Determining the training needs of agricultural employees working in the laboratories of the General Company for Grain Trade - Republic of Iraq in general, and its relationship with some research variables (age, sources of information, job satisfaction).

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Abstract

The aim of this study is to determine the training needs of agricultural employees working in the laboratories of the General Company for Grain Trade - Republic of Iraq in general. And to find the correlation between the work stages and each of the study variables such as (age, gender, sources of information, job satisfaction). The study sample was selected in a systematic random way. The study sample included (202 agricultural employees), which constitutes (47%) of the study population of (428) agricultural employees. Which percentage was calculated using the equation (SThompson, 2012, p59_Thompson 60). The research method included preparing and designing a questionnaire consisting of two parts: the first included the personal characteristics of the respondents. The second included measures of the work stages. A questionnaire form consisting of (67) test paragraphs was prepared, distributed over (7) stages as an initial formula. It was presented to experts specialized in agricultural guidance for the purpose of determining the relative importance of each stage of the work. In light of their comments, (4) paragraphs were deleted and (11) paragraphs were reformulated, so that the number of paragraphs became (63). Then, a pre-test was conducted on it by distributing it to (30) respondents as a survey sample to measure the reliability coefficient, which exceeded (73)%. After the questionnaire form was ready, it was distributed from (5/1/2023 to 9/1/2023). The data was collected through personal interviews. The percentage of ease, difficulty and discriminating power was measured, as (3) results were deleted due to their difficulty not being appropriate and not good in their discriminating power, so the number of test paragraphs became (60) paragraphs. The data were coded and processed using statistical methods (range, arithmetic mean, weighted mean, t-test, relative importance, correlation coefficient) using the SPSS program. The results of the study showed that the level of training needs is medium and tends to increase. The results showed that there is an inverse significant relationship between training needs and each of the variables (age, information sources, job satisfaction), which indicates the existence of training needs for agricultural employees working in the laboratories of the General Company for Grain Trade. On an ongoing basis, and that there is a need to conduct continuous and specialized training courses for the work of the respondents. The researcher recommended the importance of introducing agricultural employees working in the laboratories of the General Company for Grain Trade - Republic of Iraq to training courses inside and outside the country, and that these courses be linked to the necessary training needs, and to focus on introducing modern technologies.

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Introduction

Human resources are among the most important resources used by modern organizations to achieve their aims. The qualified human element is the thinking and main element in production and services [1]. Therefore, what distinguishes an advanced society is its ability to unleash the energies of individuals and develop their abilities, skills and potentials to achieve more production and development. Raising the productive efficiency of the human element requires the preparation of integrated programs for continuous and ongoing training in order to make the most of these energies [2]. The process of planning for successful training begins with identifying training needs, then deriving training objectives for programs designed to meet these needs at the individual, job and group levels, then developing training programs, implementing them and evaluating them [3]. Training is an effective means of developing the workforce in general, including employees working in agricultural institutions. Through training, the capabilities of workers can be developed from agricultural employees and agricultural guides, as well as farmers, rural leaders, rural youth and rural women, enabling them to properly understand and apply modern agricultural technologies and thus increase agricultural production in quantity and quality. The importance of training in agricultural extension work is clearly evident. Agricultural guidance is the cornerstone for achieving economic and social development, which depends mainly on developing the material and human element. In Iraq, the human element is the decisive element for achieving economic development due to the availability of other material elements of production. [4] He stated that training is a basic resource that can direct knowledge and skills towards improving production and is important in improving the knowledge and practices of the individual. He also stated that need is not a desire, but rather a gap between what exists and what should be. Training leads to raising the efficiency of the organization's employees, increasing their productivity, and improving work methods to bring about positive changes in their information, skills, and attitudes, and helping them solve the problems they face to achieve the highest level of production efficiency. Man is the effective element in the field of optimal exploitation of the available material resources due to his mental abilities that enable him to adapt and control the tools and machines in the environment for the purpose of serving him and satisfying his increasing needs. He is responsible for the process of making maximum use of the available material resources, so this element must be well trained to be able to perform the role assigned to him effectively [5]. The human element is one of the most important factors that help in providing agricultural technologies in agricultural research institutions and centers due to the availability of basic information for specialized cadres in the success and transfer of these technologies. Which contributes directly to improving and increasing the production of agricultural crops, especially crops that play an important role in achieving food security, which is the supreme goal that most peoples aspire to. Bread wheat is the first cereal crop in the world and comes at the forefront of strategic crops in terms of cultivated area and global consumption. It is the main food for most peoples of the world [6]. Cultivating wheat in Iraq is the main agricultural activity for most farmers, if not all of them, and a major source of their

