MODERN COMMUNICATIONS TECHNOLOGIES AND THEIR ROLE IN IMPROVING AGRICULTUAL EXTENSION WORK IN MIDDLE IRAQE GOVERNORATES

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ABSTRACT

The aim of this research to study the role of modern communication technologies in improving agricultural extension work in middle Iraqi governorates by providing infrastructure to use modern communication technologies in Agricultural extension work , support agricultural extension system to transform agricultural work to electronic government , electronic management of human resources , extension services introduced for the targeted people through internet and the contribution of modern communication technologies in improving agricultural work .The population of the research includes the middle region governorates numbered (8) governorates .Anbar and Tikret were excluded because of the security conditions in the time of data collection .Thus, the research society becomes (6) governorates .A random sample was taken from the governorates (67%) rate from (4) governorates (Baghdad, Karbala , Babel , Dyala) .A random sample was taken in rate (40%) from agricultural extension agents distributed on the above mentioned governorates who numbered (135) out of (335) agricultural extension agents . In order to achieve the research objectives a questionnaire form designed to collect the data from agricultural extension agents .It includes (49) items in the field of modern communication technologies role .To analyses and introduce the results (SPSS) program used as well as the manual analyses .The following statistical methods were used : the frequencies , percentages , weighted average , weight percentage as well as (SPSS) program to measure Cronbach Coefficient .The results showed that if these technologies are available sufficiently it would lead to achieve the objectives .Also, the modern communication technologies are considered the widely applied methods in agricultural extension work .Also, there is agreement by the agricultural extension agents on the necessity of using modern communication technologies to develop agricultural extension work .Also, there is support from the agricultural extension system to transform agricultural extension work from traditional work to electronic government . This research concludes the necessity of providing modern technologies in all extension directories , centers , offices and farms in order to improve agriculture extension work in Iraq .Also, it recommends to establish wide information base related to extension work .Also, it recommends to invoke extension management to support the plans to modernize the communications methods that are used in extension work which fulfill the treatment of the huge amounts of available information for the agricultural extension product as well as making the necessary plans to rehabilitate and train the workers in the agricultural extension system to transform the traditional extension work to electronic government .

Keywords: modern communication technologies, improvement, extension work, The electronic government.
***Part of M.Sc. thesis of the first author.**

تقانات الاتصال الحديثة ودورها في تحسين العمل الارشادي الزراعي في محافظات المنطقى الوسطى من العراق

