



SATISFACTION OF CORN FARMERS WITH THE PERFORMANCE OF THE AGRICULTURAL INNOVATION SYSTEM IN BABYLON GOVERNORATE

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ABSTRACT

The research aimed to identify the extent of satisfaction of corn farmers on the performance of the agricultural innovation system in the Governorate of Babylon and in each of its fields, and to achieve the objectives of the research, a questionnaire was prepared in the light of literature and previous studies related to the subject and the opinions of specialized experts and their approval of them, consisting of (19) items distributed over (4) fields, , and the research population included all corn farmers numbering (13065) farmers registered within the agricultural divisions of the Directorate of Agriculture of Babylon and the number (15) agricultural division, and a random sample was selected stratified proportional from farmers by (2%) and by (155) farmers distributed over (50%) of the agricultural divisions, has been collected Data using the questionnaire and the personal interview method, The results of the research showed that the general arithmetic average of the level of satisfaction of corn farmers with the performance of the agricultural innovation system amounted to (2.3) degrees, and a standard deviation of (0.53) degrees, and a relative weight of (14.29%) degree, and that the highest percentage (91.61%) of the respondents is within the level of satisfied with a means degree to dissatisfied, and the results also showed that the mean of the fields of satisfaction of corn farmers with the performance of the agricultural innovation system, which numbered (7) fields ranged between (1.30 – 2.69) degrees, and standard deviations It ranged between (0.27 – 0.61) degrees, and relative weights ranged between (9.73% – 20.13%) degrees. Accordingly, the researcher recommends the need for the agricultural innovation system in the Governorate of Babylon to adopt the results of the research with regard to the fields and items that formed a case of dissatisfaction and little satisfaction with the performance of the agricultural innovation system and try to address them.

Keywords: farmer satisfaction, agricultural innovation system, corn crop.

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رضا زراع الذرة الصفراء عن أداء نظام الابتكار الزراعي في محافظة بابل

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الخلاصة

استهدف البحث التعرف على مدى رضا زراع الذرة الصفراء عن أداء نظام الابتكار الزراعي في محافظة بابل وفي كل مجال من مجالاته ، ولتحقيق أهداف البحث أعدت إستبانة في ضوء الأدبيات والدراسات السابقة ذات العلاقة بالموضوع وآراء الخبراء الأخصائيين وموافقهم عليها والمتكونة من (19) فقرة توزعت على (4) مجالات ، وشمل مجتمع البحث جميع زراع الذرة الصفراء البالغ عددهم (13065) زارعاً المسجلين ضمن الشعب الزراعية التابعة لمديرية زراعة بابل والبالغ عددها (15) شعبة زراعية ، وأختيرت عينة عشوائية طبقية تناسبية من الزراع بنسبة (2 %) وبواقع (155) زارعاً موزعين على (50 %) ، وقد جمعت البيانات باستخدام الأسبانية وبطريقة المقابلة الشخصية ، وظهرت نتائج البحث أن المتوسط الحسابي العام لمستوى رضا زراع الذرة الصفراء عن أداء نظام الابتكار الزراعي بلغ (2.3) درجة ، وأنحراف معياري بلغ (0.53) درجة ، ووزن نسبي (14.29%) درجة ، وأن أعلى نسبة (91.61%) من المبحوثين تقع ضمن مستوى راضي بدرجة قليلة الى غير راضي ، كما اظهرت النتائج ان المتوسطات الحسابية لمجالات رضا زراع الذرة الصفراء عن أداء نظام الابتكار الزراعي البالغ عددها (4) مجالات تراوحت بين (1.30 – 2.69) درجة ، وبأنحرافات معيارية تراوحت بين (0.27 – 0.61) درجة ، وبأوزان نسبية تراوحت بين (9.73% – 20.13%) درجة . وعليه يوصي الباحث ضرورة قيام نظام الابتكار الزراعي في محافظة بابل بتبني نتائج البحث فيما يتعلق بالمجالات والفقرات التي شكلت حالة غير راضي وراضي بدرجة قليلة عن أداء نظام الابتكار الزراعي ومحاولة معالجتها.