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agricultural income. Agriculture is largely linked to the country's history in terms of civilization [7]. The General Company for Grain Trade is one of the most important formations affiliated with the Ministry of Trade - Republic of Iraq, which includes (25) sites and branches spread across all governorates of Iraq, in which (428) agricultural employees work with different educational levels. One of its tasks is to receive grains from farmers and store them. Then, it is prepared for mills to be ground and distributed within the components of the ration card, which is an important and basic source of food for citizens. Since this vital institution has a prominent and important role, it is necessary to provide the agricultural workers and those responsible for receiving and storing grains with important knowledge and information by conducting the necessary training for them to increase their work efficiency and conducting studies concerned with identifying their training needs.

The study focused on the training needs of agricultural employees working in the laboratories of the Iraqi General Company for Grain Trade. The problem of the research lies in the shortage in the number of agricultural employees working in the laboratories of the General Company for Grain Trade - Republic of Iraq at different levels. Therefore, there was an urgent need for employees working in the laboratories of the General Company for Grain Trade - Republic of Iraq. To determine and know these training needs to be able to develop appropriate training programs to raise the efficiency of the respondents, as this is of great benefit to this important institution that has an impact on the individual's livelihood.

Research objectives: Determining the training needs of agricultural employees working in the laboratories of the General Company for Grain Trade - Republic of Iraq in general. And its correlation with some research variables (age, sources of information, job satisfaction).

Research Hypotheses:

Negative Hypotheses:

1- There is no significant correlation between training needs and age.

2- There is no significant correlation between training needs and information sources.

3- There is no significant correlation between training needs and job satisfaction.

Positive Hypotheses:

1- There is a significant correlation between training needs and age.

2- There is a significant correlation between training needs and information sources.

3- There is a significant correlation between training needs and job satisfaction.

Research Questions:

The idea of this research came to serve as answers to the following research questions:

1- What is the level of training needs for farmers working in the laboratories of the General Company for Grain Trade - Republic of Iraq in general.

2- What is the level of training needs for farmers working in the laboratories of the General Company for Grain Trade - Republic of Iraq in all stages of work in the company's laboratories, which are: the stage of withdrawing samples and coding them (secret number), the stage of examining and analyzing grains, the stage of unloading and storing grains, the stage of sterilization and control, covering the storage, the stage of ventilation and recycling of the storage, the stage of transporting and preparing mills, and the stage of issuing laboratory analysis certificates.

3- What is the order of training needs for farmers working in the laboratories of the General Company for Grain Trade - Republic

of Iraq for all stages of the research (the stage of withdrawing samples and coding them (secret number), the stage of examining and analyzing grains, the stage of unloading and storing grains, the stage of sterilization and control, covering the storage, the stage of ventilation and recycling of the storage, the stage of transporting and preparing mills, and the stage of issuing laboratory analysis certificates) in descending order according to their relative importance.

4- What is the correlation between the level of training needs for farmers working in the laboratories of the General Company for Grain Trade - Republic of Iraq in general and each of: (age, sources of information, job satisfaction).

Research variables:

The research included a number of variables, namely (age, sources of information, job satisfaction) as independent variables and work stages, which include (the stage of withdrawing forms and coding them (secret number), the stage of examining and analyzing grains, the stage of emptying and storing grains, the stage of sterilization and control, covering storage, the stage of ventilation and recycling storage, the stage of transporting and preparing mills, and the stage of issuing laboratory analysis certificates as dependent variables.

Importance of the research:

1- Accurately identifying the training needs of agricultural employees working in the General Company for Grain Trade - Republic of Iraq, and involving them in objective training courses can reduce work costs and develop the effectiveness of their performance for their workers.

2- Through training for agricultural employees working in the General Company for Grain Trade - Republic of Iraq, it is possible to keep pace with modern technological development in their work stages, which is positively reflected in their performance.

