POPOSED MECHNISM FOR INSTITUTIONAL COORDINATION BETWEEN AGRICULTURAL EXTENTION, RESEARCHES ORGANIZATION AND AGRICULTURAL SERVES ORGANIZATIONS OPERATING IN THE GOVERNORATE OF HOLY KARBALA

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The research Milled I building proposed mechanism for institutional coordination between apicultural research and agricultural service ordain Faction operating in the 3 agricultural extension Governorate of Karbala, In order to achieve the objectives of the research, a questionnaire was prepared, including a five point scale consisting of (120) items distributed on (5) fields and (9) axes, the research was carried out in Karbala governorate on a random sample of 24 % of the research Community, which is composed of 524 respondents thus the research sample become 126 respondents. By presenting the proposed mechanism on the sample of the research, the final forum was Weight mean greater reached using the following standard: the item remains in the final form if it get a than the proposed mean announced 3 degree. The result was survival of all the items within the final Construction of the coordination mechanism, as the field of evaluation ranked first in weighted mean of (4.27degree, and then the implementation field with mean of 4. 264 degree, then the monitor field weighted mean of 4. 24 degree, then the planning field with weighted mean of 4. 2l degree, the field of organization carne last with weighted mean of 4. 18 degree. The researcher recommends adopting the proposed mechanism in order to unite the possibilities and not to waste time and effort and reduce the cost and prevent conflict in the work of all parties related to Agricultural and rural development, bicultural service agencies

Keywords: coordination mechanism, agricultural research organizations, Part of M . Sc , Thesis of the sound author

الخزرجي والعطواني	مجلة العلوم الزراعية العراقية -2019: 50(3):878-878
البحثية والخدمية الزراعية العاملة في محافظة كربلاء المقدسة	آلية مقترحة للتنسيق المؤسسائي بين الإرشاد الزراعي والجهات
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	المستخلص

هدف البحث إلى بناء الية مقترحة للتنسيق المؤسساتي بين الإرشاد الزراعي والجهات البحثية والخدمية الزراعية العاملة في محافظة كريلاء المقدسة، ولتحقيق أهداف البحث اعدت استمارة استبانة تضمنت مقياساً اخماسياً يشمل على (120) فقرة موزعة على (5) مجلات و (9) محاور، واجري البحث في محافظة كريلاء على عينة عشوائية بنسبة % 24 من مجتمع البحث المكون من (524) مبحوثا، لتصبح العينية (126) مبحوثاً على عينة البحث تم التوصل إلى الشكل النهائي لفقرات بناء ومن خلال عرض مقياس الآلية المقترحة المتاسيق آلية التنسيق المقترحة وذلك باستخدام المعيار الأتي : تكون الفقرة ضمن الشكل النهائي إذا حصلت على وسط مرجع اكبر من الوسط الفرضي البالغ (3) درجة، وقد كانت النتيجة بقاء جميع الفترات ضمن البناء النهائي. وحصول مجال التقويم على المرتبه الاولئ بوسط مرجح بلغ 4 ,27) درجة، وقد كانت النتيجة بقاء جميع الفقرات ضمن البناء النهائي. وحصول مجال التقويم على المرتبه الاولئ بوسط مرجح بلغ 4 ,27) درجة، ومن ثم الآلية التنسيق المؤسسائي، إذ جاء مجال التقويم بالمرتبة الأولى بوسط مرجح بلغ (4.27) رحبة، ثم مجال في مجال التنفيذ بوسط مرجح بلغ 4.264، ثم مجال المتابعة بوسط مرجح لي الأولى بوسط مرجح بلغ (4.27) الجهات الزراعية العلى المقترحة ولية المرتبه الألية التنسيق المؤسسائي، إذ جاء مجال التقويم بالمرتبة الأولى بوسط مرجح بلغ (4.27) الموسط الفرضي البالغ (3) درجة، ومن ثم الآلية التنسيق المؤسسائي، إذ جاء مجال التقويم بالمرتبة الأولى بوسط مرجح بلغ (4.27) مرجح 12.4 درجه، ثم مجال التنفيذ بوسط مرجح بلغ 4.2646، ثم مجال المتابعة بوسط مرجح المرتبة الأولى بوسط مرجح ملية ومنا مرجع 12.5 درجه، ثم مجال التنفيذ بوسط مرجح بلغ 4.2646، ثم مجال المتابعة بوسط مرجح المرتبة الأولى بوسط مرجح بلغ (4.27) الجهات الزراعية العليا في المركز وفي محافظة كربلاء المقدسة، من أجل توجيد الإمكانيات وعدم إضاعة الوقت والجه والمي المائية ومنع والح الجهات الزراعية العليا في المركز وفي محافظة كربلاء المقدسة، من أجل توجيد الإمكانيات وعدم إضاعة الوقت والجه ويقليل الكلفة ومنع التعارض كافة ذات العلاقة بالتنمية الزراعية والريفية والازدواج في أعمال الأطراف كافة ذات العلاقة بالتنمية الزراعية والريفية.