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المستخلص

استهدف البحث في الأساس التعرف على دور تقانات الاتصال الحديثة في تحسين العمل الإرشادي الزراعي في محافظات المنطقة الوسطى من العراق، وذلك من خلال توفر البنى التحتية لاستخدام تقانات الاتصال الحديثة في العمل الارشادي الزراعي، دعم الجهاز الارشادي الزراعي لتحول العمل الارشادي الزراعي الى الحكومة الالكترونية، ادارة الموارد البشرية الكترونياً، الخدمات الارشادية المقدمة للمستهدفين عن طريق شبكة الانترنت، مساهمة تقانات الاتصال الحديثة في تحسين العمل الارشادي الزراعي.تكون مجتمع البحث من محافظات المنطقة الوسطى والبالغ عددها (8) محافظات وقد استبعدت محافظتي (تكريت والانبار) بسبب الظروف الامنية التي يمر بها بلدنا وقت جمع البيانات، وبذلك اصبح مجتمع البحث (6) محافظات، أخذت عينة عشوائية من المحافظات بنسبة (67%) وبواقع (4) محافظات هي (بغداد، كربلاء المقدسة، بابل، ديالى)، أخذت عينة عشوائية بنسبة (40%) من المرشدين الزراعيين الموزعين على المحافظات السابقة الذكر والبالغ عددهم (335) مرشداً زراعياً وبواقع (135) مرشداً زراعياً.ولغرض تحقيق أهداف البحث، تم إعداد استمارة استبانه لجمع البيانات من المرشدين الزراعيين، تكونت من (49) فقرة في مجال دور تقانات الاتصال الحديثة في تحسين العمل الارشادي الزراعي.ولتحليل وعرض النتائج، استخدم برنامج (SPSS) فضلاً عن التحليل اليدوي، اذ تم استخدام الوسائل الإحصائية الآتية : التكرارات، النسب المئوية، الوسط الحسابي الموزون، الوزن المئوي، فضلاً عن استخدام برنامج التحليل الإحصائي (SPSS) لقياس معامل الفاكرونباخ.وقد أظهرت النتائج الى ان تقانات الاتصال الحديثة تؤدي دوراً مهماً في تحسين العمل الارشادي الزراعي، واذا ما توفرت هذه التقانات بصورة كافية ستؤدي الى تحقيق الاهداف المراد تحقيقها، كما تعد تقانات الاتصال الحديثة من الوسائل الاتصالية التي لقيت تطبيقاً في مجال العمل الارشادي الزراعي، كما هناك اجماع من قبل المرشدين الزراعيين على ضرورة استخدام تقانات الاتصال الحديثة لتطوير العمل الارشادي الزراعي، فضلاً عن هناك دعم من قبل الجهاز الارشادي الزراعي لتحول العمل الارشادي الزراعي من العمل التقليدي الى الحكومة الالكترونية. وتوصل البحث الى ضرورة توفير تقانات الاتصال الحديثة في جميع المديريات والمراكز والمزارع الارشادية وذلك لغرض تحسين العمل الارشادي الزراعي في العراق، كما يوصي ببناء قاعدة معلومات واسعة متعلقة بطبيعة عمل الارشاد الزراعي، فضلاً عن حث الادارة الارشادية على دعم خطط تحديث وسائل الاتصال المستخدمة في العمل الارشادي بما يلبي التعامل مع الكم الهائل من المعلومات المتاحة للمنتج الزراعي، فضلاً عن وضع الخطط اللازمة لتأهيل وتدريب العاملين بالجهاز الارشادي الزراعي لتحويل العمل الارشادي التقليدي الى الحكومة الالكترونية.

الكلمات المفتاحية:. تقانات الاتصال الحديثة، التحسين، العمل الارشادي الزراعي، الحكومة الاكترونية.

*** جزء من رسالة ماجستير للباحث الاول**

***Received:16/1/2018, Accepted:30/5/2018**

INTRODUCTION

The technology and scientific progress is considered one of the main reasons for economic , social and economic development in various countries in the world including Iraq which face great challenges today in all the fields of life such as the agricultural field .Thus, Iraq seeks to improve agricultural sector by using a scientific method able to apply the agricultural inventions (12). The application of agricultural inventions requires the existence of the bodies that contribute in achieving development and advances in Iraqi countryside through spreading the new agricultural thoughts and practices , transport the researches results to the farmers in applicable way and implement them .Agricultural extension system is considered one of these bodies .It is the instrument that the interested workers in agriculture depends to develop it (5) through teaching and training the farmers on using the agricultural inventions to change their knowledge , trends and their way of thinking by using various instruction methods that make them able to help themselves and convince them to improve agricultural work , benefit from scientific advances to increase agricultural incomes , improve economic and social level of countryside people and consequently improve their living (8) . The success of the change that agriculture extension targets depends on the communication process that is considered the start point of the successful extension work specially and develop the rural society in general .Through this communication the information, knowledge , thoughts and technology are transported among the targeted people in order to achieve the objectives of agricultural extension work (7).Then, the communication became one of the most important elements of the extension management success for its contribution in learning the most important problems that face agricultural extension work as well as its contribution in developing social relations among the workers in agricultural extension and the targeted people .Thus, it organizes the work process and achieve activity for the functions of extension management (10). Based on that …. The communication process played an important role in the quality of extension service and its efficiency especially after the variety of information resources and various forms which the workers require in agricultural extension system to deal with the huge amount of information and control its efficiency (13). Thus, the availability of modern communication technologies becomes necessary requirements in agricultural extension work especially after the agricultural extension and central management of agricultural extension system (11)(15):

The Ministry of Agriculture started to develop agricultural extension system with agricultural extension strategy by creating positive climate and providing a suitable environment to modernize agricultural extension system with all new and predictable matters, spread modern information and employ them to serve the targeted people as productive and consumers (9). Thus, modern communication technology has applications in agricultural extension work by opening wide modern communication channels to promote the workers' performance and provide them with new skills and information in order to communicate with the concerned offices (14) to spread invention ideas in all rural areas, communicate agricultural knowledge, increase the farmers' opportunity to reach to the result of agricultural research quickly and ability of participation of NGOs in introducing extension services (1). Also, to communicate the farmers' problems and facilitate the access to modern information and the result of local and international agricultural research (2).

