

The Reality of the Usage of Extension Methods by Workers in Agricultural Extension: A review

Talal Saeed Hameed¹, Rayan Rayadh Kadem², Maher Ibrahim Dawood³

^{1,2,3} Department of Agricultural Extension and Technical Transfer, College of Agriculture and Forestry, University of Mosul, Iraq.

¹Corresponding author: stalal1982@uomosul.edu.iq

Article history:

Received: 3 June 2023
Accepted: 31 July 2023
Published: 30 December 2023

Keywords: *The Reality, Agricultural Extension, Extension Methods, Extension work.*

Abstract

In view of the effective variation of the extension methods, in addition to what constitutes the usage of the agricultural extension system for the multiple and various extension methods as an essential duty of his job. Through this use, the agricultural extension can win the farmers' confidence and change them. and since agricultural extension directs its message to many farmers who are different in their social and economic characteristics, ages, habits, and experiences, therefore, it is required that agricultural extension use many extension methods in order to be able to face these differences between the target farmers, and the benefit of diversity in the use of extension methods is to ensure access to each individual and influence it. This is what the current study tries to shed light on in order to achieve the needs of academic knowledge and enrich scientific research in the field of agricultural extension on the one hand and to benefit those responsible for extension work on the other hand, used under the prevailing local conditions and the most effective ones, so that they can be used as a guide when introducing the ideas and recommendations used to the farmers' audience in a way that guarantees obtaining the highest possible response, in addition to knowing the obstacles to using the extension methods, and the ways to solve these obstacles.

<https://dx.doi.org/10.52951/dasj.23150206>

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Introduction

The diversity of extension communication methods is considered a comparative advantage for agricultural extension as an educational system, as it enables it to face the diversity of the audience that it deals with and the diversity of goals and programs it seeks to achieve (Esmat, 1991; Toness, 2001). As for extension aids, they are the means used by the extension or trainer to simplify the explanation of something while using the extension method (Ninah, 1999); (Burton, 1998) and the methods of communication with individuals are among the most important methods of which extension work depends, and they are

considered the basis for effective and effective communication. In these methods, communication takes place between the agricultural extension agent and one client only. This contact is often done with direct personal confrontation. Through this contact, the counselor helps to know the capabilities and problems that the counselor suffers from on the ground, and therefore, his guidance and advice are realistic and limited in line with the circumstances and capabilities of the counselor (General Organization for Technical Education, 2003; Saker, 2021). Group communication methods are also considered as one of the most widely used extension methods due to

the possibility of communicating with a large number of people in a shorter time and at lower costs. This contact occurs face to face (Al-Mousa, 2003); (ZaZueta, 2003). The diversity of the extension methods of communication gave an advantage to agricultural extension as an educational system that enables it to face the diversity of the extension audience with whom it deals and the multiplicity of its goals and programs (Abu Shaima, 2010); (Operations Evaluating Department, 2003). and that one of the most important bases that can be guided by when choosing an aid is to identify the best appropriate aids to bring about desired behavioral changes for the counseling audience, whether in knowledge, skills or attitudes, and to determine the most interesting and interesting of the counselors, and to determine what is actually available in the local environment and in which the extension agent has good experience. In its operation or use (Ballantyne and Bokre, 2003).

Classification of indicative

Communication methods:

Agricultural Extension communication methods are classified according to the number of individuals who are contacted as follows (Al-Shibli, 2007); (Dubey, 2008).

- 1- Methods of contacting individuals.
- 2- Methods of contacting groups.
- 3- Methods of contacting the masses.

First: Individual Extension methods

One of the most important methods on which the agricultural extension work depends is the methods of communication with individuals, as it is considered the basis of effective communication between the agricultural extension and only one client, and often direct confrontation (General

Organization for Technical Education, 2003: 18). This type of communication creates trust between the guide and the farmer, and thus develops the personal relationship (Al-Samarrai and Al-Jadri, 1990); (Sharma, 2002 b). Among the methods to contact individuals are the following:

1- **Telephone Calls:** It is considered one of the important methods of individual communication, as through it, the counselor can be linked to the community, such as requesting information, advice, or a solution to a problem. These messages should be brief and simple.