كلمات مفتاحية: اليبة التنسيق, الجهات البحثية الزراعية, الجهات الخدمية الزراعية.

البحث مستل من رساله ماجستير للباحث الثاني.

*Received:21/1/2018, Accepted:1/6/2018

INTRODUCTION

Agricultural development is the most difficult task that a nation face, it Isa very complex issue, because it requires the participation of different scientific disciplines (9), The major obstacle to achieve it the multiplicity of agricultural development institutions, which haven't been accompanied by the institutional interclependence between them, which has made the production Sector lag behind the global development thus interclependence, in which the roles of these institutions are coordinated and integrated to serve develop (3). And that the green revolution was instilled in the minds of some of them in the belief that reliance on huge achievements in field of genetics, use of chemicals and other aspects of technological progress could achieve substantial increases that would enable elimination other aspects of agricultural development, including extension, a new research will continue to be a great value, but reliance on research alone is not enough to make the right progress, The assumption that the extension program is no longer needed after the success of a particular type of rice or assumption wheat isa simplistic (18). Agricultural extension is generally aimed at responding to the needs of all farmers categories in terms knowledge, skills and linkages between the firin and the market, in order to manage their farms effectively . Agricultural extension is not productive effectively if a unit works inclependently of linkages within farms chain to market (all employees) And its institutions (12). The greatest challenge is to adopt a multi - sectoral gricultural extension mechanism that effectively coordination the various nation face, it is a agricultural institutions, effectively coordination the various agricultural institutions, The absence of coordination leads to conflicts of works. activities and tasks. which weakens agricultural technologies discernination and related technical recommendations, that lead to confuse farmers and beneficiaries from these agricultural services, Governments the should assure responsibility for coordination and technical supervision (12). The lack of a close working relationship between agricultural research organizations

and national agricultural extension agencies, farmer groups, and various agricultural | organizations is one of most difficult problems that facing of agriculture ministries in many developing countries (19). Several studies revealed the weak of coordination between agricultural agencies. Taha mentioned weakness of the the mechanism of communication and coordination between the extension agency and the developmental contributing bodies in the field of development, and there should be a new and effective mechanism for communication and between coordination all agricultural Organizations, especially related to a specific development guidance program for implemented (20). Al - Shammari pointed out that there should be a clear | and flexible mechanism for cooperation and coordination between agricultural organizations in general to avoid chaos in performance and to achieve tangible results on a large scale, especially with the subjects regard to the transfer of agricultural technologies (17). There is wide gap still between what researchers at research stations do and the rates of Production achieved by farmers in their fields (5). Also studies indicate a weakness between research institutions and extension, on improve the reality of rates production of farmers in their fields (12), so the link between them do not allow flow of scientific recommendations appropriately (13,14). There are barriers to strengthening the relationship between extension, research and farmers (15). And the absence of an effective machining for communication and coordination in extension program development, which was caused by the absence of joint activities between them (10, 16, 4). Al-Farhan suggested to establish a higher council for coordination between extension and research (6). The issue of agricultural development is complex and requires the participation of different scientific professional and institutional fields (9), with an interactive and interrelated relationship to results of scientific research and agricultural techniques(14). Therefore, the research came to answer the following research question : What are appropriate elements of mechanism development for the of institutional coordination among the in the actors

agricultural production Sector, research objective is developing a proposed mechanism for institutional coordination between agricultural extension and agricultural agricultural researches and service organizations providers operating in Karbala governorate, and to determine the level of consent of the respondents to the proposed mechanism.

MATERIALS AND METHODS

The research is assume approval of proposed respondents on elements of mechanism of institutional coordination between the agricultural extension, agricultural researches and agricultural services. That because of the proposed mechanism is effecting agriculture development in achievement. The researcher was used the descriptive method in conducting the research. The descriptive approach is concerned with describe the phenomenon or the subject of the research interest as a precise scientific trying investigate description and was

solutions and interpretations based on the results of the data and information research community :

The research cornrnunity was including employers in agricultural institutions in the following: Technical staff of the directorate agriculture of Karbala in all its eight agricultural divisions (Center, Husseiniva, Tuwerij, Aoun, ALjadwal ALgaraby, Khairat, Ain Al - Tamr and Sahrawi), colleges of agriculture professors and Veterinary Medicine at Karbala university, researchers of agricultural researches office, agricultural extension training center state company for agricultural supplies, Mesopotamia state company for seeds the agricultural cooperation Bank the horticulture station, the palm research Station . A random sample was selected from the Research population that announced (524) respondents by (24 %). Thus, the sample of research (126) was studied and distribution (Table 1).