Research Objectives:

In light of the above-mentioned research problem, the main objective of the study is the role of modern communication technologies in improving agricultural extension work in the

governorates of the central governorates of Iraq, which includes a set of sub-objectives:

A) Providing the infrastructure for the use of modern communication technologies in agricultural extension work.

B) Supporting the extension mechanism for the transformation of agricultural extension work into e-government.

C) Human resources management electronically.

D) Extension services provided to the target audience through the World Wide Web.

E) Contribution of modern communication technologies in improving agricultural extension work.

MATRIALS AND METHODS

1. Modern communication technologies have contributed in improving agricultural extension work.

2 - There is variation in the use of modern communication technologies in agricultural extension work.

Research Methodology:

The current research is one of the diagnostic researches that falls under the descriptive approach, because it requires knowledge of the methods and possibilities that help to develop the situation for the best and provide data on the opinions of the subjects on the issue discussed (4). Thus, it focuses on the description of modern communication technologies and their role in improving agricultural extension work which what is confirmed by this method.

Research Area:

The governorates of the central region of Iraq were selected to conduct the current research, in which large numbers of agricultural extension agents are concentrated in comparison to other northern and southern governorates.

Research Community and Sample:

A - **Research Community**: The research community included:

1 - Governorates of the central region and the eight provinces (Baghdad, Salah al-Din, Diyala, Anbar, Najaf, Karbala, Babylon, Wasit). The governorates of Anbar and Salahuddin were excluded due to the security conditions in the country data collection, thus the research community became only (6) governorates.

2 - Workers in the extension system and distributors on the directorates of agriculture and extension centers and extension farms and the agricultural divisions of the provinces of the central region, as well as the Agricultural Extension Department (424) employees, as shown in the following table:

Table 1. Distribution of workers in the extension system according to the governorates of the central region of Iraq

Governorate	Baghdad	Diyala	Najaf	Karbala	Babylon	Wassit	total
Number of workers in the extension	174	52	46	42	67	43	424

Research Sample

The research sample includes the following: The governorates sample: a proportional random sample of Iraqi middle governorates in a rate %67 with four governorates (Baghdad, Karbala, Babylon and Diyala).

1-Sample of agricultural extension agents: proportional random sample was chosen from agricultural extension agents numbered (353) subjects with rate %40 numbering 134 subjects who used modern communication technology in agricultural extension work distributed on Iraqi middle governorates as in the follow table .

Table 2: distribution of sample subject per governorate in Iraqi middle governorates

Governorate	Number of works in agricultural extension	The number of sample after approximation
Baghdad	174	70
Diyala	52	21
Karbala	42	17
Babylon	67	27
Total	335	135

Research Instrument and Procedures

Based on the nature of data collected and the methodology followed in the research, it was found that the most suitable instrument for achieving the research objectives is questionnaire, which is one of the methods of collecting data by using many questions and statements that require the subject to answer. The questionnaire is considered a suitable instrument to the information as it gives more objective data than the other data collection methods. The questionnaire was developed through the following:

1-Review the literature in the field of modern communication technology.

2-The opinions of experts and specialists from the teachers, researcher, and specialists in the agricultural extension field, general management and information and business management.

3-Research Studies articles from arabic and foreign researches.

4-Making a library visits in order to review the literature related to the research subject.

5-Using the Internet Network and according to the data available in theory and applied fields scale. According to the data available in the applied and theoretical aspect a scale was built to measure the role of modern communication technology in improving agricultural extension work containing 58 items distributed on five sub axis. The items were distributed on 13 items for the provision of infrastructure to use modern communication technology in agricultural extension work and 12 items for supporting agricultural extension system for transforming the agricultural extension work to electronic government, as well as 10 items for the electric managing human resources, 8 items for the extension services rendered via the Internet, and 6 items for the contribution of modern communication technologies in improving the extension work.