Research limitations:

The research is limited to agricultural employees working in the laboratories of the General Company for Grain Trade affiliated to the Ministry of Trade - Republic of Iraq and its affiliated sites in All governorates.

Procedural definitions:

1- Training needs:- The knowledge, needs and trends needed by agricultural employees working in the laboratories of the General Company for Grain Trade affiliated to the Ministry of Trade - Republic of Iraq. Which includes receiving (wheat grains (wheat)) and storing them and then preparing them for mills or transporting them to other storage sites.

2- Agricultural employees:- They are all agricultural employees working in the laboratories of the General Company for Grain Trade affiliated to the Ministry of Trade - Republic of Iraq. And who hold an agricultural certificate (preparatory agriculture, diploma in agriculture, bachelor's degree in agricultural sciences, master's degree in agricultural sciences, doctorate in agricultural sciences).

3- Agricultural experience:- The number of years of work in the General Company for Grain Trade affiliated to the Ministry of Trade - Republic of Iraq.

4- The General Company for Grain Trade:- It is one of the most important companies affiliated to the formations of the Ministry of Trade - Republic of Iraq. Which is the core of its work to receive grains, store grains and prepare mills for the purpose of producing flour and distributing it to citizens within the components of the ration card.

5- Silo: A group of concrete stores called (benzat) and is often cylindrical in shape and

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its shape varies according to the storage capacity or the origin. It is vertical and its height reaches approximately 30 meters. 6- Bunker: A concrete store designed in a rectangular shape, its size varies according to its storage capacity, and is often (100 x 20) m. Its wall height reaches 2 meters, its storage capacity ranges from (5000-6500) thousand tons.

Research method:

Research area:

Laboratories of the sites and branches of the General Company for Grain Trade - Republic of Iraq were selected, distributed over (25) sites and branches spread across all governorates of Iraq. The storage capacity of these sites is estimated at approximately (5634900) tons.

Research community: The study included (428) agricultural employees working in the laboratories of the General Company for Grain Trade affiliated to the Ministry of Trade, Republic of Iraq.

4.3. Research sample:

To select the study sample, all agricultural workers working in the laboratories of the sites and branches of the General Company for Grain Trade - Republic of Iraq were identified. The equation was applied. [8].

.n=(N.p(1-p))/(N-1(d^2÷z^2)+p(1-p))

Where n represents the sample size

N is the size of the study community

P = 0.5

D = 0.05

Z = 1.96

According to which a regular random sample of (202) respondents was selected, representing (47%) of the total research population, which is (428) respondents, as shown in Table . (2).

Table . (1.3) The research sample and its percentage.

Total	PhD in Agriculture	Master of Agriculture	Bachelor of Agriculture	Diploma in Agriculture	Preparatory Agriculture	Educational level
428	13	29	317	23	46	Comprehensive study
202	6	14	149	11	22	Study sample 47%

Research tool:

The researcher used the questionnaire form to obtain information by answering the respondents' questions on the questionnaire. The questionnaire form was prepared to determine the training needs of agricultural employees working in the laboratories of the General Company for Grain Trade - Republic of Iraq. According to the scientific rules for preparing the questionnaire form in terms of the clarity of the questions, their coordination, sequence and interconnection to meet the

purpose of the study, the research relied on several sources to prepare the questionnaire form, including those sources.

-1Personal interviews with specialists from agricultural employees working in the laboratories of the General Company for Grain Trade - Republic of Iraq. As shown in Appendix (B.(

-2Literature and instructions for the stages of work of agricultural employees working in the laboratories of the General Company for Grain Trade - Republic of Iraq issued by its Quality Control Department.

-3Previous studies related to the research topic.

-4The Internet.

-5The researcher's personal and professional experience. He holds the position of Director of the Grain Trade Branch in Salah al-Din Governorate.

The questionnaire consisted of two parts:

A - Part One:

This part included phrases and questions related to identifying the personal and functional characteristics of agricultural employees working in the laboratories of the General Company for Grain Trade - Republic of Iraq. Represented by (age, sources of information, job satisfaction). These independent factors were measured as follows-:

-1Age: This variable was measured by the number of years of the respondent's age until the date of data collection.

