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**Imitations of Supplies and Distribution the Agricultural Technologies to Farmers of Viewpoint Agricultural Employees in The Agricultural Supplies Company in Salahuddin Governorate / Iraq And Its Relationship with Some Variables**

**ABSTRACT**

The research aimed to identify the determinants of supplying and distributing agricultural technologies to farmers in general, of viewpoint of agricultural employees in the Agricultural Equipment Company in Salah al-Din Governorate / Iraq , the research included all employees working in the Agricultural Equipment Company in Salahuddin Governorate, who numbered (62). And after excluding (10) respondents as a survey sample. a simple random sample was taken with a number of (26) and with a percentage of (50%) . The research data was collected by using the questionnaire. The first part included the personal and characteristics of the respondents, the second part contains (18) items to measure the obstacles of supplying and distributing agricultural technologies. The third part: It is questions for the respondents about their suggestions to limit the determinants of the supplying and distribution of agricultural technologies. The last part is a question for the respondents in case there are problems not mentioned in the research.. Then, the reliability was calculated by using the Alpha Gronbach method. After that, the data was classified by using a number of statistical methods . The results of the research showed that the weighted calculation values ranged between (0.14 - 0.92), while the weighted mean was (0.61). The descending order of the items was done according to the weighted mean. The results also showed a significant correlation relationship Depending on the results, some recommendations were proposed, including the necessity to overcome the difficulties and limitations. Finally, the search results should be a guide for the agricultural employees.

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**INTRODUCTION AND RESEARCH PROBLEM**

Development depends on several factors, the most important of which is the availability of in-kind capital, natural resources, the technological level, and several other factors, as these factors are related to each other, which makes determining any factor alone is a difficult process and this includes both developed and backward countries. (Hikens, 2020, 54) The challenge of development.... is to improve the quality of life. Especially in the world's poor countries, a better quality of life generally calls for higher incomes-but it involves much more. It encompasses as ends in themselves better education, higher standard of health and nutrition, less poverty, a cleaner environment, more equality of opportunity, greater individual freedom, and a richer cultural

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life”(Virender ,2018,14) so , The Agricultural Supplies Company started in the name of the Agricultural Supplies Authority in the year 1976. However, after that it was called the General Agricultural Equipment Company, which is a self-funded company and is one of the most important companies in the Iraqi Ministry of Agriculture, and the company has (15) fifteen branches in Iraq.(the official website of the Agricultural Equipment Company)

The objectives of the company are summarized in developing the agricultural process in Iraq by providing agricultural supplies such as machines, equipment, irrigation systems, fertilizers, seeds, pesticides, plastic sheeting and all other agricultural requirements that the agricultural sector needs from global, sober and local origins. It also aims to introduce modern technologies, promote their use in the agricultural sector, provide buffer storage, as well as support farmers and peasants with agricultural inputs, support for farming and harvest campaigns, as well as achieve an increase in production and productivity to achieve the desired agricultural abundance (the Internet, the official website of the Agricultural Equipment Company)The natural resources of an underdeveloped country are underdeveloped in the sense that they are either unutilized or underutilized or misutilized. , uses may be found for the known city of natural resources by appropriate changes in technology and social and economic organization. underdeveloped countries do possess resources but they remain unutilized, underutilized or mutualized due to various inhibitions such as their inaccessibility, lack of technical knowledge, non-availability of capital and the small extent of the market.( M.L. JHINGAN , 2011, 104 ) Training is the foundation of community development because the workforce is The main element in the production process, and they must be trained and qualified, and this is one of the factors that contribute to a large role in increasing production efficiency. (Al-Abbasi, 2014: 15) The process of developing and modernizing the agricultural sector in Iraq depends on the diffusion of modern agricultural technologies, and there are multiple methods and methods in the Iraqi countryside, Agricultural rural development at the national level (Al-Taie, 2001: 07)The success of agricultural extension work requires the necessity of providing the various requirements for carrying out agricultural extension activities in an effective manner, both in quantity and quality (Saleh et al., 2004: 41). (Ghadeeb 2017, 300) emphasized that modern agricultural technologies must be equipped and available for farmers at reasonable prices and in coordination with agricultural research and extension agencies Just as the success of convincing farmers of the importance of agricultural techniques and the need to use them requires knowledge of how those who provide services to farmers think the most important problems facing these Employees, knowing their personal and functional characteristics, and knowing their problems for the purpose of communicating modern technologies to their beneficiaries, and accordingly, the idea of this research came to identify the determinants and proposals of workers in the Agricultural Equipment Company. In order to prepare the correct extension programs based on real and realistic scientific foundations. For the purpose of identifying problems and working to solve them and overcoming all obstacles and limitations through the provision of technologies by the responsible and research authorities, the research tries to answer the following questions:

- What are the determinants of providing and distributing agricultural technologies from the viewpoint of employees of the Agricultural Equipment Company / Salahuddin?
- What are the suggestions of the respondents to limit the determinants of providing and distributing agricultural technologies
  - What is the relationship between the determinants of providing and distributing agricultural technologies of e of viewpoint of agricultural employees in the Agricultural Equipment Company / Salah al-Din Governorate and each of the variables (age, academic degree t, period of employment)
- What are the problems and obstacles that hinder the provision and distribution of agricultural technologies from the point of view of agricultural employees.

## Research objective

- 1- to identify the determinants of agricultural supplying and distribution in the viewpoint of employees of the Agricultural supplies Company / Salahuddin.
- 2- to identify the respondents' proposals to limit the determinants of supplying and distribution of agricultural technologies.
- 3- to find the relationship between the determinants of supplying and distribution of agricultural technologies in viewpoint agricultural employees in the Agricultural Equipment Company / Salah al-Din Governorate and each of the variables (age, academic degree, period of employment).
- 4- What are the problems and obstacles that prevent the supplying and distribution of agricultural technologies to the farmers ?

## Statistical hypotheses:

- 1- There is no significant correlation between the determinants of providing and distributing agricultural technologies and age.
- 2- There is no significant correlation between the determinants of providing and distributing agricultural technologies and the degree of study.
- 3- There is no significant correlation between the determinants of providing and distributing agricultural technologies and years of employment.

## Procedural definitions:

Agricultural supplies Company employees: All employees who perform work supplying and distributing agricultural equipment and supplies to farmers.

Determinants of providing and distributing agricultural technologies: All that limits and prevents employees of working in providing and distributing agricultural technologies to farmers.

## Research method:

Research methodology:- The descriptive approach was adopted in order to achieve the objectives of the research, as this approach is appropriate to access detailed data and facts about the respondents at some point. (Al-Asadi, 2008: 51) The data and facts were categorized, processed, and analyzed accurately and in a connected way to derive their significance and reach adequate and accurate results and generalizations about the phenomenon. (Al-Rashidi, 2002: 16).

## Research community and sample

The research included all the employees of the Agricultural supplies Company / Salahuddin dept. , who numbered (62) employees. The polled sample, which number (10), were excluded. A random sample was taken (50%), then ( 26) research respondents answered the questionnaires.

We were collected a Data from the respondents by a questionnaire. We were prepared a questionnaire consisting of several parts: -

The first part: - This part relates to the personal characteristics of the employees interviewed (age, academic degree, number of years of employment).

The second part: It included a question for the respondents about their suggestions for measures that could contribute to limiting the determinants of the provision and distribution of agricultural technologies.

The third part: - This part included a number of phrases, each of the paragraphs expresses the determinants of providing and distributing agricultural technologies to farmers. It was determined by informing the researcher about the scientific sources related to the subject of the research and the

opinions of the specialists in the College of Agriculture, Tikrit University and Kirkuk. As for the phrases, their number is (18).