Validity of Scale:

Scale validity measuring is one of the good measuring features represents the range of the scale achieved of the objectives for which it was made. This is known the apparent validity. The validity of content means the representation range of the scale content for the aspect for the measured part (6). It was achieved through introducing the questionnaire in its primary image to the expert in the field agricultural of extension and information. The experts are requested to put tick (√) in the place that expresses their agreement on the fields, axes, and articles in the questionnaire and to suggest what they see is suitable in case they do not agree. This is done by amending, deleting or adding other articles as well as explaining their suitability for the fields and axes they belong to through triple scale that contains three levels (agree, agree with amend, do not agree), and it was given the following weights (3, 2, 1) respectively. The experts' opinion and responses were registered for the period between 2/11/2016 and 22/11/2016, and it was analyzed and agreed upon the following.

1-Demining cutting threefold amounting to 75% and more for the validity of fields, axes and articles in the questionnaire.

2-Amending the articles if the experts' and specialists' opinion are different about them.

In the light of expert team responses, their scientific opinions were considered about the precision, clarity and validity of what comes in the questionnaire and the result was the field remains as they are with simple amendments that the cutting threshold reaches %95.

Constancy Measure

Constancy is considered an important condition to validate the scales in the questionnaire which means the range of concurrence or agreement in the results obtained from the questionnaire as it was applied more than once in similar conditions and due to this a pretest was made to question the agricultural extension agents in 27/12/2016 to 18/1/2017 on a sample of 20 agricultural extension agents in Najaf agricultural directorate out of the research sample to investigate the scales constancy. The constancy of the scale items applied were approved using Cronbach's Alpha through using SPSS as in the following table.

Table 3 . Constancy coefficient for the research fields

Field	Axis	Constancy coefficient
The role of modern technology in agricultural extension work	**Providing the infrastructure for the use of modern communication technologies in agricultural extension work.**	**0.86**
	Supporting the extension mechanism for the transformation of agricultural extension work into e-government.	**0.80**
	Managing human resources electronically.	**0.95**
	Providing consultation services to the target people through the World Wide Web.	**0.95**
	The Contribution of modern communication technologies in improving agricultural extension work.	**.96**

It is clear from this table that the value of general constancy is 0.90 and that means the questionnaire has a high constancy for the total degree of the questionnaire and for all fields and axes.

Data Collection

Data of the final questionnaire was collected from agricultural extension sample numbered 135 subjects represents %40 out of the research community numbering 335 subjects. Data was collected from the subject and their responses were collected for period between 20/2/2017 and 5/3/2017 with the support of Extension Department of the agriculture Directorate in the Governorate included in the sample to coordinate with the heads of some agricultural offices to interview with the agricultural extension agents.

Data Categorization and Analysis

Data categorization has been conducted manually and was analyzed using SPSS and the following statistical methods were used:

1-Frequency was used to describe the number of subject in each item.

2-Percentage was used to describe the subject according to their distribution on the determined items.

3-Cronbach's Alpha Coefficient to measure the constancy. It was used to determine the constancy coefficient in the fields and axes used in the research.

4- **Preferred weight and the percentage** were used for each of the items and axes.(3).

RESULTS AND DISCUSSION

1-The role of modern communication technology in improving agricultural extension work

2-1: Providing the infrastructure for the use of modern communication technologies in agricultural extension work. The research result showed that the respondent's responses to the items made for the field of (Providing the infrastructure for the use of modern communication technologies in agricultural extension work),which numbered 13 items obtained weight mean between 2.94 and 3.96 degrees and percentage weight between 85.8-73.8% degrees, and the weigh mean for the subject agreement degrees on any of the suggested items is higher than the hypothetic mean degree which is 3 degrees as explained in the following table.