-2Sources of obtaining information: This variable was measured by a special scale consisting of (8) sources of information, for which a graduated scale was set that included the following levels: (always, sometimes, rarely) and these levels were given the following symbols: (3, 2, 1) respectively, and the total score on the scale represents the respondent's total score. The theoretical range values for this variable ranged between (8-24.(

-3Job satisfaction: This variable was measured through (16) paragraphs. A five-point scale was developed for it, including the following levels: (very satisfied, satisfied, neutral, dissatisfied, very dissatisfied) and the following values were given to it: (5, 4, 3, 2, 1) respectively, as the theoretical range values for this variable were between (16-80.(

B- Part Two:

This part included a number of stages and test paragraphs that include determining the knowledge, skills and attitudes related to the work of agricultural employees working in the laboratories of the General Company for Grain Trade - Republic of Iraq, as (7) seven stages were identified, which are: (withdrawing and coding samples (secret number), the stage of examining and analyzing grains, the stage of unloading and storing grains, the stage of sterilization, control and covering, the stage of ventilation and recycling of storage, the stage of transporting and preparing mills, and the stage of issuing laboratory analysis certificates). As shown in Table . (3.2.(

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Table (3.2) Main work stages.

Stages	No.
Drawing and coding of samples (secret number)	1
Grain inspection and analysis stage	2
Grain unloading and storage stage	3
Sterilization, control and covering stage	4
Warehouse ventilation and recycling stage	5
Mill transportation and preparation stage	6
Laboratory analysis certificates issuance stage	7

After completing the identification of the stages and paragraphs, they were presented to the experts (subject specialists) as shown in Appendix (T) to determine the relative importance of each stage by distributing the (100) degrees that the researcher identified as a desired situation to reach into seven stages, as the average of the degrees indicated by the experts was taken. As shown in Table . (3.3) below.

Table . (3.3) shows the determination of the relative importance of each stage by the experts

Relative importance rate%	Expert3	Expert2	Expert1	Work stages	No.
%19	%14	%24	%19	Sample withdrawal and coding (secret number)	1
%19	%19	%19	%19	Grain inspection and analysis stage	2
%19	%24	%19	%14	Grain unloading and storage stage	3
%19	%19	%14	%24	Control and sterilization stage	4
% 8	%7.75	%7.75	%8.5	Warehouse ventilation and recycling stage	5
% 8	%8.5	%7.75	%7.75	Mill transportation and preparation stage	6
% 8	%7.75	%8.5	%7.75	Laboratory analysis certificates issuance stage	7
%100	%100	%100	%100	total	

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Pre-test of the questionnaire:

After completing the preparation of the questionnaire form. A pre-test was conducted on it (Pre-Test (and a regular random sample of (30) employees was selected, which constitutes (7%) of the total number of respondents, which is (428) respondents. The survey sample data was collected through a personal interview for the period from 3/1/2023 to 4/1/2023, as shown in Table (3.6.(

Table (3.6) includes the study, the study sample, and the survey sample.

Total	PhD in Agriculture	Master of Agriculture	Bachelor of Agriculture	Diploma in Agriculture	Preparatory Agriculture	Educational level
428	13	29	317	23	46	Comprehensive study
202	6	14	149	11	22	Study sample 47%
30	1	2	22	2	3	Exploratory sample 7%

Stability and validity:

From the survey sample, the stability of the test used in the study was measured and its validity was demonstrated using the (Alpha - Cronbach) method, as the stability coefficient reached (0.73) and the test is considered stable if the stability coefficient exceeds (0.70) or more (Essawi, 1974: 58). To obtain the validity coefficient, the stability coefficient was rooted and the result was (0.90.(

Difficulty of paragraphs and their discriminatory power:

In order to analyze the test paragraphs, the difficulty of the paragraphs and their discriminatory power were calculated as follows:

A - Ease and difficulty of paragraphs:

The purpose of calculating the difficulty of the paragraphs is to determine the paragraphs with appropriate difficulty and delete the very easy or very difficult paragraphs and modify the marginal paragraphs, and accept the paragraphs whose difficulty ranges between (20%-80%). The equation for calculating the degree of difficulty for each paragraph of the test paragraphs was used, and accordingly (3) test paragraphs numbered (50, 57, 36) were excluded because they were outside the permissible range for accepting the paragraphs, while the rest of the paragraphs were acceptable in their degree of difficulty because their difficulty coefficient ranges between (20%-80%.(

