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Collage of Agricultur Sciences Engineering

BUILDING A MODEL OF EVALUATION FOR AGRICULTURAL EXTENSION ACTIVITIES IN KURDISTAN REGION OF IRAQ

Dissertation

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Dedication

This thesis is dedicated to….

Who Taught Me Love Science My supervisor …

My Wife and Lady Tender (Nigar)

My Daughters and Sanabel My Life (Lewan) and (Elyan)

My brilliant friends (Muhammad, Hashim and Tahir).…

All of Them witch Preferred in Educational With A Letter..

All My Co-Worker ;Teachers , Technicians and Administrator

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SUMMARY

The current research aims to build a model of evaluation for agricultural extension activities in Kurdistan-Iraq, which includes:

First: Inputs evaluating the extension activities in the Kurdistan region of Iraq, include: External environment information for the evaluation of extension activities, Information on the basics and general framework of the evaluation, Considerate the organizational structure of evaluation, and Resources (human, physical, financial and time).

Secondly, the processes of evaluation for agricultural extension activities includes: Plan and the implementation of the evaluation for agricultural extension activities.

Third: The outputs of the evaluation for agricultural extension activities include: Access to results, discussing the results, Prepare and writing the report.

Fourth: Feedback includes: The process of control, Issuing a judgment (strengths and weaknesses point) and Adjustments.

In order to arriving at the proposed model, the following procedures were adopted: reviewing the relevant literature, the cast study on the evaluation mechanism, models and approaches related to the evaluation of agricultural extension, websites, and opinions of experts and specialists.

In light of the previous procedures, Systems theory was employed to achieve the objectives of research, as 162 standards were developed, that formed in its primary form, and the standards were distributed on the components of the model: inputs (89), processes (52), outputs (12) and (9) standards for feedback.

Present the proposed model to a group of experts and specialists in the fields of agricultural extension, business administration and measurement - evaluation to indicate their opinion on what is stated in the model.

The model was presented after the modifications were made in the light of the opinions of the experts. As well as included (4) main elements, (24) sub-elements and of inputs, (2) main elements and (12) sub-elements of processes, (3) elements of output and (3) elements of feedback. And 108 standards were formulated and distributed as follows: (57) input standards, (33) process standards, (10) output and (8) standards for feedback.

The research community included the agricultural extension workers in the Kurdistan region of Iraq, which numbered 302 workers, and took a simple random sample by 45% and by 136 workers

The questionnaire was used to show the extent to which the extension workers approved on what was stated in the proposed model, in the light of the fifth scale : (very important, important, neutral, little important, not important) and identified the following weights: 5,4,3,2,1, respectively. And to analyze the results of the study, the weighted arithmetic mean, the number and Percentage As well as the program was used SPSS version 22.

The results of the study found that the majority of workers approved with the proposed model. So, the researcher recommended taking a model of evaluation for agricultural extension activities sequentially and according to the proposed model, and subjecting the model to application in order to know the effectiveness and realism of the agricultural extension activities in a practical way by the departments and departments of agricultural extension in the Kurdistan region of Iraq.

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CHAPTER ONE

INTRODUCTION

Evaluation is seen as a survey process that results in useful information close to the objectives (Federica, 2006). As well as it can improving the efficiency of agricultural extension work to a large extent by evaluating its programs and identifying the problems that led to a failure to achieve results (Arhim, 2018). Evaluation is one of the important stages in the extension work and leads to its development and the construction of its effectiveness, and the evaluation is an ongoing process that coincides with all stages of the extension work (problems, goals, implementation of the plan and results). Although, by evaluation can check the implementation of the work according to the plan that drawn up and detection of defects and the proposal and treatment at the same time, therefore the specialists of agricultural extension agree on the need to conduct the evaluation process as it is one of the most important principles of extension work (Al-Samarrai and Al-Jadiri, 1990). In order to carry out an evaluation process for agricultural extension and achieve its objectives, it is necessary to have an intellectual base to carry out this process, and to determine its content, objectives and the area it covers, with an organization qualified to carry in the evaluation process. (Al-Mashhadani, 2006).

In addition, for the agricultural extension evaluation to be positive, it should be based on an objective and accurate model and it's based on methodology systems, the method of system analysis is a system that helps the evaluators to conduct the evaluation process and identify the efficiency of the system in achieving its objectives (Al-Zubaei, 1981).Accordingly, Tinubi and Omran refer to the concept of the model that "A cultural tool that helps to understand any phenomenon or system and to understand the relationship and the relationship between the basic elements of the phenomenon" (Al-Tanobi. And Omran,1997). Also it helps to achieve multiple objectives, including organizing information, controlling and predicting phenomena. Also the model helps to complete the process of evaluating the extension activities in accordance with scientific and studied principles and away from personal jurisprudence at work and not to change the way it is done by changing those responsible for the evaluation process.

Because the model is a good guide to thinking about work and decision-making (Al-samiry, 1417 A.H). However, there are some studies that indicate negative cases of the evaluation process in Iraq, including the study of Al-Khazraji that focuses on weak work structure, including planning for agricultural extension (Al-Khazraji, 2006). Another study showed weakness in the training evaluation mechanism (AL-Mashhadani, 2006).

In Kurdistan, Iraq, Mamamand emphasized on the limited technical and scientific capacity of agricultural extension workers in the construction and implementation of the evaluation plan, the absence of follow-up and evaluation systems for extension work by the agricultural extension directorates and the lack of appropriate conditions for the progress of work as planned for it (Mammand,2017). The Ahmed also indicates the limited procedure of the evaluation process due to the lack of financial allocations to this process by the senior extension administrative bodies, the lack of specialists in this field, the lack of a general framework for evaluation, and the mechanism or methodology currently used and focuses only on the conduct of the evaluation after the completion of the extension activities such as the training course conducted by the agricultural extension directorates in Kurdistan.(Ahmed,2018).

Also, Rashid's study indicates that there is no planning procedure for evaluating extension activities from the point of view of workers in agricultural extension in Kurdistan - Iraq (Al-Rashid, 2016).

However, there are some regulatory problems facing the agricultural extension evaluation, including the lack of a general framework or model of the evaluation, and the use of the case study method as one of the main sources of evaluation data (Kelly and Edward.2013).

In light of this, we can conclude that there is a significant gap between what these operations should be and what is the reality of the agricultural extension evaluation in the Kurdistan region - Iraq, So to the lack of a specific organization responsible for its management. It is necessary to identify and solve this problem by establishing an intellectual base (intellectual framework) for the proposed model of evaluating agricultural extension activities in all its components in the Kurdistan region of Iraq.

Objective of research:

The research aims at developing an appropriate model of evaluation for agricultural extension activities in Kurdistan of Iraq; this is achieved through following the sub-goals:

1. Identifying the degree of approval on components of (Inputs, Processes, Outputs and Feedback) model of evaluation on agricultural extension activities.

2. Identifying the degree of approval on main elements of components for evaluation model for agricultural extension activities.

3. Identifying the degree of approval on main elements of evaluation inputs.

3.1 Identifying the degree of approval on sub-elements of evaluation inputs

3.1.1 Identifying the degree of approval on standards of evaluation inputs

4. Identifying the degree of approval on main elements of evaluation processes.

4.1 Identifying the degree of approval on sub-elements of evaluation processes

4.1.1 Identifying the degree of approval on standards of evaluation processes.

5. Identifying the degree of approval on elements of evaluation outputs.

5.1 Identifying the degree of approval on standards of evaluation outputs

6. Identifying the degree of approval on elements of evaluation feedback.

6.1 Identifying the degree of approval on standards of evaluation feedback

Research Hypothesis:

Respondents' approval to evaluation model for agricultural extension activities in Kurdistan of Iraq.

Importance of research:

1. The current study contributes to the opening of new horizons for the study of evaluation of the activities of extension in Kurdistan Iraq, as a scientific resource in the field of evaluation.

2. The importance of the study is that it deals with the orthotic system from the perspective of the macro of the elements of agricultural extension activities, through the interaction of elements with each other in an integrated manner.
3. The proposed model provides regular and accurate information on the evaluation of extension activities, which will help to develop this process in the Kurdistan region of Iraq.
4. Provide supplier administrators with a scientific and accurate basis for building a model for the evaluation mechanism for agricultural extension activities in Iraq, especially the Kurdistan region.

Procedural Definitions:

1. The evaluation model for agricultural extension activities:

   A regular and sequential structure of processes consisting of inputs, processes, outputs and feedback that is used as a guide in the implementation of agricultural extension activities Kurdistan Iraq on scientific bases, which helps to save time, effort and money.
2. Evaluation system of agricultural extension activities:

   It's a series of elements and main and subsidiary elements of the evaluation of extension activities that have interactive and mutual relations between them in the proposed model in order to reach the objectives of the evaluation process for agricultural extension activities and their development in the Kurdistan Region of Iraq.
3. Inputs of evaluation:

   Information and facts on the evaluation of agricultural extension activities includes: external environment information for evaluation, the basics and general evaluation framework, building the organizational structure of evaluation, and resources (human, physical, financial and time).
4. Processes of evaluation:

   These are sequential procedures through which inputs are converted into outputs, and this component begins with the evaluation planning phase down to the implementation of evaluation plan for agricultural extension activities.

5. Outputs of evaluation:

   Is a result that appears through the implementation of evaluation and start this phase by access to results and discussing and preparing and writing a report on evaluation results for the agricultural extension.

6. Feedback of evaluation:

   A sequential process consisting of the process of monitoring and Issuing a judgment and final adjustments, through which data is organized for the input of evaluation and the development of outputs in the light of the positive points of the result of feedback for the evaluation of extension activities in Kurdistan Iraq.

7. Standards of evaluation for agricultural extension activities:

   It is a particular situation which consensus on it by experts in the evaluation that it is desirable and it use mainly to compare and judge on another situation in building a model of evaluation for agricultural extension activities in Kurdistan region of Iraq.

CHAPTER TWO

LITERATURE REVIEW

1 .Theoretical Framework: This part related to the theory of systems analysis includes:

1.1 Introduction on the theory of systems analysis:

The concept of the systems has been derived since man began his relationship with the environment and the sense of the interdependence of things around him, Since the 1950_s, the theory of system began to take care of management scientists and among them Bertalaanffy which put the general lines for the idea of theoretical system (Ibrahim, 1998). Then this theory has been developed and it is become acceptable at the modern management school. As well as its began to study of administrative system during the 1960_s on the basis of the system as a group of elements or things are interrelated and interacting together then make up one block or membership unit. Al-Salim and Adel, sees that the General system theory is "Considers all variables or things in the creation of the universe as a system, and human resource management is an open system(Al-Salim and Adel,1991). Which is based on the organizations or institutions preparation in the open social system which interacted with open system and the external environment and entered into interrelated relationships (Duora,1991). This theory has tried to help the organizations on application administrative approach in order to a great score of flexibility (Al-Loozy, 2003). And that depends on the number of elements, degree of readiness, relationships, interdependence, levels of complexity and simplicity in the element system, which is one of the basic elements.

In the light of the concept of the systems approach, this is comprehensive regular view of things or position in all its dimensions and its components and tries to understand with the influential factors in this situation. (Al-Msheqaah, 2017) Although, the systems approaches are used in the construction of a model of agricultural extension activities evaluation contains several key elements and subsidiary organs within the structure of the full formal uniform.

1.2 The concept of system Analysis:

AL-Qarbuty define that the system as a group of interrelated parts or sub-systems and they are all interrelated and fully integrated. (Al-Qarbuty, 2000). The system is also known as a composite of a range of elements of functions, including relations between the organizations

of this meaningful activity and has all features that distinguish it from the other and this system maintains relations with the surrounding environment. (Al-Msheqaah, 2017).

The system defines: "a set of detailed methods and routine procedures that were created to implement a specific activity to perform a work or to solve a problem as well as the system consists of continuous, interconnected or direct components to achieve the goal of the system (Business dictionary, 2017).

Although, the evaluation systems are used as a channel or method to measure the results and effectiveness of a particular activity, the concepts and procedures of this system have evolved to become pivot system In identifying and developing administrative and institutions (Vanessa and Hawkins, 1996).

In light of the previous definition the researcher believes that the system contains a set of elements that depend on the relationships and interaction between the components of the system and organized performance, and on the other hand, employ the relationship between the sub-components of the components of the systems alone.

We conclude from the above that the agricultural extension activity evaluates an open system for the following reasons: (Abdullatif, 2001):

1. The system consists of interacting and interconnected parts through a special framework
2. Adapt to a number of variables that affect the external environment

Extension evaluation system as other types of human systems which manages, controls and determines its programs and Workers "(Vanessa, Killough and John, 1997).

1.3 Characterizes of evaluation systems:

1. Elements of the evaluation of extension activities that make up the whole system and occur between them interactions overlapping and connected with the systems similar to them, and it means the parts are working, In accordance with interactive exchanges (Al-Obbaedy, 2004).

2. The system has limits that distinguish it from the surrounding environment, and the system is taken only within the limits that contain the elements of the system and the interlocking relationship between them.(Stufflebem, 1971) .

3. Each system needs to be managed; the administration oversees a process or evaluation system according to the general framework of evaluation.

4. The agricultural extension activities evaluation system has multiple functions and one of the most important public functions is adjustment, adaptation and conversion and it includes

processes that provide conditions by which the inputs can be converted into output (Al-Kubaisi, 2014)

5. For evaluation system of extension activities is an input component which are the basic resources that affect the movement of the system and push it to continue to be able to achieve its objectives, and that the components of the system depend on each other(Al-Obbaedy, 2004). The inputs of the evaluation system for extension activities consist of sub-elements: External environment information - Information on the evaluation for Agricultural extension activities - Information on the organizational structure of evaluation - Financial, material and human resources. The basic function of input is to stimulate the system to conduct, work and provide basic resources for the system (Obaidat, Abdul and Khalil 1984). also ,It should be ensured that the output evaluation process precedes the input and processing process because without understanding the output requirements, the change in any input or processing cannot be assessed and described. (Kus,2017), Inputs are transformed through processes by interacting elements into desirable outputs. (Hoaaj and Farhan , 1999).

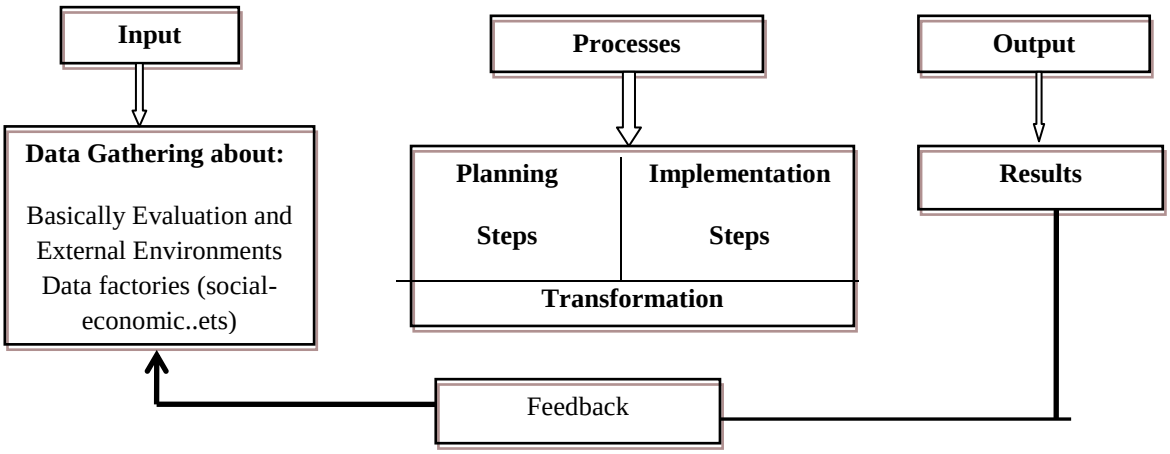
6. System evaluation processes: - The interaction between the elements of the system with each other or between them and the environment, to convert inputs into outputs to achieve a system of its goal must be a particular process or activity. (Obaidat, Abdul and Khalil, 1984)

7. System outputs: the objectives of the system or its results, the outputs of the system may be suitable for input to another system and so on. (Schodernbek, 1971).

8. The feedback system: which represents the tangible and intangible reactions towards the progress of the extension agent in the first place and the workers in the field of evaluation of agricultural extension activities, and the transmission of findings generated through the evaluation process to parties for whom it is relevant and useful to facilitate learning. This may involve the collection and dissemination of findings, conclusions, recommendations, and lessons from experience. (Niels, 2010).

Generally, the process of Feedback require sharing with employees in order to found one steps (change agent objective) and two (Actively Participation in the feed backstage) as well as the development of a plan for the change. (Enwikipedia, 2017).

Figure 1: Evaluation systems and the relationships between components according to the systems analysis methodology



1.4 Elements of System Analysis:

The elements of the evaluation system of indicative activities pursued in Kurdistan - Iraq differ in the number and extent of development according to the degree of progress and evolution of the system compared to the corrective system of Iraq's neighboring states and the territory of the Kurdistan Region in Iraq, but in general It is a practical tool systems are used in the evaluation of agricultural extension activities and, accordingly, the basic elements to assess the agricultural extension activities in the Kurdistan Region of Iraq and classified into four components or elements of the co-chairmen and they are :

1. Inputs: the system components include all the elements that enter the system to achieve certain objectives, and the input is divided into two types:

a. The President Information inputs are necessary for the system, for examples in the evaluation system are such inputs in the theoretical framework of evolutional information and inputs to the human, financial and material resources, information on the inputs of the organizational structure.

b. Information inputs to the system: the external environment surrounding the system and affects it the factors of political, agricultural, social, economic, and cultural and development environment of governmental and non-governmental organizations and institutions, all of the input that is imposed on the correctional system and affects it.

2. Processes: It is a series of procedures that are divided into two parts:

1. The evaluation plan: This includes the areas, objectives and designing the evaluation, as well as the processes of developing standards, determining measurements, selecting the sample and schedule, determining the cost, the persons assigned to conduct the evaluation and beneficiaries of the evaluation results.

2. The process of evaluative implementation: This includes data tabulation, data analysis and interpretation, codeine, and statistical data analysis

Transformation processes: is one of the most important functions of the system, and include providing conditions whereby the conversion of inputs into outputs.

The conversion process is three main areas of work which is interactive and dependent on each other:

a. Conversion product: where the interaction of the components of the system to obtain the desired conversion of these included the identification of switching operations required in the light of the inputs and outputs of the system and then classified to integrate its functions within a particular design.

b. Conversion facilities: aims to the continuity of revitalization and adjust all the components of the system are involved in the conversion process.

c. Control and adaptation: the aim of the control of switching operations and analysis of its activity and then provide the necessary adjustment to achieve the greatest possible conversion, and all the conversion processes are interrelated and integrated with each other, which requires the inclusion of the look in the integration with them or in an attempt to develop or amend any of them within him disturbed the balance of the operations and achieve the required output.

3. Outputs: The final results of the system and is an indicator of success or failure of the system, the operations include access to the results and conclusions of the interpretation results and report of the evaluation and in the evaluation, we find that changes in knowledge and performance and the behavior of those targeted from the outputs of the system. The types of outputs are: Physical, the Human and moral.

4. Feedback: Special Operations, guidance and follow-up and evaluation of the inputs, processes and outputs and processing first Powell (Salim and Salih, 2002), also, feedback is means or way to organize inputs element and contacts with outputs. (Al- Qasuqi, 1988) .

As well as give feedback indicators on the extent to which the objectives and completed and indicate the centers of power and weakness in any component from the previous three components of the system, the monitoring includes judgment and making the adjustments.

1.5 Concepts of System Analysis:

Systems Analysis a new concept and is one of the branches of the system, which has the most attention by the administrative authorities, though no specific definition agreed due to the newness of the concept and the multiplicity of its spheres, there is the view that the method or approach to dealing with problems with a view to reaching decisions, There is a view that the framework to assess the issues and problems of the alternatives solutions and contention. (Al-Zubaei, 1981).

AL-Sonbul defined the System analysis is " Orderly approach to identify and described the area is located in our attention, in which task elements between them have interactions, aims to changes Please unfolding in this area." (Al-Sonbul and Ahmed, 1992). As well as definitions of System analysis, which is the process of gathering and interpreting facts, diagnosing problems, and using the information to recommend improvements to the system".(Jawahar,2017).

Through a review of the previous definition the systems analysis method can be defined for the purposes of the current research was to analyze the evaluation system outreach activities through the identification and study of the elements of the input evaluation information inputs to the external environment in the system in addition to the plan for implementation of the evaluation. There is also the process of interactions between these elements in the framework of system operations, any organization of information, control and forecasting the phenomenon, and then access to the output of agricultural extension activities evaluation the highest yield, less costly, and writing the final report and delivered to the concerned authorities at the lowest possible cost

Given the importance of the role of systems analysis in the evaluation of agricultural extension activities especially in the field of training, It is found that “the systems analyst will have significant training and experience in analysis and design in programming", (Alan and Roberta, 2012). Systems analyses including four basic activities are: (design, evaluation, and control-and emphasize the tools and techniques), in the evaluation activity, the data are evaluated concerning four sets of constraints. These are the limits imposed by the operation itself, past data, management decisions or constraints and technical limits, although the evaluated data normally go to management where decisions are made concerning the operation itself. Occasionally the data may be used for direct control. (Thomas, 1973).

1.6 Objectives of system analysis:

The method of Structured Systems Analysis as a method to help the authorities concerned to undertake a process of agricultural extension activities evaluation for conduct aerial to see how the efficiency of the system in achieving and its objectives through (Al-Zawbaee, 1981):

1. To the fact given and realities and prospects in the future, a range of systems, each one of which represents a group of overlapping relations between inputs from and outputs from another side though each has more than the alternatives that can be changed in the outputs and inputs to modify and delete also.

2. It is used in the consideration of alternatives to the system of scientific analysis of the organizer, which is expressed quantitatively to enable a comparison between the system and its Alternatives.

3. Used of systems analysis in comparing the standard of efficiency or effectiveness, access to the results and the highest yield and lower cost and how to access the reviews the report of the evaluation of agricultural extension activities and connect it to the concerned authorities at the lowest possible cost.

1.7 Steps of system analysis:

There is a difference between most of the writers and to identify the steps of systems analysis, include the steps to the following: select:

1. Systematic testing based on the concept of the problem

2. Compared to alternatives based on cost campaign with high yields

3. Clarify the reasons for the failure and failure

Al-Ghanam and Obthany, Believe that main steps of systems analysis are:(Al-Ghanam, 1984) and (Obthany, 1998):

1. Identifying analysis system

2. Determining the inputs of the system and its elements and characteristics, and determining outputs and how to measure.

3. Find alternative systems, comparing them to identify the best alternative

4. Attention to economic analysis and reliance on quantitative methods in the Selection and comparison and differentiation.

5. The analysis results to the concerned authorities to decide in the light through a review of previous steps, we can use the implementation of the systems analysis approach in the evaluation of agricultural extension activities which is focus on the following steps:

1. Attention on interactions between components of the system and the performance of the system as a whole in terms of aggregate measurements on the extent to achieve the system's objectives and cost side effectively.

2. Attention on comprehensive and detailed analysis of the functions of the subsidiary regulations to identify strengths and weaknesses in the internal operations and propose amendments to the light.

1.8 Systems analysis process:

The entrance to the systems and procedures is the scientific basis of the ways in which the positive impact on the procedures and mechanism of the process of agricultural extension activities evaluation and the evaluation is an integrated part of the system, In order to achieve complementarily, the goal of the entrance, to the systems used in the evaluation of agricultural extension activities are supposed to analyze the systems on all of the friendliness from the required in accordance with the purpose of:

First level: Focus on interactions between components of the system and the performance of the system as a whole

Second level: Focus to conduct a detailed analysis of the functions of the subsidiary regulations and to identify strengths and weaknesses in the internal operations of the system of evaluation especially evaluation system of agricultural extension activities.

The systems analysis process includes a set of methods related to the evaluation and to be acquired in the evaluation for agricultural extension activities, (Allam, 2003).

1. The intellectual perception of the system: requires system analysis, determining the overall system and the definition of this system environment and assess the cost and any other information about the rules and regulations.

2. The definition of sub-systems of the procedural entity within the overall system: common features, and requires independent analysis, and evaluation of agricultural extension activities includes sub-systems, for example the training evaluation procedure includes the following categories: training staff, farmers, and the people who are evaluating the agricultural extension activities, although evaluation of agricultural extension projects aspects physical

and moral side, finally type included the evaluation of agricultural extension services aspects of physical, human and financial.

3. Defining the goals of the system: for the process of systems, the analysis must rely on the identification of the objectives of the Organization and the methods of achieving the goals of the system.

4. Determining appropriate variables Principal and subsidiary organs of the system, they are restrictions on the system they include the following variables: Time, information on the inputs, the evaluation systems, integration of the system and the resources facilities to achieve the goals of the system.

5. Profile for interactions between variables that occur between individuals and funds, tasks and time required to implement these tasks.

6. The analysis of interrelated variables: This analysis can be graphically flowchart, designed to explain the direction of the relationship between variables folding and this is done through the following steps:

a. Determining the relative weights of the indicators for each of the components of the system (Input- Processes – Output- Feedback).

b. Building standards in each of the elements, this marks as actors in the performance of the system.

c. Evaluation results for variables analysis and make sure to extend achieve the objectives of these systems.

7. Identify indicators to measure each of the elements of the inputs, processes and outputs and feedback, these indicators itself the analytical process of the system components.

2. Previous studies: This part related to the model and studies on Arabic and foreign model of evaluation in the current study and includes:

2.1 The diffusion of models:

Longer models of mental facilities is to build theories, and serve as evidence of thought in action and decision, and the word a model in scientific significance is the " 'experimental design something " .(Al-Samery, 1417 A.H). The definition of a procedural model is: for example, either to be a microcosm of what must be something; the design of the building or the systematic structure to implement the program or project, this structure consisted of a sequence of steps and processes that each linked to normally including before and after, which facilitates the work of the scientific integrity guarantees, it offers in the effort, time and expense efforts, and all this is according to a specific theoretical framework.

