	Total
0.2326 = 0.01			0.1654 = 0.05						Table value of (t)		

The table above shows that the highest percentage of respondents were male, accounting for 93.90%, followed by female respondents at 6.10%. To determine the correlation between the reasons for reluctance scores and the gender variable, the Contingency Coefficient (RC) was used. The calculated value was (0.1390), which is considered weak. When compared with the tabulated RC value at a significance level of 0.05, it was found to be less than the critical value. Therefore, the null hypothesis is accepted, indicating that there is no significant correlation between the scores of reasons for reluctance and the gender variable. In other words, the correlation is not real and may be attributed to chance or bias in sample selection.

Age Variable: The study results showed that the oldest respondent was 79 years old, and the youngest was 20 years old. The respondents were divided into three age groups using the range formula, as shown in Table (3).

The results shown in Table (10) above indicate that the highest percentage of respondents fell within the medium age group, accounting for 40.85%, followed by the low age group with 38.46%. To determine the correlation between the scores of the reasons for reluctance and the age variable, the Contingency Coefficient (RC) was used, and the calculated value was (0.081), which is considered very weak and merely superficial (Barba 's, et al,2024) (Barba 's, et al,2025).

3- Educational Level: The respondents were distributed according to six ordinal levels of educational attainment (Illiterate, Can read and write, Primary, Intermediate, Secondary, College), as shown in Table (4).

Table (4): Distribution of respondents according to the educational level variable and its correlation with the reasons for their reluctance to attend extension activities.

Decision	(rc) Values	x ²	total		High class (271-148)		Medium class (147-124)		Low class (123-100)		Dependent variable
			%	frg	%	frg	%	frg	%	frg	education level variable
refusal H0	*.2280	520.7	33.7	127	32.35	22	28.9	63	46.15	42	Illiterate
			43.5	164	41.18	28	43.58	95	45.05	41	read and write
			13	49	17.65	12	14.22	31	6.6	6	Elementary
			1.3	5	0	0	2.3	5	0	0	Intermediate
			5.57	21	4.41	3	7.8	71	1.1	1	Preparatory
			2.93	11	4.41	3	3.2	7	1.1	1	College
			100%	377	%100	68	100%	218	100%	91	Total
0.2326 = 0.01			0.023			0.1654. =0.05			Table values of (t)		

The study, as shown in Table (11), revealed that the majority of respondents were primary and secondary school graduates, with a combined percentage of 18.57%. To determine the correlation between the reasons for reluctance scores and the educational level, the Contingency Coefficient (RC) was used. The calculated value was (0.228), indicating a weak correlation. Agree with (Hameed, et al, 2025). However, when compared with the tabulated value at a significance level of 0.05, it was found to be statistically significant. Therefore, the null hypothesis is rejected, meaning there is a correlation between the scores of reasons for reluctance and the educational level variable. This indicates a real but weak relationship. The results showed that education played a noticeable role, as college graduates participated in extension activities at a rate 45% higher than those with lower levels of education or illiteracy. It can be concluded that the educational level of farmers contributes to explaining the reasons behind their reluctance to attend extension activities, although the relationship is weak yet statistically significant. This may be due to the fact that education enhances the farmers' ability to understand technical information. However, there may be other variables that better explain the phenomenon of reluctance, exceeding the influence of education, which could explain the weak correlation discovered in this study despite its significance.

4. **Ownership of a Means of Transportation:** The respondents were categorized according to the variable "ownership of a means of transportation" into two nominal levels (Yes, I own a means of transportation) , (No, I do not own a means of transportation as shown in Table (5).

Table (5) illustrates the distribution of respondents according to the variable of transportation ownership and its correlation with the reasons for their reluctance to attend agricultural extension activities.

Decision	(rc) values	x ²	total		High class (271-148)		Medium class (147-124)		Low class (123-100)		Dependent variable
			%	frg	%	frg	%	frg	%	frg	Independent variable: owning means of transportation Q
refusal H0	*0.202	16.031	45.4	171	26.47	18	48.17	105	5.75 2	48	Yes / I have
		calculated values of (t)	54.6	206	373.5	50	51.83	113	47.25	43	I don't have
		3.585	100%	377	%100	68	100%	218	10% 0	91	Total
		0.2326 = 0.01	0.1654 =0.05						Table values of (t)		