The fourth : Includes a question for the respondents if there are other problems not mentioned in the research.

After completing the form, it was presented to the professors specialized in agricultural extension at the college of Agriculture, Tikrit University, to ensure its apparent sincerity, and based on their observations, some other phrases were modified and formulated to become more appropriate to reach the objectives of the research.

The stability coefficient (0,80) and the validity coefficient (86, 0) were found, which indicates the high stability of the scale.

Which can be adopted by measurement and that the values of stability and suitability are acceptable as stability is acceptable if its value reaches more than (0,70), and is more satisfactory whenever it approaches (1) and the validity factor is satisfactory if its value reaches (0,50) degrees (Zobaie, 1986: 58).

There for , we were completing the final form, a preliminary test was carried out on a sample of (10) respondents, excluded from the research sample in order to verify the stability of the scale and the stability was calculated by (Alpha Gronbach) method, which is the minimum estimated value of the stability (Allam: 2009).

Data were collected from (4/3/2019) to (5/4/2019). The statistical program( SPSS) was used to analyze data.

### **Independent factors Measurement**

The independent factors were measured as follows:

1- Age: measured in years.

2 Academic degree: - It was measured according to the following levels (primary, intermediate, preparatory, institute, college, master's and doctorate) and calculated by the values (1,2,3,4,5,6) respectively.

3- Years of employment: - It was measured by the number of years It was measured by the number years, when the employee started his job.

The second part is a question for the respondents about their suggestions to limit the determinants of providing and distributing agricultural technologies, and about the most important measures that can prevent limiting the determinants.

The third part included (18) items, in which there is a binary scale (the problem exists, the problem does not exist). And values (2,1) were given respectively, to measure the determinants of the processing and distribution of agricultural technologies. Therefore, the values of the determinants ranged between (18-36) numerical value. As for the fourth part, it is a question for the respondents, about the problems that were not in the research

### **Statistical means**

After completing all the data, it was audited and then categorized. The following statistical methods were used: -

1-: (Mean) was used to describe some variables of the study and its law is ⊕ Sapna 2009: 22)

$$X = \frac{\sum xi}{n}$$

2 - Percentage: Used to describe the respondents according to their distribution among groups in the studied independent variables and the dependent factor.

3- Pearson's Simple Correlation Coefficient: (person): used to find the correlation between the determinants of the provision and distribution of agricultural technologies and independent variables (Quality, 2009: 255).

$$r = \frac{\sum x_i y_i - n \bar{x} \bar{y}}{\sqrt{(\sum x_i^2 - n \bar{x}^2)(\sum y_i^2 - n \bar{y}^2)}}$$

5- Standard Deviation: It was used to describe deviations of values or their sum from their averages for some of the variables included in the study according to the following law (Ismail, 2003: 6-7).

$$s.d = \sqrt{\frac{\sum x_i^2 - \frac{(\sum x_i)^2}{n}}{n-1}}$$

6- Test (t): (-test t): used to test the correlation significance compared to the tabular value (t) and its equation is (Hun young '2009: 8).

$$\sqrt{\frac{n-2}{1-r^2}} r = t$$

7 - Spearman's RS correlation equation: used to find the relationship and his equation is (pink, 1991: 270)