Generally, Al-shibly refers to the model as organization totalitarian or evidence of an organized work gives a detailed visualization of how the development or application of a curriculum or educational program, explaining his philosophy and objectives, inputs and other human and material standard specifications (Al-shibly,2000).

We conclude from the above model a conceptual framework for evaluation describes the vision of dishes made of the concepts of the basic evaluation and how that can be employed by these concepts to access provisions and recommendations could be justified. (Al-Amaira,2016) and evaluation model can be defined as a plan of action laid out in the model rates finds that followed would produce an effective valuation.

2.2 Forms of evaluation models:

First: Bufam Classifieds the models of evaluation to following forms: (Al-Dusarry,1421 A.H):

1. Objectively models: The models are known as the achievement of the goals and consider these models to the evaluation that processes to identify the extent to which objectives are achieved.

2. Arbitration or judgmental models: This model can be divided into two types, first: Input arbitration model is focusing where the focus on inputs (Inputs test) where the evaluation proceeded in the light of the professional provisions of valuator, second: outputs arbitration models focus on outputs where the evaluation proceeded in the light of the output.

3. Decisions models: These forms of models where the evaluation proceeds for resolution are:

(Bufam) believes that this classification is widely accepted in the evolving extension model, It also highlights the advantages and disadvantages, and the possibility of using various models by the evaluators as well as building a model for evaluation programs is designed according to its purpose or goal yet the problem is choosing the way the model is applied. (Federica, 2006).

Second: (Alexis and Wilson) classify the model by its components to follows: (Al-Aezit, 1984)

1. Functional Models: This model focuses on functions which are consisting of problems and topical research.

2. Formative Models: This model focuses on components or elements of problems and topical research.

The researcher believes that a model for evaluating agricultural extension activities and its goals is suitable for the current study (Classification of formative models), so this model focused on identifying the elements, relationships and interdependence between these elements. Although the most important elements in the composition and solutions of the problem are identified, the evaluator's should be know the purpose of the data, and the evaluator is to determine whether the programs have made a difference compared to other programs. (Mika, 1996).

2.3 Previous evaluation models:

There are several models for evaluation and some are seen based on the goals, others only based on resolutions while seen on the foundations of the system-based, also, there are members of Arab and foreign models, the most important concerning the current research as follows:

1. Stake Model:

This model focuses primarily on the format for adoption to criticism Taylor goals only in the evaluation, This model focused on achieving the objectives and the method of collecting the evaluation of information that is limited to tests and experiences, in order to know how to change the goals during implementation, which calls for contacting the benefits of the program to discover issues of particular importance to take into account when re-establishing program evaluation. (Al-Sweedy,1997). The stake has contributed to the development of the

concepts of the evaluation when he presented a countenance model and the model is known as the integrated images of the evaluation which consists of :

a. Program description: consists of three operations: (Inputs, processes / outputs)

b. The sources of information.

c. analysis of the coherence interconnection

d. Identify relevant standards and different uses of the results of the evaluation

2. Patton Model (Utilization Focused Evaluation):(Patton, 1997)

This model was developed and built by Patton, and this model focused on the fact that evaluation is a useful and accurate systematic process, based on learning and education, based on information, decision-making and meeting the needs of the target, as well as taking into account political and organizational factors, available resources and factors cultural in its construction.

The characteristics of the model are:

a. That determines precisely the targets from evaluation; usually they design research methods and participation in the analysis and interpretation of the results together.

b. Sets the target of the evaluation, and identifies the points that will focus on the evaluation

c. The formulation of questions to facilitate invariably adopted the answer.

3. Scriven Model: (Nasaar and Ruwaeshid, 2000).

This model focuses on assessing reality as it is without giving importance to the results envisaged in the objectives of the program (See in fig2) , as well as assuming that evaluation is the process of focusing primarily on the information which can be obtained.

The steps of evaluation consist of nine consecutive steps, and can be divided into two phases as follows:

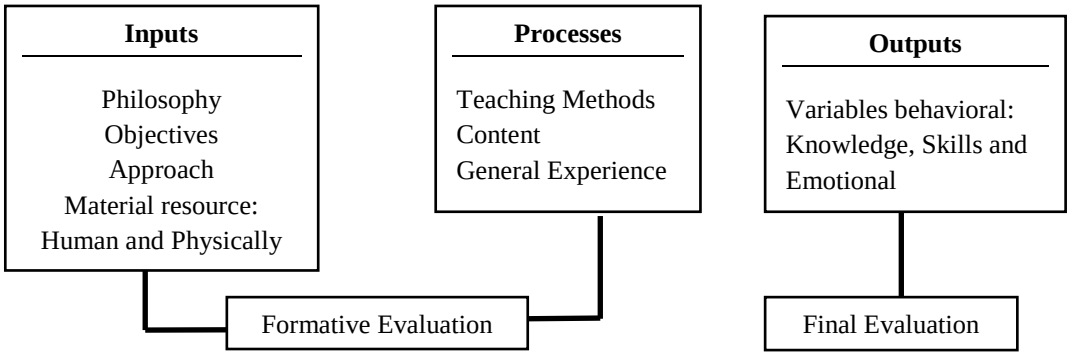
1. Determine the description of the program, determine the nature of the conclusions reached from the evaluation process, and determine the causal relationships between the independent variables in the program.

2. Choose the validity of the program, including integrating the program, discussing and reaching conclusions.

The importance of the program can be affected during the program or at the end of the evaluation, the first stage of formative, and the second stage final evaluation.

The model is based on the consideration of basic input for the development of the plan; the evaluator can follow up and implement the evaluation of the program, and in the light of the results of the program can eventually be reached to judge the results of the programs.

Fig:2. Scriven Models for evaluation program



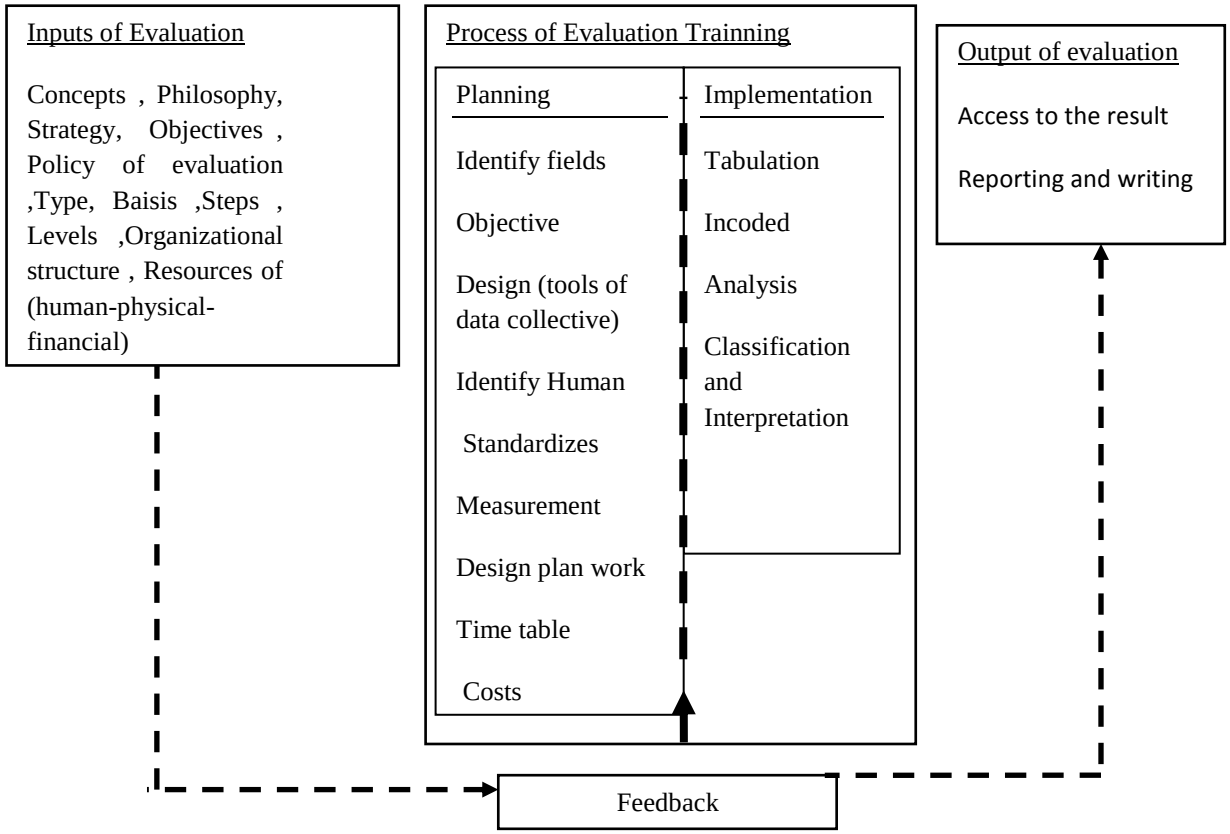
The panel finds, that the value of the validity and relevance of programs that could be affected during the work of the programs or the end of the evaluation, then in the first phase is formative types and in the second phase is final evaluation, and depended on inputs program and basically of plan programs. The residents can follow-up and implement the evaluation of programs, and in the light of the results of the programs could be judgment in the final.

4. Al -Mashhadani Model **:**(Al-Mashhadani,2006).

This model is based on the assumption " that the model training evaluation during service is a conceptual tool of the Organization followed by the organization of extension training in Agricultural extension staff training evaluation, including basic inputs, information and human and material resources required to carry out evaluation and how holding out a final report to the concerned authorities in the process of training evaluation

In the model of the Al- Mashhadani, (See the fig.3), That used the standard evaluation system, and through the analysis of systems for the evaluation, as the deal this system on the basis of totally perspective of elements of evaluation training included :(Input - Processes - output - Feedback) and this through the interaction of these elements together in a complementary.

Figure : 3 AL- Mashhadani model for Evaluation mechanism of training in Iraq



The Panel finds, however, that Al-Mashhadani adopted in the construction of a model for Training evaluation mechanism on the idea of the systems approach as the system consists of four stages (Input- Processes - Output- Feedback) the training evaluation during service positive results if applied according to the model of the objective and accurate.

2.4 Discussion of Models:

1. It is clear to the previous models can be guided by the evaluation of agricultural extension activities, and before approving or using any model for evaluation of agricultural extension activities, it should be noted that the use of models for a different evaluation process, depending on the different models' The models of the evaluation and the Steck model which known as the full-body model (Full picture) of the evaluation, confirm the collection of the metadata for the judgment. Patton's evaluation model responds to the circumstances to make decisions and improve programs and instructional activities.

In the Scriven model, however, it is necessary to know the results of the programs and in light of the judgment can be rendered definitively.

Al-Mashhadani confirms in the evaluation of the models of the evaluation on the use of systems approach and the process of evaluation of in-service training with positive results if applied to it according to an objective and accurate model.

2. Different models of evaluation of activity discussed here indicate that the forms of some models involved in the evaluation are different and complex, especially the models that have been prepared according to the systems approach. They use systems analysis to compare the criterion of efficiency or effectiveness to reach the results and the highest cost and the cost of the less and how to reach the writing of the evaluation report of agricultural extension activities and delivery to the concerned parties at the lowest possible cost.

3. Through the holistic view of the conclusions of the previous models, we find that Al-Mashhadani Model is the closest suitable model with the objective of this study. So in the (fig. 4) clarified the suggestion mechanism for the model proposed of evaluation extension activity in Kurdistan region of Iraq according to the system theory included:

Figure:4 Compounds and elements of a model evolution for agriculture extension activity in Kurdistan region-Iraq according to the system theory

Compounds of Model	Elements and Sub-element in evaluation model
1. INPUTS	1. External environments factors including:
	a. Information on environmental extension activity factors
	b. Environmental factors of policy and economic
	c. Environmental factors of social and cultural factors
	d. Environmental factors of technological factor
	e. Environmental factors of farmers union or syndicates
	f. Environmental factors of agricultural research sciences
	g. Factors of transportation and communication.
	h. Factors of NGO and Agriculture .companies
	i. factors of institutes and agricultural collages
	j. Factors of extension teams in government counsels.
	2. basic and general evolutional framework included:
	a. The concept of evaluation

	b.Philosophy of evolution
	c. Basic of evolution
	d. Objectives of evolution
	e. Strategies of evolution
	f. Policies of evolution
	g. Types of evolution
	h. Levels of evolution
	i. Steps of evolution
	3. construction of organizational structure for evolution included:
	a. Philosophy and Objectives
	b.Descriptions job for evaluations' staffs
	c.Agreeable and Conformation in operational evaluation
	d. Tasks and Duties of evaluations' staffs
	e. Coordination and relationships
	4. Resources included :
	1. Human resource
	2. Physical
	3.Finance and Time
2. PROCESSES	2.1. Planning of evolution included:
	a. Determine the fields evaluation
	b. Determines problem and objectives evaluation
	c. Design tools for operational evaluation
	d. Development of Standard, Proofs, and measurements
	e. Determine methods of data collectives
	f. Determine time tables

	g. Determine the costs of operational evaluation
	h. Determine types of evaluation
	i. Determine the evolution makers (staffs)
	j. Determine of beneficiaries of evaluation
	2.2. Application plan of evolution included:
	a. Collection and Tabulation of data
	b. Statically analysis of data
	c. Encodings process
	d. Interpretation and conclusions data
3. OUTPUTS	Access of results
	Discussions and Interpretation of results.
	Prepared and Writing a report
4. FEED BACK	1. Control of process
	2. Issues a judgment (Decision and showing strong and weak points).
	3. Adjustments

3. Description of theories to a model evaluation and its components for agriculture extension activity in Kurdistan region-Iraq.

1. Inputs of evaluation model and its main, minor, sub-minor elements:

1.1 Information on external environment factors:

Environment: The area that works in which the organization, Includes natural resources, human and their relationships. (Salih, 2003).

And Khalifa prefers to environment that is everything surrounded by human, and its includes: natural, social - cultural environments types. (Khalifa, 1983),In addition, the relationship between the environment and the organization is an interactive and reliability relationship, whenever the organization was able to work a change of basically vocabulary then it's able to survive prosperity and development in the environment. (Al-Salim, 1988).

We conclude from the previous definition, the case study of extensional environment will help to raising the content of management, organization and planning of agricultural extension. (Burton, 1999).

Environment of extension activity: the set circumstances surrounding the extensional work or activity, which are effected by and affected in extensional activity. So, the environmental extension activity divided in: Internal and External environments types.

Types of environment extension activity:

1. External environments of extension activity: a set of circumstances surrounding of internal environment for extensional activity, which was effected by and affected on extensional activity, and included: Economize Sociology, Policy, Technology, Cultures and Natural conditions.

2. Internal of environment for extension activity : is contain a set of conditions which are surrounding the works or extensional activity and effected by some variables such as, human areas which includes the administration of extension, styles and methods of evaluation, Allocated Budgets for evaluation processes, Relations between the members of extensional system, formal and informal relationships.

The most important factors that affect on environmental extension activity are a quality factor , Status of extensional activity and natural performance of individual or staff works specially evolutional extension activity, which are leaves positive or negative impacts, and the output of organizational activity or activities which offered by an organization. (Salih, 2003).

1.2 Basics and general evaluation framework:

1.2.1 Concept of evolution for extension activity:

Michael said that the definitions of evaluation are changing according to categories or its fields of evaluation. (Michael, 2008).

Evaluation: is the systematic acquisition and assessment of information to provide useful feedback about some object. (William, 2008). Also, Lana sees evaluation as the systematic collection and analysis of data needed to make decisions (Lana, 1993).

Extensional evaluation: is the systematic process of determining the worth or value of a person, extensional activity or extension programs. (Seevers and Fredman, 2007).

Evaluation of Agricultural Extension: This is a regular measure to the effectiveness and impact of extensional programs, particularly about the special objectives. (Adems, 1984)

As a part of previous definitions, can be defined as follows:

Evaluation of agricultural extension activity: is an organizing process to obtain the information necessary to make decisions about agricultural extension activities or programs and considerations objective to agricultural extensional activity.

1.2.2 Evaluation philosophy:

The philosophy conception generic is focusing on the understand facts comprehensively and considering its elements through the different relations which are linking them, Besides, the interactions continuous between these elements and the different factors which are affecting these relations.(Al-Affife,1974). The nature of agricultural extension philosophy must be appropriate and suitable with the knowledge extension workers about the inputs on the external environment data and information about the framework and internal resources such as human, physical and finance, for evaluation of agricultural extension activity.

Also, It should be on the extensional staffs especially which have a responsibility in the topical management levels in the agriculture extension directors, that they have clear visions and philosophic in their fieldwork, which is leading to increasing its capabilities to exercise of their roles effectively and competence during the performance of their extensional duties. So, the agricultural extension is an organizer work which is in accordance with group foundations, rules of philosophical instrumentation, and which describes the nature of this activity and feature for other activity to others. (AI-Kiashta,2013).

Therefore, the evaluation of agricultural extension activity requires to put a private philosophy and which is derived from the foundations of evolutional philosophy, which in turn, derived from the philosophy of agricultural extension.

In addition to that, the philosophy of agricultural extension is, essentially, an understanding of ideas which an individual agricultural extension worker holds about rural people and rural environment. (Zakaria, 2000).

In the light of the previous definition, it’s seen that the word philosophy is derived from two Greek words ‘Philos' and ‘Sophia'. ‘Philos' means knowledge and ‘Sophia' means manner and it used as away to achieving knowledge (Chauhan, 2000). And it can be defined philosophy as " The framework of views and philosophical beliefs a round of the human and the world surrounding them (Mursi, 1980). As known, philosophy is a group of beliefs that is accepted from someone as true (Ali, 2000).

Besides, Philosophy refers to a coherent set of beliefs that are acquired or developed, based on experience and reflection on the world and serves as a guide to action, Also philosophy is a body of principles governing human activities. (Zakaria, 2000)

As the development and putting the philosophy of evolutional extension requires knowledge of vocabulary related to the agricultural extension programs or activity, as some researchers have prepared beliefs about vocabulary which related the desired topic and put the philosophy of this topic, and the majority elements of this topic.

Also Al-Taiee identified some philosophical beliefs based on evolutionary functions, represented by the majority elements of the evolutionary extension program. It includes the following: (Al-Taiee, 1998)

1. Beliefs about the organization's extension objectives, as the evaluation of extension programs related to achieving the objectives of the indicative organization.

2. Beliefs about the process of evaluation of the programs, being the desired subject to put his philosophy.

3. A belief about the decision-maker, which is the main purpose of the evaluation of the extension programs, is, to help decision-makers in approval of the evaluation process.

4. A belief about the process of development of extension programs that is the development of an extension program is a continuous process and evaluation is one of its tools.

1.2.3 Objectives of evaluation:

The determination of goals is necessary for the exercise of any human activity, the goal which man believes in; creates his motivation, directs his efforts, and assisted in the selection of appropriate tools to achieve. (Alshiser, 2017).

While it is clear, the importance of determining the objectives of evaluating extension activities as the foundation on which it was built other steps in the preparing evaluation system and decisions of evaluation. The terms ‘aim' and ‘objective' are often seen as having the same meaning and they are used interchangeably, but in practice, there is a clear and important difference. An aim indicates or provides a general statement of intent.

On the other hand, objectives spell out precisely how this is to be achieved. (Roger and Jim, 2009).

The objectives evaluation including the following: (Al-Remawi and Al-Subaehi, 1996)

1. Measuring the impact of economic and social programs

2. Measuring the level of performance of the extension activity

3. Identify the successes and failures of the extension programs and the reasons for not achieving their goals.

4. Take action to address the causes of failure of the programs (judging what happened).

In relation to the indicative evaluations objective in the extension work.

Also, Waist and savlee Indicates that " the main purpose of evolution process in agricultural extension work as justify to the implementation this evaluated or not", (Waist 1972) and (Savlee, 1978), As well as these evolutes answers the questions posed by those who are involved programs or agricultural extension activities to be evaluated.

Additionally, Abu-zeid added some of evaluation goals in the extension work, includes follows: (Abu -Zaid, 2006)

a. Contributes activation of the extension evaluation in determining the value of the program and its efficiency with great accuracy, provided that, this process is not subject to personal moods.

b. The current evaluation provides the necessary basis for the planning of future extension programs, and it also works to develop the professional capacities of the coordinators and agricultural extension officers.

c. The purpose of evaluating activities is to know the nature of the communication process between the different levels of the agricultural extension system in the vested regions with the programs which are conducting the evaluation process.

d. The evaluation is considered by itself strong bonds for agricultural extension officials, to provide it strong justification for modification or change the plan for Specific programs.

e. Conduct process evaluation activities that focus on the effectiveness of program and pilot project design and delivery. Al so, conduct an impact evaluation that focuses on the extent to which the program and each pilot project met their respective objectives. (Ridge and Associates ,2016) and (Smith, 1989).

f. The generic goal of most evaluation is thus to provide useful feedback to a variety of attendees or audiences including administrators, Staff and others relevant constituencies (Fred, 2004)

In addition to that, It should be noted that any particular evaluation activity can have more than one purpose as well as the evaluation purpose is best understood as identifying what evaluation activity is going to be used. (Michael, 2008) It is clear that evaluation is a fundamental part of extension programs, and all extension activity involves a conscious or unconscious evaluation of progress and effectiveness.

In addition, program or activity may be evaluated on the basis of one or more types of measurement based on different value systems. So In general, there is an agreement; each objective will depend for successful accomplishment on success of the previous object (Addison 1972).

1.2.4 Evaluation policy:

For the purpose of achieving conformity in the decision-making process related to the evaluation of agricultural extension activities, and to ensure access to the objectives of this process, we must design an evaluation policy that guided by the staff of the extensional organization to decisions on this process.

It is clear that the policy means a formulate clear rules which is obliged by individuals at different administrative levels or evidence guided by all when appropriate making decisions for directions higher Management." (Muslim, and Al-Ghalbi, 1999).

Also, Durra, Musa and Ibrahim defined the policy as "A set of principles and concepts which are set by the highest administrative levels in the organization, In order to guide them at various other administrative levels when developing their plans or when decisions are made and abide by them, by the executors while carrying out their duties". (Durra, Musa .and Ibrahim, 1994) while, Hashem defined that "As a general rules which are thought control, behavior and similar conditions in the future" (Hashem, 1989).

It is clear from this presentation of the concept of politics as being guide to completing work on specific format In order to achieve the objectives of the organization and do not come out the concept of evaluation policy about this.

Therefore, the researcher can define the policy of evaluation of agricultural extension activities as "General indicators in the thinking and work of evaluating agricultural extension activities, which is control or directed the decision-making process related the mechanism of evaluation of extension programs and how to implement them".

So, the elements of policy evaluation for agricultural extension activities can be identified as follows:

a. Ensure that writing a policy evaluation for extension programs or activity by a method which is clear and understandable to all evaluators.

b. The evolutional policy determines the selection of specialists or new agents for appointment in the extension of organization on the scientific and objective basis.

c. The evolutional policy determines the evaluation methods which will be used in Implement and evaluate extension programs of various kinds.

d. Review the policies of extensional evaluation between time to time, to make any modifications on its, there to in response to the emergency situations that faces the directorates and extension centers.

e. Evolutional policies should be realistic and applicable, In view of Input of external environment factors as (socio-economic, psychology, technology and educational factors) and internal environment factors related to (extension activities, human, material and financial resources available).

1.2.5 Strategy of evaluation:

Maarey defined the strategy as the " A set of decisions and administrative practices that determine the performance of the organization" (Maarey,2001) as well as Van den Ban and Hawkins were defined the concept of strategy that "A way to achieve clearly specified goals with a combination of means and in a certain time period. By anticipating we try to predict what the opponent selfness and/or nature can do". (Van den Ban and Hawkins, 1996)

Additionally, Idris identified the strategy as "the general framework which is necessary to define, and define the objectives of the organization, and completion and follow-up to their basic message" (Idris, 2001).

Regarding previous definitions, the researcher can the indicative evaluation strategy as "General framework which can be formulated into this a comprehensive plan for evaluating extension activities and achieve the basic objectives of the evaluation process which is put it down by the organization in a specific period of time .

Finally, Hareem, said that the strategy of evaluation for extension activities depends on the use of style more open and flexible. (Hareem and Shafiq, 1998)

Advantages of Strategy for evaluation extension activity are: (Al-Saad, 1989)

a. Responsive strategy with different environmental conditions.

b. Resources of human, time, money, tools, equipment and information on external environmental factors are used to achieve the objectives of the extension evaluation.

c. Responsive strategy to the requirements of the basically and secondary goals for evaluation

d. Be flexible.

e. The strategy is implemented according to the planned schedule.

f. Be simple and easy to implement.

The levels of evolutional strategies are :(AOAD, 2007):

The first level: Are the evaluation of the validity and the direction of program planning. It requires:

1. Conduct several reviews of the needs identification method

2. Designing and planning the programs and estimating the expected costs

3. Pre-evaluation procedure for approval of implementation.

The second level: is to evaluate the validity of the program and its effectiveness in achieving its objectives. It requires:

1. Use the acceptable methods in the evaluation during the implementation of the program

2. Evaluation after the end of the extension activities directly .for example (training)

3. An –action a short-range evaluation to measure the incidence of learning.

The third level: is to evaluate the effectiveness of the program and its relation to career and professional reality. It requires:

1. Evaluation of the transfer of the activities and the application of what he learned from the program in the workplace.

2. An –action a long-term evaluation to ensure the continuity of behavioral changes and measure the level of the first and second levels.

Types of Strategy evolution for extension activity: (Barakat , 2001)

1. Tribal Survey: This strategy is based on recording by the Researcher or evaluator for various Sides of positions before starting the implementation of the program and project.