2- **Office Visits:** It is considered one of the methods of direct communication between the individual and the agricultural extension agent in his office to request assistance, technical information, or solve a problem in a specific field, (Renwick, 2009). One of the most important features of office visits is the low costs and the time consumed by the agricultural extension (Al-Khafaji, 1990; Haynes, 2000), and the most important disadvantage of using this method is that the solutions provided by the agricultural agri.Agents may be unrealistic, and this method is limited to a category that possesses Agricultural extension Agent awareness that distinguishes them from the rest of the people (Al-Laila and Othman, 1987; Loretta *et al.*, 2004).

3- **Personal Letters:** Correspondence exchanged between the Agricultural Extension Agent and the beggar without prior planning, and these messages are directed from the client to the beggar or vice versa for the purpose of presenting a specific problem or obtaining data (Al-Adly, 1983). Personal messages are characterized by the development of good relations between the Agricultural Extension Agent and the farmers, as it contains a large package of information that the extension Agent wishes to deliver to the farmer. Small numbers of farmers, besides to the fact that it needs

a high postal service (Saravanan and Bhattacharjee, 2014).

4- Farm and Home visits: It is the Agricultural Extension Agent transition to meet the farmer in his farm, field, or home for the purpose of giving advice, identifying a problem, clarifying, or demonstrating a specific experience that helps the farmer in solving his own problem, or to push the Agricultural Extension Agent to participate in an expected extension activity, and thus contributes to building the farmer's confidence in the guide (the senior). One of the advantages of this method is that it helps the Agricultural Extension Agent with the time of the farmer and enables him to carry out other tasks. It is considered an extension Agent, an indicator and a measure of the extent of confidence of the farmers in the agricultural guide. (Al-Shawakh, 2008; Richard, 2003).

Second: Group Extension Methods

In this part, we discuss some of the agricultural extension communication methods commonly used in communicating with farmers' groups, such as practical demonstration by observation, practical demonstration by presenting results, agricultural extension meetings, and field day, and the following is an explanation of these methods (Abdullah, 2007).

1- Method Demonstration: Practical demonstration methods are defined as the methods that provide the opportunity for the farmer to learn the way of working in order to acquire the necessary skills to advance production (Alex and Derek, 2009). There are two basic types of practical clarification: practical clarification by observation and experiment and practical clarification of the results. Communication in this group is between the guides and one audience member, or a small group of them. Guide and farmer. This group of methods is important in many circumstances and cases, as it is preferable to use them in societies related to prevailing customs and traditions,

in which it is difficult to bring about behavioral changes. (Imad, 2003; Singletary *et al.*, 2004).

2- Result Demonstration: It is a method that attempts to convince farmers of improved methods that can be applied under their local conditions. This method involves one individual, a small group or a large audience visiting or participating in a field day (Naouri, 2020).

3- Steps to implement the method:

a- Studying the conditions in the village to determine whether it is necessary to rely on this method for the purpose of increasing the confidence of the farmer and the guide in the recommendations and instructions.

b-Determine the exact purpose of the scientific explanation.

c- Determining the methods of persuasion to be followed, and the data needed to conduct the presentation. This is in addition to determining the number of presentations and the necessary tools.

d- Choosing the farmers who will perform the display or the display will be conducted in their fields in consultation with the local leaders. (Wallace, 2002).

4- Extension Meetings: The meeting is a meeting or interview that takes place between one or more people who carry out the extension work on the one hand and a group of mentors on the other. Agricultural extension programmers. Agricultural extension meetings vary according to several considerations: The aim of the meeting may be to plan an extension program or explain the agricultural plan, or disseminate innovative ideas or other things in terms of spatial geography or administration.

5- Field Day: One of the methods of guiding groups, which combines in its procedure and advantages some of the procedures and advantages of clarifying

practice, clarifying results, public meetings and field days are of two types:

a- **Seasonal Field Day:** It usually takes place when preparing for the cultivation of important crops and when harvesting them, such as cotton, wheat and corn. Local guides and leaders practice clarification by observation and experience, and clarification of the results, or both together.

b- **The annual field day:** It differs from the previous one in that the preparation for it is not limited to clarifying the observation and experiment or clarifying the results only, but rather the types of preparations and activities are multiplied with it so that it becomes a busy day for the entire region and includes a large number of advisory messages.