Table 4. subject distribution according to their opinions about the provision of the infrastructure for the use of modern communication technologies in agricultural extension work

Form seq.	Order by importance	Field	Preferred weight	Percentage weight
10	1	Electronic folders stored on electronic computers help to document agricultural extension work.	3.69	73.8
8	2	E-mail is a two-way communication channel between the Ministry of Agriculture, departments, directorates and extension centers	3.67	73.4
13	3.5	Qualified human cadres are required to apply agricultural extension work electronically	3.59	71.9
2	3.5	Computer and the Internet help to spread the activities of remote guidance through social media sites	3.59	71.9
7	5	An e-mail and an independent website to publish the activities of the agricultural extension system are required	3.57	71.4
6	6	The preparation of easy and familiar programs for use by agricultural extension workers published through the pages of Facebook	3.46	69.2
9	7.5	The preparation of educational podcasts related to the work of agricultural extension spread through the networks of the Internet and mobile phone	3.4	68
1	7.5	Providing an infrastructure for the application of electronic guidance work.	3.4	68
3	9	A system of internal and external correspondence between the employees of the agricultural extension system should be implemented through social networking sites and e-mail	3.38	67.6
4	10	The extension system should be equipped with computers to store data and information related to agricultural extension work and send it to the concerned authorities through the program	3.33	66.6

5	**11**	**There should be cooperation and coordination between the employees of the internet centers and the other agricultural departments in order to reach a high quality electronic system**	**3.23**	**64.6**
11	**12.5**	**Security systems such as surveillance cameras should be available to monitor the operation of the agents by the senior management**	**2.94**	**58.8**
12	**12.5**	**Using a special password for each employee helps protect electronic data and information related to agricultural extension work**	**2.94**	**58.8**

The table above summarizes the convergence of the weighted circles according to the level of importance and the level of the subjects' agreement on the items of the axis (providing an infrastructure for the use of modern communication technologies in agricultural extension work). However, the item "Electronic folders stored on electronic computers help to document agricultural extension work", which confirms that it obtained first place in terms of the level of importance or approval of subjects, having achieved a weighted average of (3.69) degree and a percentage weight (73.8%) degree, which is higher than the weighted circles of other items, the reason may be due to the difficulties resulting from systems, information and data relating to the work of agricultural extension system. While the two items "security systems such as surveillance cameras to monitor the functioning of agents by senior management" and "the use of a special password for each employee helps to protect data and electronic information for agricultural extension work," and this enhances their status in the last level The importance of the subjects, as they achieved a weighted average of (2.94) degree and a percentage weight of (58.8%) degree, which is less than the weighted circles of other items, and may be due to several reasons, including:

1. Maintaining the functioning of agricultural extension work in an organized manner.

2. Preserving the stored files related to the activities of the indicative work of tampering with them. 3. Keeping the devices away from improper use by non-competent people.

2-2: Supporting the agricultural extension system to transform agricultural extension work into e-government.

The results of the study showed that the responses of the respondents to the items of the axis (supporting of agricultural extension system for the transformation of the extension work to e-government), which reached (12) items, obtained a weighted average between (2.98 - 3.61), and a percentage weight between (59.6 - 72.2%), and the weighted mean of the subjects' approval ratings on any of the proposed paragraphs is higher than the satisfactory mean of (3) degrees, as shown in the following table:

Table 5: Distribution of respondents according to their views on the axis of support of agricultural extension system for the transformation of the extension work to the egovernment.

Form seq.	Order by importance	Field	Preferred weight	Percentage weight
1	1	The transition to e-government is commensurate with the guiding action strategies	3.61	72.2
11	2	human competencies are required to do good work	3.57	71.4
4	3	Internal electronic correspondence should be formally adopted by the staff of the agricultural extension system.	3.52	70.4
5	4	The extension system supports the information technology center with modern systems to achieve transformation into e-government	3.41	68.8
10	5	The extension system should use a strategy that combines traditional and electronic business	3.4	68
3	6	The extension system should promote the idea of transformation of e-government	3.39	67.8
9	7.5	To eliminate the organizational obstacles that prevents the transformation of the extension work into e-government.	3.23	64.6
2	7.5	Make official decisions regarding the transformation of the extension work into e-government	3.23	64.6
8	9	Training the employees of the extension system on e-government systems and work efficiently	3.22	64.4
12	10.5	The extension agency cooperates with private companies to implement some of the software components of e-government systems	3.12	62.4
6	10.5	The extension system shall provide the necessary equipment for the operation of e-government systems	3.12	62.4
7	12	The agricultural extension system should provide the required awareness to transform the traditional extension work into e-government	2.98	59.6