الكلمات المفتاحية : رضا الزراع ، نظام الابتكار الزراعي، محصول الذرة الصفراء .

INTRODUCTION

The agricultural sector performs a prominent activity in the economies of countries as the main source in providing foodstuffs to all developed and developing countries of the world alike (Al-Jubouri & Ridan, 2021), and that one of the most important sources of food is cereal crops due to the basic and important elements of life for humans and animals alike, and that one of the most important of these crops is the corn crop, which constitutes the first crop in obtaining proteins compared to other crops (Okab & Abed, 2022), as it constitutes the third place after wheat and barley in terms of cultivated area, productivity and nutritional value (Khalaf & Hassan, 2022). It used its residues to improve soil properties and improve the productivity of crops planted afterwards in the agricultural cycle, which enhances the sustainability of the farm system of the rural family (Mutar *et al*, 2022), as well as its use in animal feed (Abdulla *et al*, 2022). Despite the efforts made by the state and the relevant authorities, the production and productivity of the corn crop are still below the required level, and this decrease is confirmed by statistics indicating that the cultivated fields during the years 2019 and 2022 were (478), (325) don respectively, and production (633) and (374) tons respectively, while the productivity for the same years reached (134),(114)kg/ don , respectively (Central Organization for Statistics, 2019- 2022). This decline in productivity can be attributed to several factors, including the agricultural innovation system, which is the main driver of sustainable agriculture and food security in the future of developing countries,



including Iraq (Al-Taye *et al*, 2021). It is represented in improving and increasing the productivity and production of the farm system and developing the knowledge, skills and capabilities of farmers, as well as preserving natural resources and reflecting positively in improving their economic resources and their social and living level appropriately and in accordance with international specifications for agricultural products, as it is one of the important aspects in the development, survival, growth and continuation of its constituent organizations in providing the best services (Saadia, 2021). The performance of the agricultural innovation system is affected by several factors, including the satisfaction of farmers with the services it provides to them, as the satisfaction of the targeted people is not achieved unless there is a strong and distinct relationship between the management of the organization and the relevant authority that provides them with the service, and the satisfaction of farmers is one of the indicators that determine the level of good performance of the organization's management of its activities and the achievement of its goals, and satisfaction is an indicator of the level of performance of workers in any system and the extent of their needs for training programs, which is reflected in Improving the level of their performance in providing services to the targeted, In addition, satisfaction enhances the loyalty of those targeted in the survival of dealing with governmental organizations (Taiser & Al-Zubaidi, 2022). That is, satisfaction is a tool that enables the system to measure the appropriateness of the services it provides to the target (their sense of satisfaction or dissatisfaction) with those services and to make them respond to their needs and expectations (Salih & Khan, 2021). Based on the above, and given the importance of knowing the satisfaction of corn farmers as an important indicator of the level of performance of the agricultural innovation system, this research came to raise the following question: What is the satisfaction of farmers with the performance of the agricultural innovation system for the corn crop in Babylon Governorate? What are the priorities for farmers' satisfaction with the performance of the agricultural innovation system for the corn crop in Babylon Governorate?

Research Goals:

- 1- Identify the level of farmers' satisfaction with the performance of the agricultural innovation system for the yellow corn crop in Babylon Governorate.
- 2- Determining the priorities of farmers' satisfaction with the performance of the agricultural innovation system for the yellow corn crop in Babylon Governorate. Research hypothesis: The existence of high satisfaction among farmers with the performance of the agricultural innovation system for the yellow corn crop in Babylon Governorate.

Research Methods and Tools Used

Research methodology: In order to achieve the objectives of the research, I use the descriptive approach, which is one of the research methods that deal with events, phenomena and practices that exist and are available for research and measurement as they are without the intervention of the researcher in their events.

Research Population and Sample: The research population included all corn farmers numbering (13065) farmers registered within the agricultural divisions of the Directorate of Agriculture of Babylon and the number (15) Agricultural Division, and a random stratified proportional sample of farmers was selected by (2%) and by (155) farmers distributed over



50% of the agricultural divisions and by (8) agricultural divisions, namely (Al-Siddha, Hillah, Al-Kifl, Al Escandariya , Abi Gharaq , Al- Al Muhaweel , Al Showmali , Al Mashrooa ').