$$r_s = \frac{1 - 6 \sum d^2}{n(n^2 - 1)}$$

## RESULTS AND DISCUSSION

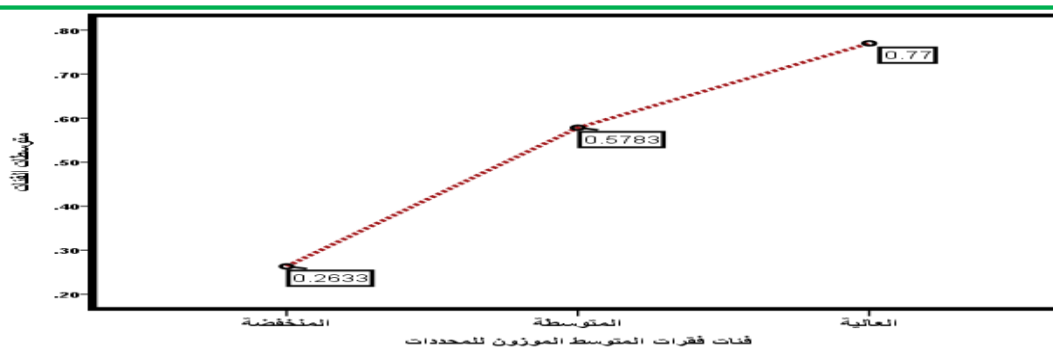
**The first objective:** to identify the determinants of agricultural processing and distribution in general from the viewpoint of employees of the Agricultural Supplies Company / Salahuddin branch.- The results of the analysis showed that the weighted arithmetic values are between (0.14-0.92), with a general weighted mean of (0.61), and the descending order of the items was done according to the weighted mean as shown in Table (1) and Figure ( 1 )

In Table (1) there are (11) items with a weighted mean arithmetic, are higher than the general weighted average, equivalent to 66.66% of the total. There for , these paragraphs are the main determinants in the processing and distribution of agricultural technologies for farmers and their treatment from the point of view of agricultural employees in the Agricultural Supplies Company in Salah al-Din Governorate. The paragraph (Transport vehicles are few for employees, especially in the company's departments) ranked first with a weighted average of (0.92). Then followed by a paragraph (agricultural loans not available for farmers .....), second place with a weighted average of (0.88), then a paragraph (presence of favoritism among the leaders .....). Functional in the distribution of positions ....) with a weighted average of (0.76), and these paragraphs to paragraph 12 constitute the main determinants of processing and distribution of agricultural technologies to farmers. As for the paragraphs (13-18) and despite having a weighted average less than the general weighted average, it is very important because it leads to obstruction and limiting the process of processing and distributing agricultural technologies, even if the paragraph (the unwillingness of employees to work in the company ...) is in the last rank but Indicates a defect in the company's work environment. We can say that all paragraphs are important and limit the processing and distribution of modern agricultural technologies.

**Table (1)** shows the processing and distribution of agricultural technologies in general from the viewpoint of employees of the Agricultural Equipment Company / Salah Al-Din Dept.

#	paragraphs	The answer		Weighted average	Descending order
		available	not available		
1	Transport vehicles are few for employees, especially in the company's departments	24	1	0.92	1
2	Not providing agricultural loans.	23	3	0.88	2
3	Spread the favoritism in administrative and technical leaders, which misrepresents the distribution of technologies	21	5	0.80	3
4	Dysfunction in the distribution of administrative and technical positions in all departments	22	6	0.76	4
5	Agricultural policy is not deliberately planned by the government, so the technologies are not appropriate for farmers	19	7	0.73	5
6	The lack of financial incentives for employees in the company, which weakens their impulsion of their duties	19	7	0.73	5
7	There is no interest in the employees of the company by the Ministry of Agriculture, which weakens their impulsion of their duties.	19	7	0.73	5
8	There is no functional communication among the authorities of the technology transfer process (agricultural extension, technology transfer and agricultural research)	18	8	0.69	8
9	There is no financial support of the state, which impairs the performance of the Agricultural Equipment Company <sup>1</sup>	17	9	0.65	10
10	Negative view of the importance of the company's role from agricultural extension and scientific research centers	17	9	0.65	10
11	The stagnation in the administrative and technical duties in the company / Salah Al-Din, due to the Ministry's failure to prepare agricultural technologies	18	8	0.65	10
12	Suspending all administrative and technical power of attorney of division directors, which confuses the work of the company	16	10	0.61	12
13	The company's weak relationship with farmers and agricultural extension	15	11	0.57	13
14	The professional staff in the company is few, which prevents the progress of work	14	12	0.53	14
15	Cooperation and coordination between the company's headquarters and its subsidiaries is weak	12	14	0.46	15
16	Some employees take bribes with beneficiaries.	8	18	0.30	16.5
17	The number of employees and technicians in the agricultural equipment company is insufficient, which affects work	8	18	0.30	16.5
18	The unwillingness of employees to work in the company, and this affects their job performance	5	21	0.14	18
<b>Average weighted mean</b>		<b>0.61</b>			