No	Workplace	Community	Sample	
1	Agricultural directorate of Karbala	204	49	
2	Agricultural extension centre	25	6	
3	agricultural research office	82	20	
4	Collage of agriculture	41	10	
5	college of Veterinary Medicine	30	7	
6	Veterinary Department	80	19	
7	Private agricultural companies	42	10	
8	State company for agricultural supplies and Mesopotamia state company for seeds	7	2	
9	Horticulture Station	5	1	
10	Palm Research Station	4	1	
11	Agricultural cooperation Bank	4	1	
	Total	524	126	

 Table 1. Distribution of the research sample

The survey questionnaire was prepared as a tool for collecting data to the proposed mechanism for institutional coordination between agricultural extension, agricultural researches, and agricultural service originations, The questionnaire included scale on the way to measure approval of respondents on proposed mechanism for institutional coordination. The questionnaire was passed on several stages to achieve ultimately form as exposed below First: Configure the primary form scale The primary form scale was configured in light of literature and previous studies the of coordination in field . relationship and links between various institutions related with agricultural production, the scale consisted of five fields and nine axes : first, organization which consists of three axes that are: organizational structure, responsibilities and duties, job deseeration of the addrministrative coordinators. second plannins which consists of six axes : development Need for planning, organization for planning, mechanism of the work, participation, communication and publication, actual planning. Third. implementation, forth. Fifth, monitor. evaluation. The number of items was amounted (120) items distributed in fields and axes mentioned above (35, 50, 14, 10, 11) respectively, as reveal in Table 2

No	Fields	Axes	The number of items	%
1	Organization	1.organizational structure	12	10
		2. Tasks and duties	16	13.3
		3 - job descriptions for administrative coordinators	7	5.8
2	Planning	1 - development of the need for planning 2.organization	6	5
	-	for planning	5	4.2
		3. mechanism of work	10	8.3
		4. participation	7	5.8
		5. communication and publication	12	10
		6. actual planning	10	8.3
3	Implementation		14	11.7
4	Monitor		10	8.3
5	Evaluation		11	9.2
Total			120	100

Table 2 . The distribution of fields, axes and items of the proposed mechanism of institutional coordination

Second: Developing the scale

The initial scale was presented to a group of experts and specialists in the field of agricultural public extension and administration (16)experts using a questionnaire to indicate the degree of their approval in the light of the approval scale of three levels are agree, agree with the amendment, and disagree. The purpose of presenting the initial measure to the experts is to examine the apparent truthfulness of looking for what the test seems to measure (21), as well as the validity of the content, which is the knowledge of measuring each of the test items for the content of the material to be measured Thirdly: The scale is finalized scale was finally constructed by The comparing the scores of the experts ' approval on the fields, axes, and items of the scale with

the cutting threshold, All the items achieved 75 % or reaching the cutting threshold (90%). The number of iterns of the scale (116) distributed on (9) Xes Indi (5) areas, and thus achieve the first goal of the research through created of the final version of the scale for the proposed mechanism. Sample of 14 respondents outside the research sample was selected to check research stability by pre - test to the scale, and Kronbach coefficient used to scale stability measurement, that is scientifically acceptable if it announted 0.80 and above (8), All fields and axes for the proposed mechanism institutional coordination has kronbach coefficient more than 0.80, this means getting the same result if re - test regardless of the date of the test or how different the analysts (1) . as shows in Table 3.

No	Scale	Kronbach coefficient
1	Organization	0.95
2	planning	0.96
3	Implement	0.94
4	monitor	0.85
5	Evaluation	0.93
6	Mechanism institutional coordination	0.93

Table3. Kronbach coefficient for fields of the mechanism institutional coordination

Research data was collected by the questionnaire throughout the personal interview with respondents at the period (30 / 12 / 2016 - 28 / 02 / 2017). After the data were collected and , data was analyzed using manual analysis, and used the statistical analysis (SPSS) program to measure the stability coefficient, the respondents approval of the fundamentals of the proposed ineclianismn was measured on a five - point scale consisting of (very agree, gree, neutral, disagree, very disagree) and was give value of (5.4.3.2.1) respectively. The researcher used the percentage weight weighted average and the Cronbach coefficient

RESULTS AND DISCUSSION

First Objective: preparing the proposed mechanism institutional coordination to agricultural between the extension. the research organizations , and the service providers for agricultural development. The proposed mechanism intended for institutional coordination was achieved as mentioned above on the methodology by presenting the scales elements to experts in the fields of weight agricultural ranging for extension and management, and produced the scales final version.Second Objective: determination level of respondents' approval of the proposed mechanism for institutional coordination between agrictureal Extension, research Organizations and the service providers of agricultural development.