Data Collection Tool: A questionnaire was prepared in the personal interview method as a tool for collecting data from corn farmers.

The preparation of the questionnaire went through a series of stages:

1- Preparation of the questionnaire in its initial form: In the light of the literature and previous studies related to the subject and the opinions of specialized experts, a measure of corn farmers' satisfaction with the performance of the agricultural innovation system has been prepared, consisting of (17) items distributed over (4) fields.

2- Development of the questionnaire: The questionnaire was presented to a group of experts in the field of agricultural extension, numbering (17) experts to indicate the degree of their approval on the fields and items of the questionnaire in the light of the scale of approval consisting of three levels: agree, agree with the amendment, and disagree.

3- Determining the criterion of expert approval (threshold cut) on the components of the questionnaire by (75%) or more than the degree of approval of experts for the survival of any of the components of the questionnaire (fields and items) proposed in its final form.

4- Calculating the averages of the scores of expert approval on the components of the questionnaire (fields and items): Estimated weights (numerical values) were given to the levels of approval scales as follows: (agree = 2), (agree with amendment = 1), (Disagree = zero), and thus the degree of the scale ranged between (0-2) degrees, and the averages were calculated by calculating the total scores obtained on the number of experts.

5- Preparation of the questionnaire in its final form: In light of comparing the average scores of expert approval on the components of the questionnaire (fields and items) with the threshold of cutting to prepare the questionnaire in its final form, all fields and items have achieved the threshold of cutting or more, as the threshold of cutting for the measure of satisfaction of corn farmers with the performance of the agricultural innovation system in Babylon Governorate reached (94.12%). As one item was added to each of the following fields: satisfaction with workers and satisfaction with agricultural financing. Thus, the number of items on the scale became (19) items distributed over (4) fields. Thus, the number of items of the scale became (19) items distributed over (4) fields.

Reliability: It was used to measure the reliability of the satisfaction of corn farmers with the performance of the agricultural innovation system Alpha Cronbach coefficient, which amounted to (0.84).

Data collection: The research data was collected using the questionnaire by personal interview method from the sample of (155) corn farmers during the period 5/10/2022 – 19/12/2022. Tabulation and analysis of data: The weights (1, 2, 3, 4) were given to the levels of the corn farmers' satisfaction scale on the performance of the agricultural innovation system (highly satisfied, moderately satisfied, slightly satisfied, dissatisfied) respectively, and to arrange the fields and items according to their importance from the farmers' point of view, they were arranged in descending order according to the mean, standard deviation and relative weight.

Statistical methods: The statistical methods used in analyzing research data are frequencies, percentages, Alpha Cronbach coefficient, mean, standard deviation and relative weight



RESULTS AND DISCUSSION

1- Identifying the satisfaction of corn farmers with the performance of the agricultural innovation system The results of the research showed that the highest percentage (79.35%) of the satisfaction of corn farmers with the performance of the agricultural innovation system is within the level of satisfied with a means degree, with an arithmetic average of (1.91) degrees, a standard deviation of (0.48) degrees, a relative weight of (20.76%) degrees, and (12.26%) of them falls within the level of dissatisfied, with an arithmetic average of (1.33) degrees, a standard deviation of (0.56) degrees, and a relative weight of (14.46%) degree, followed by the percentage (5.16%) within the level of satisfied with a Moderately satisfied degree, with an mean of (2.59) degrees, a standard deviation of (0.52) degrees, a relative weight of (28.15%) degrees, and the lowest percentage was (3.23%) within a level of high satisfaction, with an arithmetic average of (3.37) degrees, a standard deviation of (0.55), and a relative weight of (36.63) degrees, as shown in Table (1).