2. Eventually Survey: The researcher records the same data and collected from the same area by using the same style and tools in the tribal survey, but this process is implemented after

completion of the programs, with giving advice to the researcher or researcher to collect data after a period of (1-3 years), So as to know the extent of the change that has occurred and it occurs during the execution of the project and as a result of it.

3. Periodic survey: It is preferable to perform it during the implementation of programs to find out the range of project progress and the complexity surrounding the implementation of the difficulties to be overcome, It also gives an idea of the progress of work in form of Objective statistics, In addition to agreeing to implement the actual proposals in the original plan by individuals and the supervisors of the implementation.

4. Apply a comparison measurement between effectiveness data in individuals Trial and eventually: this strategy is based on a comparison of individuals who provide them with specific extension activities or training with someone else in works in the same conditions and at the same level of skill by using the same working methods. But he was not exposed to this activity, if there is a difference between the two, we can say this difference is the result of the individual exposure to that activity or training and effectiveness. (Al-Mashhadani,2006).

The researcher concludes the above can prefer to the strategy of evaluating extension activities is based on the provision of the necessary data relating to individuals or organization, and activities before and after the evaluation, with adjusting data on external environment factors while using the strategy that is selected by the executive committees .

So, that would be used only surveys' experimental methods to evaluate the extension programs or use comparative of effectiveness data between pre and after through a placated pre-evaluation or after – evaluation process to individuals and groups performance.

1.2.6 Types of evaluation:

There are categories for evaluation that you need to know before defining evaluation types Which is the most appropriate with the evaluation of extension activities (Michael, 2008) refers to the following evaluation categories:

1. The modality, In terms of the evaluator’s institutional relationship to the activities under evaluation: (Auto-evaluation, internal evaluation, External evaluation).

2. The timing of the evaluation: (Ex-ante evaluation, On-going/mid-term evaluation, Terminal or final evaluation, Ex-post evaluation).

3. The purpose of evaluation: (Formation evaluation, Summative evaluation, Impact evaluation, sustainability evaluation).

Also, IFR and RCS (IFR and RCS, 2011), classified the evaluation programs according to the authorities responsible for implementing the evaluation as follows:

1. Internal or subjective evaluation: This type of evaluation, take over the implementers of a program that may help build the capacity of employees and create their sense of belonging.

2. External or independent evaluation: In this type of evaluation conducted by the evaluation that do not belong to the implementation team, which gives them a degree of objectivity it is often technical expertise.

3. Joint Assessment: This type of evaluation is carried out the through impacts of a partner in implementation. And it can help to achieve consensus at various levels, ensure credibility and joint support.

4. Participatory evaluation: This type is carried out through cooperation with beneficiaries and the potential to contribute to their capacity-building, the formation of their sense of belonging and laying the foundations for their support. While, Some are called current status, which is the primary objective of providing echoes in a manner existing participation at present in the fieldwork of the evaluation to the concerned authorities to implement humanitarian confrontation and management. (Cosgrove and Ramalingam, 2009).

Although, Raab and others, classified evaluation into four major types: (Raab, Swanson and Dark ,1987)

1. Evaluation for planning: provides information with which planning decisions are made.

2. Process evaluation: is conducted to detect or predict defects in the procedural design of training activity during the implementation phase. Or process evaluation is periodically conducted throughout the entire period of the program.

3. Terminal evaluation: is conducted to find out the effectiveness of a training program after it is completed. The objectives of the terminal evaluation are to determine the degree to which desired benefits and goals have been achieved, along with the causes of failure, if any.

4. Impact evaluation: evaluation changes in on-the-job behavior as a result of training efforts. It provides feedback from the trainees and supervisors about the outcomes of training. It measures how appropriate the training was in changing the behavior of participants in real-life situations. Also, It can also be displayed a classification for evaluation from the perspective of sociologists are two types that used in the estimation of Self - groups efficacy within social organizations and Al-Tuwaryaqi refers to the following types: (Al-Tuwaryaqi,1997)

1. Individual Evaluation: includes the following types:

a. Evaluation of reflecting appraisal: The nature of human beings are social objects which affect the attitudes and views of others around them towards them, so the assessments of others for us, It leads us to know what others see to us as individual units, negative or positive. As well as Ibdi believes that it is a direct and exchange relationship between what others see in us as a self, and their attitudes towards us, and our perceptions about ourselves as we live in reality. (Ibdi, 1972,)

b. Evaluation of comparison with reference individuals: This evaluation type is based on the fundamentals of specific attributes between individuals, like intelligent personality where there is an intelligent person and another stupid.

2. Group's evaluation: This type of evaluation is based on a standard comparison based on what is considered acceptable and what is contrary, meaning it; the comparison is not limited solely to the perception of the worst and the best as in the individual comparison. But based on the extent of the near or individual spacing on these standards.(Kelley, 1954)

Generally, the researcher concludes the above categories for evaluation types, a new classification of the evaluation is appropriate with the administrative and technical functions within the agricultural extension, especially, related activities or extensional programs.

Also, the process of planning and implementation of extension activities needs evolutional operation, then from an administrative perspective, In the opinion of the researcher that, the implementation of assessments by the evaluator depends on the selection of the quality of the evaluation and suitability with the area to be evaluated and the objectives and levels of evaluation.

Accordingly, the researcher identified the following classification:

1. Educational evaluation (assessment for awareness): Are being implemented to improve Individuals, community and organization performances.

2. Summary evaluation: Take place at the end of the period of implementation of programs or extension activities, to assess the effectiveness and case study of the extension programs and activities.

3. Pre-Evaluation: Take place at the before the implementation of any programs or extension activities, and to issue the instructions, Economic feasibility and potential benefits for that activity or extension programs.

4. Mid-term Evaluation: is educational in purpose and conducted in the middle of the implementation period or during implementation.

5. Final Evaluation: is summarized in terms of purpose; it is conducted mostly externally, after the completion of the implementation period in the form of evaluation reports which provided to the beneficiaries of this evaluation or report.

6. Next Evaluation: That the implementation of this evaluation comes after a certain time, this is done to estimate the reality and sustainability in the long term.

1.3 Construction of organization structure for evaluation:

Toffiq 1988 and Louis 1958 Defines the organization " is the process of identifying and summative work to be performed within defining and delegating authority , responsibility and establishing relationships between organized individuals, in order to completion their work most effectively to achieve organized goals. (Toffiq, 1988,), (Louis ,1958).

Although, When two or more people worked together to achieve a group result, it is an organization. After the objectives of an organization are established, the functions that must be performed are determined. Personnel requirements are assessed and the physical resources needed to accomplish the objectives determined. These elements must then be coordinated into a structural design that will help achieve the objectives.

Finally, appropriate responsibilities are assigned; while the primary formal relationships for organizing, as discussed earlier, are responsibility, authority, and accountability.

Also it can bring together functions, people, and other resources for the purpose of achieving objectives. The framework for organizing these formal relationships is known as the organizational structure. It provides the means for clarifying and communicating the lines of responsibility, authority, and accountability. (Montana and Charnov, 1993).

Additionally, the constriction of organization evaluation structure provides a framework which holds the various functions together in accordance with the pattern determined by managers. So, a planned structure outlines the required functions, correlates the functions in a systematic manner and assigns authority and responsibility. (Venkatesh, 2004).

As well as the organization structure has been settled; the design of an extension project should turn to objectives and operating principles. (Roger and Jim 2009).

Benefits of organizational structure for projects or evaluation of extension activities: (Al-Eqlla, 2015)

1. That regulation is prohibited duplication, and repetition in the work entrusted to employees.

2. Gives job to every person according to his experience, and the academic qualification he

has obtained.

3. Identify the relationship between employees, as each employee knows his duties, and his powers.

4. Gives all employees the opportunity to gain experience, and exchange knowledge and information among staff owners multidisciplinary.

5. The correct scientific distribution of the jobs available to each employee, without having a personal effect on anyone.

6. The organization helps to determine the exact relationship between individuals and between departments in various parts of the organization.

7. The organization achieves a good way to control administrative and technical processes of evaluating activities.

In addition, when a group of people is formally appointed to consider or decide certain matters, this type of structure is a committee. As well as committees can be permanent (standing) or temporary and usually supplement line and staff functions. Sometimes temporary committees are set up to deal with a specific problem. Once this committee makes its recommendations, it is dissolved.

Although, permanent committees usually act in an advisory capacity to certain organizational units or managers. (Montana and Charnov, 1993) The purpose of feasibility analysis, an evaluation committee shall be established. The committee shall be composed of 7–13 members who have relevant professional knowledge about the objectives to be evaluated. Among the members, at least one third of the total number shall be outside experts or scholars.

The evaluation committee's duties are: (Tzeng and Chang, 2006).

a. Approving the evaluation items, the evaluation criteria, and the evaluation method;

b. Project conceptualization, site identification.

c. Public outreach and feedback

d. Feasibility analysis (technical, social and economic).

In the light of the above that, actually there is not construction of organization structure for the evaluation extension activities in Kurdistan region – Iraq, because there is not special model evaluation mechanism for extension activities and applicable in the directorates and

extension departments in the provinces of the region yet there are even mini committees, consisting of three to five members.

The most important tasks of these committees are: to prepare a detailed objective self-report that reflects the status of the evaluation of the indicative program and its activities, than including all attached reports of the evaluation committees of the extension division, and then to the unit of evaluation and follow-up in the directorate of extension in each of the provinces of the Kurdistan Region.

So, these committees are exposed to administrative, technical and financial obstacles, and the fact that they will not be formed within the organizational structure of the agricultural extension system in the region.

So, the researcher proposes organizational building to evaluate the extensional activities according to the following:

Formation of organizational units for evaluation agricultural extension activities:

Formatively consists of a central unit, specialized in evaluation and development of extension activities, this unit, and is associated with the rural development department of the general directorate of agricultural extension.

The duties of evaluation units or teams structure are :

b. To determine the technical, administrative and scientific functions of the central evaluation and development unit and its subsidiary in the governorates of the region.

c. The importance of identifying the qualifications and duties of those who perform specialized technical works, as heads of evaluation units and evaluators.

Resources: human, physical, financial and time:

The basic rules of publican administration refer to the importance; that management achieves optimal use of elements include: human, physical and financial resources, So the administer cannot make decisions as it sees it, but there is a rule that control its actions and decisions, while this rule has an economic nature,

Also can be divided in two type of rules: Effectiveness and Efficiency.

Hence, Niels Define each of effectiveness and efficiency follows: (Niels,2010).

Effectiveness**:** The extent to which the development intervention's objectives were achieved, or are expected to be achieved, taking into account their relative importance.

Efficiency: A measure of how economically resources/inputs (funds, expertise, time, etc.) are converted to results.

Efficiency Evaluation: It is the amount and value of what someone invest to obtain the results, and the efficiency of any program is determined by comparing the amount of results (achievements) with the value of the invested of costs and human, physical and capital recourses.(Kishta, 2012,).

The measure of a basic efficiency refers to the usable range of an organization to its resources, that it shows the ratio of organization output to its inputs, as for measure of effectiveness (influence), it refers to an organization's ability to achieve its objectives; it builds on the best use of human resources and the continuous improvement of material potential. It uses measurements Revenue on investment, productivity, profitability. (Al-Shibli and Taher, 1999).

1.4 Resources:

1.4.1 Human Recourses:

The development of human resources is one of the necessary elements in the movement, formulation, development of human capacities and competencies in the scientific, practical, technical and behavioral, Then it is an educational tool which provides data and information that increases the human capacity to productive work and activate its role in decisions and administrative practices which determine the performance of the organization as well as human resources are not only a part of resources for the community-building; But it is the active part, that create values for other natural and physical resources, and more importantly, it has higher resources that have capability to renewal and development. (Fathi, 1998).

Although, the process of human resources development, especially those working in agricultural extension requires to description relate to know and what tools or means used by them; and one of the basically information inputs for the extension work done by.(Al-Khafajy,1983) Al so ,To conclude from what has been previously mentioned, that human resources are of great importance in the field of evaluation for extension activities through the expertise and skills possessed by workers in this field, As well as its ability to employ other resources efficiently and effectively. It can also be used as one of the main elements of the evaluation processes, so the extension worker represents all acquired capacities and associated moral products, and it is invests all the evaluation possibilities for the development of agricultural extension activities.

1.4.2 Physical Resources:

The extension organization has not only provided human resources working in the field of evaluation but depends on the provision of scientific sources and the preparation of all tools, equipment and material requirements related to the facilitation of the evaluation activities extension activities, material resources include tests, list of notes and questionnaire.

As well as the presence of buildings, equipment, advanced equipment and means of transport necessary during the implementation of the evaluation process.

1.4.3 Financial Resources:

Before starting evaluation study through an extension organization, there are factors to be taken into consideration when planning of evaluation for extension programs, these factor are to determine the financial requirements to cover the purpose of the project and obtain the required information. (Al-Khafajy, 1983).

Hence, the provision of financial resources is necessary to execution the evaluation process, and because the evaluation of some programs requires financial guarantees during the execution and published results of evaluation program, therefore requires of higher extensional administrative to take into consideration the provided necessary funds to execution evaluation and direct it for the suitable channels and concerned to the execution of evaluation processes.

Also, the process of determining financial customization It depends on the exact determine for the cost in advance by the implemented to evaluates of evaluation for extension activities; Include the fixed and variable costs such as: evaluate fees and extensional employees, transportation fees, the training costs for workers or participators, financial incentives for workers, Finally, the costs of carrying out preliminary surveys to evaluation of agricultural extension activities.

2 .Processes of evaluation for agricultural extension activities:

In the following section, attention will be paid to prepare a plan of action for the evaluation and implementation of extension activities, because the evaluation process is a continuous process starting from the beginning of the first stage of planning and continues until the completion of the planning process and implementation.

As well as the confirmation of policies, methods, objectives, philosophy of the evaluation, review the information sources and the organization of planning groups for the evaluation

within the above evaluation input element, Operations (processes) element comes in second place, according to the order of the components of the systems methodology.

In light of this system can work in the phase of operations by the priorities of the actual occurrence of the evaluation process, It includes the preparation of the work evaluation and plans implementation phase.

2.1 Plan of evaluation for agricultural extension activities:

A plan of action for the evaluation of programs or extension activities is prepared by the provincial planning committee or by a mini committee originate and offering from this committee. While the main purpose of developing a plan for evaluating the extension activities is to ensure that the tools, and resources used in the evaluation process are correct and used as a practical guide for implementing the evaluation process.

Before discussing the stages of the work plan, you should know some of the terms and concepts used in them, as follows: What is the work plan?

Al-hegawy said that "work plan It is a detailed plan that includes a set of specific procedures to carry out the work Related to the indicative program stages" (Al-hegawy,2010) .

While Plan of work for extension programs refers to what is the organization that helps to achieve the purposes of the indicative program accurately and efficiently?

It concludes that the state cannot implement programs without a plan, the work plan is an overview of the procedures for applying the indicative evaluation or programs in a timely manner, and it helps the successful implementation of the program or any other agricultural extension activities.

2.1.1 Requirements steps for implementation of evaluation plan:

a. Engage: Involve people to participate in the extension activity.

b. Describe: describe the activity you want to evaluate.

c. Focus: Select Methods and focus on evaluation design.

d. Gather: Collect credible data about (Evidence, measure, objective)

e. Justify: Analyses the data and Conclusion

f. Ensure: Learn from evaluation and ensures, focuses share, lesson learn

There are no established rules and foundations for program planning Program work plan or any other indicative activity, where planning possibilities vary and the circumstances

surrounding planners and implementation phases of programs from one area to the other. (Muhahl and Ezat, 1972) , But It should nevertheless be taken into account in the process of preparing a plan for evaluation programs to be established according to a firm foundation and criteria.Also, in formal program evaluations, there is a group of decisions to make. First of all, about what should be evaluated? This question is not as simple as it first appears.

The other thing describing specifically, what needs to be evaluated is an important first step? Once that has been determined, the following questions need to be answered*:* (Seever and Fredman ,2007)

1. Why should it be evaluated?

2. Who wants to know?

3. What resources of time, people and money are available to do the evaluation?

4. What is the best method to use?

5. How should the results be reported?

2.1.2 The contents of the evolutional plan:

2.1.2.1 Determine the field of the evaluation.

2.1.2.2 Objectives of the evaluation:

These objectives should be clear and specific,(AL-Shibli and Taher 1999) , Also make it possible to achieve a process of evaluation purposeful and continuous, controlled, observable and measurable.(AL-Ejelli and Khalil ,1996)

2.1.2.3 Design for evolution tools : Apul referred to the design to as the structure of the study in which it determines how the data is collected for the phenomenon to be studied, as the type of standard is determined in the light of the design that can be used (Apul,2000).

As well as In order for the evaluator to start the evaluation process, he must have typical standards for the evaluation process in order to compare it with reality and develop it.

The standards are defined as "a set of rules that others can understand and base upon when making a judgment. (Jammei, and Muhammed, 1998).

Also, to know the evaluator the meaning of the standard has to understand the nature of the standard and use it correctly (Abu-Hatab, 1987).

Additionally, Dalen (1984) and Jaber (1978) They refer to conditions for building standards that were developed and relied upon by specialists in measurement and evaluation, The most important conditions are:

1. The paragraph contains one idea.

2. Avoid using words that carry more than one meaning.

3. The paragraph should be clear and far from generalizations and known as much as possible to members of the application community.

4. Avoid paragraph wording with a long sentence.

5. The standards should include paragraphs, that their number is proportional to the importance side which is the function to be described (Ahmad, 1960).

The standard of the evaluation system is classified as follows (Marei.2001).

a. Divorced standards: they represent the ideal limit adopted by the extension organization and prepare it suitable for its reality.

b. Relative standards: this help to measure the performance of each worker relative to his / her other needs.

c. Individual standards: It allows for an assessment of the performance of the indicative factor, but it does not facilitate the extent to which each worker contributes to the results of the organization's extension work.

d. Collective standards facilitate the assessment of the performance and effectiveness of the team in the extension organization in relation to the specific objectives.

2.1.2.4 Development of standards, Evidences and measure evaluation:

Before talking about developing standards and evidences it is better to know their concepts, Kishtta defined the measure "as a position or position there is a consensus on desirable as desirable, so we use it as a basis for comparison and judgment on another position.(Kishtta ,2012).

Either evidence intangible observations are intended to be observed in the prescribed standards. (Al-Tanoubi, 1998). These elements are considered: standards, evidence, and judgment, from the basic elements of the evaluation (Boyle, 1981).

Additionally, to develop the standards and criterion of agricultural extension activities the following principles shall be observed. (Abu- jlala, 1999).

a. Determine the level of implementation which represents the minimum acceptable for the success of the evaluation process in making the desired changes which represented at the goals and measurement levels; it defines evaluator the acceptable degree of measurement. To based on previous experience and the material to be evaluated, And to know the beneficiaries of the assessment and the extent of their needs for measurement in the future.

b. Identify aspects of behavior and described scientifically or procedural can be measured.

c. Data collected and specify a numerical or descriptive evidence for something or a particular situation to be measured, and there are two basic types of data: quantitative and qualitative. And tend to focus on numerical data and qualitative data are expressed in words. (Murari and Gail, 2016).

2.1.2.5 Method of data collection:

2.1.2.6 Selection of measures and data collection tools:

Multiple meanings of Measurement are:

a. The result we get from the scale process

b. The unit or standard used in the scale

c. Statistical estimation of properties the things, each of (mean, standard deviation-correlation) is a measure and each expresses a characteristic of things.

The primary objective of calibration, measurement and evidence is to use the measurement results to obtain specific information that would be useful in the use of science for the guidance organization at all levels, (public or private).

2.1.2.6.1 Basic steps of designing the standards and data collection tools: (Abu-Zeina,1998) :

a. Determine the purpose of measurement: The measurement objective is related to determining the time required for measurement. Resulting in time, type, formulation and number of questions, which is included in measurement.

b. Analysis of content into its paragraph: Content has a great importance in designing of standard, because she is the mediator who achieved through behavioral goals.

c. Building the paragraphs of standard: There are several ways to get paragraphs when building them, these methods depend on the topics or content units that are included. One of the most important methods used in building measurements is to utilize the personal experience of the designer. Besides reviewing books and consulting experts in the scientific material of the phenomenon to be measured.

d. Determining the pattern of paragraphs:

In the measurement which uses two types of paragraphs style:

First: The styles of the paragraphs which is respondent answers himself without the designer specifying the alternatives to the answer, Such as topicality or articles questions and open (short answer).

The second type is that provides alternatives to the respondent, as an example: the selection of alternatives (Multi choice), True / Fault, Alternatives triple, four and five choices.

e. Determine the length and time of measurement

f. Writing paragraphs

g. Lay down special instructions about Answer the test or measurement and its application.

h. Apply the measurement:

The application process is carried out in two phases: first; it is testing the measurement on a small group of subjects which is called Pre-test.

Also, pre-test provide a means of testing the method and instrument before actual data collection in the field. It is usually associated with quantitative methods, though qualitative and participatory methods also pre-tested can prevent costly errors and wasted effort. (Murari and Gail, 2016).

As a result, in order to ensure the extent of clarity of instructions for the scale, and the time it takes to measurement and diagnosis of obscure paragraphs and reformulates them.

I. Analysis of measurement paragraphs: The aim is to measure that paragraphs should be included in the measurement; to make final modification in forms, and it's appropriate with the nature of respondents in order for popularization.

2.1.2.6.2 The steps of analyzing paragraphs:

a. Measure the validity of the paragraphs:

Mueller prefer that "validity and Honesty are the most important criteria for assessing the quality of instruments. (Mueller, 1986). As well as reliability of data collection instruments are related directly to objective measurement, and the validity asks the question, "Does the evaluation instrument measure what it purports to measure?" *(*Murari and Gail, 2016). .

b. Measuring the difficulty of paragraphs:

The level of difficulty of the paragraph is determined on the basis of the purpose of measuring and the nature of the respondents,

The degree of difficulty is determined through following :(Al-Jadri,2000) and.(Abu-sal,2002)

1. Arrange the grades of the respondents.

2. Divided into groups in both groups to upper and lower

3. calculated the average degree of respondents according to the specialists, the measure is good if the degree of difficulty of paragraphs between (% 20-%80) to suit different levels of the respondents.

c. Measuring power discriminatory:

The special equation is used to measure the power of the paragraphs as follow "The number of individuals in the lower group who responded to the paragraph correctly" Then dividing the result by half of the total number of individuals in the upper and lower groups "(Al-Zubaei, 1981). This is to determine the possibility of acceptance or rejection of the paragraph in light of the coefficient of excellence uses the Ebel scale. (Ebel, 1972,)

d. Measure reliability of a questionnaire:

Reliability of questionnaire is a way of assessing the quality of the measurement procedure used to collect data. In order to consider a result valid, the measurement procedure must first be reliable. Choose a measure while examining the construct of a study. Construct is the hypothetical variable that is being measured and questionnaires are one of the mediums As well as to A measurement procedure that is stable should produce the same (or nearly the same) results when same individuals and conditions are used. There are threats to reliability of a measurement also, to calculating reliability of questionnaire using (Cronbach Alpha) because (Alpha) is an important concept in the evaluation of assessments and questionnaires (Shruti and Priya,2016).

e. Determine the criteria or standards:

The specific questions to be asked in an evaluation should be structured so as to highlight the overall criteria as relevance, effectiveness, efficiency, impact and sustainability for what constitutes good performance. (Christoplos, Sandison and Chipeta, 2012) So, there should be specific criteria is done by measuring the achievement of each major goal and contribution of the sub-goals in achieving the overall objective and determine the length and time of measurement.

2.1.2.6.3 Characteristics of measurements and data collection tools:

a. The purpose of measurement and tools of data collection are specific and one purpose.

b. Validity and Confidence:

Al-Kubaisi knew the means that it measures what is develop and put or set for it or the attribute to be measured. (Al-Kubaisi, 2007) As well as the purpose of validity procedure is to ensure that the content of the test is true if the property is appropriately representative of all its dimensions (Moamriya, 2009).

While regards' methodology to apply this process, there are two methods to achieve confidence and Validity of measurements are : Two control experts group or team and the other is comparing two known groups. (Seevers, and Fredman, 1996). In general, the presenting or showing tools or the scale to a group of experts is a good way to check the veracity of its contents. (Ayoub, 2001) .

c. Verifiable; Means of verifiable that to obtain the same results as the measurement or data collection tools , If returned after a period of time on the same sample.(Al-Meligi,2002) , Additionally, The Verifiable coefficient for each field was calculated in measurements to increase the accuracy in verifiable. (Allam,2000) ,

OSS assessment staff indicated that there are several ways to check the verifiable of measurement; the first method is construction two images for testing similar and equivalents, (OSS assessment staff, 1948). The second method is to find the correlation coefficient between the results of the first and second results of measurement, or it means repeating the measurement twice and extracts the correlation coefficient between them and finally partition way. (Hassan, 1986). While the best way is to use the midterm split of the scale paragraphs and using the Person equation, then correct the results using Spearman Brown equation. (Ahmed, 1991).

d. An economic in costs and measurement applicable.

e. Objectivity: Means not to intrusion the individual factors in estimation of measurement results. (Monroe, 1945), so may not be affected by the ideas of those who measure.

f. Simplicity: It means these properties are easy to use in the application and validated cases.

2.1.2.7 Determine the scheduling of the evaluation: The variable of time is an important variable when preparing any practical plan studied, in order to get good results and through easier work and in a shorter time. Therefore, taking into consideration develop a detailed

timetable within a well thought out plan, has a great importance despite its difficulties due to different variables and possibilities (shibli,1984)

However, it is necessary the evaluation process is performed during different time at during the implementation of programs or after completion. (AODA, 2007) As well as it follows from this that determining the time required for the evaluation of agricultural extension activities helps to make decisions at the appropriate time.

2.1.2.8 Determine the necessary requirements to evaluate the extension activities: Includes costs , People who carry out the evaluation process and Beneficiaries of the results of the evaluation.