1 - The organization field :

Taking into consideration the results of items, the respondents ' responses getting weighted mean ranging (3, 730 - 4. 484), and getting percentage weight ranging (74.6- 89.68) for That all items remain within the final version of the proposed institutional cordination mechanism the same as shows in Table 4

Table 4, distribution of the respondents according to the proposed items of the organization
field

		field			
Axes	Sort of items as importan t	Items	Number of items in questionnaire	Weighte mean	Percent age weight
1- Organization structure	1	The members of the Division shall be Competent and skilled in communicating with others and gaining their trust and . Sustaining the relationship with them	8	4.444	88.88
suucture	2	The members of the Division shall be familiar with the extension approaches that adopt coordination and partnership between the various bodies involved in agricultural production	7	4.3288	87.76
	3	The members of the division shall have a degree in agricultural sciences and preferably in agricultural extension	6	4.230	84.6
	4	Establishment of an administrative organization in the Directorate of Agriculture and a level of division in the Department of Extension and Agricultural Training called the Institutional Coordination Division	1	4.214	84.28
	5	Nominating an administrative coordinator from all research, educational, service, private agricultural companies, farmers and their Organizations in the governorate	9	4.150	83
	6	The Institutional Coordination Division is directly associated with the head of the Agricultural Extension and Training Section	2	4.071	81.42
	7	The number of employees in the division (6) shall be three facilitators and three specialists	5	3.857	77.14
	8	The Guidance Center in the governorate is represented in the Division by the Under - Secretary of the Center	10	3.825	76.5
	9	The Division is subject to the central directives of the Ministry of Agriculture and the Agricultural ComTimmittee of the Provincial Council and the Directorate of Agriculture of Karbala through the Director of Agriculture and Head of Agricultural Extension Department	3	3.809	76.18
	10	The authority of the Division shall be delegated by the Director of Agriculture	4	3.730	74.6
2-task and duties	1	Continued coordination with farmers and their organizations	12	4.484	89.68
	2	Coordination with agricultural service institutions in the governorate (state company for agricultural supplies , agricultural rant in bark , Mesopotamia state company for seeds palm station , plant tissue culture , plant protection , animal recourse department of veterinary and fish	10	4.412	88.24
	3	Building links and rdination with agricultural research educational institutions in the governorate (Faculty of Agriculture, Faculty of Veterinary medicine)	9	4.404	88.24
	4	The Division coordinates the efforts possibilities available to research and service institutions, extension agencies farmers and their organizations lo Produce, transfer and disseminate agricultural techniques and scientific reeminhenslations	13	4.341	86.82
	5	coordinate and approve agricultural technology dissemination plans and programs	4	4.341	86.82
	6	The Division coordinates with agricultural research institutions (stations, centers, research projects and agricultural development programs)	8	4.285	85.7
	7	The Coordination Division assists researchers in establishing contact with farmers to invest local sources of information and to provide information on prevailing agricultural practices	17	4.277	85.54
	8	Developing the mechanism of the flow of productive problems and solutions among farmers, research centers, universities and agricultural extension	2	4.253	85.06
	9	The Division works to strengthen the sense of the need for coordination the extension, research and service providers, farmers and their local organizations	14	4.246	84.92
	10	Cordination with private agricultural companies in the governorate	11	4.412	84.92
	11	Request for financial locations for institutional ordination processes	5	4.206	84.12
	12	The Division is preparing integrated information system with continuous updating on the research, extension	16	4.198	83.96
	13	Building links with international regional supporting agricultural and research projects	18	4.166	83.32
	14	The Division is preparing a program stimulate research, extension, service and farmers to participate in coordination activities.	15	4.150	83