(*) Significant at the 0.05 level

The study, as shown in Table (12), revealed that the majority of respondents do not own a means of transportation, with a percentage of 54.6%. To determine the correlation between the scores of the reasons for reluctance and the variable "ownership of a means of transportation", the Contingency Coefficient (RC) was used as (Hameed & Abd AlFaraje, 2024) and (Hameed, Abd Al-Faraje & Adress,2024). The calculated value was (0.202), indicating a weak correlation. However, when compared with the tabulated value, it was found to be greater than the tabulated value at the 0.05 significance level, thus the null hypothesis is rejected. This means that there is a statistically significant correlation between the scores of reasons for reluctance and the variable of owning a means of transportation. This result indicates that owning a means of transportation actually contributes to farmers' attendance or reluctance to participate in extension activities. That is, not owning a means of transportation is one of the variables that hinder farmers from reaching the locations where extension activities are held, thereby increasing the likelihood of their reluctance to attend. Although the correlation is weak, it is statistically significant, meaning it is not due to chance. This may be attributed to the fact that owning a means of transportation is an influential factor that should be taken into consideration when identifying reasons for farmers' reluctance to attend extension activities. Therefore, this variable should be considered when developing policies to facilitate attendance(Hameed, & Sawicka, 2023).

Third Objective: To identify the reasons for farmers' reluctance to attend agricultural extension activities held by the Directorate of Agriculture in Nineveh and its affiliated divisions, specifically focusing on administrative reasons.

The results showed that the actual scores reflecting the administrative reasons for farmers' reluctance to attend the extension activities organized by the Directorate of Agriculture in Nineveh and its affiliated divisions ranged between (13–39), with a mean of (30.12) and a standard deviation of (4.78) on a theoretical scale ranging from (13–39) this agree with (Hameed, 2019). The respondents were divided into three categories using the range method, as shown in Table (6).

Table (6): Distribution of respondents according to their scores in the second domain (Administrative Reasons for Reluctance).

Categories average	%	number	Categories
17.8	2.65	10	(21–13) Low class
26.87	48.81	184	(30–22) Medium class
34.05	48.54	183	(39 –31) High class
	%100	377	total
$\bar{x} = 30.23$		sd= 4.78	

The study showed that the majority of respondents (97%) believe that the reasons for farmers' reluctance to attend extension activities are administrative in nature and are described as moderate tending toward high. This indicates the presence of administrative accumulations that do not reach the level of a crisis but clearly affect farmers' participation in extension activities held by the Directorate of Agriculture in Nineveh and its affiliated divisions. This may be due to administrative aspects that fail to provide an encouraging and flexible environment for attendance, such as bureaucracy, weak coordination in time and place, or the repetition of activities and events without tangible benefit and with unsuitable scheduling. These and other factors may contribute to the farmers' reluctance and declining interest in attending extension activities.

CONCLUSIONS

1. The reasons for farmers' reluctance, in general, do not amount to major challenges but represent minor or transient obstacles. These can be addressed by enhancing coordination between extension agencies and farmers, developing communication and media mechanisms, and improving logistical aspects related to organizing activities.
2. The reasons for farmers' reluctance to attend extension activities do not represent major barriers. The majority see a wide scope for improvement through simple organizational and informational interventions that could increase participation rates in the future.
3. A large proportion of the respondents believe that the reasons for reluctance reflect a low to moderate level of disengagement, while the lower group indicates that a considerable portion of respondents see no real obstacles to their participation. This could be interpreted as a positive indicator that can be built upon to improve attendance in the future.
4. Administrative reasons represent one of the most significant areas, receiving the highest acknowledgment from respondents as a cause for their reluctance. There are strong indications that the existing administrative system in the Directorate of Agriculture in Nineveh needs revision and development to align with farmers' needs and realities. The perceived lack of organization and weak administrative communication reduces farmers' motivation to participate in extension activities.
5. Most farmers do not consider the causes behind their reluctance to attend extension activities as major or fundamental obstacles to their participation. Rather, they are relatively

limited factors, potentially linked to simple organizational issues such as the timing of the activity, lack of prior knowledge about it, or weak promotion.

6. There are organizational and administrative accumulations that do not amount to a complete crisis but clearly affect farmers' participation in extension activities.

7. The administrative aspects do not provide an encouraging or flexible environment for attending activities.

Recommendations

The researcher directed several recommendations to the Directorate of Agriculture in Nineveh, as follows:

1- Reorganize extension programs according to a clear and coordinated schedule and inform farmers in advance using effective methods.

2- Improve administrative communication between extension agencies and farmers using modern communication tools (e.g., text messages or mobile apps).

3- Simplify administrative procedures related to registration, invitations, or participant follow-ups.

4- Establish field administrative follow-up teams to assess the level of organization and provide periodic reports to improve performance.

5- Involve farmers in the administrative planning of activities to ensure their suitability to their actual conditions and needs.

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