In the following, there is a brief explanation of the requirements conducting the evaluation of extension activities:

a. Necessary costs to conduct operations evaluation:

In order to directorate of agricultural extension and associate to perform its role, and achieve its goals effectively and efficiently, It must have an independent budget. It is established by the higher authorities in the evaluation of extension activities, and based on current estimates and future assessments which affect the decision to start the evaluation or not. It is also the cost factor in practice will be affected in the selection and design of the evaluation research. (Wahib, and Raza,1999).

While Harem and others know the budget is a clarify statement or declaration about the expected results in form of the financial value, and includes lists about investment and operational costs.(Hareem, and Shafiq,1998).

Al so, the line item in their budget for evaluation may include salaries for an internal evaluator or data staff and to that budget to offset the costs for conducting an evaluation, In addition, expenses might include hiring an valuator, cost of data system or software, training of staff or volunteers, travel costs for evaluation, translator or interpreter costs. (W.K., 2017). Robert and Trend suggests that " The budget should be set at three levels: The first is spending on creating sections, expanding operations in the department and finally financial allocations to cover operational needs" (Robert and Trend,1993) .

While Anderson and John said that " The costs that should be included in the budget are: salaries of trainers and trainees, wages of labor, materials and means, and costs of housing and travel. Finally, Granting rewards about the opposite of Completion or development of the program". (Anderson and John, 1993)

b. Evaluators:

The staff of agricultural extension centers consisted of four categories namely agricultural extension workers, officials of extension centers and the extension supervisors, external evaluators or subject matter specialists while the Subject Matter specialist has a specialty with a non-extension agricultural field, his/her duties are extension management and Participating with agricultural extension worker in the analysis of data and information, and clarify the problems related to the extension program (Al-Samarrai and Al-Jadri, 1990). While, if the program is relatively small, program staff may manage all stages of evaluation. (Sherrard and Lesley, 2001). It also appears that the process of evaluation of extension activities. it is the responsibility of an integrated team consisting of agriculture agents and co-evaluators each group of the evaluation team and to varying degrees.

Consequently, It is determined the role of each of them according to the activities to be evaluated quantitatively and qualitatively within the areas to be evaluated and in light of objectives nature of the evaluation and the necessary possibilities to implement them.

c. Beneficiaries of results evaluation:

There are multiple entities, to evaluate the extension activities or demand to do, so it should be to identify and benefit from those who are interested in the results of the evaluation regularly by reviewing the evolutional plan as well as the administrators extension and decision-makers are concerning by knowing the results of the evaluation.

In addition to extension workers, farmers, employers and agricultural projects in particular, as well as training institutions therefore, we find that each category has special interests that can be considered (AODA,2007).

2.2 Implementation of evaluation stage for agricultural extension activities:

After the program writing by the evaluators' agricultural extension, it is discussed through the higher administrative and technical levels, to approval, recognition, and adoption of the programs, to take its progress in implementation by the evaluators or the agricultural extension in the departments and division of agricultural extension at the local level.(Al-Ubaide,1984) , this stage begins with the implementation of the evaluation plan which includes the actual procedures and activities to implement the advanced evaluation plan as it is decreed in time. With a note that there is sufficient flexibility in the implementation procedures, Where it can be stopped and start the executive procedures of the program or any other emergency activity (Al-samarai, 1992).

The main purpose of the implementation and implementation of the plan of action for the evaluation of extension activities is to ensure that the extension activities have been completed as required, Also that the objectives set for the programs have been completed, finally, determine the extent to which the goal is achieved in achieving these goals.

The stages of implementation of evaluation:

1. Data collection:

Evaluation of programs or extension activities requires the preparation of plan work to data collection and accurate information on the field that evaluation plan will focus on, this plan includes: data resource, Amount of data, timing of data collection and formal versus informal data collection. (Aruna,2013). As well as the process of preparing the plan for data collection rests with the designer of the evaluative system and the evaluation team.

Before starting to prepare tools for collecting data, the evaluator or designer must adopt on different sources of informatics such as : Previous research and studies, visits and field follow-up, records And previous evaluation reports.

The success of the data collection process depends on: (Nassar and Fahd, 2000)

1. Employ a number of methods
2. Data collection tools such as: Questionnaire, Testing, Interview, and Attitude Scale

Also, based on the importance of data sources, it can be divided into:

Primary Sources include the original documents, which were collected either by the evaluator or obtained from another source. As well as secondary sources include secondary documents that collect data from multiple primary sources. (Na ssar and Fahd, 2000)

The choice of appropriate data sources should be based on: the relative advantages of each source, time and type of population (Murari and Gail, 2016)

The characteristics of data collection tools are as follows: (Aruna,2013) and (Radhah, and Khatib,2003)

a. Appropriate for what is being evaluated

b. Appropriate for the domain being evaluated

c. Comprehensive

d. Easy to use

e. Cost effective

f. Time efficient

g. Realist, Objectivity and Validity.

2. Tabulation and Interpret data:

After the stage of collecting data from different sources, there are tab process and data interpretation. Al-khafaji defined the tab process that "as a process by which data are organized, according to the objective plan, so as to facilitate their analysis and interpretation" (Al-khafaji, 1988). As well as this process must be designed by data collection tools, allowing the researcher to unload, arrange and schedule data in tables with precise mechanism And to be with the evaluator data required for the study and its quality.

3. Statistical Analysis:

This process is related to the analysis of statistical data, and installed in tables in order to Access to the final results, which is used by the researcher in writing his report. (Ibdi., 1972). In addition to that, Analysis of statistical data comes after the collection and, classification and configuring data tables for evolutional extension activities. Statistical analysis "means the way we put it in the form of numbers, which can in time, identify and understand what it is; and through the analysis it can be identified the suitable answer for the questions used in data collection tool. (Al-khafaji,1988).

So, the efficiency of the data analyst or evaluator has an important role in identifying, Selection of tools, appropriate analytical methods and focus on the information they need. Then this is done through the development of an analytical framework before doing data collection in sample tables for proposed statistical tests.

3.1 The researcher concludes, that the data analysis of the evaluation process of extension activities in to the following stages:

a. Review the data obtained, make sure it is correct and write it in a way that helps to classify and tabulation processes.

b. Classification of data into homogeneous groups and design tables to unload the data questions, and calculate by hand or mechanism according to available facilities. (Yates, 1953)

c. Coding is a conversion metadata to digital data for easy access to results, then review the coding and supervision of the first classification which helps the evaluator or the finder tab and census information, and insert them in statistical tables to be ready for statistical analysis (Haris,1956).

d. Appropriately analyzing data to ensure a quality evaluation. And robust statistical analysis is critical to credible results Also; choice of analytical technique depends in the part of whether the data are quantitative or qualitative. But rigor is an essential characteristic for both quantitative and qualitative analyses, the quantitative analysis for the Evaluation data usually are collected in the form of numbers, and its help to determine relationships or differences between variables while the qualitative analysis are mainly narrative data that come in many forms and from a variety of sources. Sources include personal interviews, focus group interviews, key informant interviews, case studies, daily journals and diaries, documents, and testimonials or storytelling based on personal accounts of experience, data collection primarily involves the use of participatory methods. (Murari and Gail ,2016)

Besides, quantitative data scheduling and implementation of statistical analysis through the using the appropriate statistical programs, Such as: SPSS-version18, Program of Microsoft Word Document and Excel Worksheet (Alphons, 2009). Then explain the information in the tables to reach safety decisions, the interpretation of data requires specialized training for people who are knowledgeable about the subject, their ability to formulate goals and the flexibility of the report's findings. (Mandar, 1983).

3. Outputs of evaluation for agricultural extension activities:

3.1 Access to data and display the results:

The process of collecting, analyzing, summarizing and categorizing data in a simple statistical way is one of the basic things that make it easy to understand and present the data in a way that explains the purpose of the evaluation. In light of the results of the analysis, (Al-Samarrai and Al-Jadiri, 1990)

3.2 Interpretation and discussion of the data:

Al-Liyla and Osman Attempts to define and detect the focus on what means about discussion data or information. (Al-Liyla and Osman, 1987), And that the main purpose of reading and interpreting the results is to know the factors affecting the situation studied, and the relationships between them and other phenomena and situations, in addition to that, without interpretation of the results become the facts reached by the rectifier is meaningless. (Al-Samarrai, and Al-Jadiri, 1990).

The most important benefits of using the interpretation and discussion of data results are as follows: (Al-Samarrai, and Al-Jadiri, 1990).

a. Provide a factual basis for the improvement and development of the next extension programs

b. The results of the evaluation in the work of the extension work based on scientific facts rather than guessing.

c. Giving the supervisors and the beneficiaries of the evaluation a sense of satisfaction with their knowledge of the results and achievements of the programs

d. Defining a new starting point based on the real behavioral-economic-social changes of the beneficiaries of the valuation or outcome outcomes.

3.3 Writing the report:

After completing the results display, analyze them statistically and then discuss the data, then the stage of writing report. In this stage which explains the results reached and communicated to the responsible authorities in a suitable time, So that they can be used to make the right decisions and find out what needs to be done in the future to develop work and gives them a clear picture of the progress of their work. (Muhalhl and Ezat, 1972).

The report is a view of specific facts about the topic analytically, and Analytical presentation sequentially and simply with suggestions mentioned that are consistent with the results reached in the research or analysis. (AOAD, 2007)

Al-Khafaji knows the evaluation report as a demonstration of how to choose the problem and identify goals and collect information and analysis to reach the results achieved. (Al-khafaji, 1988) . While Mandar pointed out the requirements of writing the evaluation report, which is to know the type of beneficiaries of the report, and the type of information used in each section of the report by the evaluator or the organizers of the report. (Mandar, 1984),

In addition to that, Program administrators and managers have a responsibility to report evaluation findings to stakeholders and other audiences who may have an interest in the results. (Murari and Gail, 2016), and there should be remembered that the use of results is different from simply reporting and disseminating them (Patton, 2008b).

Also, the evaluation reports should clearly describe the program being evaluated, including its context, and the purposes, procedures, and findings of the evaluation, so that essential information is provided and easily understood. (James, 1994,).

3.3.1 The objective of writing a report for evolutional results:

a. By report, the Applicant may convey to the Beneficiaries of the findings.

b. To provide a clear picture of his work since the first steps related to the selection of the evaluation problem down to the results.

c. The report shall be used to inform the authorities responsible for expenses and problems, and the level of performance of various special activities related to evaluation activities.

d. Through the report can identify the views of employees at various levels of evaluation for topics and work-related problems in a field.

3.3.2 Types of Extension evaluation Reports:

In any reporting system, both short-term and long-term reports will usually be required of the extension workers at the lower level. So Addison 1972 classified the extensional reports into two types: (Addison, 1972).

a. Short-term reports designate reports submitted either semi-monthly or monthly. These are primarily operational reports; that is most of the information which they contain derives from work performed by the field staff and cooperating parties.

b. Long-term reports designate quarterly or annual reports. Long-term reports primarily record accomplishments and they will contain information regarding program accomplishments and progress, pointing out desirable changes that have resulted from the activities of the extension organization.

3.3.3 Classification of reports for extension evaluation:

The Reports evaluation can be classification in two majority parts:

1. Mandar classifies the report of evaluation which depends on the duration of applies sectors in the following: (Mandar, 1983).

a. Reports of short-range: Submit this type in the form of monthly and half-monthly, and most of the information contained in is come from the work done by evolutes' teams.

b. Reports of long-range: Provide this type as seasonally or annually report, which are contains information on program achievements, progress and changes resulting from regulatory activities for evaluation.

2. Al-Samarri and Al-Jadri classifies the evolutional Report depends on the styles of writing report in the following: (Al-Samarrai and Al-Jadiri, 1990)

a. Scientific Reports: Provide this type of the reports for the scientific bodies, which contains a table of contents, a summary of the results, the purpose and objectives of the study, the importance of the study, the reasons for carrying out the evaluation study of the activity with a particular project or project.

In addition to the method of conducting the study and the statistical method and procedures followed in tab, analyze, and interpret results, and the names of those responsible for the study at the end of the report there is a copy of the questionnaire and tables as an annex to the report.

b. Technical reports: These reports are submitted to agricultural extension workers to take advantage of them, it contains the results display with a shortcut for some details about the statistical method, sampling methods and method of conducting the field study or delete from the report.

c. Special reports for employers and farmers: In the preparation and writing of this type of report, it takes a special approach method from technical formulas, So that the content of the report is limited to the main results of a given activity or other agricultural extension activities in a clear, easy and simple way.

4. Feedback of evaluation for agricultural extension activities:

In the evaluation of all its forms, feedback is considered as the conscious axis it influences the style of interaction, that influences and affects the method of interaction between the components of the evaluation, and feedback is characterized by two aspects: one negative and the other positive. (Al-Tuaeraqi, 1997). The reaction may take the form of confirmation or acceptance, objection or rejection of the extensional messages. It may sometimes be in the form of complete silence, resulting from the inability of the worker to express an opinion, whether the extensional communication message has influenced his behavior or did not affect. (Al- Tanobi, 1998)

As well as Al-Ta'ani Known feedback that is an information about the actual performance which achieved by the various activities of the system and carried out by the control process. And it is provided to the inputs, processes or outputs, so it is used by managers to maintain on a level Performance plan, with processing, solutions to problems and modifying activities, although adapting them to changing circumstances. (Al-Ta'ani ,2002).

So, the feedback process accompanies the formative evaluation contribute to providing the evaluator with detailed information about the evaluation of nature and whether successful. A positive feedback system lets employees know where they need to build upon their skills and motivates them; also it helps employers to discover their employees' specific skills and to assign them to the departments in which they will excel the most. The other thing is providing employees with such feedback uses valuable time.

While the positive results can be used in the next planning of evolutional operations and for any valuation activity or accompanied by a final evaluation, It is limited to giving the evaluator the final estimates, By informing him of its success or failure in the evaluation process. (Al-Hila, 1999).

4.1 Functions of feedback: (Ramzia, 1996)

a. The movement or behavior in the direction of a particular goal or in a specific way

b. Compare the effects of this movement in the right direction of the movement and set the error

c. Use the previous error signal to reorient the organization

4.2 Patterns of feedback: (Momany,2009)

a. Media feedback: It is to give the learner information about the accuracy of his answer. Also ,it is most commonly used by the sender or teacher (Swalihya, 1985)

b. Corrective feedback: It provides the learner with information about the accuracy of his answer and correcting the wrong answers.

c. Explanatory feedback: It provides the learner with the necessary information about the validity of his answer, correcting the wrong answers, in addition to explaining and explaining the reasons for the error.

d. Reinforcement feedback: Giving the learner information about the accuracy of his answer, correcting the wrong answers and discussing the causes of the error, as well as providing him with reinforcing words.

4.3 Types of feedback:

A. Feedback is classified according to the type of response by the sender or caller: (Al-Tnubi,1998).

1. The internal apostolic effect (sensory): This type appears in the form of the sensory echo back or Listen to himself

2. The external apostate effects (Sense-dynamic): is the part of the message that the individual as a communicator can hear or feel within the individual when his bones or muscles move.

B. According to sources of feedback, include: (Al-Hila,1999)

1. Internal feedback: refers to the information that results from the experience of the evaluator and its immediate effect (the source of feedback is the same).

2. External feedback: refers to the information provided by the evaluator to provide the entities responsible for providing extension activities in the form of information on how to quantify or to detect negative aspects and try to avoid them and modify them.

C. According to the time in which feedback includes : (Al-Tuaeraqi,1997)

1. Immediate feedback: This is related to behavioral observed, which provides the evaluator with information or extensions for refrain to develop the area to be rectified or corrected, often on written or oral forms such as Comment - correction - Emphasis), Or physical form such as : The smile - resentment, lack of interest.

2. Deferred feedback: It is the one that gives the person after time to complete the work or performance.

4.4 Characteristics of feedback: (Al-Shuqirat, 2017)

Educational researchers and Psychologists such as (Gooden and Klosemeyer) believe that feedback has several characteristics that distinguish it from others:

a. The reinforcement; the individual's knowledge that the answer provided by him/her is correct enhances his/her success and increases his feelings of pleasure in success and pain in failure.

b. Activation: The interrogator is motivated to provide more correct answers and a desire to master the work he is doing, making him continue to advance with enthusiasm driven by the success he/she has achieved.

c. Mentoring, where the interviewer proves the correct answers, and removes the wrong answers, leading him and performing his performance to higher levels, driven by the success he/she has achieved, increasing his self-confidence and the results of his work.

4.5 Factors affecting on feedback: (Smith and Foltz, 1966)

a. Learning phase

b. The time needed for feedback

c. Type of effectiveness or skill to be taught.

4.6 Sources of feedback: (Al-Said, 2009)

1. Self-feedback (Sensual): They come from the same person who did the work when he feels that his work is consistent with previous information.

2. External feedback (associated with knowledge of the results): This is based on external guidance to show how successful the work done by the individual.

we concludes that feedback is the actual verbal and physical responses towards the provision of agricultural extension services, especially for extension activities, which are given to elements of systems theory (input - processes/outputs and feedback).

So , feedback is a key subject In this system, which is used as a method to construct a model for evaluation of extension activities. And it is important in the control and issuance of judgment and makes adjustments that accompany or track the assessments of extension activities. It also helps to modify the behavior of the promoter or beneficiaries of extension activities and develop them in the right direction, for behavioral changes in the guide/evaluator, effective and appropriate assessment methods should be used to make these changes.

In general, feedback allows the evaluator to correct and adjust his/her programs and give final estimates in their light, and adapt them to the nature of the evaluation process of agricultural extension activities.

CHAPTER THREE

MATERIAL AND METHODS

1. Methodology of Study:

The study was classified from exploratory research, and it's an descriptive approach As well as It is used to describe characteristics of phenomenon being studied, and serves to organize the findings in order to fit them with explanations, and then test or validate those explanations (Krathwohl, 1993) and It is also useful in providing data on the opinions and approval of researchers on a particular topic or phenomenon (Melhem, 2000). The researcher followed the descriptive approach as an attempt to describe the components and main elements of the evaluation model for extension activities in Kurdistan region of Iraq.

2. Areas of Study:

1. Geographically, the study area includes all provinces: Erbil, Duhok, Sulaimaniyah , and Halabja in Kurdistan Region of Iraq.

2. Administratively, includes extension organizations in Kurdistan Region of Iraq at the level of provinces centers or department down to districts and Sub-districts.

3. Population of Study:

1. The study community included the provinces of Kurdistan, Iraq: Erbil, Sulaimaniyah, Duhok and Halabja..

2. Workers in agricultural extension and distributors on agricultural extension directorates and departments, and thy numbered 302 workers.

4. Sample of Study:

Took a random sample of 45% and by 136 workers, as shown in Table 1.

Table 1: The distribution of the extension workers, based on extension organizations in the Kurdistan Region

Provinces	Extension workers		
	Population of Study		Sample of study
	The names of the Centers	The number of Extension workers	The number of Extension workers
Erbil	Extension Training directorate	22	10
	Erbil Center	13	6
	Khabat	3	1
	Koya	3	2
	Salahaddin	4	1
	Harir	2	1
	Ankawa	3	2
	Qushtapa	5	2
	Taq Taq	2	1
	Shaqlawa	3	1
	Merga Sur	2	1
	Choman	2	1
	Soran	2	1
	Barzan	2	1
	Rawanduz	2	1
	Sidakan	2	1
Sulaymaniya	Sulaymaniya Center	87	39
	Qarahanjir	6	3
	Sayidsadiq	7	3
	Dukan& Tabeen	12	5
	Tanjaro	9	4
	Qaradagh	3	1
	Chwarta	7	3
	Darbandikan	5	2
	Sangasar	5	2
	Chamchamal	9	4
	Sharazur&Qralee	9	4
	Chawarqurna	6	3
	Qaladze	4	2
	Dhouk Center	25	11
	Bakirat	5	2
	Qdsh	2	1
	Qsrok	2	1
	Asmawa	2	1
	Batil	3	2

Dhouk	Derluk	2	1
	Darkar	4	2
	Sewsenan	2	1
	Mreena	3	2
	Battufa	3	1
Halabja	Halabja and Sirwan	8	3
Total		302	136

5. The method of building a suggested model of evaluation for agricultural extension activities in the Kurdistan Region of Iraq:

The evaluation model for agriculture extension activities was built through the following:

5.1 Procedures of the building a model of evaluation:

5.1.1 Considering that the evaluation of agricultural extension activities is part of the components and functions of agricultural extension organizations, which consist of a set of steps and procedures.

5.1.2 Case study on the evaluation mechanism for agricultural extension activities in Kurdistan, Iraq.

5.1.3 Literature related to evaluation and measurements.

5.1.4 The opinions of experts and specialists in the Ministry of Higher Education and Scientific Research and the Ministry of Agriculture and Water Resources in Kurdistan - Iraq.

5.1.5 Preparing the specification table: The specification table represents linking content to objectives, as they come together in a single chart that shows how each objective is linked to a specific aspect of the content and can be adopted when building the initially questioner.

This specification table has been adopted to clarify the validity of each paragraph and the standards of the form components. Accordingly ... A proposed model has been prepared to evaluate agricultural extension activities in Kurdistan region, See appendix (1).

In the light of the first , second and fifth procedures, the systems analysis method was used to achieve the objectives of the study, which is to build a model of evaluating for agricultural extension activities and include the following components: inputs for evaluating agricultural extension activities, processes, outputs and feedback ,See table (2)

Table 2: Number of standards for components of the evaluation model in the primary questionnaire

Components	Number of Standards
Inputs	99
Processes	60
Outputs	15
Feedback	6
Total	180

5.2 prepared a questionnaire form for model of evaluation:

The proposal form was presented to a group of experts, See appendix (3) in the field of business administration and evaluation – measurement, basically education and agricultural extension from specialists and experts to consult their opinion on the components and elements of the model and the required amendments to come out in the final copy before being presented to the workers for a pre-test process then used the Likert scale (Gail, 2013): Fully valid, Valid with Modification and Invalid, finally the percentage of the agreement was determined 80% or more of expert opinion as condition on validity. So, Bloom said that "The percentage of agreement between the arbitrators or experts if obtained 75% or more can be Feeling satisfied with the sincerity of the tool" (Bloom, 1971). As shown in table 3.

Table 3 the distribution of experts' opinions on the validity of the elements, paragraphs, and components of the proposed model

Validity alternatives	Validity of Maine elements			Validity of Sub- elements			Validity of paragraphs			Validity of paragraph contents	
	Number of Maine elements	Number of experts	%	Number of Sub-elements	Number of experts	%	Number of Paragraphs	Number of experts	%	Number of experts	%
Fully valid	12	14	82.4	39	14	82.4	141	14	87.7	14	82.4
Valid with modification	-	-	-	1	14	88.23	21	16	94.11	15	88.23
Invalid	-	-	-	-	-	-	18	17	100	17	100
Total	12	17	100	40	17	100	180	17	100	17	100

In the table 3 shows the result of the experts' opinions and observations that is all of the components were retained, with a 100% agreement. Also it retained the main elements, which amounted to 82.4% while the paragraphs that most experts agreed to delete were 100% agreement.

Additionally, the number of deleted paragraphs was 18 and included paragraphs of both inputs, processes, output and sub-elements, including input standards: (2,3,9,15,30,31,32,37,46,51), Process include: (54,59,61,64,66,67,117,118) and Output (144,145,146) ,See Appendix (2).

In the light of the experts' opinions and observations that, the total standard became (162) standard were distributed among the four components of the proposed model, as shown in the Table 4:

Table 4: Number of standards for components of the evaluation model in the final questionnaire

Components	Number of Standards
Inputs	89
Processes	52
Outputs	12
Feedback	9
Total	162

5.3 Tools of data collection included the following:

5.3.1 Prepared questionnaire for data collection:

The questionnaire used as the study tool, the questionnaire is a convenient tool to collect information, data, and facts related to a certain situation (Melhem, 2000). To obtain the present research data, the questionnaire has been prepared for building a model evaluation for agricultural extension activity in Kurdistan regions and witch to be used in collecting data related to the research's objective, and It is intended stays the component, element, sub – element and paragraph if it obtains a significant approval degree (3) and above from the respondents to come up with the required form before the Pre- test of the model.

The cut-off degree is a conceptual limit on the True-Score Scale between acceptable and unacceptable performance. (Audeh, and Ahmad, 2010). Accordingly, a questionnaire was prepared. See Appendix (1).

5.3.2 Pre-test, Validity and Reliability for the questionnaire:

5.3.2.1 Pre- test process for questionnaire:

The model was applied on a random sample from outside the study population in (Garmyan and Maxmur) zone on 27 workers in July 27, 2018.

5.3.2.2 Validity test:

Peersman defined the validity that "a data measure which they are intended to measure". (Peersman,2014).

Also, it is one of the most important standard characteristics that should exist in psychological scales (Eble, 1972). This is because of the correlation of the validity with the purpose or achieving expected goals of the measurement performance as well as the extent of its relationship with the type and the importance of the decision that will be taken accordingly (Al-Nabhan, 2004).

In addition, the tool is reliability in estimating the property of individuals whenever it is free from the influence of factors that make it biased in that estimate. Two indicators of reliability have been adopted; they are realistic or virtual and content reliability for the form, virtual Reliability is "the degree to which the paragraphs relate to the function or behavior to be measured", although, that is all paragraphs of the form, its instructions and appearance should be related to the subject (title of the test). (Abusel, 2002).

Ebel, indicates that "The best way to achieve virtual reliability is to have a group of specialists evaluate the validity of the paragraphs to measure what is prepared (Ebel, 1972).

Either, reliability content means that " The degree of representation of the test of the content of the behavior and objectives" and gained the content has validated this name because it is related to the behavior content to be measured. (Abusel, 2002).