15	One of the duties of the Division Officer is to establish internal regulations	6	4.119	82.38
10	for coordination work	Ū		02.00
16		7	4.111	82.22
17	monitor and evaluation of institutional coordination processes	19	4.103	82.06
18	The Division shall define the overall framework of the institutional coordination process, including strategy, policy and objectives	1	4.079	81.58
19	Coordinating scientific research plans for agricultural production problems and submitting them to the Higher Agricultural Committee in the governorate for approval	3	4.063	81.26
1	The administrative coordinators have the knowledge and skills necessary to carry out their duties	6	4.420	884
2	The management coordinators recognize the importance of working in a	5	4.373	87.46
	one- team, multidisciplinary approach			
3	The administrative coordinators shall abide by the time and space schedules the periodic meetings with the Institutional Coordination Division and shall designate an alternative if they are not possible to attend	3	4.206	84.12
4	The administrative coordinators shall transmit to their organizations the findings of the Institutional Coordination Division and return to the Division as undated and proposed by their organizations	4	4.174	83.48
5	Administrative coordinators should be responsible in the organizations they work for	1	4.150	83
	17 18 19 1 2 3 4	 for coordination work 16 One of the functions of the Division Officer is to propose coordination programs and activities 17 monitor and evaluation of institutional coordination processes 18 The Division shall define the overall framework of the institutional coordination process, including strategy, policy and objectives 19 Coordinating scientific research plans for agricultural production problems and submitting them to the Higher Agricultural Committee in the governorate for approval 1 The administrative coordinators have the knowledge and skills necessary to carry out their duties 2 The management coordinators recognize the importance of working in a one- team, multidisciplinary approach 3 The administrative coordinators shall abide by the time and space schedules the periodic meetings with the Institutional Coordination Division and shall designate an alternative if they are not possible to attend 4 The administrative coordinators shall transmit to their organizations the findings of the Institutional Coordination Division and return to the Division as updated and proposed by their organizations 	for coordination work 16 One of the functions of the Division Officer is to propose coordination programs and activities 7 17 monitor and evaluation of institutional coordination processes 19 18 The Division shall define the overall framework of the institutional coordination process, including strategy, policy and objectives 19 19 Coordinating scientific research plans for agricultural production 3 problems and submitting them to the Higher Agricultural Committee in the governorate for approval 3 11 The administrative coordinators have the knowledge and skills necessary to carry out their duties 6 2 The management coordinators recognize the importance of working in a one- team, multidisciplinary approach 5 3 The administrative coordinators shall abide by the time and space schedules the periodic meetings with the Institutional Coordination Division and shall designate an alternative if they are not possible to attend 4 4 The administrative coordinators shall transmit to their organizations the findings of the Institutional Coordination Division and return to the Division as updated and proposed by their organizations 4	for coordination work16One of the functions of the Division Officer is to propose coordination74.11116One of the functions of the Division Officer is to propose coordination74.11117monitor and evaluation of institutional coordination processes194.10318The Division shall define the overall framework of the institutional14.079coordination process, including strategy, policy and objectives14.06319Coordinating scientific research plans for agricultural production34.063problems and submitting them to the Higher Agricultural Committee in the governorate for approval64.4201The administrative coordinators have the knowledge and skills necessary to carry out their duties64.4202The management coordinators recognize the importance of working in a one- team, multidisciplinary approach54.3733The administrative coordinators shall abide by the time and space schedules the periodic meetings with the Institutional Coordination Division and shall designate an alternative if they are not possible to attend44.1744The administrative coordinators shall transmit to their organizations the thindings of the Institutional Coordination Division and return to the Division as updated and proposed by their organizations44.150

Table 4 indicates that item (continuous coordination with farmers shall be delegated by the Director of and their organizations) has come in Agriculture) has come in the last place first place perhaps because the respondents believe that farmers and their organizations as the center of agricultural production, where agricultural extension efforts are directed towards raising there economic and social level. achieving development and agricultural and rural achieving food security, while the item (The authority of the Division) has came in the last place, this may be due tow the lack of

confidence in the capacities of agricultural extension workers in addition to the centralism and bureaucracy, and the fact that most of the employees are in employed by carrying out a series of orders from bosses at work.

2- Planning field :

taking into consideration the results of the respondents' responses, all items getting weighted mean ranging (3.730 coordination mechanism, the same as - 4.484) and getting percentage weight ranging 74.6-89.68), for that all items remain within the final version of the proposed institutional shown in the table (5) below.

Table 5 Distribution of the re	snondants according to the ni	roposed items of the planning fiel
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Axes	Number of item as important	Item	Number of items in questionnaire	Weighte mean	Percent age weighte
1-Development need for planning	1	Institutional coordination among the extension, research and service providers, farmers and their local organizations should increase production and improve farm incom	1	4.468	89.36
	2	Institutional coordination between the agricultural extension, research and service providers, farmers and their local organizations should contribute to the creation of sustainable rural development	2	4.404	88.08
	3	coordination planning policy should be written, clear and accessible to all and encourage coordination and partnership	3	4.357	87.14
	4	The coordination plans for the establishment of research and extension programs depend on the participation of farmers and beneficiaries, especially in the problem identification phase	4	4.277	85.54
	5	The philosophy of the Division stems from the environment surrounding farms systems considering the social reality, economic, cultural realities	5	4.214	84.28
	6	Adopting a coordination strategy derived from the strategies of the Ministry of Agriculture considering the agricultural specialization in the governorate	6	4.190	83.8
2- Organization for planning	1	The plan of coordination should include financial, material, and supplies planning for activities and extension activities aimed at transferring and disseminating the results of research programs and	4	4.182	83.64