B- Discrimination power of paragraphs: It means the extent of its ability to distinguish between the respondents from the low-knowledge category and the high-knowledge category in their answers to the paragraph. The special equation was used to calculate the discriminating power of each paragraph of the test and the (EBEL) scale was relied upon as a standard for comparing the discriminating power of the paragraphs. Accordingly, (2) paragraphs numbered (50, 57) whose discriminating power was less than (20%) were excluded, and the paragraphs whose discriminating power ranged between (20% - 29%) were modified. After deleting all the paragraphs due to their inappropriate difficulty and poor discriminating power, which

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amounted to (3) paragraphs, the number of test paragraphs became (60) paragraphs. After that, the paragraphs of each stage were redistributed and weighted according to their relative importance. As shown in Table (3.8.(

Table . (3.8) shows the final distribution of the paragraphs of each stage and their percentage weights.

Paragraph weight	Paragraph sequence	Stage weight%	Number of paragraphs	Stage
1.66	1	20	12	Drawing and coding of samples (secret number)
1.67	2			
1.67	3			
1.66	4			
1.66	5			
1.67	6			
1.67	7			
1.67	8			
1.66	9			
1.67	10			
1.67	11			
1.67	12			
1.66	1	20	12	Grain inspection and analysis stage
1.67	2			
1.67	3			
1.66	4			
1.66	5			
1.67	6			
1.67	7			
1.67	8			
1.66	9			
1.67	10			
1.67	11			
1.67	12			

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1.66	1	20	12	Grain unloading and storage stage
1.67	2			
1.67	3			
1.66	4			
1.66	5			
1.67	6			
1.67	7			
1.67	8			
1.66	9			
1.67	10			
1.67	11			
1.67	12			
1.66	1	20	12	Sterilization, control and covering stage
1.67	2			
1.67	3			
1.66	4			
1.66	5			
1.67	6			
1.67	7			
1.67	8			
1.66	9			
1.67	10			
1.67	11			
1.67	12			
1.75	1	7	4	Storage ventilation and recycling stage
1.75	2			
1.75	3			
1.75	4			
1.62	1	6.5	4	Mills transportation and preparation stage
1.63	2			
1.62	3			

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1.63	4			
1.62	1	6.5	4	Laboratory analysis certificates issuance stage
1.63	2			
1.62	3			
1.63	4			
100	\	100	60	total

Measuring training needs:

The training needs of the respondents were measured by the respondent's answer to the test form paragraphs to know the respondent's answer and after giving the grade allocated to each paragraph according to the specifications table and collecting the grades obtained by the respondent and subtracting them from the standard grade (100). The respondent's need is determined according to the following equation- :

Training need = Current status of knowledge - 100

Data collection:

After preparing the test form and completing all the scientific conditions that must be available in the entire form, the form became ready. As in Appendix (A) to collect data and information, the information collection process was carried out through personal interviews with the respondents, numbering (202) respondents, as the data collection process began from 5/1/2023 until 9/1/2023.

.13.3Data Analysis:

After completing the data collection, unpacking and tabulation, it was analyzed using the SPSS program for social sciences, and since the research data is distributed normally, the researcher relied on the following statistical methods:

)range, arithmetic mean, standard deviation, item ease and difficulty coefficient, Pearson correlation coefficient, Spearman's rank correlation coefficient, multi-stage regression model, chi-square, t-test (t.(

Results and discussion:

-1The level of training needs for agricultural employees working in the laboratories of the General Company for Grain Trade - Republic of Iraq was measured by measuring their level of knowledge, i.e. the grades they obtained in the cognitive test consisting of (100) points, according to the need equation mentioned in Chapter Three. As shown in Table . (4.1.(

Table (4.1) shows the distribution of the respondents according to the training needs of agricultural employees working in the laboratories of the General Company for Grain Trade - Republic of Iraq in general.