5.3.2.3 Reliability test:

Abdul- Khaliq refers to the concept of reliability is a stability of the test and validity in measuring what it declares it measured (Abdul- Khaliq,2000) As well as Peersman define that

" A data which are measured and collected consistently according to standard definition and methodologies, the results are the same when measurements are repeated. " (Peersman,2014) Reliability means stability in the sense that if the measurement process was repeated for a particular phenomenon, its degree showed some degree of stability as well as objectivity (Bahi and Abdulhafeez , 2000).

Additionally, to find reliability building a model for the evaluation of agricultural extension activities in Kurdistan region of Iraq, The scale was applied to a prospective sample from outside the study sample as previously mentioned by pre- test.

Then to find reliability the method has relied on internal consistency and used Alpha-Cronbach (AL-Abassiy,2018) and It is one of the most common measures of reliability and most suitable for scales with a gradual scale, this method depends on the extent to which the paragraphs are linked within the scale and also test each paragraph of the scale as a whole. Since that average internal correlation coefficients between the paragraphs are the determinant of the alpha coefficient (Bahi and Abdulhafeez , 2000).

In table 5 shows the reliability and validity of components of model evaluation for agriculture extension activities.

Table 5: The values of (Alpha-Cronbach) for the components of evaluation model

N0.	Components of evaluation model	Alpha-Cronbach	Values of Validity
1.	Input	0.97	0.98
2.	Processes	0.95	0.97
3.	Outputs	0.86	0.92
4.	Feedback	0.86	0.92

6. Data collection:

The data for this research was collected through a questionnaire interview with the respondents during the period From 15, September, 2018 To 11, November, 2018 of the samples which were about 136 respondents.

7. Statistical Methods:

After the completion of the data collection and the date were checked, unloaded, tabulated and arranged in tables according to the research objectives and analyzed by using statistical analysis program as $SPSS_{version19}$ (Zoubi and Abbas,2012), which used the statistical techniques as following:

1. Percent Weight:

(Percentile weight = Weighted mean/ Maximum score * 100) …… (Al- Ghareeb, 1978).

2. Mean: used to describe the average numeric values of each components, Maine elements, sub- elements and standards of evaluation models as follows (Sror, 2007):

$$\overline{X} = \frac{\sum_{1}^{n} X_i}{n}$$

Where:

$\overline{X}$: Mean

$\sum_{1}^{n} X_i$: Summation of numeric values

n: Number of respondents

3. Standard Deviation: used to describe the deviation of the numeric values for each components, Maine elements, sub- elements and standards of evaluation models as follows (Al- Bayati, 2008):

$$SD = \sqrt{\frac{\sum_{1}^{n}\left(X_i - \bar{X}\right)^2}{n-1}}$$

Where:

SD: Standard deviation

X_i: Numeric value

$\bar{X}$: Mean

n: Number of respondents

4. Arithmetic Mean: Used in the ranking of each components, Maine elements, sub- elements and standards of evaluation models, using the following equation (Al- Maghribi, 2002):

$$\bar{X}_w = \frac{\sum x_i w_i}{\sum w_i}$$

Where:

$\bar{X}_w$: Arithmetic mean

$\sum w_i$: Weight value x_i

$\sum x_i$: Sum of syllable values

5. Cronbach's Alpha Coefficient Method: It is used to find reliability coefficient of the research,(AL-Abassiy,2018):

$$\alpha = \frac{n}{n-1}\left[1 - \frac{\Sigma Si^2}{S_x^2}\right] \text{ ..... (3.8.5)}$$

Where:

n = the number of section tools of the search.

Si^2 = the variation per section.

S_x^2 = the total variation (total) of the sections of the tool search.

6. Correction coefficient: used the form to see the validity in measuring the phenomenon to be studied, which is the sum of the square root of the coefficient of reliability (r_{xx}). (Al-Jadri, 2000):

$$r = \sqrt{r_{xx}} \quad \text{.....} \quad (3.8.6)$$

Where:

r = Correction coefficient

r_{xx} = Value reliability coefficient based on the correlation coefficient between the odd and even paragraphs values.

CHAPTER FOUR

RESULTS AND DISCUSSION

1. Respondents' approval to components of evaluation model for agricultural extension activities:

The results of study showed that weighted arithmetic mean in term of the important degree which the respondents gave to each formed of : Feedback, Inputs, Processes, Outputs are: 3.820, 3.787, 3.692 and 3.643 degrees, respectively, On a 5-step scale, it starts with (1) and ends with (5) degrees As shown in Table 6:

Table 6: Weighted arithmetic mean and percentage for the components of evaluation model for agriculture extension activities

Components	Weighted arithmetic mean	%	Rank
Feedback	3.820	76.40	1
Inputs	3.787	75.74	2
Processes	3.692	73.84	3
Outputs	3.643	71.80	4

Table 6 shows that, weighted arithmetic mean to the important degree from the point of view of respondents to each formed of the components of the evaluation model of agricultural extension activities has obtained a higher degree of cutting which were identified in this study at (3) degrees are more. Because the degree of cutting is used for a statement what is stay within a model or not. So the four components are acceptable within proposed evaluation model for agricultural extension activities.

As for the descending order of components of the model for the evaluation of the extension activities, the feedback came in the first rank, with a weighted arithmetic means of 3.820 degrees.

The reason may be that the feedback is one of the important and essential evaluation processes to ensure that the evaluation results (human, physical and moral) are achieved and that in light of it a judgment can be issued on the positive results and acknowledging the survival and continuity of the process of monitoring the components and other elements of the analytical system in an efficient and effective manner in the field of evaluating agricultural

extension activities in the directorates and departments of agricultural extension in the Kurdistan Region - Iraq.

Or perhaps it is due to the respondents having sufficient information about the concept of feedback and its implementation mechanism within the agricultural extension apparatus and its application specifically to some extension activities and considering it an alternative process not due to the process of evaluating extension activities within the calendar system for extension activities in the Kurdistan Region - Iraq.

Whereas, the output of the evaluation came in last rank with a weighted mean of 3.643 degrees which is lower than the weighted mean, compared to other components.

The reason may be due to the respondents have primitive knowledge and information about the types of outputs and beneficiaries of the results of the evaluation as well as a number of them were unaware of the importance of the evaluation process because they did not participate in training courses for the evaluation process and their ignorance of how to prepare and write the final report of the evaluation results, And how to discuss it before its delivery at the scheduled time to the decision makers

In order to clearly analyze and know the nature and location of the model's components, the main elements of the form will be identified separately, addressing the main and sub-elements and paragraphs and what can be adopted in the evaluation model of the proposed agricultural extension activities.

2. Respondents' approval to the main elements components of evaluation model for agricultural extension activities:

The search results showed that weighted arithmetic mean to the important degree which the respondents gave to each of the main elements components of model of evaluation for agricultural extension activities in Kurdistan region-Iraq, as shown in Table 7:

Table 7: Weighted arithmetic mean and percentage of the main components of the evaluation model for the agricultural extension activities

Components	Main elements components	Weighted arithmetic mean	%	Rank
Inputs	Construction of organizational structure of evaluation	3.873	77.46	1
	Resources :Humanity, Physical, financial and time	3.850	77	2
	External environment factors for evaluating activities	3.715	74.30	8
	Basics and general framework of evaluation	3.712	74.24	9
Processes	Plan of evaluation	3.738	74.76	7
	Implementation of evaluation plan	3.647	72.94	10
Outputs	Access to results	3.760	75.20	6
	Prepare and Writing the report	3.591	71.82	11
	Discuss the results	3.580	71.60	12
Feedback	Process of Control	3.847	76.94	3
	Issuing a judgment (Strengths and weaknesses point)	3.813	76.26	4
	Adjustments	3.801	76.02	5

Table 7 shows that, weighted arithmetic mean value to the important degree from the point of view of respondents to all of the main components of the evaluation model components for agricultural extension activities has obtained a higher degree of cutting threshold which were identified in this study at (3) degrees are more .So All Maine elements components of the evaluation model are acceptable within proposed evaluation model for agricultural extension activities. As for the descending order of main elements components of the model for the evaluation of the extension activities, (Construction of organizational structure of evaluation) came in first

rank in terms of respondents' approval, with a weighted arithmetic means of 3.873 degrees within the input of evaluation, while (Plan of evaluation) came within the processes in the first rank in terms of importance, with a weighted arithmetic means of 3.738 degrees, (Access to results) came first rank in terms of respondents' approval with a weighted arithmetic

means of 3.760 degrees, finally the element of (Process of control) came first rank in terms of respondents' approval, with a weighted arithmetic means of 3.847 degrees within feedback.

Perhaps the reason is that there is sufficient information among the respondents about the organizational structure and the tasks of the orthotic committees, in addition to the mechanism of participating in these committees and activating them with the knowledge of the higher extension management on the main practices and adherence to the framework that currently exists in the agricultural extension directorates In the Kurdistan region of Iraq.

The coming of the element of writing and preparing the report to evaluate the extension activities in the last rank in terms of the importance of the researchers, may be due to the weakness of scientific and technical of respondents for the questioners to judge the efficiency of the results achieved and the contribution of the resources available to learn about agricultural extension activities and turn them into written and reliable results and data Or due to that the respondents have many information and skills about what the output is, especially on the types of reports and how they are formulation, but they have limited scientific and technical capabilities on discussing the evaluation results and the method used to formulate the expression of the evaluation results scientifically

3. Respondents' approval to the main element of evaluation inputs, which includes the following:

The search results showed that weighted arithmetic mean to the importance degree and approval level of respondents to the main elements of inputs as shown in Table 8.

Table 8: Weighted arithmetic mean and percentage for main elements of inputs of the evaluation model

Main elements of inputs	Weighted arithmetic mean	%	Rank
Construction of organizational structure of evaluation	3.873	77.46	1
Resources :Humanity, Physical, financial and time	3.850	77	2
External environment factors of evaluation	3.715	74.30	3
Basics and general framework of evaluation	3.712	74.24	4

Table 8 shows that, weighted arithmetic mean to the important degree from the point of view of respondents to all main elements of evaluation inputs for agricultural extension activities has obtained a higher degree of cutting which were identified in this study.

Therefore, the main elements of inputs evaluation model for agricultural extension activities are acceptable. As regards the order of Main elements of inputs for agricultural extension activities, which came (Construction the organizational structure of the evaluation of extension activities) at the first rank in terms of importance or approval of respondents, with an means weighted arithmetic of 3.873 degrees,

The reason may be due to the reliable information and data on the organizational structure of the agricultural extension system, which is the commission of the formation of the orthotic committees and the distribution of roles, and job descriptions, which they benefit from the evaluators in their extension work in general and evaluation in particular.Whereas, the (Basics and general framework of evaluation) that came in the last rank in terms of importance or approval of respondents, and with a means weighted arithmetic of 3.712 degrees which is lower than the means weighted arithmetic compared to other elements. This may be due to the extent that the respondents have substantial and little information about the framework of the evaluation and the mechanism activated in detail and scientifically, but they focus on general information on the quality of evaluation and the mechanism of the orthotic work in the departments and departments of agricultural extension in the Kurdistan region of Iraq

3.1 Respondents' approval to sub-elements of the external environment factors of evaluation:

The search results showed that weighted arithmetic mean to the importance degree and approval level of respondents to sub-elements on external environment factors of evaluation as shown in Table 9.

Table 9: Weighted arithmetic mean and percentage for sub-elements on external environment factors of evaluation

Sub-elements on the external environment factors of evaluation	Weighted arithmetic mean	%	Rank
Environmental factors of transportation and communications	3.904	78.08	1
Environmental factors of Agriculture extension activities	3.769	75.38	2
Environmental factors of farmers union	3.702	74.04	3
Environmental factors of policy-economic	3.688	73.76	4
Environmental factors of agricultural research sciences	3.639	72.78	5
Environmental factors of Social -cultural	3.588	71.76	6

In Table 9, the results show that the weighted mean and the important degree from the point of view of respondents for the sub-elements of the external environment factors for evaluating agricultural extension activities higher degree of cutting were identified in this study except : (Environmental factor of agricultural educational institutions, the environment factor of private agricultural companies and NGOs, environmental factor of Agricultural committees in the governorate councils), because the weighted mean of these sub- elements lower than the degree of cutting which were identified in this study ,See appendix (5).

With regard to order Sub-elements on the external environment factors of evaluation, the sub-elements of (Environmental factors of transportation and communications) came at the first rank in terms of importance or approval of respondents, with a means weighted arithmetic of 3.904 degrees.

The reason may be due to that the information and data about the communication environment and its effects are important indicators that have positive effects on the evaluation processes of agricultural extension activities, or perhaps due to the existence of relationships and contacts between the respondents and the beneficiary of the results of the evaluation which Its effects are clearly visible within the evaluation input for agricultural extension activities.

Whereas, the sub-element of (Environmental factors of Social -Cultural) came in the last rank in terms of the importance of the respondents and the means weighted arithmetic 3.588 degrees which is lower than the means weighted arithmetic compared to other sub-elements, May be due to the lack of the social and cultural environment cannot be used as an accurate database in the evaluation process, which shows its negative effects on the final results of the evaluation and sentencing.

3.1.1 Respondents' approval to standards of the external environment factors of evaluation:

The results showed that the weighted arithmetic mean, the degree of importance and approval level on standards of external environment factors of evaluation for extension activities , as follows as shown in Table 10

Table 10: Proposed standards for the external environment factors of evaluation for extension activities according weighted arithmetic mean and percentage.

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

In Table 10, 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 of evaluation for the agricultural extension activities has obtained a higher degree of cutting which were identified in this study. Therefore, all standards for external environment factors of the input component are acceptable in proposed model of evaluation.

With regard to order standards of the external environment factors of evaluation, this came standard, (Providing data on transportation, communications and benefit from them.) In the first rank with a means weighted arithmetic of 4,176 degrees, this is higher than the weighted arithmetic means for other standard. It may be due to the importance of access to information on transport and transportation to the beneficiary of the results of the evaluation and to all

levels of higher and lower administrative, especially agricultural extension workers and farmers in different regions of Kurdistan, Iraq

Perhaps come a standard of (Be results of agricultural research and extension and its effects are reliable and dealt with in the hands of evaluators) at the last rank, with a means weighted arithmetic of 3,500 degrees which is lower than the means arithmetic weighted for other standard.

The reason may be due to a range of reasons, the lack of input of the research and information environment in the evaluation process, and the weak role of agricultural educational institutions in Kurdistan in providing specialists in the field of evaluation and measurement, or due to the lack of research field studies related to the evaluation of agricultural extension activities, and the failure to update and develop the curriculum for evaluation and measurement within the courses and use them as information inputs to conduct the evaluation process.

3.2 Respondents' approval to sub-elements of the basics and general framework of evaluation.

The results showed that the weighted arithmetic mean, the degree of importance and approval level of the respondents for the sub-elements on the basis and framework of evaluating for the extension activities As shown in table 11

Table 11: Weighted arithmetic mean and percentage for the basics and general framework of evaluation.

Sub-elements on Basics and general framework of evaluation	Weighted arithmetic mean	%	Rank
Evaluation concept	3.863	77.26	1
Steps of evaluation	3.799	75.98	2
objectives	3.735	74.70	3
Strategy	3.730	74.60	4
Basics	3.724	74.48	5
Politics	3.691	73.82	6
Levels of evaluation	3.650	73	7
Types	3.644	72.88	8
Philosophy of evaluation	3.573	71.46	9

In the table 11, the results show that the weighted arithmetic mean of importance from the point of view of the respondents on the sub-elements for basics and general framework of evaluation has obtained a higher degree of cutting threshold which were identified in this study. Therefore, all Sub-elements of the basics and general framework of the input component are acceptable in proposed model for evaluation.

With regard to the order the sub-elements for basics and frameworks of evaluation for extension activities which came the (Evaluation concept) in the first rank with an means weighted arithmetic of 3,863 degrees, which is higher than the weighted arithmetic means of other elements.

The reason may be that the respondents during their academic studies obtained sufficient information about the evaluation and the procedure conducted on scientific grounds.

Whereas, the (Philosophy of evaluation) came in the last rank in terms of importance or approval of the respondents and with the weighted arithmetic means of 3.573 degrees, which is lower than the means arithmetic weighted for other elements, and may be due to the absence of a philosophical and informatics rule on the evaluation of indicative activities and their inconsistency with the philosophical foundations of agricultural evaluation, as well as the low level of information on what the orthotic philosophy is and its development in the directorates and departments of agricultural extension in Kurdistan, Iraq.

3.2.1 Respondents' approval to standards of the basics and general framework of evaluation:

The results showed that the weighted arithmetic mean, the degree of importance and approval level of the respondents for standard of the basics and general framework of evaluation As shown in table 12.

Table 12: Proposed standard for the basis and framework of evaluating the extension activities according to the weighted arithmetic mean and percentages

Standards	Weighted arithmetic mean	%	Rank
Evaluation as a diagnostic process that provides quantitative data And purposeful.	4.036	80.72	1
Identification of evidence and proofs	4.110	82.20	2
Conditions for the development of the strategy are being responsive to the requirements the evaluation objectives.	3.962	79.24	3

Be determine evaluation area in Sequentially and It starts with the first stage and ends by writing report.	3.955	79.10	4
Classified evaluation levels according the methodology of Systems analysis to the levels: Synthesis and compositional.	3.919	78.38	5
Preparing and writing the report to evaluate the extension activities.	3.838	76.76	6.5
Evaluation types according to time period are: Elementary, on-going and after implementation finally.	3.838	76.76	6.5
Be the evaluation policy for extension application on components and stages of systems analysis.	3.808	76.16	8
Identify on the strategically nature and its impact and affordable between the evaluators' hands.	3.742	74.84	9
Identify on the over achievements and Participating in the evaluation is a priority of the evaluation goal.	3.735	74.70	10
Doing checks for the work of evaluation committees due to the needs of the work evaluation.	3.720	74.40	11
Review of activities by Periodically from is a basis of evaluation	3.705	74.10	12
Activities evaluating concept, It is scientific and descriptive.	3.691	73.82	13
Determination the measurements and evaluation standards	3.661	73.22	14
Be information and intellectual perceptions on the components and elements of systems analysis Known and trusted by evaluators.	3.632	72.64	15.5
Define and define the characterize of components and elements of evaluation systems.	3.632	72.64	15.5
Determine the quality of evaluation level is one of the necessary indicators to measure the components and elements of systems analysis methodology.	3.625	72.50	17
Report and formulate goals evaluation	3.595	71.90	18
Keeping the philosophical foundations and their use for evaluation in accordance the methodology of systems analysis.	3.588	71.76	19
Evaluation extension be classified according to the type of sources to: Internal - external – collectively or shared).	3.580	71.60	20
There should be a link between the components of agricultural policy And evaluation and the lack of conflict between them.	3.573	71.46	21
To be thinking on evaluation Logically far away for personal biases.	3.558	71.16	22
At the compositional level: The evaluator focuses on the mechanism of interactions between system components and system performance.	3.551	71.02	23
Be the strategy contact ion to allotted time to it, when executing the evaluation processes.	3.522	70.44	24.5
At the structural level of evaluation: the evaluator focuses on the analytical procedure and detailed functions of subsystems for the components of evaluation system.	3.522	70.44	24.5
To be evaluation for extension activities is Structurally or community.	3.514	70.28	26

In the table 12, the results show that the weighted arithmetic mean of importance from the point of view of the respondents on standards of general framework of evaluation for extension activities has obtained a higher degree of cutting which were identified in this study excepted the standards : 30,31,32,34,36,37,40,41,43,44,45,46,48,49,55,56,57,61 and 67 were deleted because the weighted arithmetic mean value of this standard lower than the degree of the degree of cutting in this study. Therefore, all standards of a general framework of evaluating the extension activities are acceptable in proposed model for evaluation. See appendix (5).

With regard to the order of standards: (The evaluation is a diagnostic process that provides quantitative and objective data). This came in the first rank with an means weighted arithmetic of 4,036 degrees, which is higher than the weighted arithmetic means of other standard.

Perhaps it is due to necessity for existence of basic information on the evaluation concept as framework reference and used in the diagnosis of extension activities to be evaluated in the directorates and extension department in the Kurdistan Region.

Whereas, the standard of: (The evaluation activities should be structured or structured). This came in the last rank in terms of importance with an means weighted arithmetic of 3,514 degrees, which is lower than the weighted arithmetic means of other standard.

This is due to the weak ability of the evaluators to distinguish between structural and synthesis or deduction evaluation. Or this is due to the weak ability of the evaluators to distinguish between structural and societal evaluation In terms of its use as informational inputs and apply in the evaluation process for agricultural extension activities in the directorates and department of agricultural extension in Kurdistan.

3.3 Respondents' approval to sub-elements of constriction of organization structure for evaluation:

The results showed that the weighted arithmetic mean ,degree of importance and approval level of the respondents for Sub-elements of constriction of organization structure for evaluation shown in table 13.

Table 13: Weighted arithmetic mean and percentage of sub-elements of constriction of organization structure for evaluation

Sub-elements of constriction of organization structure for evaluation	Weighted arithmetic mean	%	Rank
Conditions of organizational structure of evaluation	4.065	81.30	1
Job Descriptions	3.977	79.54	2
Objectives of organizational structure	3.936	78.72	3
Tasks and duties of the evaluation committees	3.845	76.90	4
Characteristics of organizational structure of evaluation	3.750	75.00	5
Relationship mechanism and contacts between organizational units and/or Organizational units for evaluation	3.669	73.38	6

In the table 13, the results show that the weighted arithmetic mean of importance from the point of view of the respondents on sub-elements of constriction of organizational structure for evaluation has obtained a higher degree of cutting which were identified in this study.

Therefore, all Sub-elements of constriction of organizational structure for evaluation of the input are acceptable in proposed model for evaluation.

With regard to the order of sub-elements of the organizational structure for the evaluation of agricultural extension activities which came the (Conditions of the organizational structure of evaluation) in the first rank with an means weighted arithmetic of 4,065 degrees, which is higher than the weighted arithmetic means of other elements,

This indicates the need for data on the most important information and technical sources on how to formulate and the conditions of the organizational structure of the evaluation committees with the evaluators and to benefit from them in constriction of organizational structure to evaluation extension system in the directorates and department of agricultural extension in the Kurdistan Region. Either, the sub element of (Relationship mechanism and contacts between organizational units and/or Organizational units for evaluation) which came in the last rank in terms of importance with an means weighted arithmetic of 3,669 degrees, which is lower than the weighted arithmetic means of other elements.

It may be due to a group of reasons are: the lack of interest of the evaluator in the relations and the mechanism of communication between and within the agricultural extension organizations, especially the organizational committees of the agricultural extension activities. And the lack of a formal structure of the agricultural extension system and the lack of an appropriate mechanism to establish human relations between the components of the organizational units of the agricultural extension as well as to ensures a streamline of current extension work, especially the work of the evaluation committees to achieve its objectives by effectively and efficiently.

Or perhaps the reason is that the evaluators do not know how closely they are related to their jobs and tasks, and this may be related to their satisfaction with the work entrusted to them within the evaluation committees and their lack of knowledge of the true image of the job, and their lack of knowledge about the relationship of the evaluation system to the agencies that deal with it.

3.3.1 Respondents' approval to standards of the constriction of organization structure for evaluation:

The results showed that the weighted arithmetic mean, degree of importance and the level of approval of the respondents on the constriction of organizational structure for evaluation of the extension activities, which were arranged in Table 14:

Table 14: Proposed standard for the constriction of organizational structure of evaluation according to the weighted means and percentage

Standards	Weighted arithmetic mean	%	Rank
To be preparation of evaluation committees based on scientific, technical and economic bases.	4.345	86.90	1
To achieve some kind of harmony between evaluation committees in implementation by accurately and comprehensive.	3.977	79.54	2
Suitability of Structure of evaluation committees with the philosophy and objectives of evaluation.	3.926	78.52	3
To be Information about tasks and duties is known by the evaluators and evaluation Committee members.	3.845	76.90	4
Consider the degree of compatibility between the organizational components of the evaluation committees with implementation mechanisms.	3.786	75.72	5
Take into consideration Job description when forming Evaluation Committees.	3.750	75.00	6
To be the mechanism of communication and / or organizational units of committees are efficient and applicable.	3.669	73.38	7

In the table 14, the results show that the weighted arithmetic mean of importance from the point of view of the respondents on standards of constriction of organizational structure of evaluation for the extension activities has obtained a higher degree of cutting threshold which were identified in this study, excepted the standard 86 were deleted because they are the weighted arithmetic mean value to standard of organizational structure of evaluation lower than the degree of cutting which were identified in this study. See appendix (5).

Therefore, all standard for constriction of organizational structure of evaluation input are acceptable in proposed model for evaluation.

With regard to in order of standards, It came standard (To be preparation of evaluation committees based on scientific, technical and economic bases.) in the first rank in terms of importance with an means weighted arithmetic of 4,345 degrees, which is higher than the weighted arithmetic means of other standard.

This may indicate that the preparation of organizational committees for evaluation extension activities bases on scientific, technical and economic which is one of the foundations for the managing human resources, financial and physical in the directorates and department of agricultural extension in Kurdistan.

Either being a standard (To be the mechanism of communication and / or organizational units of committees are efficient and applicable). This came in last in terms of importance with an means weighted arithmetic of 3,669 degrees, which is lower than the weighted arithmetic means of other standard.

The reason may be that the mechanism of communication and relations between organizational units in the agricultural extension directorates is not at the level required in terms of performance and effectiveness. So, it needs to develop and improve relationships between evaluation committees by the higher administrative extension authorities in Kurdistan region- Iraq.

3.4 Respondents' approval to sub-elements of resources of evaluation:

The results showed that the weighted arithmetic mean, degree of importance and the level of approval of the respondents of sub-elements of resources, which include: human resources, physical and financial and time as shown in table 15:

Table 15: Weighted arithmetic mean and percentage of resources to evaluate for extension activities

Sub-elements of resources	Weighted arithmetic mean	%	Rank
Human resources	4.002	80.04	1
Physical	3.805	76.10	2
Financial and Time resources	3.745	74.90	3

In the table15, the results show that the weighted arithmetic mean of importance from the point of view of the respondents on sub-elements on resources has obtained a higher degree of cutting which were identified in this study. Therefore, all sub-elements on resources for evaluation of the input component are acceptable in proposed model for evaluation.