		scientific recommendations to farmers and persuading			
		them			
	2.5	The coordination plan shall specify the indicative	1	4.150	83
		methods used in the communication process between specialists from research, education, service			
		institutions with the farmers			
	2.5	The coordination plan should include financial,	2	4.150	83
		material, and supplies planning requirements for			
		institutional coordination		4.000	00.44
	4	The coordination plan should include the financial and material planning and the requirements for	3	4.023	80.46
		implementing the indicative research programs and			
		projects derived from the main coordination plan			
3- mechanism	1	Use of the web to coordinate with various agricultural	10	4.206	84.12
of action	_	institutions related to agricultural production			
	2	The mechanism of work with farmers and their local	6	4.198	93.96
		organizations should be decentralized and directly in the preparation and implementation of indicative			
		plans and programs			
	3	Periodic and weekly meetings are held between the	7	4.047	80.94
		Institutional Cordination Division and the			
		Administrative Coordinators			~~ ~~
	4	The path of the work mechanism of the Institutional	1	4.039	80.78
		Cordination Division shall according to the plan ' s path from bottom to top and vice versa			
	5.5	The mechanism of work for the internal cordination of	2	4.023	80.46
	0.0	the Directorate of Agriculture shall be centralized and	-		00110
		directly in the preparation and implementation of the			
		indicative plans and programs			
	5.5	Use of telephone communications to Coordinate with	9	4.023	80.46
		various agricultural institutions related to agricultural			
	7	production Use the method of the official administrative	8	3.99	79.84
	1	correspondence to coordinate with various parties	0	5.77	17.04
		related to agricultural			
	8	The mechanism of working with the private	5	3.960	79.2
		agricultural companies should be decentralized and			
		directly in the preparation and implementation of the			
	9	indicative plants and programs The process of working with the agricultural service	3	3.920	78.4
	,	agencies should be decentralized and direct in the	5	3.920	70.4
		prepatriation of the indicative plans and programs			
	10	The mechanism of working with agricultural	4	3.857	77.14
		education institutions should be decentralized and			
		indirect in the preparation and implementation of			
4 participation	1	plans and extension programs Consult all local stakeholders and benefit from their	2	4.404	88.08
+ pur ticipation	-	experiences and experiences	2	4.404	00.00
	2	Participation helps to make crect decisions in	4	4.357	87.14
		exertion Work			
	3	Participation helps to create rural leadership	5	4.333	86.66
	4	Participate in collecting an information facts about the	3	4.277	85.54
		community and the community and the current agricultural situation			
	5	Participation in the process of social change	6	4.238	84.76
	6	Participation is done by belonging to groups	1	3.849	76.98
		committees and organizations			
5	1	The deployment include a plan to train famiers on	11	4.404	88.08
communication		modern agricultural techniques by Meditation			
and publishing		between extension , researchers and private agricultural companies			
	2	Focus on extension methods that focus on field	2	4.388	87.76
		observations such & denstralia fields and field days			
	3	The dissemination process includes a plan to Introduce	9	4.373	87.46
		the modem agricultural techniques to the Intries and			
		to clarify it results and convince thenm bo adopt it in			
		cordination between extension , researchers and university professors			
	4	The dissemination process includes a plan to equip	10	4.349	86.98
	-	firmiers with modern agricultural techniques and the	10		00050
		requirements applied in Nordination with the			
		Agricultural Equipment Company and the			
	_	Agricultural Bank and private agricultural companies			0 / F
	5	The dissemination process includes plans for monitor and avaluation in geografication and participation of	12	4.325	86.5
		and evaluation in coordination and participation of farmers , extension Workers and researchers			
	6	Specify the time and space schedules for the indicative	3	4.93	85.86
	v	methods used in the Communication process	C C		00.00
	8	Identify the methods used in the communication	1	4.269	85.38

		process that should be appropriate to the number and			
		levels of the farmers			
	8	Determine the purpose of the communication process	5	4.269	85.38
	8	Preparing the content of the extensional message to be	6	4.269	85.38
	o	delivered in coordination between agricultural	0	4.209	05.30
		8			
	10	extension, research centers and universities	0	10(1	05.00
	10	link and coordinate the dissemination of agricultural	8	4.261	85.22
		techniques with their system in research centers, on			
		the one hand, and problems of agricultural production			
	11	on the other	-	1.016	04.03
	11	Identify the responsibilities and roles of agricultural	7	4.246	84.92
		extension, research centers, universities, service			
		organizations agricultural producers and their			
		organizations in the dissemination of agricultural			
		techniques		4.400	00.04
	12	Identify the financial and material potential of the	4	4.198	83.96
		extension methods used in the communication process			00 F (
6 actual	1	Planning for farmer training by researchers and	8	4.428	88.56
planning		mentors on modern techniques produced in research			
		projects			
	2	Identifying problems and needs by mentors	1	4.341	86.82
		researchers and farmers and prioritizing them for			
		farmers and their farming systems			
	3	Planning for the training of mentors by researchers on	7	4.309	86.18
		modern techniques produced in research projects			
	4	Selection of farmers' farms for the implementation of	3	4.301	86.02
		research projects, or stations and research centers			
		similar to the targeted farm environment			
	5	Transforming problems and needs into objectives,	2	4.285	85.7
		solutions and research projects			
	6	Document the coordination plans between the	4	4.246	84.92
		extension, research, service organization and farmers			
		and their organization			
	7.5	The coordination plan shall include the responsibilities	5	4.147	83.48
		and roles of the agricultural extension officers, the			
		administrative coordinators and the organizations to			
		which they belong			
	7.5	The coordination plan includes how to monitor the	9	4.174	83.48
		implementation of coordination plans and staff			
		performance			
	9	The coordination plan includes how to evaluate the	10	4.126	82.52
		implementation of coordination plans			
	10	The coordination plan should identify means and tools	6	4.071	81.42
		for data collection			