**In Figure ( 1 )** The weighted mean distribution of the determinants, as well as the mean of the groups and the relationship between them.

**The second objective:** The suggestions that contribute to limiting the determinants of the provision and distribution of technologies: These are the suggestions of the respondents to limit the determinants of the processing and distribution of agricultural technologies. The respondents' suggestions were arranged of limit of processing and distribution in the Agricultural Supplies Company ,this were arranged according to the weighted average.

**Table (2)** Distribution of the suggestions of the employees of the Agricultural Equipment Company to limit the determinants of processing and distribution of agricultural technologies

#	The suggestions	Weighted average	Arrangement
1	Providing soft loans without profits, while monitoring how loans are disbursed	69	1
2	Activating the role of agricultural extension in the process	57	2
3	Increase farmers' technical expertise	34	3
4	Increased government support	26	4
5	Reducing routine paper transactions in administrative work	19	5
6	Providing a central database with continuous updating	15	6
7	Increase employee training opportunities	15	6
8	Monitoring contracts for agricultural land and canceling unused contracts	15	6
9	Activating the national industry in producing the requirements of agricultural production and reducing import	15	6
10	Increasing the powers of department 's directors to facilitate administrative procedures	7	7

In Table No. (2), we note the paragraphs (providing soft loans without profits ..... ) and (activating the role of agricultural extension) have been attracted by high interest of the respondents by 4.6%, while the paragraphs (increasing the technical expertise of farmers) (Increasing government support) (reducing paper transactions) have attracted an average interest of respondents by 37.7%. As for the other paragraphs, it ranked third, at 21.6%, and the last paragraph (increasing the powers of department's directors to facilitate administrative procedures) is the least concern of the respondents. It is noted that most of the paragraphs are important from the point of view of the employees. This may be because the agricultural employees to know the problems and determinants in the process of processing and distributing agricultural technologies, due to their contact with farmers.

**The third objective** : is to find the relationship between the determinants of the processing and distribution of agricultural technologies of the view point of agricultural employees in the Agricultural Equipment Company / Salahuddin Governorate and a variable (age, academic degree, period of employment)

1- **The age** : The results showed that the ages of the respondents are between (25-49) with an average of (37) years and a standard deviation of (12.06). The respondents were distributed according to the age groups into three groups using the range as shown in Table (3). The table also shows an increase in the percentage of the age group (25-32) years and their percentage is 50% of the total respondents, while the average group (33-40) years was 38.46 % Of the total respondents, and the last category (41-49) years, and their percentage is 11.53% of the total respondents who were included in the research.

**Table (3)** Distribution of respondents according to age groups.

#	Categories of age	The number	%	Average	r	signification
1	25 - 32	13	50	11.15	0.363	**
2	33 - 40	10	38.46	11.00		Sd
3	41 - 49	3	11.53	12.67		12.06

From the above table, there were a relationship between the determinants of processing and distribution of agricultural technologies and age, as the simple correlation coefficient was 0.363. The calculated value (t) was (2.116), which is significant at the probability level (0.1). Perhaps this indicates that the young respondents had a greater role in preparing and distributing agricultural technologies, and they may be due that employees of this age have the skillful and enthusiasm and find new ways to develop the work.