It is clear from the above table that the "The transition to e-government is commensurate with the extension action strategies" category has achieved the first ranking in terms of importance and the approval of the respondents. This is reinforced by a weighted mean of (3.61) and a percentage weight of (72) 2%), which is higher than the weighted average for the other paragraphs. This may be due to the fact that the shift to e-government needs a qualitative shift in the method of providing targeted extension service that requires a change in the management approach and organizational structures.While the paragraph " The agricultural extension system should provide the required awareness to transform the traditional extension work into e-government", ranked last in terms of the level of importance or approval of the subjects, having obtained a weighted average of (2.98) degree and a percentage weight (59.6). The reason for this is that the transition of the traditional extension work into e-government requires the awareness of the employees of their importance in overcoming the problems facing the traditional extension work and to achieve smooth, interactive and work easily to improve the communication interface between the Agriculture extension and the beneficiaries.

2-3: Human Resources Management electronically.

The results of the study showed that the responses of the respondents to the ten items of the axis of "human resources management electronically" obtained a weighted average between (2.85 - 3.6) and a percentage weight between 57-72% , and that the weighted mean

of the respondents approval ratings on any of the proposed paragraphs is higher than the satisfactory mean grade of (3), as shown in the following table:

Table 6: Distribution of subjects according to their views on the axis of Human resources Management electronically

Form seq.	Order by importance	Field	Preferred weight	Percentage weight
6	1	Enabling workers in the agricultural extension system to access the information available faster and more efficiently with less time	3.6	72
9	2	Making the workers in the agricultural extension system familiar with the researches and modern technology on the Web	3.54	70.8
8	3	Stored data and information should be available for all workers in the agricultural extension body	3.51	70.2
10	4	The workers in the agricultural extension body should exchange information via social media	3.49	69.8
7	5	workers in the agricultural extension body should participate in exchanging the information and knowledge and expertise with international agriculture universities	3.39	67.8
5	6.5	workers in the agricultural extension body should make benefit of the electronic service of remote learning	3.34	66.8
1	6.5	Announcement of vacant extension jobs through websites of the extension system	3.34	66.8
2	8	Job applications to be submitted with the extension electronically	3.2	64
4	9	Attendance and dismissal of workers in the agricultural extension body should be marked electronically	3.1	62
3	10	Affairs of workers in the agricultural extension body are run through special websites	2.58	57

From the above table, it is clear the convergence of the weighted circles of the respondents (management of human resource electronically). However, the item "Enabling workers in the agricultural extension system to access the information available faster and more efficiently with less time" category has achieved the first ranking in terms of importance and the approval of the respondents. This is reinforced by a weighted mean of (3.6) and a percentage weight of (%72), which is higher than the weighted average for the other paragraphs. This may be due to the fact that the endeavor for valuable information, in addition to providing the skills to search for the information. While the paragraph "Affairs of workers in the agricultural extension body are run through special websites ", ranked last in terms of the level of importance or approval of the s respondents, having obtained a weighted average of (2.85) degree and a percentage weight (% 57) degree. The reason for this is that the transition of the agricultural extension system aims at developing and modernizing the management through the reduction and simplification of administrative procedures.

2-4 The Extension Service Rendered to the targeted People via the Internet

The research result showed that the answers of the respondents of the items for the field "The Extension Service Rendered to the targeted People via the Internet" which numbered 8 items weight average between 3.27-3.77 and percentage weight between 65.4-75.4% and weighted average for the degrees of respondents' agreement on any suggested item is highest than the hypothetic average of 3 degrees as in the following table:

Table 7. the distribution subjects according to their opinions about the services the axis of extension works rendered to the targeted people via the Internet

Form seq.	Order by importance	Field	Preferred weight	Percentage weight
4	1	The extension materials should be poste don thee General committee for the Agricultural Extension and Training	3.77	75.4
5	2	The Agricultural Extension body should have information base that include all the extension activities	3.72	74.4
6	3	The extension activities are maintained and archived through the computers	3.7	74
3	4	The training program to be introduced on the General committee for the Agricultural Extension and Training	3.6	72
7	5	Modern communication technologies are used in the prefect form which electrically serve the extension services	3.59	71.8
8	6	The extension body should have an email to communicate with the farmers and to respond to their question	3.42	68.4
1	7	The extension body must have a clear strategy to introduce extension services electrically for the targeted people through the activities that is published on the social media	3.39	67.8
2	8	The extension body provides the targeted people electric correspondence service through the email	3.27	65.4

