



# PROPOSED PERCEPTION TO STANDARDS INPUTS OF EVALUATION FOR AGRICULTURAL EXTENSION ACTIVITIES CARRIED OUT IN THE KURDISTAN REGION, IRAQ

Dara A.S. Kalhory

Department of Biotechnology and Crop Sciences, Collage of Agricultural Sciences Engineering,  
University of Sulaimani, Iraq.

## Abstract

The research aims to define the proposed perception to standards inputs of evaluation for extension activities carried out by the agricultural extension directorates in the Kurdistan region. The research community then included all 302 agricultural extension workers who were randomly selected by 45% and 136 workers. Then the data were then collected through a questionnaire and a personal interview, the data collection tool includes terms and proposed standards for evaluation input with other components for the proposed evaluation model of agricultural extension activities, then the process was conducted (pre-test) for the questionnaire to checking the ratatability and validity of the questionnaire, then, for the statistical analysis, the researcher used data analysis tools were : frequencies, percentages, relative importance and weighted arithmetic mean and SPSS program. The results of the research that the weighted arithmetic means of importance degree from extension workers for standards of input were (external environment, the organizational structure evaluation and Resources) were higher than the threshold score defined in this study by (3.50) degrees. Therefore, all input standard was considered approved.

**Key words:** Perceptions of Extension workers, Standards Evaluation input, Extension workers.

## Introduction

Extension evaluation systems in Iraq are quite different in number and development depending on the degree of system progress. And its development compared to evaluation system of agricultural extension in neighboring countries. The use of systems analyzing method is a practical and important tool in evaluating extension activities. On the other hand, Input is one of the important components of systems analysis and it is imposed on the evaluation system and affects it. Therefore, determining the relative importance of inputs standards helps extensional directorate to know the efficiency and performance of the evaluation system in achieving its goals which helps the evaluators to how to access to write the report of the evaluation results and connect it to beneficiaries at the lowest possible cost. (Zobaie *et al.*, 1981). Extension evaluation has received the attention of researchers and evaluators, as they conducted many studies and researches to identify the

methods of appropriate systems with the evaluation model and its components in a scientific and accurate ways, as well as know the application mechanism of evaluation model for extension activities, which achieve the objectives of evaluation in the shortest time and less effort and cost.

So seen to the evaluation in the Kurdistan region as a force that, if applied, the re-adaptation of extension work within agricultural extension directorates can occur to any new situation in the shortest possible time. (Mamand, 2018). It also helps in creating change that includes the skills and methods required with the total change of evaluating extension activities, although, Leading to successful extension work from the pyramid base by extension workers, As the employees are the main pillar and front line of the Agricultural Extension Service. (AOAD, 1994). In spite of evaluation importance systems in the Kurdistan region of Iraq, there are weakness in the presence of evaluation standards,

\**Author for correspondence* : E-mail: dara.abdulrahman@univsul.edu.iq

especially standards of inputs is one of the main pillars of the evaluation of extension activities and programs, With decries knowledge level of extension workers relate on how to use this standards within evaluation system in the directorates and departments of agricultural extension in Kurdistan-Iraq

Objective of the research: Definition, proposed perceptions of evaluation input standards for extension activities carried out by agricultural extension directorates in the Kurdistan Region of Iraq.

Extension Workers' Perspective: This is the view point of staff towards the proposed criteria for evaluation inputs within the components of the systems analysis method used to build an evaluation model in the Kurdistan Region and to determine the degree of importance of the criteria of the following elements: external environment, organizational structure of assessment and resources

Agricultural Extension Workers: includes all agricultural extension workers who hold a junior high certificate of agriculture and above, in the directorates and extension departments in the Kurdistan region of Iraq.

## Materials and Methods

Research Methodology: The descriptive approach was used in the current research and aims to identify the proposed standards inputs based on realistic and studied through access to data that determine the standards and the relative importance of input evaluation standards.

Community and Sample Research: The research community included all agricultural extension workers in the directorates and agricultural extension departments in the governorates (Erbil, Sulaymaniyah, Dohuk and Halabja) of the Kurdistan Region-Iraq. There were 302 workers and the random sample was selected by 45% by 136 workers.

Stages of preparing the composition of the evaluation inputs in the proposed evaluation model for agricultural extension activities:

First: Prepared elements and standards for evaluation inputs through the reliance on previous literature and studies related to the construction of evaluation indicators and Access to data on measurement and evaluation through the Internet. In the light of this, the input component was prepared as the rest of the systems analysis components which used in building the proposed model for the evaluation extension activities, Where consists inputs from 4 main elements distributed over 16 Standards for external environment, 26 Standards for general framework and basics of evaluation concept, 7 Standards for organizational structure evaluation and 8

Standards for Resources. Either, determine the relative importance measurements of input elements and standards were done through a scale: (Very important, neutral, few important, unimportant), front of terms for each standard and elements input component. Then to indicate what elements or standard approved within the proposal model or not, it has identified the degree of cut-off score in this study was (3.50) and the cutting score was estimated the based on arbitrators estimates and statistical methods (George, *et al.*, 2006), The cut-off score is a conceptual limit on the True-Score Scale between acceptable and unacceptable performance (Audeh, 2010). Accordingly, a questionnaire was prepared.