2- **Academic degree**: The respondents were distributed according to their academic achievement as shown in Table (4). In the table there was an increase in the percentage of respondents who hold a master's degree where they were (50%), while those with secondary school were (23.08%), and they were The percentage of those holding a primary certificate (11.53%), and those with a BSC's degree have reached (7.71%), those with an Medium degree (3.84%) and they have a standard deviation of (11.10)..

**Table (4)** Distribution of the academic degree of the respondents

#	Academic degree	The number	%	Average	r	signification
1	Primary	3	11.53	10.67	0.430	**
2	Medium	1	3.84	14.00		Sd
3	Secondary	6	23.08	11.50		11.10
4	BSC	2	7.71	12.50		
5	Master	13	50	11.71		
6	PhD	1	3.84	3.00		

There was a positive correlation between the determinants of agricultural technology processing and distribution in the Agricultural Supplies Company and the degree of the respondents. As the value of the simple correlation coefficient was (0.430) and the calculated value of t (2.584) is significant at the probability level (0.01), and this indicates that there is a large role for academic achievement and the reason may be due to an increase in their knowledge, which develops the processing and distribution of agricultural technologies.



**3- Employment period:** the results of the research showed that the highest period of years of service for the respondents is (20) years and the lowest is two years. We have distributed the categories according to the number of years of employment, according to the statistical laws, as shown in Table (5). It appears from the table that the majority of the respondents, whose work period (2-7) years fall in the upper category and their percentage (88.46%) after them the middle category with a percentage (zero%), while the third category was their percentage (11.54%, and a standard deviation of (12.06).

**Table (5)** Distribution of categories of years of service for the respondents

#	Duration of the job	The number	%	Average	r	signification
1	2-7	23	88.46	11.43	0.379	**
2	8-13	0	0	0		Sd
3	14-20	3	11.54	11.00		10.11

The above table showed , there was a positive correlation relationship between the determinants of the provision and distribution of agricultural technologies and the duration of employment. The value of the simple correlation was (0.379) and the calculated value (t) was (2.16), which was significant at the probability level (0.01). Perhaps this indicates that the determinants of the supply and distribution of agricultural technologies increase with increasing experience, and this may be due to the accumulation of experience as a result of an increase in the practice of work .

**Fourth objective:** to identify problems or obstacles that did not appear in the paragraphs. The respondents' suggestions were arranged to limit the processing and distribution determinants of the viewpoint of the agricultural employees in the Agricultural Supplies Company according to the percentage of answers. Thus, an agreement percentage was adopted and the results were as in Table (6).

**Table (6)** problems and obstacles that did not appear in the paragraphs

#	The respondents' suggestions	Repetition	%	Rank
1	Support the farmer with soft loans and without profits, with supervision	18	69.23	1
2	Activating the role of agricultural extension	15	57.69	2
3	Increase the farmer's experience with modern agricultural techniques	9	34.6	3
4	Increased government support	7	26.92	4
5	Create a central database documented with people and needs	5	19.23	5
6	Supervising of agricultural contracts and cancellation of unused contracts	4	15.38	6
7	Increase staff training	3	11.53	7.5
8	Increasing the authorities of the assistant directors of the Dept.	3	15.38	7.5

Table (6) shows that the suggestions to limit the problems and determinants that obtained an agreement percentage (75%) at least. Thus, its number (8) became suggestions, the first is a suggestion (supporting the farmer with soft and interest-free loans with oversight), a suggestion after that is (activating the role of agricultural extension). This evidence gives great importance to the suggestions in limiting the determinants of the processing and distribution of agricultural technologies, so it must focus on them and the procedures for dealing with problems and put them into practice, as well as for the rest of the needs and suggestions.