Sd	x^-	Average training needs	%	numbers	Categories of needs	
13.08	58.70	25.57	5.44	11	39.97-19.97	Low
		53.45	58.91	119	59.98-39.98	Medium
		72.45	35.64	72	59.99- and more	High
			%100	202	total	

Table . (4.1) shows that the highest degree of training need level was (80.08) degrees. The lowest degree was (19.97) degrees, with a general average of (58.70), and a standard deviation of (13.08). Using the range law, the respondents were distributed according to the level of training needs into three categories. The results showed that the highest percentage of respondents (58.91%) were in the category of medium needs, with an average need of (53.45). Followed by the category of high needs at (35.64%), with an average need of (72.45). The low category occupied the lowest percentage of training needs at (5.44%), with an average need of (25.57). This means that those with medium training needs are close to (59%), while there are close to (36%) of those with high training needs, and there are (5%) of those with low training needs. That is, the level of training needs is described as medium tending to increase. This result may be due to the weakness of educational activities or the lack of specialized training courses or the inability to deliver information or expertise to the respondents in those courses or the lack of means of clarification or practical application in the courses. This confirms that most agricultural employees working in the laboratories of the General Company for Grain Trade - Republic of Iraq need to develop the knowledge, skills and applied scientific expertise that the agricultural employees working in the laboratories of that company lack, especially in the information related to the stages of the grain receipt process during the marketing season. Here the importance of in-service training appears to provide employees with the necessary and important information, expertise and skills that would give the employee the ability to perform his job duties with the required accuracy and speed. Which will directly contribute to improving the job performance of agricultural employees working in all stages of work. This result is consistent with what was reached by [9.[

- -2The correlation between the level of training needs of agricultural employees working in the laboratories of the General Company for Grain Trade - Republic of Iraq in general and each of: (age, sources of information, job satisfaction). 1- Age: The respondents were distributed according to age groups using the range law and the length of the group into three groups, as shown in Table . (4.11) below.

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Table (4.11) shows the distribution of respondents according to age groups.

t tabulated value	**t calculated value**	**r value**	Average training needs	Percentage%	numbers	Categories
3.89	* 9.15 -	- 0.54	62.98	64.35	130	33-42 years
			55.27	26.24	53	43-52 years
			39.03	9.40	19	53-62 years
				%100	202	Total

*Indicates that the relationship is significant at the (0.05) level. Table (4.11) shows that the highest percentage (64.35%) of the respondents were in the age group (33-42) years, with an average training needs of (62.98). Followed by the age group (43-52) years with a percentage of (26.24%), with an average training needs of (55.27). While the age group (53-62) years had the lowest percentage (9.40), with an average training needs of (39.03). To find the correlation between training needs and age, the simple Pearson correlation coefficient was used, which reached a value of (-0.54), which is a negative correlation. To test the significance of the relationship, and using the (t) law, the calculated (t) value was found, which reached (-9.15). When compared with the tabular (t) value, it was found to be an inverse significant relationship at a probability level of (0.05). Thus, the statistical hypothesis is rejected and the alternative hypothesis is accepted, which is (there is a significant correlation between training needs and age). This means that as the age increases, the training needs of the respondents decrease. This is due to the accumulation of experiences possessed by the farmers working in the laboratories of the General Company for Grain Trade - Republic of Iraq, as their ages increase, which is consistent with what was reached by [10], [9], [11], and [12]. It does not agree with what was reached by [13] and [14]. 2- Information sources:

Using the range law and category length, the respondents were distributed according to the information sources into three categories. As shown in Table . (4.15.(

Table . (4.15) Distribution of respondents according to sources of obtaining information.

t tabulated value	**t calculated value**	**r value**	Average need	Percentage%	numbers	Categories
3.89	* 14 -	0.70-	74.67	22.27	45	8-13
			56.26	66.83	135	14-19
			41.06	10.89	22	24-and-over
				%100	202	Total

*Indicates that the relationship is significant at the level (0.05.(

The research results showed that the respondents differed in the number of sources from which they obtained information. The highest value for information sources was (24) and the lowest value was (8.(