It is clear from the table above that the approaches of the weighted averages according to the level of importance or the research sample agreement on the items of (Extension services introduced for the targeted people through Interment) although the item (The extension materials should be poste don thee General committee for the Agricultural Extension and Training) comes in the first rank in the level of importance or the respondents agreement .It achieved weighted average (3,77) and percentage weight (754,4%) degrees .It is higher than the weighted average of the other items .The reason behind that is that the agricultural extension system faces difficulties in fulfillment the requirements of the targeted people which are distinguished by its variation and fast change that required continuous update of what is introduced on the international web to face these changes . Meanwhile the item (The extension body provides the targeted people electric correspondence service through the email)What support that is its position in the last rank in in the level of importance or the respondents agreement .It achieved weighted average (3,27)degrees and percentage weight (65,4%) degrees .It is less than the weighted averages of the other items .The reason behind that is that the agricultural extension system uses the email to communicate the targeted people in limited range to fulfill their requirement ,to response the questions and to listen to their suggestions. 5-2 The contribution of modern communication technologies in improve agriculture extension work .The research results showed that the respondents responses of the items in the field (The contribution of modern communication technologies in improve agriculture extension work) which numbered (6) items acquired weighted average (3,65 -3,82) degrees and percentage weight between 73 -76,4%) and the weighted average for the subjects agreements on any suggested items is higher that the hypothetic average (3) degrees as shown in the following table:

Table 8: the distribution subjects according to their opinions about the contribution of modern information technologies in agricultural extension work

Form seq.	Order by importance	Field	Preferred weight	Percentage weight
1	1.5	Modern communication technologies contribute to streamlining guiding procedures so that extension services can be implemented.	3.82	76.4
5	1.5	Modern communication technologies contribute to the rapid delivery of instructions to agricultural extension workers and with the required accuracy.	3.82	76.4
4	3	Modern communication technologies contribute to providing an information base on agricultural extension work.	3.76	75.2
6	4	Modern communication technologies reduce the cost of archiving and archiving.	3.74	74.8
2	5	Modern communication technologies contribute to the time and effort of agricultural extension workers.	3.73	74.6
3	6	Modern communication technologies reduce the costs of agricultural extension work	3.65	73

It is clear from the above table that the two paragraphs " Modern communication technologies contribute to streamlining guiding procedures so that extension services can be implemented ", "Modern communication technologies contribute to the rapid delivery of instructions to agricultural extension workers and with the required accuracy" have the same rank in the level of importance and the agreement of the respondents .They achieves weighted average (3,82)degrees and percentage weight (76.4%), which is higher than the weighted average for other items. This may be due to the fact that the use of agricultural extension system for modern communication technologies requires specialized cadres with high degree skills in the field of information systems , databases and Internet systems to simplify agricultural extension work procedures and deliver instructions to the employees the required speed and accuracy . While the item (Modern communication technologies reduce the costs of agricultural extension work) e item

(contribution of modern communication technologies in reducing the cost of agricultural extension comes in last in terms of the level of importance and the agreement of the respondents . It acquired a weighted average of (3.65) and a percentage weight of (73%) It is less than the weighted average of other items. This may be due to the fact that modern communication technologies help to reduce the consumption of large quantities of paper and stationery and thus reduce the costs of agricultural extension work.

Conclusions and recommendations

We conclude from the research that modern communication technologies play an important role in improving agricultural extension work. If these technologies are sufficient, they will achieve the objectives to be achieved, and modern communication technologies are the means of communication that are applied in agricultural extension work. There are census by agricultural extension agents on the necessity to use modern communication technologies for the development of agricultural extension work, as well as there is support by the agricultural extension system to transform agricultural extension work from traditional work to e-government .The researcher recommends the need to provide modern communication technologies in all extension directories , centers, offices and farms for the purpose of improving the agricultural extension work in Iraq .Also it recommends the establishment of a broad database related to the nature of the work of agricultural extension, as well as urging the extension department to support plans to modernize the means of communication used in the work in order to deal with the large amount of information available to the agricultural product, as well as to make the necessary plans for the rehabilitation and training of workers in the agricultural extension system to convert the traditional extension work to the e-government.

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