As regards the order of Sub-elements of the evaluation resources for agricultural extension activities, this came the (Human resources) in the first rank with an means weighted arithmetic of 4,002 degrees, which is higher than the weighted arithmetic means of other elements.

The reason may be that respondents contributed effectively with the extension authorities while carrying out any extension activity charged with for them in the agricultural extension directorate or departments, And that the human element within extension organizations is the main operator for planning and implementing evaluation of agricultural extension activities. Either, the sub-element (Financial and Time) which came in the last rank in terms of importance with an means weighted arithmetic of 3,745 degrees, which is lower than the weighted arithmetic means of other elements, the reason may be due to the lack of sufficient information to the evaluators about financial allocations which are needed to plan and implement the evaluation of extension activities in the directorates of agricultural extension as well as the lack of knowledge of evaluators for the implementation of extension activities including the evaluation process and its compliance, all of this due to administrative, technical and financial constraints during the implementation of its activities scheduled time and its decree within the annual plan of the directorates of agricultural extension in Kurdistan.

3.4.1 Respondents' approval to standards of the resources of evaluation:

The results showed that the weighted arithmetic mean, degree of importance and the level of approval of the respondents of standard of resources as shown in Table 16:

Table 16: Proposed standard for the resources of the evaluation for extension activities according to the weighted means and percentage

Standard	Weighted arithmetic mean	%	Rank
Determine the evaluation number according to evaluation nature and time.	4.198	83.96	1
Identification of financial allocations and provided within the budget which allocated for the evaluation process.	4.044	80.88	2
To be requirements of evaluation work are known and manipulated by the hands of evaluators.	3.992	79.84	3.5
Configuration of tools and supplies before conducting the evaluation and implementation.	3.992	79.84	3.5
Evaluator must have an experience, skill and ability to make decisions in the field of his work evaluation	3.816	76.32	5
Used programs and statistics which are most economical in the evaluation process.	3.669	73.38	6
Providing material and informational resources on the reality of the evaluation process and to benefit from them in the light of the possibilities available.	3.617	72.34	7
To be the time required to perform and execute of evaluation known and installed in the evaluation work plan.	3.522	70.44	8

In the table16, 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 which were identified in this study. Therefore, all standard of evaluation resources for input component are acceptable in proposed model for evaluation.

With regard to the order of standards, it came standards of (Determine the evaluation number according to evaluation nature and time) in the first rank In terms of importance with an means weighted arithmetic of 4,198 degrees, which is higher than the weighted arithmetic means of other standard. This may indicate the need for personal and functional information and data on participants in the evaluation committees and determine their performance according to financial resources and supplies available to implement the evaluation of the extension activities with install them in the extension work plan in all directorate and extension department in Kurdistan region. Either, the standard of (To be the time required to perform and execute of evaluation known and installed in the evaluation work plan) that came in last rank respectively in terms of importance with an means weighted arithmetic of 3,522 degrees, which is lower than the weighted arithmetic means of other standard, Maybe the reason is due to not specifying the budget and financial allocations to provide physical and informational supplies by the higher administrative authorities in the ministry of agriculture and water resources in Kurdistan, due to delaying the implementation of some extension activities and the political and economic conditions experienced by the Kurdistan Region-Iraq.

4. Respondents' approval to the main element of the evaluation process, which includes the following:

The search results showed that weighted arithmetic mean to the importance degree and approval level of respondents to the main elements of evaluation process for agricultural extension activities as shown in Table 17.

Table 17: Weighted arithmetic mean and percentage of main elements of evaluations process for extension

Main elements of evaluations process	Weighted arithmetic mean	%	Rank
Plan of evaluation	3.738	74.76	1
Implementation of evaluation plan	3.647	72.94	2

In the table 17, the results show that the weighted arithmetic mean of importance from the point of view of the respondents on the main elements of the evaluation processes (plan and implementation evaluation) for agricultural extension activity has obtained a higher degree of cutting which were identified in this study. Therefore, main elements for processes component are acceptable in proposed model for evaluation. As regards the order of main elements of evaluations process for agricultural extension activities, this came the (Plan of evaluation) in the first rank in terms of importance with an means weighted arithmetic of 3.738 degrees, which is higher than the weighted arithmetic means of other elements.

The reason may be due to the evaluation plan is a basic rule which it is based on other extension administrative functions in the directorates of agricultural extension, which can the higher administrative authorities through it determining the directions of organizational activities necessary to achieve the evaluation objective, It also helps the evaluation plan explains the nature of the steps and executive procedures as well as providing , description of the evaluation processes and the conclusions that it requires. Either the main elements of (Implementation of evaluation plan) that came in the last rank in terms of degree of importance from the point of view of the respondents with an means weighted arithmetic of 3,647 degrees, which is lower than the weighted arithmetic means of other elements.

This may be due to the implementation of the evaluation depends on the determination of the objective of evaluating any extension activity in the directorate and departments of the agricultural extension while the work plan formulated by a goal to monitoring and follow-up elements of evaluation plan then attention to the organization of evaluation data and analysis by the nature of data , the areas of evaluation and statistical methods used in the analysis of those data in order to access to accurate conclusions and applied in the extension system in the provinces of the Kurdistan Region- Iraq.

4.1 Respondents' approval to sub-elements of evaluation plan:

The search results showed that weighted arithmetic mean to the importance degree and approval level of respondents to the sub-elements for the evaluation plan of the extension activities, shown in Table 18.

Table 18: Weighted arithmetic mean and percentage of sub-elements of evolution plan

The sub-elements of evaluation plan	Weighted arithmetic mean	%	Rank
Data collection tools	3.830	76.60	1
Cost	3.805	76.10	2
Evaluation areas	3.757	75.14	3
Participants and evaluators	3.751	75.02	4
Development of the measurements, Criteria and Evidence	3.726	74.52	5
Timetable	3.716	74.32	6
Objectives	3.681	73.62	7
Design tools for data collection	3.622	72.44	8

In the table18, the results show that the weighted arithmetic mean of importance from the point of view of the respondents on sub-elements of plan for agricultural extension activity has obtained a higher degree of cutting which were identified in this study. Therefore, sub-elements of plan processes to evaluation are acceptable in proposed model for evaluation, excepts the sub-element items have been deleted for evaluation plan that is (Identify categories of beneficiary for results of evaluation) that the value of the weighted means of those elements lower than the degree of cutting (3), See appendix (5).

With regard to the order the sub-elements of plan evaluation for agricultural extension activities which came (Data collection tools) in the first rank with an means weighted arithmetic of 3,830 degrees, which is higher than the weighted arithmetic means of other elements.

This refers to necessity interest of respondents by mechanisms that used in the collection of evaluation data and the skillful capacity of respondents on selection of assignments and appropriate equipment and methods to collect data in accordance with the planned evaluation objectives Or perhaps, this indicates the need to give great importance to the preparation of the evaluation plan including formulation of data collection tools. Either the coming of the sub-element (Tool design) in the last rank with an means weighted arithmetic of 3,622 degrees, which is lower than the weighted arithmetic means of other elements, It may be due to the knowledge weakness of the evaluators relate the concepts of evaluation and its general and secondary objectives, including the purpose of designing the data tools and mechanisms to develop them in commensurate with the whole evaluation goals and the evaluation policy for agricultural extension Or it may be due to the lack of interest of respondents to formulate data collection tools and its development in accordance with the evaluation objectives.

4.1.1 Respondents' approval to standards of evaluation plan:

The results showed that the weighted arithmetic mean, degree of importance and the level of approval of the respondents on Standards plan evaluation for agriculture extension activities, which were arranged as shown in Table 19

Table 19: Proposed standard of evaluation plan according to the weighted means and percentage

Standards	Weighted arithmetic mean	%	Rank
To be design and prepare the plan for the evaluation process according to use components of systems analysis.	4.257	85.14	1
The characteristic of evaluator is explicit and able to convince others in his field of work.	4.088	81.76	2
To be standards and measurements their use is known and circulated among the hands of evaluators.	3.977	79.54	3.5
To be cost allocations by the higher authorities based on preliminary estimates for evaluation process.	3.977	79.54	3.5
Evaluators have scientific knowledge and sufficient experience in the areas of measurement and evaluation.	3.948	78.96	5
Harmony general goals and agricultural goals with extension evaluation	3.889	77.78	6
Conditions for selecting design tools on the basis of inputs and data on evaluation	3.860	77.20	7
Diversity of data collection tools is guide on a proper selection for the area to be evaluated.	3.830	76.60	8
Use of information and experiences of beneficiaries and participants in the evaluation in the preparation of evaluation plan.	3.816	76.32	9
Provide adequate information about how to prepare the plan for the evaluation process with the evaluators.	3.808	76.16	10
One of the requirements for determining the time for evaluation are know the availability of tools, the scope of work, and the number of participants and beneficiaries.	3.779	75.58	11
The designer has enough skills in designing evaluation plan.	3.727	74.54	12
To be standards are simple , understandable and credible to the evaluators	3.705	74.10	13.5
Capacity of evaluator on activates the measures In a manner economically in terms of cost and time..	3.705	74.10	13.5
Employ the components and elements of the system analysis style in the evaluation plan and ensure harmony between them.	3.698	73.96	15
To be characteristics areas to be evaluated measurable (quantitative and qualitative) and comprehensive.	3.676	73.52	16
Harmonize between the specified time and evaluation quality	3.654	73.08	17
To be report goals In a manner can be measured and applied.	3.639	72.78	18
To be financial allocations are accurate and flexible and on the basis of realistic guesses.	3.632	72.64	19.5
To be selecting evaluation areas is contact to the goals to be measured.	3.632	72.64	19.5
Evaluators to be know the laws and instructions which are employed during the implementation of evaluation plan.	3.588	71.76	21
Conditions for formulation of measurements it measures the property that is designed for it.	3.515	70.30	22
Responding farmers and beneficiaries of the results of evaluation for directed by evaluator easy the implementation of evaluation plan.	3.514	70.28	23.5

To be the goals declare and specific for evaluator and committees evaluation.	3.514	70.28	23.5
To be formulated tools respond to the requirements of decision -makers or beneficiaries of evaluation results.	3.507	70.14	25
Choose the area of evaluation will be on the scientific basis and needs evaluation.	3.510	70.12	26
To be having the designer of evaluation tools enough skills and experience in this area.	3.500	70	27

In table 19 , The results show that the weighted arithmetic mean of importance from the point of view of the respondents on Standards plan evaluation for agriculture extension activities has obtained a higher degree of cutting which were identified in this study , excepts standards of sub-element evaluation plan are:(100, 101, 105, 109, 111, 112, 113, 115, 116, 117, 118, 121, 125, 130), this is the value of the weighted means of their standards lower than the degree of cutting. See appendix (5).

With regard to arrangement of the plan's standards for the evaluation of the extension activities, the standards: (The design and the preparation of the plan for the evaluation process according to the use of the components of the systems analysis) which came in the first rank in terms of importance and from the point of view of the respondents with an means weighted arithmetic of 4,257 degrees, which is higher than the weighted arithmetic means of other standard, the reason may be that a plan to evaluate agricultural extension activities in accordance with the methodology of analysis systems requires scientific competence and specialists in the field of evaluation in order to reach objective and accurate results. Either the coming of the standards of (To be having the designer of evaluation tools enough skills and experience in this area.) that came in last rank in terms of importance and from the point of view of the respondents with an means weighted arithmetic of 3,500 degrees, which is lower than the weighted arithmetic means of other standard.

This may be due to the fact that the respondents do not have the ability to diagnose the area to be straightened, Also, Inability to distinguish between the quality of the extension activities to be carried out in accordance with the evaluation committees, which requires him skill and experience in the field of evaluation of the extension activities obtained through his academic studies or participation in training courses on agricultural extension evaluation.

4.2 Respondents' approval to sub-elements of evolution implementation:

The search results showed that weighted arithmetic mean to the importance degree and approval level of respondents to the sub-elements for the evaluation implementation for extension activities, as shown in Table 20

Table 20: Weighted arithmetic mean and percentage of sub-elements of evolution implementation

Sub-elements of the evaluation implementation	Weighted arithmetic mean	%	Rank
Tabulation data	3.742	74.84	1
Interpretation of data	3.650	73	2
Coding	3.610	72.20	3
Statically analysis data	3.586	71.72	4

In the table 20, the results show that the weighted arithmetic mean of importance from the point of view of the respondents on sub-elements of the evaluation implementation for agricultural extension activity has obtained a higher degree of cutting which were identified in this study. Therefore, Sub-elements of implementation to evaluation are acceptable in proposed model for evaluation.

With regard to arrangement of evolution implementation for extension activities, which came Tabulation data in the first rank with an means weighted arithmetic of 3,742 degrees, which is higher than the weighted arithmetic means of other elements. This may be due to the reason that the process of tabulating evaluation data is one of the main tasks of the agricultural extension activities because through which statistical methods are determined and the results are reached It is appropriate to evaluate the activities of agricultural extension while sub element of (Statically analysis data) came in the last rank in terms of the importance or approval of the interrogators and with an means weighted arithmetic of 3.586 degrees which is lower than the weighted arithmetic means of other elements, It may be due to the lack of interest of the evaluator to choose statistical programs It is appropriate for the quality of the corrective data, or perhaps because the implementation of statistical analysis is not the competence of the evaluator, but rather the competence of specialists in management and economics.

4.2.1 Respondents' approval to standards of evolution implementation:

The results showed that the weighted arithmetic mean, degree of importance and the level of approval of the respondents on implementation standards of evaluation for agricultural extension activities, as shown in Table 21:

Table 21: Proposed standard for evaluation implementation according to the weighted means and percentage

Standards	Weighted arithmetic mean	%	Rank
Recommendations on the tabulation of data and how to conduct it	3.742	74.84	1
The interpretation of the data should be used both in description, inference and in conclusion	3.691	73.82	2
Having skills and previous experience with evaluators on data interpretation and on a scientific basis	3.610	72.20	3.5
The coding process depends on the selection of programs and how they are used by evaluators	3.610	72.20	3.5
To be interpretation of results and statistical analysis in light of evaluation objectives	3.595	71.90	5
To be statistical analysis is proportional with quality of objective standards.	3.588	71.76	6

In table 21, the results show that the weighted arithmetic mean of importance from the point of view of the respondents on standards of evaluation implementation for agriculture extension activities has obtained a higher degree of cutting which were identified in this study. Therefore, standards of evaluation of implementation are acceptable in proposed model for evaluation.

With regard to arrangement of standards of evaluation implementation for agriculture extension activities is (Recommendations on the tabulation of data and how to conduct it), which its came in first rank with an means weighted arithmetic of 3,742 degrees, which is higher than the weighted arithmetic means of other standard, This may be due to the data tabulation process require knowledge and skills from the evaluator of the plant extension activities and to achieve the objectives of the evaluation plan.

Either being a standard of (To be statistical analysis is proportional with quality of objective standards) that came in the last rank in terms of degree of importance from the point of view of the respondents with an means weighted arithmetic of 3,500 degrees, which is lower than the weighted arithmetic means of other standard. This may be due to the lack of interest in choosing statistical instruments that are appropriate to the evaluation standards set to achieve the corrective goals, or the interrogators will not use the methods statistics that fit the

description of corrective data in a comprehensive manner and do not have sufficient experience to carry out this process scientifically.

5. Respondents' approval to elements of evaluation outputs:

The search results showed that weighted arithmetic mean to the importance degree and approval level of respondents to elements for evaluation outputs as shown in Table 22

Table 22: Weighted Arithmetic mean and percentage of outputs element for agricultural extension activities

Elements of evaluation outputs	Weighted arithmetic mean	%	Rank
Access to results	3.760	75.20	1
Prepare and writing the report	3.591	71.82	2
Discuss the results	3.580	71.60	3

In table 22, The results show that the weighted arithmetic mean of importance from the point of view of the respondents on elements of evaluation outputs for agriculture extension activities has obtained a higher degree of cutting which were identified in this study. Therefore, elements of outputs evaluation are acceptable in proposed model for evaluation.

With regard to arrangement of elements of outputs evaluation for extension activities which came (Access to results) in the first ranks and with a weighted means arithmetic means of 3.760 degrees, that is higher than the weighted means arithmetic for other elements.

This may indicate that the evaluation results is the only means used to issue judgment on the activities and workers in agricultural extension, as well as the positive results of the evaluation also affect the formulation of the evaluation plan and the interpretation, approval of its results, then the delivery of the results to the beneficiaries and decision makers in the Kurdistan region of Iraq.

Whereas, the element of (Discuss the Results) that came in the last rank with a weighted means arithmetic means of 3.580 degrees, which is lower than the weighted arithmetic means of other element. The reason may be due to the inability of the respondents to analysis, discussion of the results and recommendations on how to write, express the discussion of the results of the evaluation and arrange them according to their importance and preference during the preparation and writing the final report for the evaluation of agricultural extension activities

5.1 Respondents' approval to standards of evaluation outputs:

The results showed that the weighted arithmetic mean, degree of importance and the level of approval of the respondents on standards of evaluation outputs for agricultural extension activities, as shown in Table 23

Table 23: Proposed standard of evaluation outputs for extension activities according to the weighted means and percentage

Standards	Weighted arithmetic mean	%	Rank
To be report type of evaluation either scientifically or ethically or specifically for extension worker and the owners of agricultural projects	3.897	77.94	1
To follow a scientific bases in the interpretation of the results of the evaluation	3.764	75.28	2
To exposure evaluation results in graphical formations by clear style and understandable	3.757	75.14	3
Show scientific and technical aspects for extension activities in the blackish or draft of evaluation report	3.610	72.20	4
Discuss calendar results before generalizations and publishing	3.580	71.60	5
Non-duplication between recommendations contained in the report With the purpose of preparing them.	3.558	71.16	6
Conduct the review scientifically and technologically prior to publication on the concerned parties and beneficiary of evaluation results	3.551	71.02	7
Take into consideration in writing the report the scientific and professional level for users of evaluation results	3.522	70.44	8
Consider the time and place during their access to the beneficiaries of evaluation results.	3.514	70.28	9
To be characteristics report in comprehensive, realistic, economic and usable as references and secondary sources.	3.507	70.14	10

In table 23, the results show that the weighted arithmetic mean of importance from the point of view of the respondents on standards of evaluation outputs for agriculture extension activities has obtained a higher degree of cutting which were identified in this study. Therefore, standards of evaluation outputs are acceptable in proposed model for evaluation Excepts standards of : 145,151 were deleted because the weighted arithmetic mean value is lower than the degree of cutting which were identified in this study at (3) degrees, See appendix (5).

With regard to arrangement the standards of evaluation outputs for agriculture extension activities. The standard of (To be report type of evaluation either scientifically or ethically or specifically for extension worker and the owners of agricultural projects) that came in the first rank in terms of importance from the point of view of the respondents with an means

weighted arithmetic of 3,897 degrees, which is higher than the weighted arithmetic means of other standard.

This may be due to the existence of administrative instructions and directives on the obligation of the evaluators to write the final report to evaluation of agriculture extension activities, which leads them to the availability of scientific resources about what, is the report and how to use it according to the evaluation fields Either being a standard of (To be Characteristics report in comprehensive, realistic, economic and usable as references and secondary sources.) came the last rank in terms of importance from the point of view of the respondents with an means weighted arithmetic of 3.507 degrees, which is lower than the weighted arithmetic means of other standard.

It may be due to the lack of interest of officials and the evaluator about writing evaluation reports and not benefiting from them in issuing judgment scientifically. As well as the senior extension administration does not keep the evaluation reports in the special files and use them as references to formulate the subsequent evaluation plan in the agricultural extension directorates in the Kurdistan region of Iraq.

6. Respondents' approval to element of evaluation feedback, which includes the following:

The search results showed that weighted arithmetic mean to the importance degree and approval level of respondents to elements for evaluation feedback as shown in Table 24:

Table 24: Weighted Arithmetic mean and percentage of elements of evaluation feedback for extension activities

Elements of evaluation feedback	Weighted arithmetic mean	%	Rank
Process of control	3.847	76.94	1
Issuing a judgment (Strengths and Weaknesses point)	3.813	76.26	2
Adjustments	3.801	76.02	3

In the table 24, the results show that the weighted arithmetic mean of importance from the point of view of the respondents on elements of evaluation feedback for agriculture extension activities has obtained a higher degree of cutting which were identified in this study. Therefore, the elements of evaluation feedback are acceptable in proposed model for evaluation.

With regard to the order of the elements of feedback for agricultural extension activities which came (Process of control) in the first rank in terms of importance from the point of view of the respondents with an means weighted arithmetic of 3,847 degrees, which is higher than the weighted arithmetic means of other elements.

This may be due to that the evaluators have sufficient information about the control and follow-up of agricultural extension activities and conditions of application, which helps them to know the validity of the response of the targets to evaluation extension activities in Kurdistan region-Iraq.

Either being the element of (Adjustments) in the last rank in terms of degree of importance from the point of view of the respondents with an means weighted arithmetic of 3.801 degrees, which is lower than the weighted arithmetic means of other element.

This may be due to the inability of the respondents to identify the strengths and weaknesses scientifically and correctly for the extension activities to access the final judgment.

6.1 Respondents' approval to standards of evaluation feedback:

The results showed that the weighted arithmetic mean, the degree of importance and approval level of standards of evaluation feedback for the evaluation of extension activities as follows, as shown in Table 25:

Table 25: Proposed standards for feedback of evaluation according to the weighted means and percentage.

Standards	Weighted arithmetic mean	%	Rank
Take advantage of the feedback to know how to improve the performance of the beneficiaries of the evaluation	4.154	83.08	1
Decision makers benefit from the resulting information to feedback to improve the performance of the agricultural extension organization.	3.985	79.70	2
To be Issuance Judgment on the results of feedback according to scientific and legal basis.	3.911	78.22	3
Results of feedback should include negative and positive deviations about actual performance for evaluation.	3.860	77.20	4
Control process is a means to achieve evaluation results	3.786	75.72	5
The results of the feedback should be the main driver for the rectification arbitration on the on-going evaluation of agricultural extension activities.	3.669	73.38	6
The feedback should be based on modify the behavior of beneficiaries of the evaluation results.	3.617	72.34	7
To show the results of the feedback written in the form of follow-up performance.	3.602	72.04	8

In the table 25, the results show that the weighted arithmetic mean of importance from the point of view of the respondents on standards of evaluation feedback for the evaluation of extension activities has obtained a higher degree of cutting which were identified in this study. Therefore, standard of feedback evaluation are acceptable in proposed model for evaluation excepts standards of 157 has been deleted because the weighted arithmetic mean value of standard of feedback evaluation is lower than of cutting which were identified in this study at (3) degrees, See appendix (5).

With regard to arrangement the standards of feedback evaluation for agriculture extension activities, the standards (Take advantage of the feedback to know how to improve the performance of the beneficiaries of the evaluation) that came in the first ranks in terms of importance degree or approve of respondents on it with an means weighted arithmetic of 4,154 degrees, which is higher than means of weighted arithmetic other standard,This may be due to that respondents have the necessary information and recommendations for the process of feedback through monitoring of extension activities by using communication technology or self-control by handing (checked) to know achieve the evaluation objectives for agricultural extension activities and provide the evaluator with the information, recommendations or symbols necessary to enhance his / her performance or corrected and installed permanently.

Either being a standard of (To show the results of the feedback written in the form of follow-up performance) in the last rank in terms of importance from the point of view of the respondents with an means weighted arithmetic of 3,602 degrees, which is lower than the weighted arithmetic means of other standard.

Maybe the reason is due to the lack of competence of the respondents on the quality of feedback and the lack of exposure to information resources on how to write and display the results of feedback, which helps those sources to providing evaluator with data and information inputs on the external environment and the internal environment for the evaluation process of agricultural extension activities and better perception for situations or agricultural extension activity in the directorates and sections of agricultural extension in Kurdistan.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

Conclusions:

1. The respondents' agreement on the proposed model with all its components is evidence of the relevance of the model, because it depends on the current case of agricultural extension activities, through which an evaluation of agricultural extension activities is considered a comprehensive and integrated process in terms of construction that begins with the phase of feedback to the evaluation outputs of agricultural extension activities in Kurdistan Region – Iraq.
2. There is greater emphasis from the respondents on the greater importance of arranging the components of the proposed model and the image, which includes: feedback, inputs, processes and outputs. Which means that in the results, it was shown that the respondents gave great importance to the feedback, as it is an important process to make sure that the results of the evaluation are achieved and in light of them, a judgment can be made on the results and approval of starting the evaluation process from start not continuing with it. The results also showed that the respondents gave the least importance to the outputs. This indicates that the respondents have elementary information on the results of the evaluation and how to prepare the final report of the results and discuss them before helping it reach them to the beneficiary of the evaluation results.
3. There is a great emphasis from the respondents that the proposed model includes the main and minor elements and paragraphs of the components of the model and its importance, which indicates the suitability of the model for application in the field and its role in advancing the level of efficiency and effectiveness of the evaluation of agricultural extension activities in the Kurdistan Region – Iraq.
4. There is a great emphasis from the respondents on the importance of the proposed model for evaluating indicative activities and based on systems theory, this indicates that systems theory can be applied in this study and similar studies, because by applying this theory it can cover the phenomenon and study it in a comprehensive manner.