It is clear from Table . (4.15) that the highest percentage (66.83%) for respondents was in the category of medium information sources, with an average training needs of (56.26), followed by a percentage (22.27%) for respondents in the category of low information sources, with an average training needs of (74.67). While the lowest percentage (10.89%) appeared for respondents in the category of high information sources, with an average training needs of (41.06). To find the correlation between training needs and sources of obtaining information, the simple Pearson correlation coefficient was used, which reached a value of (-0.70), which is an inverse relationship between the two variables. To test the significance of the relationship, the (t) test was used, which had a value of (-14). When compared with the table (t) value, it was found to be significant at a probability level of (0.05). Thus, the statistical hypothesis is rejected and the alternative hypothesis is accepted, which is (there is a significant correlation between training needs and information sources). Therefore, there must be priorities in training, as it must focus on the first category (8-13) with an average need of (74.67), followed by the second and third categories. The reason for this may be that the more the respondents are exposed to information sources, the more knowledgeable and skilled they are in the job work in the silos. This means that with the increase in information sources, the training needs decrease, and this result is consistent with what was reached by [15], [16] and [9.[

-3Job satisfaction:

Using the law of range and category length. The respondents were divided into three categories, as shown in Table . (4.19) below.

Table . (4.19) shows the distribution of respondents according to job satisfaction.

t tabulated value	**t calculated value**	**r value**	Average training needs	Percentage%	numbers	Job Satisfaction Categories
3.89	* 13.6 -	0.68 -	70.60	34.65	70	16-37
			54.60	50	101	38- 59
			45.22	15.34	31	60- and above
				100	202	Total

Table (4.19) shows that there is a variation in the respondents' scores according to job satisfaction, as the highest value was (69), and the lowest value was (16). The highest percentage (50%) of respondents were in the medium job satisfaction category, with an average training needs of (54.60), followed by (34.65%) in the low job satisfaction category, with an average training needs of (70.60). While the lowest percentage was (15.34%) in the high category, with an average needs of (45.22). To find the correlation between training needs and job satisfaction, the simple Pearson correlation coefficient was used, which reached a value of (-0.68), indicating a negative relationship between the two variables. To test the significance of the relationship, the (t) law was used, which reached a value of (-13.6), and when compared with the (t) tabular value, it was found to be an inverse significant relationship, at a probability level of (0.05). Thus, the statistical hypothesis is rejected and the alternative hypothesis is accepted, which is (there is a significant correlation between training needs and job satisfaction). This indicates that job satisfaction has an impact on the training needs of the respondents. The more satisfied the employee is with his job, the more motivation and desire he has to learn and participate in various educational activities and the desire to love learning is generated, which increases the experiences, knowledge and skills and reduces the training needs of the respondents. This is consistent with what was reached by [17]. And not consistent with what was reached by [9.[

Conclusions:

•The research aimed to study the training needs of agricultural employees working in the General Company for Grain Trade - Republic of Iraq. The results confirmed the existence of urgent training needs and the importance of this important institution and its effective role in achieving food security and providing food for the people, which is the goal that all governments and systems in the world seek, and since the study aimed to study a large community at the level of the Republic of Iraq, an important institution from the institutions of the Ministry of Trade was chosen.

•The results of the research showed that the percentage of those with medium training

needs is close to (59%). While there are approximately (36%) that can be considered as having high training needs. And only (5%) of those with low training needs, we conclude from this that the level of training needs is average and tends to increase. In general, we conclude from this that there is an urgent need to hold continuous and effective training courses to reduce and address these needs.

•The research results showed an inverse significant relationship between each of the training needs and age. This means that with increasing age, the training needs of the respondents decrease. This is attributed to the accumulation of experience possessed by the farmers working in the laboratories of the General Company for Grain Trade - Republic of Iraq with increasing age.

•The research results showed a significant relationship between each of the training needs and information sources. This may be due to the fact that the more the respondents are exposed to information sources, the more knowledgeable and skilled they are in their job work in the silos. This means that with increasing information sources, the training needs decrease.

•The research results showed an inverse significant relationship between each of the training needs and job satisfaction. This indicates that job satisfaction has an impact on the training needs of the respondents. The more satisfied the employee is with his job, the more motivation and desire he will have to learn and participate in various educational activities, thus increasing his experiences, knowledge and skills and reducing his training needs.

Conclusion:

•The study aimed to identify the training needs of farmers working in the laboratories of the General Company for Grain Trade in the Republic of Iraq. After analyzing the data related to these needs, the study concluded that it is necessary to prepare training programs on an ongoing basis to enhance the professional efficiency of agricultural employees in light of the challenges facing their work, whether they are technical or administrative challenges they face.