Third: Mass Extension Methods

1- **Radio:** The radio is a fast, timely and effective means of communication that is almost devoid of a rural house. The radio has the following advantages: It delivers an audible message to a large number of listeners and covers a large geographical area. Diversity of programs that can be broadcast simultaneously, such as religious, cultural, scientific and educational extension programs, which helps in following up on events and different activities at the time. Limitations of radio as an agricultural extension educational method It is a one-way communication method, and this means that the guide or the listener is unable to ask or inquire. Likewise, the presenter of the program is unable to identify the impressions on the face of the listener in terms of response or denunciation of his conversations and his lack of consideration for individual differences sometimes. The broadcast time of the educational program may not be suitable for the audience, depending on the sense of hearing only.

2- **Television:** Television, and later video, is one of the most recent educational methods, and its importance is evident in that it relies on the senses of hearing and sight in

communicating ideas and practices, strengthening the educational impact. In this method, agricultural extension is semi-direct. (Al-Subaie, 2008) Characteristics of audiovisual, television and video guidance: A method of mass communication in which communication is semi-direct and closes to direct transmission. It exploits the senses of hearing and sight in education, which increases its educational effectiveness over methods that exploit only one sense. It reaches farmers and non-farmers and those who find it difficult to attend meetings. and other indicative methods. It can be used in a practical presentation with the ability to control the display speed to comply with the educational purpose, through which events and processes that take a long time can be presented in a short and appropriate period, and agricultural operations, growth, germination, and crop harvesting can be followed (Saleh, 2000; Sharma, 2003a).

3- **Extension Posters:** It is considered an aid or an indicative educational tool for guidance meetings. The poster is a piece of cardboard that contains a picture representing an educational objective in addition to a simple sentence or a focused phrase that explains the picture and completes its meaning. Among the functions of the poster is disseminating innovative ideas that the agricultural guide would like to communicate to the farmer in order to adopt and work with them. It plays an important role in the early stages of the adoption process, as it helps the farmer to understand the elements of innovative agricultural and household technology (Burton, 1998; Fred, 2002).

4- **Extension Publications:** It is everything that relied on written words in the extension publishing process to send scientific material to farmers, extension men, or local leaders, or to inform them of certain facts and instructions (Al-Tanubi *et al.*, 1996; Vanday, 2004). Increasing the effectiveness of information transfer and instructional education, reaching a relatively large indicative audience, and contributing to the

principle of repetition by keeping it and referring to it whenever necessary, its costs are relatively low.

Conclusion

Agricultural extension is one of the integrated educational systems, and at the same time, is complementary to the public education system, which is based on thinking and problem-solving. The change that is targeted by agricultural extension and its success depends on the

Planned extension communication process, which is the essence of extension work. The agricultural extension agents are often described as a link between farmers and scientific agricultural research and educational institutions as they transfer what is new and beneficial to farmers and vice versa.

Conflict of interest

The authors state that there are no conflicts of interest with the publication of this work.

Acknowledgement

We extend our thanks and appreciation to the presidency of Agricultural Extension and Technical Transfer Department, Deanship of College of Agriculture and Forestry, University of Mosul for providing research requirements and continuous support for us that helped us to complete this research.

References

- Abdullah, S. b. A. (2007). Interactive and real-time communication in the distance education environment, a working paper presented to the First International Conference on Media Education, Riyadh.
- Abu Shaima, N. S. (2010), Human Resources Management, 4th Edition, Dar Al-Safaa for Publishing and Distribution, Egypt.
- Al-Adly, A. A. (1983). Fundamentals of Agricultural Extension Science, New Publications House, Egypt.
- Alex, G., Z. Willem and B. Derek (2009). Advisory Services: New directions, Rural Development Strategy Background Paper, Agricultural and Rural Development, World Bank, Washington.
- Al-Khafaji, A. A. M. (1990). Agricultural Extension between Philosophy and Application, Al-Fateh Complex Publications, Libyan Jamahiriya.
- Al-Laila, Z. H. and Othman, S. A. (1987). Principles of Agricultural Extension, Dar Al-Kutub for Printing and Publishing, Mosul.
- Al-Mousa, I. S. (2003). Introduction to Mass Communication, Dar Al-Katani for Publishing and Distribution, Irbid.
- Al-Samarrai, A. A., and Al-Jadri, A. H. (1990). Agricultural Extension Science, Higher Education Press in Mosul.
- Al-Subaie, S. S. (2007). The preferred extension methods for farmers of Al-Hariq governorate, Saudi Arabia. *Journal of the Saudi Society for Agricultural Sciences*, (6) 20-33.
- Al-Shibli, S. (2008). the indicative methods used to transfer knowledge and modern technologies.
- Al-Tanubi, M. O. (1996). Training of Manpower in the Agricultural Sector. 228-229.
- Ballantyne, P. and D. Bokre. (2003). ICTS: Transforming Agricultural extension, report of an INARS e-discussion 20 August- 30 September, The technical centre for Agricultural and rural cooperation.