XTable 5 deduces that item the main objective of planning the Institutional coordination among the coordination process extension, research and service providers, farmers and their local organizations (Participation is done by belonging to should increase production and improve farm income) has come in the first place this may be attributed to the respondents' de to the respondents' belief in the belief that increasing agricultural failure of previous experiences of the production and improving farm income is to which all efforts while potential and the item groups, committees and organizations) has come in the

last place, this may be infliction of contagion in Karbala governorate in groups and associations due to various reasons, such as the lack of sufficient support for the continuation of these associations

3- implementation field:

taking into consideration the results of the respondent's responses all items getting weighted mean ranging (4.015- getting 4.380), and getting percentage weight ranging (80.3-87.6) for that all items, remain within the final version of the respondents responses, all items proposed institutional coordination mechanism, the same as shows in the Table 6.

Table 6. Distribution of the respondents according to the proposed items of theimplementation field

Number of item as	Item	Number of	Weight mean	Percent age
important	item	items in questionnaire	weight mean	weight
1	Coordinating the implementation of field days for the dissemination of modern agricultural techniques	8	4.380	87.6
2	Coordination with the Agricultural Bank to provide loans to farmers	12	4.373	87.46
3	Coordinating with the research institutions to train farmers to apply modern agricultural technologies correctly	14	4.349	86.98
4	Coordinating with private agricultural companies to produce modern technologies and distribute them to farmers at suitable prices	11	4.341	86.82
5	Coordinating the implementation of demonstration fields for the dissemination of modern agricultural techniques and the scientific recommendations resulting from extension research programs and projects with the participation of researchers, extension workers and farmers	6	4.333	86.66
6	Coordinating with researchers and specialists to prepare the scientific material for agricultural extension brochures and posters	9	4.325	86.5
7.5	Coordination for the implementation of agricultural extension meetings with the participation of researchers, extension workers and farmer	7	4.317	86.34
7.5	The division provides office and field consultations to the farmers	13	4.317	86.34
9	Provide researchers with feedback and farmers' reactions to modern agricultural techniques resulting from research projects	15	4.309	86.18
10	Preparation of scientific material for the methods of public communication via radio and television by agricultural extension workers, researchers and professors of the Faculties of Agriculture and Veterinary Medicine	10	4.285	85.7
11	Preparing field studies and collecting data and information on targeted agricultural areas with the participation of agricultural extension workers researchers and farmers	3	4.214	84.28
12	Conducting adaptive and adaptive experiments of modern agricultural techniques resulting from research programs and projects in agricultural fields with the participation of researchers, extension workers and farmers	5	4.150	83
13	The Division implements approved plans for institutional coordination between agricultural extension, agricultural scientific research agricultural service providers and the farmers	1	4.142	82.84
14	The Division shall implement approved plans generation and transfer of modern agricultural techniques	2	4.111	82.22
15	Testing of modern agricultural techniques resulting from research programs and projects in farmers fields	4	4.015	80.3

Table 6 reveals that item (Coordinating the implementation of field days for the dissemination of modern agricultural techniques) was ranked first, may be due to the importance attributed by the respondents to the field days, as one of the best agricultural extension methods in the dissemination of agricultural technologies, because it include practical application of these technologies in farmers fields while the item (Testing of modern agricultural techniques resulting from research programs and projects in farmers fields) has come in the last place, this may be due to the respondents ' dissatisfaction with the possibility of testing modern agricultural techniques resulting from research programs and projects in farmers ' fields, because they had not seen it previously.

4 - Monitor field:

Taking into consideration the results of the respondents ' responses, all items getting weighted mean ranging (4 . 126 - 4.412), and getting percentage weight ranging (82 . 52 - 88 . 24), for that all Items remain within the final version of the proposed institutional coordination mechanism, the same as shows in the Table 7.