•Achieving these goals requires concerted efforts between the concerned parties, whether at the level of the company's senior management or academic institutions and vocational training centers on the other hand. Through this thesis, we hope that these recommendations will contribute to improving the quality of performance of agricultural employees within the company's laboratories, and that they will represent a step towards developing the work of an important institution such as (the General Company for Grain Trade) that has an effective role in achieving self-sufficiency in grains, thus enhancing the country's food security.

•Finally, this study represents an open invitation to researchers and those interested to continue research in this vital field, and explore more ways to support national competencies working in the General Company for Grain Trade.

Recommendations:

•Holding intensive and continuous training courses inside and outside Iraq that specialize in all the work of agricultural employees working in the laboratories of the General Company for Grain Trade - Republic of Iraq. To be able to address their training needs in general.

•Urging the relevant authorities to expedite the appointment of agricultural employees to compensate for the shortage in the number of agricultural employees working in the laboratory, as a result of the annual departure

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of a number of agricultural employees due to retirement.

•Forming a team of specialized agricultural employees, preferably holders of higher degrees (masters and doctorates) to prepare continuous training courses, and distributing scientific publications and brochures specializing in all modern and old technologies used in the work of agricultural employees working in the laboratories of the General Company for Grain Trade - Republic of Iraq. Which would increase the sources of information.

•Demanding and urging senior management to bring in modern technologies specialized in the work of agricultural employees working in the laboratories of the General Company for Grain Trade - Republic of Iraq, which would improve the performance of the respondents to keep pace with the development witnessed by the world in this field.

Appendix (T) Names of agricultural employees who were interviewed

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Work location	Job Title	Names	No.
Tikrit Silo Laboratory	Senior Chief Agricultural Engineer	Diaa Thalj Jassim	1
Al-Dour Grain Complex Laboratory	Chief Agricultural Engineer	Hussein Ahmed Saleh	2
Al-Alam Grain Complex Laboratory	Senior Chief Agricultural Engineer	Waleed Khaled Ahmed	3
Sharqat Silo Laboratory	Chief Agricultural Engineer	Yassin Issa Al-Lahibi	4
Al-Tajji Grain Complex Laboratory	Chief Agricultural Engineer	Ahlam Attia Joda	5
Samarra Grain Complex Laboratory	Chief Agricultural Engineer	Fares Wasmi Shihab	6

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Appendix (B) Names of agricultural employees (specialized experts).

Academic Achievement	Work location	Job Title	Names:	No.
PhD	Babylon Silo Laboratory	Expert	Adel Hussein Radhi Al-Marshadi	1
PhD	Sharqat Silo Laboratory	Chief Agricultural Engineer Senior	Salem Ibrahim Akram	2
PhD	Grain Complex Laboratory	Chief Agricultural Engineer Senior	Sumait Awad Sumait	3

Appendix (C) Names of agricultural extension experts to whom the questionnaire form was presented.

Job Title	Specialization	Academic ladder	Name	no.
College of Agriculture\Tikrit University	Agricultural Extension	Professor	Dr. Ali Ahmed Ghadib	1
College of Agricultural Engineering Sciences\University of Baghdad	Agricultural Extension	Assistant Professor	Assistant Professor Mithal Abdul Latif Al-Mashhadani	2
College of Agricultural Engineering Sciences\University of Baghdad	Agricultural Extension	Professor	Dr. Bayan Abdul Jabbar Reda	3
College of Agriculture\Tikrit University	Agricultural Extensio	Assistant Professor	Assistant Professor Majid Khalil	4

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	n			
College of Agriculture University of Kirkuk	Agricultural Extension	Assistant Professor	Dr. Al-Sayed Khattab Abdullah Muhammad	5
College of Agriculture University of Tikrit	Agricultural Extension	Assistant Professor	Al-Sayed Mahmoud Hadis Jassim	6
College of Agriculture University of Kirkuk	Agricultural Extension	Assistant Professor	Dr. Salah Jassim Amin	7
College of Agriculture\Tikrit University	Specialization	Assistant Professor	Ahmed Sakr	8

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