Recommendations:

1. Subjecting the proposed model for evaluating agricultural extension activities with all its components for application in a sequential manner and in the order present in the conclusion by the Ministry of Agriculture and Water Resources, especially the directorate of Agricultural Extension Departments in the Kurdistan Region – Iraq.
2. Conducting an applied study of the evaluation model to know the effectiveness and realism of the model in a practical way by the directorate of Agricultural Extension Departments in the Kurdistan Region - Iraq.
3. When taking the proposed model, the Agricultural Extension Directorate and its departments in Iraqi Kurdistan should focus on the following:

a. Standards for feedback, especially the Standards (Identify the concept of control and benefit from it to find out individual performance, organization and indicative

b. Input standards for building organizational structure of evaluation,

c. In particular, the criterion (The preparation of the evaluation committees be based on scientific, technical and economic bases)

d. Standards related to process of the plans, specifically the criterions (The design and preparation of the evaluation plan is according to the use of the components of systems analysis theory)

e. Output Standards related to reaching the results, specifically the criterions (Types of evaluation report, whether they are scientific or technical, or for extension workers or owners of agricultural projects).

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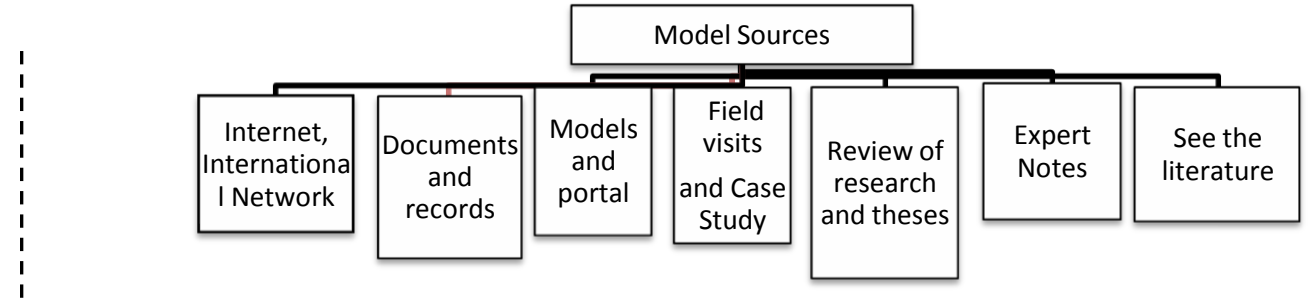
Appendixes

Appendix 1. Specification table or Plan work of building model for evaluation extension activity according to systems analysis



The initial form of the model includes (4) components, (12) main components, (40) sub-components, and (180) standards

Inputs	Processes	Output	Feedback
(4) main elements	(2) main elements	(3) main elements	(3) main elements
(27) Sub-elements	(13) Sub-elements	---------	---------
(99) Standards	(60) Standards	(15) Standards	(6) Standards

Present the questioner to the experts

Make changes to some components of the model which is included: Delete - Modify – Add

Model form after making changes, includes (4) components, (12) main elements, (42) sub-elements, and (162) standards

Apply process of Validity and Reliability on the questioner form

Survey the respondents' opinions regarding their approval of the proposed model

The final of model evaluation includes (4) components, (12) main elements, (36) sub-elements and (108) standards

Appendix (2) Questioner form on build a model of the evaluation for experts

Ministry of Higher Education and Scientific Research / University of Sulaimani

College of Agricultural Sciences Engineering

Department of Microbiology and Crops Science

Form No. ( )

Build a model of the evaluation for Agricultural extension activities in the Kurdistan region of Iraq

Professor / Expert Respected:

The researcher conducts the Study through aims to "Build a model of evaluation for agricultural extension activities in the Kurdistan Region of Iraq." , and the proposed model of the evaluation included : main element , sub-elements and phrases /Standards according to the theory systems analysis and represented by : Inputs , Processes , Outputs and Feedback .

With appreciation for your cooperation

Note : The information we will receive will remain confidential and will only be used for scientific research purposes

- Please do not include the name when filling out the questionnaire.

Researcher : Dara Abdulrahman Salih

1. Inputs of evaluation for agricultural extension activity:

Not: Symbols used for approval are : (1= Approve),(2= Approve with modification) ,(3= Proposed amendment) (4= Unapproved) :

Main elements of the Input	Approval degree				Sub Elements	Approval degree				Items	Approval degree			
	1	2	3	4		1	2	3	4		1	2	3	4
1-1 External environment information for evaluation					Environmental extension activity factors					1.Knowledge and benefit from the quality of extension activities.				
										2.The quality factors of extension activities and their effects on the evaluation of extension activities should be documented.				
										3.Knowledge and utilization of the status factors of extension activities by stakeholders in extension organizations				
										4.The status of extension activities related to actual results when compared to planned results				
										5.Knowledge and benefit from the nature of the performance of the team work by those involved in the extension				
										6.The performance of the team and the evaluation committees and their effects should be documented				
					policy-economic factors					7.Knowledge and utilization of the general characteristics of policy by those involved in extensional organizations				
										8.Knowledge and utilization of agricultural policy factors by those involved in extension organizations				
										9.Agrarian policy factors and their impact on the evaluation of extension activities should be reliable				
										10.Knowledge and utilization of the principles of agricultural economics by those involved in the extension organizations				
										11.Agricultural economic factors and their effects should be documented.				
					Social & cultural factors					12.Knowledge and utilization of social factors by those involved in extensional organization				
										13.Social factors and their effects should be documented and accessible to those in charge of the indicative evaluation				
										14.Knowledge and utilization of cultural factors by those involved in extensional organization				
										15.Cultural factors and their effects should be documented and within the reach of those in charge of the indicative evaluation.				
					Transportation and communication factors					16.Knowledge and utilization of transport factors and means of communication by relevant extensional organization				
										17.Communication factors and their effects should be documented and within the reach of practitioners				

					Agri. and Scientific research factor					18.Knowledge and utilization of scientific research factors and their results by those involved in extensional organization				
										19.The factors and achievements of scientific research and their effects should be documented				
					Farmers union factors					20.Knowledge and utilization of the influence of farmers' associations by those involved in the extension organization				
										21.The information should be sufficient the farmers' associations and their effects are documented.				
					Information on Agricultural collage & institutes factors					22.Knowledge and utilization of agricultural educational institutions in the provinces by those involved in the extensional organization				
										23.To be specialties the experience of workers in agricultural colleges and institutes is documented.				
					Agricultural Company factors					24.Knowledge and utilization of agricultural companies by those involved in the guiding regulatory.				
										25.To be information detailed information about agricultural companies and their effects are documented				
					NGO and Non Gove. Organization factors					26.Knowledge and utilization of NGOs working in the countryside by those involved in extensional organization				
										27.Information on NGOs and donors working in the countryside should be documented				
					Extensional teams in government consuls					28.Knowledge and utilization of agricultural committees in provincial governing boards by those involved in the extensional organization				
										29.There should be information on the plans and needs of the guidance committees in the governing councils of the governorates				

Main elements of the Input	Approval degree				Sub Elements	Approval degree				Items	Approval degree			
	1	2	3	4		1	2	3	4		1	2	3	4
1-2 Basics and general evaluation framework					Concepts of evaluation					30.Evaluation of extensional activities should be diagnostic.				
										31.It is a descriptive process (quantitative - qualitative) to judge the thing.				
										32.It includes the search for treatments..				
										33.It is a means of developing extension work				
										34.Is the use of evidence levels and determined in the light of a judgment				
					Philosophy					35.A basically reference frame which guides by the evaluators				
										36.Its Include all stages of extension activities: planning, implementation, evaluation.				
										37.Cooperation with staff is essential for the success of the evaluation process				
										38.Work freely is necessary to achieve the objectives of evaluation				
										39.One of The philosophy is to maintain the quality of human relations with the evaluators				
					Basic					40.Use the work review in extension activities.				
										41.The existence of periodic checks for the work of committees and evaluators according to the needs of extension activities.				
										42.Ensure matching achievements through predicted and planned guesses in the time period.				
										43.Use the final audit of the extension activities and acceptance in a specified period time.				
					Objective					44.The existence of written objectives to evaluate the extension activities				
										45.Goals are accurate and measurable				
										46.Goals are defined on the basis of realistic problems				
										47.Comprehensiveness of objectives in the development of knowledge - skills – trends.				
										48.Unison Objectives with the guidance of the Ministry of Agriculture in the Kurdistan Region				
										49.Linking the objectives of the indicative evaluation with the objectives of other agricultural organizations				
					Strategies					50.The conditions for developing an indicative evaluation strategy are its knowledge				
										51.Communicate the residents with others in their field				
										52.Use of primary resources to achieve the objectives of the evaluation of extension activities				
										53.Agree with the objectives of the evaluation of extension activities				
										54.Implementation of the evaluation strategy according to time				
					Policy					55.The evaluation policy should be clear				
										56.Participate in setting policy evaluation activities				
										57.The evaluation policy for extension activities should be comprehensive				
										58.Correct behavior (with flexibility) when any change occurs				

									59.The evaluation policy should achieve coherence and coordination between policies					
									60.The evaluation policy should be writable					
									61.To be subjective and objective evaluation.					
				Types					62.The evaluation is classified into the following types: preliminary (ongoing), final and after implementation					
									63.Evaluation of activities should be constructive and social					
									64.Its classified according to the quality of sources in to: Internal - External - Mutual					
									65.Work to determine the objectives of the reactions					
									66.Identify what the participants do towards the extension activities					
									67.Determine the amount of development in the information of the farmer as a result of the presentation of activities					
									68.Measure the methods size witch applied by the staff as a result of their learning and understanding of the evaluation process.					
									69.Contribution in providing activities within farmers' behavior modifications					
				Levels					70.To compare the performance of the rectifier before and after the implementation of the evaluation plan					
									71.What are the effects of providing guidance activities on the behavior of the evaluators.					
									72.Contribution of the results in determining the return through the provision of extension activities.					
									73.The evaluation deals with the level of the output of the extension work					
									74.The extent to which the provision of activities contributes to improving the functional achievement of the evaluators.					
									75.Determine the behavioral needs of the evaluators by measuring the achievements of activities objectively.					
									76.Determine the fields of evaluation activities					
									77.Identify elements or properties to be evaluated					
				Steps of evaluation					78.Formulation of evaluation objectives and decide on the basis of indicative problems					
									79.Determine the standards and criteria of evaluation activities					
									80.Identify evidence and Proofs for the evaluation of activities					
									81.Design and write a final report to evaluate the activities					

Main elements of the Input	Approval degree				Sub Elements	Approval degree				Items	Approval degree			
	1	2	3	4		1	2	3	4		1	2	3	4
1-3 Construction of organizational structure of evaluation					Characteristics of organizational structure					82.To be Organizational installation Suitable for evaluation mechanism and based on scientific basis.				
					Objectives of construction evaluation					83.To be the objectives of the organizational structure of evaluation are clear, understood.				
					Descriptive jobs in the construction evaluation					84.One of the basic principles of creating an organizational structure is power and the exercise of power that is given through job descriptions.				
					Coordination & Compliance					85.Investigation a kind of harmony in the implementation of evaluation work and away from inconsistencies.				
					Task& Duty in the construction evaluation					86.To be the duties of the evaluators are clear and procedural with the provision of appropriate means.				
					Communication& Relationships					87.To be the relations and communication between the levels of the evaluation unit accurate and efficient.				

Main elements of the Input	Approval degree				Sub Elements	Approval degree				Items	Approval degree			
	1	2	3	4		1	2	3	4		1	2	3	4
1-4 Resources of evaluation					Human Resources					88.Determine the adequate number of extension activities.				
										89.To be evaluators professionally competent in practicing the evolutional work.				
					Physical					90.Preparation of tests, list of notes and form before doing the evaluation.				
										91.Make sure to availability of equipment, transportation, and communications.				
										92.Getting preliminary indicators on the achievements of extension activities.				
										93.Knowledge and utilization of a case study to evaluate extension activities.				
					Financial and time					94.Determination of funds and provide cash for the evaluation process.				
										95.Preparation and processing tools and supplies that are used in the evaluation process				
										96.To be Time to implement evaluation known and installed in the work plan.				

2.Processes of evaluation for agricultural extension activity:

Main elements of the Process	Approval degree				Sub Elements	Approval degree				Items	Approval degree			
	1	2	3	4		1	2	3	4		1	2	3	4
1. 1. Planning of evaluation					Evaluation fields					97.The evaluation plan should include activities to identify the field to be evaluated				
										98.Be evaluate the needs of agricultural extension activities				
										99..Be evaluate programs for extension activities before implementation				
										100.Be evaluate programs for extension activities during implementation				
										101.Determines the suitability of program content for extension activities.				
										102.Be participate Both evaluator and the farmers In the evaluation				
										103.The evaluator should be described with scientific and performance skills in the field of evaluation extension activity.				
										104.Participants or farmers have the ability to carry out what is asked of him of duties				
										105.Farmers have the skill of working with groups and adapting to new environments.				
					Objectives					106.To be realistic objectives				
										107.Be comprehensive				
										108.Be clear				
										109.Be flexible				
										110.Participate in the formulation of goals				
										111.Be goals a measurable				
					Design tools for data collection					112.Choose a design for the evaluation of extension activities				
										113.The design should be modern in displaying information				
										114.The design should be comprehensive and its serve the needs of decision-makers of information.				
										115.Design should be appropriate with changes that occur to the evaluation activities				
										116.Contrast range of the design format used in the evaluation of extension activities				
										117.It meets the design needs of decision makers.				
										118.The design contains information and resources related to the evaluation of extension activities				
					Development of the measurements, standard and evidence					119.The standard should be accepted by the evaluators				
										120.The standard should be understood by supervisors and implementers				
										121.The standard should be quantified for comparison				
										122.To be evaluators excluded to implement and activate the standard				
										123.The scale shod be measures the quality to be measured				
										124.The scale be characterized by Virtual truth and content				
										125.The scale should be stable or validity in the results in case of repetition				

										126.The measurement should be objective				
										127.The measurements should be non economically expensive				
										128.Diversity in data collection lead to create a clear picture of the area to be evaluated				
				Preparation of data collection tools						129.The majority of evaluators Reaches to the same conclusions almost when using the data collection tool				
										130.To be suitable data collection tools with goals evaluation				
										131.Preferably the data collection tool has already been applied or tried				
										132.The data collection tool is accurate and easy and interpretable and analyze the results of the evaluation of extension activities				
										133. Determine the time of the evaluation depends on: Providing tools, scope of work, number of beneficiaries and financial allocations.				
				Timetable						134.The time specified for a evaluation is consistent with the quality of the evaluation				
										135.To respond the time of implementation of the evaluation of the requirements of the beneficiaries of the evaluation results				
										136.Be a budget specific to the evaluation and covers the costs borne by the extensional organization				
				Cost						137.The financial allocations should be flexible and realistic and based on accurate estimates				
										138.To possess educational and training capacity enable it to work properly				
										139.To know the correct information about the psychological and educational aspects of understanding the nature of the participants				
										140.To possess farmers or participants adequate specialized experience				
										141.Be benefited evaluators Rectifier of information owned by participants				
				Identify categories Participants and evaluators						142.One of the priorities of the evaluators' work is the desire of the participants to conduct the evaluation				
										143.Farmers should participate in the evaluation of evaluators , curriculum and schedule				
										144.To know the evaluator or teams laws and instructions that and used to improve the implementation of evaluation.				
										145.To know the decision-makers every detail of the evaluation process				
										146.The participation of experts from abroad, especially specialists in education and management in the evaluation of goals				
				Identify categories of a beneficiary for result evaluation						147.To benefit from the results of the evaluation bodies working extension, research and extension services.				
										148.To know the beneficiaries All the details of evaluation activities from the beginning stage.				

Main elements of Implementation	Approval degree				Sub Elements	Approval degree				Items	Approval degree			
	1	2	3	4		1	2	3	4		1	2	3	4
1. 2 Implementation of evaluation					Data Tabulation					149.To elect the data tab mechanisms before implementation				
										150.Check the answer of data evaluation in detail.				
										151.Organize data on a basis conformity.				
					Statically analysis data					152.Be interrogated statistical analysis on questions evaluation activities				
										153.Be used different styles In the evaluation activities efficiently in the analysis of statistics				
										154.To be analyze and interpret the results based on the evaluation field				
					Incoded data					155.It facilitates data encoding according to the types and access to the results.				
					Interpretation of data					156.The data is interpreted to reach on judgment or conclusions				
										157.Data are interpreted through the use of descriptions and inference				
										158.The evaluator should have previous experience in interpreting data and on scientific basis				

3. Out puts of evaluation for agricultural extension activity:

Elements of out puts	Approval degree				Items	Approval degree			
	1	2	3	4		1	2	3	4
Access to results					159.To use scientific perspectives in interpreting and presenting the results of evaluation activities				
					160.Be used in the results display graphs in a clear methods				
Discussion of results					161.Take into account the appropriate place and time in discussing the results before publishing and circulating them to the beneficiaries of the evaluation.				
					162.Using group methods In discussing the results of evaluation activities				
					163.Be issued Judgment In light of the results reached				
					164.include discussion of results descriptive statements showing the type of behavior required				
Preparing and writing the report					165.Prepare writing evaluation report for different destinations				
					166.To be highlighted in the report specific strengths and weaknesses of extension activities				
					167.Include the report all the details of evaluation extension activities				
					168.The report should focus on the use of understandable ideas and languages as they are written.				
					169.Report writing is consistent for recommendations and proposals with the objectives of the report				
					170.Contribution of all participants in writing the initial report in a way that shows their views.				
					171.Review and see On the report before publication is necessary				
					172.Includes a separate and separate chapter to indicate the opinion of the evaluators				
					173.The final report should arrive to the beneficiary in perfect time.				

4. Feedback of evaluation for agricultural extension activity:

Elements of Feedback	Approval degree				Items	Approval degree			
	1	2	3	4		1	2	3	4
Control process					174.The objective of monitoring is to ensure that the results of the evaluation are achieved in accordance with their evaluation objectives				
					175.Control shall be conducted to make sure the evaluation process and the possibility of achieving the objectives of the evaluation by the staff				
Issuing a judgment					176Uses feedback to pass judgment and control on deviations (positive - negative) according to the time and place appropriate.				
					177.To be sentenced on the results of feedback to evaluate according to scientific and legal bases.				
					178.Take advantage of the positive results of evaluation and judge its continuity.				
Adjustments					179.Take advantage of feedback for the purpose of directing and modify the behavior of participants in the evaluation extension activities				
					180.To be final recommendations for feedback reliable and written in the hands of the mentors and applicable.				

Not: Do you suggest other terms or standard for the evaluation of agricultural extension activities in addition to the above?

Please answer Yes ------, No ------- If yes, please indicate the proposed standard:

1. ----------

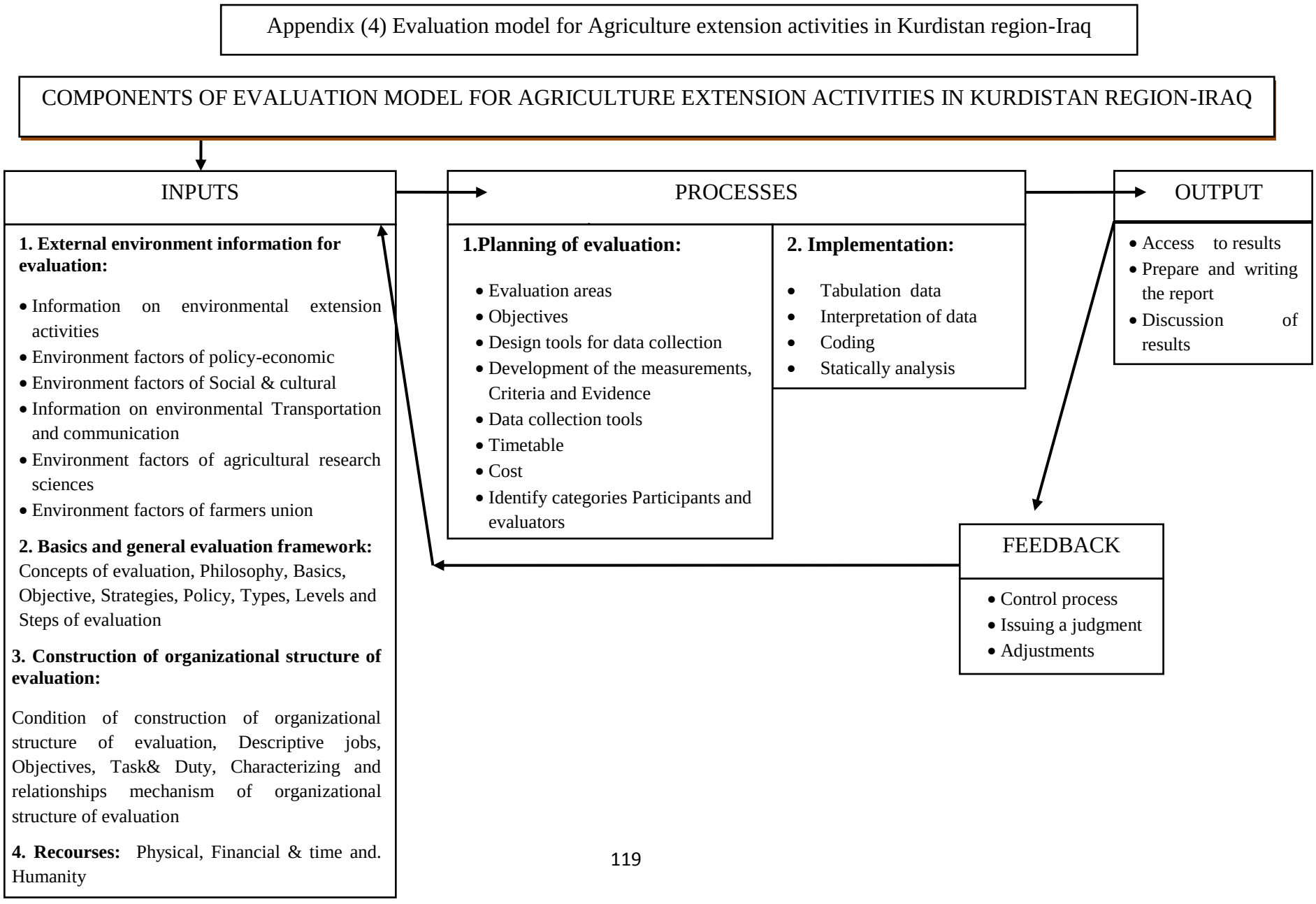
2. ----------

3. ---------

Appendix (3) Expert names of the arbitrators according the certificate, the scientific title and the work destination

No.	Name	scientific title	Specialty	work destination
1.	Dr. Tariq Oglla Hidros	Profesor	Agricaltural Extension	College of Agriculture /University of Dhiqar
2.	Dr.Abid Ali Hsan AL-Doski	Profesor	Extension Trainning	College of Agricultural Sceinces / University od Duhok
3.	Dr.Ashwaq Abdulradhaq AL-Badri	Profesor	Extension Evaluation	College of Agricultural Engeeneering Sceinces/University of Baghdad
4.	Dr.Karem Shareef Qarachtani	Profesor	Educational Psycologic	Fculity of Educational Basic / University of Sulaimani
5.	Dr. Najm eldeen Abdullah Saleem	Professor	Agricultural Extension	College of Agriculture- University of Musil
6.	Dr. Jabr M. Hameed Al- Attabi	Professor	Agricultural Extension	College of Agriculture, University of Wasit
7.	Dr.Tahir Muhammad Laiq AL-Jaff	Asist profesor	Extension Management	Collage of Agricultural Sceintific Engeeneering/ University of Sulaimani
8.	Dr.Abdulstar Omer Osman	Asist profesor	Agricaltural Extension	College of Agriculture/University of Kirkuk
9.	Dr. Mohammad Usif AL-Abbasi	Asist profesor	Extension Mnagement	College of Agriculture and Forestry / University of Mosul
10.	Dr.Bayan Abduljabar AL-Saady	Asist profesor	Extension Planning	College of Agricultural Engeeneering Sceinces/University of Baghdad
11.	Dr.Ali AL-Xatib	Asist profesor	Agricaltural Management	College of Agriculture/University of Tikrit
12.	Dr.Sabir Bakir Bocani	Asist profesor	Evaluation and Measurement	Fculity of Educational Sport/ University of Sulaimani
13.	Dr.Methal A.AL-Mashhadani	Asist profesor	Evaluation Trainning	College of Agricultural Engeeneering Sceinces/University of Baghdad
14.	Dr. Ali Ahmad AL-Ghadeeb	Asist profesor	Extension agricultural	College of Agriculture/University of Tikrit
15.	Dr. Xattab Abdulla M. AL-Jburi	Asist profesor	Educational Technology	College of Agriculture/University of Kirkuk
16.	Dr.Sazan Mustafa Ahmed	Lectuere	Buseaness Managment	Collage of Economic and Management/ University of Sulaimani
17.	Dr.Hashm Saeed AL- Zebary	Lectuere	Extension& Rural Development	College of Agricultural Sceinces / University od Duhok

Appendix (4) Evaluation model for Agriculture extension activities in Kurdistan region-Iraq



Appendix (5) Final questioner form on build a model of the evaluation in Kurdistan region of Iraq

Ministry of Higher Education and Scientific Research

University of Sulaimani / College of Agriculture Sciences Engineering

Department of Microbiology and Crops Science

Form No. ( )

"Build a model of the evaluation for Agricultural extension activities in the Kurdistan region of Iraq"

Dear Respondent:

The current study aims to build a model of evaluation for agricultural extension activities in the Kurdistan Region and the proposed model includes the main and sub-elements and standards according to the systems analysis, which consists of inputs, processes, outputs and feedback.

Best regards

Note: - The information we will receive will remain confidential and will only be used for scientific research purposes

- Please do not include the name when filling out the questionnaire.