Table 7. Distribution of the respondents according to the proposed items of the monitor field

Number of item as important	Item	Number of items in questionnaire	Weight mean	Percentage weight
important		questionnaire		0
1	Monitor to provide farmers with the necessary information using modern technologies and applying scientific recommendations	7	4.412	88.24
2	Verification of farmers ' application of scientific recommendations correctly	6	4.309	86.18
3	Diagnosis of deviation and problems in the implementation of approved plans and work to correct them	3	4.277	85.54
4	Verification the availability of new technologies resulting from research projects and the requirements of applying scientific recommendations at the appropriate prices, times and places	5	4.206	83.8
5	responsible for monitoring the implementation of approved coordination plans through field visits to the implementation sites and periodic progress reports	1	4.19	83.8
6	Development of a mechanism to verify the orderly flow of data and information from the implementation sites to the Institutional Coordination Division	2	4.166	83.32
7	Verify of Implementation matching of approved plans	4	4.126	82.52

Table 7 reveals that item (Monitor to provide farmers with the necessary information using modern technologies and applying scientific recommendations) was ranked first, this may be due to the respondents 'great importance to the monitor of farmers ' use of these technologies to avoid errors resulting from their misuse of misapplication, while the item (Verify of Implementation matching of approved plans) has come in the last place, this | may due to the fact that many of the plans that have been decided annually must find their way ti implementation and not to falter in their application.

5 - Evaluation field:

Taking into consideration the results of the respondents ' responses , all items getting Weighted mean ranging (4 , 174 - 4 . 4349), and getting percentage weight ranging (83 . 48 - 86. 98), for that all items remain within the final version of the proposed institutional coordination mechanism, the same as shows in the Table 8.

	1 / 11	4 41	1 • 4	P / 1 P 1 1
Table 8. Distribution of the res	nondents according	to the nro	nosed items o	ht the monitor field
I able 0. Distribution of the res	ponucino accoruniz	io inc pro	poscu nemo u	m une monitor nera

Number of item as	Item	Number of	Weighte	Percentage
important		items in	mean	weighte
		questionnaire		
1	The evaluation shall be continuous and follow all coordination	1	4.349	86.98
	processes in the Organization planning , implementation and monitor			
2	Measure the farmers ' reactions to the extension programs	10	4.317	86.34
	carried out according to the coordination processes between the			
	agricultural extension and the research and agricultural services			
3	Determination of farmers ' satisfaction with modern agricultural	11	4.309	86.18
	techniques published according the coordination between			
	agricultural extension and research and agricultural services			
4.5	Verification the feasibility of coordination processes for the target community	2	4.293	85.86
4.5	Measuring the changes achieved after the implementation of the	3	4.293	85.86
	coordination plans on the target community			
6	Evaluation of means of communication and the agricultural	8	4.269	85.38
	extension methods and used to disseminate modern technologies			
7.5	Use evaluation results to make the right decisions about future	5	4.253	85.06
	coordination processes			
7.5	Evaluation of modern agricultural techniques published	7	4.253	85.06
110	according to the coordination between agricultural extension,			
	agricultural researchus and agricultural services			
9	Evaluation of the results of the extension programs carried out in	6	4.246	84.92
	accordance with the coordination processes between agricultural			
	extension , agricultural research and agricultural service			
	providers			
10	Achieving participation of farmers in evaluation processes	9	4.214	84.28
	~			
11	Identify the objectives and results of coordination achieved from	4	4.174	83.48
	others that have not been achieved			

Table 8 reveals the items (The evaluation shall be continuous and follow all coordination processes in the organization, planning, implementation and monitor) was ranked first, this may be due to the importance of evaluation for the respondents as the best way to know the deviations in the course of operations and try to correct them at the right times , while the item (Identify the objectives and results of coordination achieved from others that have not been achieved) has come at the last place this may be due to the fact that the evaluation process is more conducive to the detection of mistakes and abuse of staff than to the extent to which the goals are achieved. In order to rank the five fields of the institutional coordination mechanism, the results showed that the fields obtained a Weighted range ranging between (4 . 18 - 4 . 27) and percentage weights ranging between (83, 64 - 85. 4) as shows in Table 9.

Table 9. Distribution of respondents according to the fields of the proposed mechanism forinstitutional coordination between agricultural extension and research and agricultural

services				
Field	Weighte mean	Percentage Weighte	Fields ranking	Field number in the questionnaire
Evaluation	4.27	85.4	1	5
Implementation	4.264	85.28	2	3
Monitor	4.24	84.81	3	4
Planning	4.21	84.26	4	2
Organization	4.18	83.64	5	1
General rete	4.23	84.67		

It is concluded from the table, as a result organizing procedures of the of the high levels of approval obtained coordination process are carried out on a from the research sample, that the small scale in some projects and hypothesis of research is accepted which states that is necessary to create a procedures do not exist, and if they mechanism for the coordination process . It is concluded that the evaluation field proper scientific form . weight of 83.64 degrees this may be due to the fact the organizing procedures of the that

coordination process are carried out on small scale in project and , extension programs, But the evaluation procedures do not exist, and if they | exist, they do not take place in the proper scientific form Table 9 summarizes the outline of the proposed institutional coordination mechanism of the proposed mechanism as shown in Figure 1, which shows clear lines of coordination and division duties and responsibilities between agricultural extension and various centric agencies related to rural development in Karbala governorate



Figure 1. proposal mechanism for coordination

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