Second: The proposed evaluation form was presented including inputs on a group of 12 arbitrators\*. Therefore, experts are one of the main sources in building the model (Wentling, 1993), to explain their opinion on the components of the inputs and its main and sub-components and its proposed terms. And in the process of representation inputs as a component of systems theory have been used as a framework for this model. Although, by putting (acceptance) in front of the element or terms in the case of acceptance and (rejection) in the case of no-acceptance and (amendment) with the procedure in case it needs to. Given the results were selected the rate of agreement is 80% or more of the experts' opinions as a condition on the validity. Wile, Bloom points out that the rate of acceptance among the arbitrators if they get 75% or more can be satisfied with believe tool (Bloom *et al.*, 1983). The input component was accepted within the components of systems theory used in the proposed model of the mechanism of evaluation of agricultural extension activities in the Kurdistan region-Iraq (Kalthory, 2019) and its degree was higher than (3.50). So the created a Judgment on the content validated for the test which is called virtual honesty. (Abu-Zeina, 1995, Allam, 2000).

Third: Input components were applied to a random sample from an outside exploratory sample in Garmian and on the date of 2018/11/9, to implement a pre-test for the questionnaire on 17 workers and to verify the rehabilitate and validity of the questionnaire. Therefore, validity indicates the degree of consistency in the measurement result when repeated (Melhem, 2000). It is also honesty is one of the most important standard characteristics that should be available in psychological scales (Eble, 1972). And to find Reliability was relying on the method of internal consistency, Alpha Krumbach. (AL-Abasse, 2018), which is one of the most common and most appropriate measures of Reliability for Likert's standards. So the averages of internal correlation

coefficients between the terms are determinant of the alpha coefficient (Bahi, 1999). Finally, the correlation coefficient was 0.98 and the result was corrected using the spearman-Brown equation and the coefficient of Reliability was 0.97. And to ensure the validity of the questionnaire, the stability coefficient was rooted, its value was 0.93. The final questionnaire is now ready to collect data on it.

Fourth: the stage of data collection and statistical analysis, where the data was collected on the research sample by 136 workers, between the period 15/9/2018 to 11/11/2018. Also, statistical analysis was used the statistical tools of Frequencies, percentages, weighted arithmetic mean with the use of SPSS software for data analysis (Voct, 2009).

## Results and Discussion

Extension worker' approval of some standards of inputs evaluation for agricultural extension activities, including:

1. Extension worker' approval on Standards of the external environment: The results showed that the weighted arithmetic mean, the degree of importance and approval level of the external environment standards for the evaluation of extension activities which have been arranged as follows and in light of

the degrees of importance On a 5-step scale, it starts with (1) and ends with (5) degrees As shown in table 1.

In table 1, the results show that the weighted arithmetic mean is of importance from the point of view of the respondents on standards of external environment factors to evaluate the agricultural extension activities has obtained a higher degree of cutting threshold which were identified in this study at (3.50) degrees. Therefore, all standards for external environment factors of the input component are acceptable in proposed model for evaluation.

2. Extension worker approval on Standards for the organizational structure for evaluating: The results showed that the weighted arithmetic mean, degree of importance and the level of approval of the respondents on the organizational structure of the assessment of the extension activities, which were arranged as follows and in light of importance degrees for weighted mean and On a 5-step gradient starting with (1) and ending with (5) degrees as shown in table 2.

In the table 2, the results show that the weighted arithmetic mean of importance from the point of view of the respondents on Standards of organizational structure