- Haynes, B. R. (2000). Management skills of county Extension administrators: Are they sufficient to do the job. *Journal of Extension*, 38(2), 1-5.
<https://archives.joe.org/joe/2000april/rb2.php>
- Burton, E. S. (1998). Improving Agricultural Extension, Food and Agriculture Organization of The United Nations Rome, 303.
- Dubey, V. K. (2008). Extension education and communication. New Age International (P) Ltd., Publishers.
- Esmat, M. H. M. & EL-Latef, A.S. (1991). A study of some variables associated with the use of extension methods by extension agents in Beheira governorate. *Agricultural & Rural development Research institute*, 160, P16.
- Fred, W. (2002). Social Psychology. Williams College, New York, Fifth Edition, 102-114 p.
- General Organization for Technical Education. (2003). Agricultural Extension, Riyadh, Saudi Arabia.
- Imad, H. (2003). Communication and its contemporary theories, Cairo, The Egyptian Lebanese Publishing House.
- Singleary, L., Smith, M., Hill, G., & Corcoran, P. (2004). Survey of Extension Professionals' Skill Levels Needed to Practice Public Issues Education. *The Journal of Extension*, 42(6), Article 13. <https://tigerprints.clemson.edu/joe/vol42/iss6/13>
- Naouri, M., Kuper, M., and Hartani, T. (2020). The power of translation: Innovation dialogues in the context of farmer-led innovation in the Algerian Sahara. *Agricultural Systems*, 180, 102793.
<http://dx.doi.org/10.1016/j.agsy.2020.102793>
- Ninah, B. W. (1999). Some factors affecting the use of agricultural extension agents for some extension methods and aids in the countryside of Qalyubia Governorate, the Arab Republic of Egypt, *PhD thesis*, Faculty of Agriculture, Ain Shams University.
- Operations Evaluating Department. (2003). Agricultural Extension and Research in India.
- Renwick, S. (2009). Potential for Use of Information and Communication Technologies (ICTs) in Agricultural Extension, Paper submitted for AGEX 6003 – Trends and Emerging Issues in Extension, April 21, 2009.
- Richard, W. (2003). E. Extension, Pre-select Business Case. Cooperative extension system, U. S. A. (On Line). <http://ext.wsu.edu/links/business/plan>.
- Saker, K. S. (2021). A Study Of Cell-Phone Usage by Agricultural Extension Workers in Extension Work in Beheira Governorate. *Journal of the Advances in Agricultural Researches*, 26(3), 243-254.
<https://dx.doi.org/10.21608/jalexu.2021.94085.1003>
- Saleh, M. S. (2000). Agricultural Extension Science, second edition, Omar Al-Mukhtar University Publications, Libya.
- Saleh, S. M., Al-Tanoubi, M. O. and Azmy, S. M. (2004). Agricultural Extension, Its Basics and Applications, first edition, Alexandria Book Center, Faculty of Agriculture, Alexandria University.
- Saravanan, R., Bhattacharjee, S. (2014). *Mobile Phones For Agricultural Extension*. New India Publishing Agency. 75 p.
- Sharma, V. P. (2003 a). Cyber extension: connecting farmers in India–some experience. *Map Asia*.

Sharma, V. P. (2002 b). Cyber extension: The extension approach for new millennium. *Manage Cyberary*, 18(8).

Toness, A. S. (2001). The potential of participatory rural appraisal (PRA) approaches and methods for agricultural extension and development in the 21st century. *Journal of International Agricultural and Extension Education*, 8(1), 25-37.

Swanson, B. E. (2008). *Global review of good agricultural extension and advisory service practices* (Vol. 82). Rome: Food and Agriculture Organization of the United Nations.

Vanclay, F. (2004). Social principles for agricultural extension to assist in the promotion of natural resource management. *Australian journal of experimental agriculture*, 44(3), 213-222.

Wallace, M. (2002). Toastmasters international communication and leadership, law library recourse exchange.

ZaZueta, F. (2003). Use of Hand Held Computers in Agricultural 2003/centrelpd/ooo2pdf (on Line) <http://www.dateha/efita> Extension Programs.