## Conclusions

1. The results of the research showed a positive correlation between the determinants and each of the research variables studied (age, degree, job years). We conclude that each of these variables has a significant correlation relationship that leads to the determinants having a high impact in the process of preparing and providing agricultural techniques.
2. The results showed that need for effective agricultural extension , which is a communication mean between the agricultural service and research departments to transfer the results of research and modern agricultural knowledge to farmers, with the modern technologies provided by the Agricultural Supplies Company.
3. The results of the research showed that there is a high agreement rate on the suggestions to reduce problems and limitations. It got an agreement rate of (75%), which is (8) suggestions. A suggestion to support the farmer with soft and profit-free loans with supervising may be issued after a suggestion (activating the role of agricultural extension).

## Recommendations

1. The researcher recommends that there be a contribution to the agricultural staff in the decision-making process in the processing and distribution of agricultural technologies because they deal with farmers directly.
2. Carrying out training courses for the agricultural employees of the Agricultural Supplies Company to avoid problems and obstacles to their employment.
3. The researcher recommends, that the research be a map and use it as a working guide for the agricultural employees of the Agricultural Supplies Company in preparing and distributing agricultural technologies to farmers.
4. The research recommends the Agricultural Extension Authority to conduct training courses for farmers on modern agricultural technologies with the Agricultural Supplies Company coordination.
5. For the importance of the topic, the researcher recommends that there should be other studies in different other regions. This is because it is linked to the process of spreading and adopting modern technologies.

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## محددات تجهيز وتوزيع التقانات الزراعية للزراع من وجهة نظر الموظفين الزراعيين في شركة التجهيزات الزراعية في محافظة صلاح الدين / العراق وعلاقة ذلك ببعض المتغيرات

محمد عمر شريف

جامعة تكريت / كلية الزراعة / قسم الاقتصاد والإرشاد الزراعي

### المستخلص

استهدف البحث التعرف على محددات توفير وتوزيع التقانات الزراعية للزراع من وجهة نظر الموظفين الزراعيين في شركة التجهيزات الزراعية في محافظة صلاح الدين / العراق بشكل عام وعلاقته ببعض المتغيرات .. شمل البحث جميع الموظفين العاملين في شركة التجهيزات الزراعية في محافظة صلاح الدين والبالغ عددهم (62). وبعد استبعاد العينة الاستطلاعية البالغة (10) مبحوثين أخذت منهم عينة عشوائية بسيطة بنسبة (50 %) بلغ عدد الموظفين المبحوثين في عينة البحث (26) مبحوثاً. وتم جمع بيانات البحث من خلال استمارة استبيان كأداة لجمع البيانات . وقد تضمن الجزء الاول منها بيانات تتعلق بالخصائص الشخصية والوظيفية المتعلقة بالمبحوثين , تضمن الجزء الثاني (18) فقرة لقياس محددات توفير وتوزيع التقانات الزراعية . الجزء الثالث اسئلة للمبحوثين عن مقترحاتهم للحد من محددات تطوير وتوزيع التقانات الزراعية واخيرا سؤال للمبحوثين في حالة وجود مشكلات لم تذكر في البحث . وتم التأكد من الصدق الظاهري وصدق المحتوى بعرضها على المختصين كما تم حساب الثبات بطريقة (Alpha Gronbach) , وبعد ذلك تم تصنيف البيانات باستخدام عدد من الوسائل الإحصائية . وقد أظهرت نتائج البحث أن قيم الحساب الموزون تراوحت ما بين (0.14-0.92) وبمتوسط حسابي موزون عام (0.61) وتم الترتيب التنازلي للفقرات وفقاً للمتوسط الحسابي الموزون . وظهر من خلال البحث وجود محددات حقيقية ومهمة لعملية توفير وتوزيع وكذلك وجود علاقة ارتباط معنوية مع المتغيرات . واستناداً إلى النتائج تم اقتراح بعض التوصيات منها ضرورة تذليل الصعوبات والمحددات, تنفيذ دورات تدريبية للموظفين والمزارعين . وان يكون البحث دليل عمل للموظفين الزراعيين في الشركة .

الكلمات المفتاحية : محددات تجهيز ، توزيع التقانات الزراعية.