**Table 1:** Arithmetic means to the importance degrees for the external environment Standards and their arrangements.

Rank	%	Weighted arithmetic mean	Standards
1	83.52	4.176	Providing data on transportation, communications and benefit from them.
2	83.08	4.154	Providing data on the quality of extension activities.
3	76.76	3.838	Be data quality and its effects are reliable and dealt with in the hands of evaluators.
4	75.58	3.779	Providing data on agricultural scientific research and make use of its results.
5	75.28	3.764	Be information for farmers in unions and its effects are reliable and dealt with in the hands of evaluators.
6	74.54	3.727	Providing data on status of extension activities and use them for the evaluation.
7	74.26	3.713	Be data on agricultural economics factors and its effects are reliable and dealt with in the hands of evaluators.
8	73.66	3.683	Providing data on agricultural policy factors and benefiting from it.
9	73.38	3.669	Providing data on the general characteristics of the policy and benefiting from it.
10	73.22	3.661	Recognition on social factors and benefit from them
11	72.78	3.639	Providing data on farmers unions and benefit from them.
12	72.64	3.632	Be the transport and communications factors and its effects are reliable and dealt with in the hands of evaluators.
13	72.04	3.602	Be information on the team's performance and its effects are reliable and dealt with in the hands of evaluators.
14	70.44	3.522	Recognition on the performance nature of the evaluation team And benefit from them.
15	70.28	3.514	Providing data on cultural factors and benefit from them
16	70	3.500	Be results of agricultural research and extension and its effects are reliable and dealt with in the hands of evaluators.

**Table 2:** The weighted arithmetic mean of the importance of standard for the organizational structure evaluation and their arrangements.

Rank	%	Weighted arithmetic mean	Standards
1	86.90	4.345	To be preparation of evaluation committees based on scientific, technical and economic bases.
2	79.54	3.977	To achieve some kind of harmony between evaluation committees in implementation by accurately and comprehensive.
3	78.52	3.926	Suitability of structure of evaluation committees with the philosophy and objectives of evaluation.
4	76.90	3.845	To be Information about tasks and duties is known by the evaluators and evaluation committee members.
5	75.72	3.786	Consider the degree of compatibility between the organizational components of the evaluation committees with implementation mechanisms.
6	75	3.750	Take into consideration Job description when forming Evaluation Committees.
7	73.38	3.669	To be the mechanism of communication and / or organizational units of committees is efficient and applicable.

to evaluate for the extension activities has obtained a higher degree of cutting threshold which were identified in this study at (3.50) degrees. Therefore, all standard of organizational structure for evaluating the extension activities of the input component are acceptable in proposed model for evaluation.

3. Extension workers' approval on Standards of the resources for evaluating: The results showed that the weighted arithmetic mean, Degree of importance and the level of approval of the respondents of standard of resources which were arranged in light of the degrees of importance for weighted mean and on a 5-step gradient starting with (1) and ending with (5) degrees as shown in table 3.

In the table 3, the results show that the weighted arithmetic mean of importance from the point of view of the respondents on standard of resources evaluation for

agricultural extension activity has obtained a higher degree of cutting threshold which were identified in this study at (3.50) degrees. Therefore, all standard of evaluation resources (human, physical and finance and time) for input component are acceptable in proposed model for evaluation.

### Conclusion and Recommendation

1. Weakness in providing information on calendar inputs in general, Especially the external environment to evaluate the mechanism of relations and communication between the organizational units and information on financial allocations and time required to plan and start the implementation of the evaluation according to the annual plan drawn up for agricultural extension in the Kurdistan region of Iraq.
2. Lack of awareness whether by the senior

**Table 3:** The weighted arithmetic means of standard for resources elements and their arrangements.

Rank	%	Weighted arithmetic mean	Standards
1	83.98	4.198	Determine the evaluation number according to evaluation nature and time.
2	80.88	4.044	Identification of financial allocations and provided within the budget which allocated for the evaluation process.
3.5	79.84	3.992	To be requirements of evaluation work are known and manipulated by the hands of evaluators.
3.5	79.84	3.992	Configuration of tools and supplies before conducting the evaluation and implementation.
5	76.32	3.816	evaluator must have an experience, skill and ability to make decisions in the field of his work evaluation
6	73.98	3.669	Used programs and statistics which are most economical in the evaluation process.
7	72.34	3.617	Providing material and informational resources on the reality of the evaluation process and to benefit from them in the light of the possibilities available.
8	70.44	3.522	To be the time required to perform and execute of evaluation known and installed in the evaluation work plan.

management or extension workers to the importance of the availability of standards for the quality of inputs and evaluation and how to benefit from them during the evaluation of the extension activities in the directorates and sections of the Kurdistan Region.

3. Lack of reliable data about the mechanism applies the proposed evaluation input standards which serve the evaluation process and lead to improving the level of performance of extension workers in the Directorate of Agricultural Extension in Kurdistan of Iraq.
4. The researches recommends the use of the proposed criteria for evaluation inputs by the evaluator in the directorates and departments of extension in the Kurdistan as a database in the preparation and design of the evaluation plan and achieve positive evaluation results that help in the development of evaluation and improve their performance.
5. The research suggested that the Ministry of Agriculture and Water Resources in the Kurdistan Region, in cooperation with the agricultural extension directorates, re-draft training programs for workers on what model and its components and how to apply the mechanism of the evaluation model, including the proposed standards for the evaluation inputs for agricultural extension activities and the requirements of the evaluation mechanism for extension activities. In the Kurdistan region of Iraq.

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