Researcher : Dara Abdulrahman Salih

In the proposed model, there are suggested Standards and sub-elements. Please indicate your opinion on the importance by putting a sign (√)

1. Inputs of evaluation for agricultural extension activity:

Main elements of the Input	Sub Elements	Items	Likert Scales				
			Very important	Important	Neutral	Low important	Not important
1-1 External environment information for evaluation	1.Environment extension activity factors	1. Providing data on the quality of extension activities					
		2. Quality data and its effects should be reliable and accessible in the hands of the evaluators					
		3. Provide data on the status of extension activities and use them for evaluation					
		4. Learn about the nature of the performance of the team evaluation and benefit from it					
		5. Information on the performance of the team and its effects should be reliable and accessible to the evaluators.					
	2. Environment of policy-economic factors	6. Provide data on the general characteristics of the policy and benefit from it					
		7. Providing and benefiting data on agricultural policy factors					
		8.The factors of agricultural policy and its effects should be reliable and accessible to the evaluators					
		9.The factors of the agricultural economy and their effects should be reliable and accessible in the hands of the evaluators					
	3.Environment of Social and cultural factors	10.Identify and benefit from social factors					
		11.Social factors and their effects should be reliable and accessible in the hands of the evaluators					
		12.Providing and benefiting data on cultural factors					
		13.The factors of culture and its effects should be reliable and accessible in the hands of the evaluators					
	4.Transportation and communication factors	14.Providing and utilizing data on transport and communications					
		15.Transport and communication factors and their effects should be reliable and accessible to the people					
	5.Environment of agriculture Scientific research	16.Providing data on agricultural scientific research and benefiting from its results					
		17.The results of agricultural and extension research and their effects should be reliable and accessible to the evaluators					
	6.Environment of farmers union factors	18.Providing and benefiting data on farmers' unions					
		19.Information about farmers in the federations and their effects should be reliable and accessible to the evaluators					
	7.Environment of agricultural collage and institutes factors	20.Providing and benefiting from data on educational institutions (agricultural colleges and institutes)					
		21.Information on the specialties working in scientific institutions should be accessible to the evaluators					
	8.Environment of agricultural Company	22.Providing and benefiting data on farmers' unions					
		23. Information about farmers in the federations and their effects should be reliable and accessible to					

	factors	the evaluators					
	9.Environment of NGO factors	24.Providing and utilizing data on NGOs and its factor					
		25.The information and effects of NGOs should be reliable and accessible to the evaluators.					
	10.Environment of Agriculture teams in government consuls	26.Providing data on agricultural committees working in the provincial council and benefiting from them					
		27.Identify the tasks and duties of the agricultural committees in the provincial council and their effects and reach in the hands of the evaluators					

Main elements of the Input	Sub Elements	Items	Likert Scales				
			Very important	Important	Neutral	Low important	Not important
1-2 Basics and general evaluation framework	Concepts of evaluation	28.Evaluation is a diagnostic process that provides quantitative and targeted data					
		29.The concept of evaluating activities which is scientific and descriptive					
		30. Evaluation It is a search for treatment					
		31.Evaluation is a way to improve and develop extension work					
		32.Using specific criteria and levels which is done in the light of it final arbitration					
	Philosophy	33.Maintaining philosophical foundations and using them for evaluation in accordance with the methodology of systems analysis					
		34.Unite efforts for activities to be evaluated to ensure access to results					
		35.To think about the evaluation logically away from personal biases					
		36.Provides data on evaluation concepts and is accessible to the evaluators					
		37.From the philosophy of the evaluation: taking into account the level of human relations with and among those covered by the evaluation					
	Basically	38.Periodically review activities from the foundations of the evaluation					
		39.Conducting tests for the work of the evaluation committees in accordance with the needs of the evaluation work					
		40.Ensure that achievements are matched with the action plan to evaluate the extension activities					
		41.The final audit of the extension activities should be clear, comprehensive and understandable					
	Objective	42.Identify the extent of achievements and participate in the evaluation as a priority of the evaluation goal					
		43.Providing senior management with sufficient data on the results of the evaluation					
		44.Providing the database on the mechanisms of application of the evaluation process are the main objectives of evaluating the extension activities					
		45.The objectives should be consistent, coherent, inclusive and implementable.					
		46.The objectives should be determined on the basis of realistic problems					
	Strategies	47.Find out what the strategy is and its effects are in the hands of the evaluators					
		48.The strategy provides a common language among specialists in their field of work					
		49.A strategy as a means of economically extension resources					
		50.The conditions for the development of the strategy to meet the requirements of the evaluation objectives					
		51.The strategy should be linked to the time specified for it when the evaluation operations are implemented					
		52.The characteristics of the strategy should be implemented comprehensive and simply					

	Policy	53.The orthodontic policy for extension should be applicable to the components and stages of systems analysis					
		54.There should be a link between the components of agricultural and evaluation policy and the non-conflict between them					
		55.The need to participate in the preparation and formulation of policy between the senior administrative bodies and the nationalists					
		56.Periodic review of the extension and evaluation policy according to the requirements of the conditions of the extension activities					
		57.The evaluation policy should be flexible, accurate and consistent with the evaluation levels and applicable					
	Types	58.Evaluation is classified by time period : preliminary - ongoing - after final implementation					
		59.The extension evaluation is classified by the quality of the sources : internal, external and common					
		60.To be evaluating the extension activities constructively or in community					
		61.The quality of the evaluation should be related to the functions of the extension activities					
	Levels	62.Evaluation levels are classified according to the methodology of systems analysis to levels: Summative and Formative					
		63.Information and intellectual perceptions of the components and elements of the systems analysis should be known and reliable					
		64.Determining the level of indicators needed to measure the components and elements of the systems analysis methodology					
		65.At the formative level, the evaluator focuses on the mechanism of interactions between the components of the system and the performance of the system.					
		66.At the summative level, the evaluator focuses on the analytical and detailed functions of the subsystems of the components of the evaluation system.					
		67.Estimate the results of variables for analysis evaluation and make sure they are achieved in evaluation levels					
	Steps of evaluation	68.To determine the areas of the evaluation sequentially and start with the first phase and end with writing the report for evaluation					
		69.Identify and determined components and elements of evaluation systems					
		70.Report and formulate evaluation goals					
		71.Determining evaluation of measures and standards					
		72.Identifying evidence and evidence					
		73.Preparing and writing the report of evaluation					

Main elements of the Input	Sub Elements	Items	Likert Scales				
			Very important	Important	Neutral	Low important	Not important
1-3 Construction of organizational structure of evaluation	Characteristics of organizational structure of evaluation	74.To be preparing the evaluation committees based on scientific, technical and economic foundations					
		75.Taking into account the degree of matching between the organizational components of the orthotic committees with the mechanisms of implementation					
	Objectives of construction evaluation	76.The suitability of the structure of the orthotic committees with the philosophy and objectives of the evaluation					
	Descriptive jobs	77.Taking into account job descriptions when forming orthotic elves					
	Coordination and Compliance	78.To achieve a kind of harmony between the evaluation committees in the implementation and accurate and comprehensive					
	Task and Duty in the construction evaluation	79To have information about the tasks and duties known by the evaluators and members of the committee for evaluation					
	Communication and Relationships	80.The mechanism of communication and relations between/the organizational units of the committees should be efficient and applicable					

Main elements of the Input	Sub Elements	Items	Likert Scales				
			Very important	Important	Neutral	Low important	Not important
1-4 Resources	Human Resources	81.Determine the number of evaluators according to the nature of the evaluation and the exact time					
		82.The requirements of the evaluation work should be known and accessible to the people					
		83.The evaluator must have the experience, skill and ability to make decisions in his field of evaluation					
	Physical	84.Preparing tools and supplies before the evaluation and implementation					
		85.Providing material and information resources about the reality of the evaluation and benefiting from them in light of the available possibilities					
		86.There are preliminary indicators related to the achievements of the evaluation work					
	Financial and time	87.Identify and provide financial allocations within the budget allocated to the evaluation					
		88.Use the most economical programs and statistics in the evaluation process					
		89. The time needed to hold and implement the evaluation should be known and installed in the plan work of evaluation.					

2. Process of evaluation for agricultural extension activity:

Main elements of the Process	Sub Elements	Items	Likert Scales				
			Very important	Important	Neutral	Low important	Not important
1. 1. Plan of evaluation	Evaluation fields	90.To be designed and plan for the evaluation process according to the use of the components of systems analysis					
		91.Provide sufficient information on how to prepare the plan for the evaluation process of the evaluators					
		92.Employing the components and elements of the systems analysis methodology in the evaluation plan and ensuring harmony between them					
		93.The designer of the evaluation plan has sufficient skill in this field					
		94.The selection of evaluation field is based on scientific principles and evaluation needs.					
		95.The characteristics of the areas to be evaluated should be measurable as and qualitative and comprehensive.					
		96.The selection of evaluation fields should be related to the objectives to be measured					
	Objectives	97.Harmony of the goals of the general and agricultural with the objectives of the extension evaluation					
		98.To be measuring and applied to the targets					
		99.The objectives should be announced and specific for the evaluator and the orthotic committees					
		100.Participation of beneficiaries and evaluators in the formulation of evaluation goals					
		101.Goals Characteristics are : Simplicity, Realism and Flexibility					
	Design tools	102.Conditions for choosing to design evaluation tools based on input and data on the evaluation					
		103.The formulation of the tools should respond to the requirements of decision makers and those who benefit from the results of the evaluation					
		104.The designer has sufficient skills and experience in this field.					
		105.Characteristics of evaluation tools are : flexibility , comprehensiveness and modernity in the presentation of information					
	Development of measurements, standard and evidence	106.The standards and measures to be used should be known and circulated in the hands of the evaluators					
		107.The criteria should be simple, understandable and reliable.					

		108.The ability of the evaluator to activate the measure scoring economically in terms of cost and time					
		109.The purpose of determining the measures of the basics of the evaluation					
		110.The conditions for the formulation of the measure sought to measure the property for which it was designed					
		111.In the execution of the measure is to get the same results if they are repeated on the same researches and under the same conditions					
		112.The scale is objective.					
		113.The evidence and evidence should be comprehensive, flexible and effective in implementation					
	Tools of data collection	114.The variety of use of data collection tools is evidence of the proper choice of the domain to be straightened out					
		115.The use of the same data collection tool by the majority of evaluators leads to almost the same results					
		116.Adapting data collection devices with the evaluation objectives set for them					
		117.Preferably using the data collection tool that has already been applied and tried					
		118.Be a data collection tool accurate, easy to interpret and analyze					
	Timetable	119.One of the requirements for determining the time to conduct the evaluation is to know the availability of tools, the scope of work, the number of participants and respondents.					
		120.Harmony between time limit and quality of evaluation					
		121.Response time set to implementation with the requirements of the administrative authorities and beneficiaries of the results of the evaluation					
	Cost	122.The cost allocations by the higher authorities should be based on preliminary guesses to conduct the evaluation process					
		123.Financial allocations should be accurate and flexible and based on realistic guesses					
	Identify of categories Participants and evaluators	124.The evaluators should have sufficient scientific knowledge and experience in the fields of measurement and evaluation					
		125.Providing data on the management and ecology of individuals and groups and benefiting from it to the evaluators					
		126.One of the characteristics of the evaluator is to be frank and able to convince others in his field of work					
		127.Use the information and expertise of users and participants from evaluation in the field of preparing the evaluation plan					
		128.The rules and instructions that are employed during the implementation of the evaluation plan					
		129.The response of farmers and recipients of the results of the evaluation to the directives of the evaluator facilitates the implementation of the evaluation plan					
		130.Processing the beneficiaries of the evaluation about the mechanisms and details of the planning processes and implementation and evaluation activities					

	Identify of categories beneficiary for result evaluation	131.Those who benefit from the results of the evaluation: the owners of administrative decisions in the governmental and non-governmental guidance organizations					
		132.Introducing those who benefit from the evaluation with sufficient information about the evaluation mechanism and making use of it in their field of extension					

Main elements of Implementation	**Sub Elements**	**Items**	**Likert Scales**				
			Very important	**Important**	**Neutral**	**Low important**	**Not important**
2.2. Implementation of evaluation plan	Tabulation Data	133.Recommendations on data tabulation and how to make it					
		134.Organize data in tables and graphic forms identically in accordance with the objectives set for evaluating activities					
	Statically analysis data	135.The statistical analysis should be commensurate with the quality of objective criteria					
		136.The choice of appropriate statistical methods depends on the scientific and skill-based competence of the evaluators.					
		137.Interpreting and analyzing the results statistically and in the light of evaluation objectives					
	Coding	138.The coding process depends on the choice of programs and how they are used by the evaluators					
		139.The code should be simple, flexible and can be disassembled when applied in computer software or manually					
	Interpretation of data	140.To be used in the interpretation of data description, inference and conclusion					
		141.The presence of previous skills and experience of those who are responsible for interpreting the data and on scientific basis					

3. Out puts of evaluation for agricultural extension activity:

Elements of out puts	Items	Likert Scales				
		Very important	Important	Neutral	Low important	Not important
Access to results	142.To follow in the interpretation of the results of the evaluation the basis of scientific					
	143.To present the results of the evaluation in the charts in a clear and understandable way					
Discussion of results	144.Discuss the results of the evaluation before generalization and publication					
	145.The discussion of the results should be descriptive, showing the type of behavior required.					
Preparing and writing report	146.Types of evaluation report either to be : scientifically , tactically and for agents and agricultural entrepreneurs					
	147.In writing the report takes into account the scientific and professional level of those who are the recipients of the results of the evaluation					
	148.Show the scientific and technical aspects of the guidance activities in the draft report					
	149.Do not duplicate the recommendations in the report with the purpose of their preparation					
	150.Conducting the review scientifically and technically before publishing it to the concerned authorities and taking the results of the evaluation					
	151.To have a separate opinion in the final report.					
	152.The report should be comprehensive, realistic, economic and usable as secondary references and sources.					
	153.Considerate of time needed and the appropriate place during its arrival to the beneficiaries of the evaluation results					

4. Feedback of evaluation for agricultural extension activity:

Elements of Feedback	Items	Approval degree				
		Very important	Important	Neutral	Low important	Not important
Control process	154. Take advantage of the feedback to know how to improve the performance of the beneficiaries of the evaluation					
	155.Censorship is a way to achieve the results of the evaluation and how to achieve them					
	156. Decision makers benefit from the resulting information to feedback to improve the performance of the agricultural extension organization.					
	157.Type of control are personal and use cameras or electronically					
Issuing a judgment (Strength and weakness)	158. Results of feedback should include negative and positive deviations about actual Performance for evaluation.					
	159. To be Issuance Judgment on the results of feedback according to scientific and legal basis.					
	160. The results of the feedback should be the main driver for the rectification arbitration on the on-going evaluation of agricultural extension activities.					
Adjustments	161. The feedback should be based on modify the behavior of beneficiaries of the evaluation results.					
	162. To be Issuance Judgment on the results of feedback according to scientific and legal basis.					

Not: Do you suggest other terms or criteria for the evaluation of agricultural extension activities in addition to the above?

Please answer Yes ------, No ------- If yes, please indicate the proposed standard:

1. ----------

2. ----------

3. ---------

پوختە

ئامانج لەم توێژینەوەیە بونیاتنانی مۆدێلێکی هە لسەندگاندنە بۆچالاکیەکانی ڕێنمایی کشتوکاڵی لە هەرێمی کوردستان- عێراق کە پێکهاتووە لە:

1. دەروازەکان: ئەم پێکهاتەیە بریتیە لە توخمەکانی : زانیاری فاکتەرەکانی ژینگەی دەرەکی هەڵسەنگاندن ، زانیاری لە سەر بنچینەکان وهێڵی گشتی هەڵسەنگاندن ، بونیاتنانی پەیکەری ڕێکخراوەیی بۆهەڵسەندگاندن، دەرامەتەکان : مرۆیی، ماددی، دارای وکات.
2. پرۆسەکانی هەڵسەنگاندن: توخمەکانی پلاندانانی هەڵسەنگاندن وجێبەجێکردنی هەڵسەنگاندنی چالاکیەکانی ڕێنمایی کشتوکاڵ دە گرێتەوە.
3. دەرچەکان (ئامانجەکان)ی هەڵسەنگاندن، توخمەکانی : گەیشتن بەئامانجەکان ، گفتوگۆی ئامانجەکان ، ئامادەکردن ونووسینەوەی ڕاپۆرتی ئەنجامەکان دەگرێتەوە,
4. فیدباك: توخمەکانی (پرۆسەی چاودێری ، بریاردان ، چاککردنەوە و ڕاستکردنەوە) لە خۆدەگریت .

بەئامانجی گەیشتن بە مۆدێلێکی پێشنیارکراو پشتبە ستراوە بەم ڕێکارانە : چاوخشاندنەوە بەئەدەبیاتی تایبەت بەبابەتە کە ، لێکۆڵینەوەی کە سی لەسەر هەڵسەنگاندنی هەنووکەیی ومیکانیزمی هەڵسەنگاندن، مۆدێلەکان، فەرهەنگەکانی تایبە ت بە هەڵسەنگاندن ، تۆرەکانی ئەنتەرنێت و بۆچون و ڕای پسپۆران وشارەزایان.

لەژێر ڕۆشنای ئەو ڕێکارانە ی کەباسکراوە بیردۆزی سیستەم بەگەرخرا بۆپێکانی ئامانجی توێژینەوەکە .

بە شێوەیەکی سەرەتای (162) پێوەر دانرا بۆمۆدێلەکە کەدا بەشبوون بەسەر پێکهاتەکانی: دەروازەکان (89) پێوەر ، پرۆسەکان (52) پێوەر ، دەرچەکان (12) وە فیدباك (9) پێوەر. دواتر مۆدێلە پێشنیارکراوەکە خرایە بەرچاوی کۆمەڵێك لە شارەزایان وپسپۆران لەبوارەکانی : ڕێنمایی کشتوکاڵ، کارگێڕی بەرێوەبردن ، پێوانەکردن

وهەڵسەنگاندنەکان ، بۆدەرخستنی ڕاو بۆچونیان لەسەر مۆدێلەکە وپێکهاتەکانی.

پاشان گۆرانکاری و زیادەکردن بۆمۆدێلەکە ئەنجامدرا لەسەر بنەمای ڕای زۆرینەی پسپۆرەکان . وە پێکهاتەی مۆدێلەکەبوو بە (4) توخمی سەرەکی وە (24) توخمی لاوەکی بۆدەروازەکان ،(2) توخمی سەرەکی و (13) توخمی لاوەکی بۆپرۆسەکان ، (3) توخم بۆ دە رچەکان و (3) توخم بۆ فیدباك.

لەکۆتایدا (108) پێوەر پەسەندکرا و بەم جۆرە دابەشکرا (57) پێوەر بۆدەروازەکان،(33) پێوەر بۆپرۆسەکان (10) پێوەر بۆ دەرچەکان و (8) پێوەر بۆ فیدباك .

کۆمەڵگەی توێژینەوەکە سەرجەم کارمەندانی ڕێنمای کشتوکاڵی هەرێمی کوردستانی لە خۆگرتبوو، کەژمارەیان (302) کارمەندە ، وە نمونەی توێژینەوەکە هەڕەمەکی سادەیە کەبەڕێژەی 45٪ وەرگیرا کەژمارەیان (136) کارمەندبوو.

فۆرمی ڕاپرسی بەکارهات بۆدەرخستنی مەودای رازبونی کارمەندەکا نی ڕێنمای کشتوکاڵی بۆمۆدێلە پێشنیارکراوەکە . وە لەسەر ڕۆشنای پێوەری پێنجی (زورگرنگە، گرنگە، رام نییە، کەمێك گرنگ، گرنگ نییە) وە کێشە کانیان دیاریکران بەریزبەندی بە : (5 ، 4 ، 3 ،2 ،1) ، بۆشیکارکردنی ئەنجامەکانی توێژینەوەکە ئامرازەکانی : ڕێژەی سەدی، ناوەندی هەژمارکراو هەروەها پڕۆگرامی $SPSS_{version22}$ بەکارهات.

زۆرینەی کارمەندەکان رازیبوون لەسەر مۆدێلەپێشنیارکراوەکە، توێژەر پێشنیاردەکات کە مۆدێلەکە بەهەند وەربگرێت بەشێوەی پلەبەندی یەك بەدوای یەك وەك ئەوەی ئاماژەی پێکراوە لە ئەنجامەکاندا، هەروەها بەگەرخستن وجێبەجێکردنی مۆدێلەکە بۆزانینی مەودای کارایی وراستی مۆدێلەکە وە بەپراکتیزەکردنی لەلایەن بەرێوبەرایەتی ڕێنمای کشتوکاڵ لە هەرێمی کوردستان – عێراق .

المستخلص

يهدف البحث الحالي الى بناء انموذج التقويم لنشاطات الارشاد الزراعي في اقليم كوردستان –العراق والمتضمن :

1. مدخلات التقويم : وتشمل كل من العناصر: معلومات عوامل البيئة الخارجية للتقويم ، معلومات عن اسس واطار عام لتقويم ، بناء التركيب التنظيمي للتقويم والموارد: البشرية ، المادية ، المالية والوقت .
2. عمليات التقويم : وتشمل عناصرخطة التقويمية وتنفيذ التقويم لنشاطات الارشاد الزراعي.
3. مخرجات التقويم : وتشمل عناصر الوصول الى النتائج ، مناقشة النتائج ، اعداد وكتابة تقريرنتائج التقويم.
4. التغذية الراجعة : تشمل عناصر عملية الرقابة ، اصدار الحكم و التعديلات .

و بهدف الوصول الى بناء انموذج المقترح لتقويم تم الاعتماد على الاجراءات الاتية : مراجعة الادبيات ذات العلاقة بالموضوع ، دراسة الميدانية عن الية التقويم، النماذج والمداخل المتعلقة بالتقويم لنشاطات الارشاد الزراعي ، المواقع الا لكترونية وجدول المواصفات واراء الخبراء والمختصين .

وعلى ضوء الاجراءات السابقة تم توظيف نظرية تحليل النظم لتحقيق اهداف البحث الحالي ، اذ تم وضع 162 معيارا لتكوين انموذج المقترح بصورة الاولية ، وتوزع المعايير على مكونات انموذج كالاتي : المدخلات (89) ، العمليات (52) ، المخرجات (12) والتغذية الراجعة (9) معيارا.

عرض انموذج المقترح على مجموعة من الخبراء والمختصين في : الارشاد الزراعي، ادارة الاعمال و القياس والتقويم ، لبيان رايهم على ماجاء في انموذج ، ثم تم اجراء التعديلات على ضوء اراء الخبراء ، ثم وضع (4) عناصر رئيسة و (24) عناصر الفرعية لمدخلات ، (2) عناصر رئيسة و(13) عناصر فرعي للعمليات ، (3) عناصر للمخرجات و (3) عناصر لتغذية الراجعة . وتم صياغة (108) معيارا وتوزع كالاتي : (57) معيار لمدخلات ، (33) للعمليات ، (10) للمخرجات و (8) معيارا لتغذية الراجعة . وشمل مجتمع البحث جميع العاملين بالارشاد الزراعي في كوردستان- العراق والبالغ عددهم 302 عاملا،واخذت عينة عشوائية بسيط بنسبة 45٪ و بواقع 136 عاملا.واستخدمت استمارة استبيان لبيان موافقة العاملين بالارشاد على ماجاء في انموذج، في ضوء مقياس الخماسي : (مهم جدا ، مهم ، محايد ، قليل الاهمية ، غير مهم) وحدد الاوزان الاتية : (5 ، 4 ، 3 ، 2 ، 1) على التوالي.

ولتحليل نتائج البحث تم استخدام : النسبة المئوية، الاعداد، الوسط الحسابي الموزون (المرجح) وذلك من خلال استخدام برنامج $SPSS_{version22}$.

وخلص نتائج البحث الى موافقة العاملين على ماجاء في انموذج المقترح لتقويم النشاطات الارشادية ، وقد اوصى الباحث الاخذ بانموذج التقويمي بشكل متسلسل وحسب ماوردت في انموذج المقترح، واخضاع انموذج للتطبيق لتعرف على مدى فاعلية و واقعيته بصورة عملية من قبل مديريات واقسام الارشاد الزراعي في اقليم كوردستان – العراق.

اقليم كوردستان – العراق

وزارة التعليم العالي والبحث العلمي

جامعة السليمانية

كلية هندسة العلوم الزراعية

بناء أنموذج التقويم لنشاطات الارشاد الزراعي في إقليم كوردستان – العراق

أطروحة مقدمة إلى

مجلس كلية علوم الهندسة الزراعية في جامعة السليمانية

وهي جزء من متطلبات درجة دكتوراه فلسفة في

الارشاد الزراعي / تقويم الارشاد الزراعي

من قبل

دارا عبدالرحمن صالح كلهوري

بكالوريوس في الارشاد الزراعي / جامعة بغداد - 1994

ماجستيرفي تخطيط الارشاد الزراعي / جامعة السليمانية - 2009

باشراف

الاستاذ الدكتور

سحاب عايد يوسف العجيلي

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2020 م

حکومەتی هەرێمی کوردستان

وەزارەتی خوێندنی باڵاو توێژینتەوەی زانستی

زانکۆی سلێمانی

کۆلێجی زانستە ئەندازیاریيە کشتوکاڵیەکان

بونیادنانی مۆدێلێك بۆ هەڵسەنگاندنی چالاکییەکانی ڕێنمایی کشتوکاڵی لە هەرێمی کوردستان - عێراق

تێزێك پێشکەشە بە

ئەنجومەنی کۆلێجی زانستە ئەندازیاریيە کشتوکاڵیەکانی زانکۆی سلێمانی

وەك بەشێك لە پێداویستیەکانی بەدەستهێنانی پلەی دکتۆراە فەلسەفە

لە ڕێنمایی کشتوکاڵ / هەڵسەنگاندنی ڕێنمایی کشتوکاڵ

لەلایەن

دارا عبدالرحمن صالح کەڵهوری

بەکالوریوس لە ڕێنمایی کشتوکاڵ / زانکۆی بەغداد - 1994

ماستەر لە پلاندانانی ڕێنمایی کشتوکاڵ / زانکۆی سلێمانی - 2009

بەسەرپەرشتی

پرۆفیسۆر دکتۆر

سحاب عايد يوسف العجيلی

2720 کوردی

2020 زایینی