Table (1): Distribution of respondents according to their satisfaction with the performance of the agricultural innovation system.

levels of satisfaction	degrees of satisfaction	The number of farmers	%	means	standard deviation	relative weight
not satisfied	1 – 1.75	19	12.26	1.33	0.56	14.46
Slightly satisfied	1.76 – 2.51	123	79.35	1.91	0.48	20.76
Moderately satisfied	2.52 – 3.27	8	5.16	2.59	0.52	28.15
Highly satisfied	3.28–4	5	3.23	3.37	0.55	36.63
total sum		155	100			100
overall mean				2.3	0.53	25

from Table (1) that (91.61%) of the respondents had a level of satisfaction with the performance of the agricultural innovation system between dissatisfied to a means degree, and this may be attributed to several reasons, including that most of the technologies developed are unable to address the problems they face, and that the activities implemented for them did not meet their actual needs, and that workers in the agricultural innovation system do not communicate with them except within official working hours, as well as the high costs of agricultural inputs and the continuous delay in disbursement of their dues from the marketer's quotient.

2– Determine the priorities of the fields of satisfaction of maize farmers on the performance of the agricultural innovation system The results showed that the mean of the fields of satisfaction of maize farmers on the performance of the agricultural innovation system ranged between (1.3 – 2.69) degrees, standard deviations ranged between (0.27 – 0.61) degrees, and relative weights ranged between (20.13% - 9.73%) degrees, as shown in Table (2).



Table (2): Distribution of respondents according to their fields of satisfaction with the performance of the agricultural innovation system.

fields number in the questionnaire	fields	means	standard deviation	relative weight	arrangement	level of satisfaction
6	Satisfaction with agricultural extension services.	2.69	0.27	20.13	1	Moderately satisfied
1	Satisfaction with workers in the agricultural innovation system.	2.53	0.47	18.94	2	Moderately satisfied
7	Satisfaction with marketing the obtainer.	1.55	0.59	11.6	6	Not satisfied
4	Satisfaction with agricultural financing.	1.3	0.61	9.73	7	Not satisfied
the total sum				100		
The overall average of the fields		2.02	0.49	15.1		

from Table (2) that the field related to (satisfaction with agricultural extension services) came in the first place with an mean (2.69) degrees, a standard deviation (0.27) degrees, and a relative weight (20.13%) degrees, followed by the field related to (satisfaction with workers in the agricultural innovation system) came in second place with an arithmetic average of (2.53) degrees, a standard deviation of (0.47) degrees, and a relative weight (18.94%) degrees, both of which fall within the level of satisfaction with an average degree, and the reason for this may be attributed to the nature of The diversity and multiplicity of topics and extension activities provided to them by the guiding organization, which enhances the level of their knowledge and skill in applying the correct practices in the integrated management of the yellow corn crop, as well as the positive treatment of workers in the agricultural innovation system in rapid response in solving the productive and agricultural problems facing corn farmers and finding alternatives to solve them.

While the fields related to (satisfaction with the marketing of the obtainer), (satisfaction with agricultural financing) ranked third, fourth, respectively with mean of (1.55) degrees, (1.3) degrees, and standard deviations (0.59) degrees, (0.61) degrees, and relative weights (11.6%) degrees, (9.73%) degrees on respectively, All these fields mentioned above fall within the level of dissatisfied, and this may be due to several reasons, including the means quantities received from the yield of yellow corn marketed by farmers, waiting and delaying for long hours in queues of transport vehicles in front of centers. Receipt of the yield, and the continuous delay in the payment of farmers' financial dues for the marketed yield, as well as the lack of amounts allocated to support the production of the crop and the timing of obtaining it.



To arrange the items of each area of the satisfaction of corn farmers with the performance of the agricultural innovation system, the results were as follows:

1- Satisfaction with workers in the agricultural innovation system

The items related to the field of (satisfaction with workers in the agricultural innovation system) of (5) items obtained mean ranging between (1.1 - 3.81) degrees, standard deviations ranging between (0.31 - 0.56) degrees, and relative weights ranging between (8.7% - 30.12%) degrees, as shown in Table (3).

Table (3): Distribution of respondents according to the items of the field of satisfaction with workers in the agricultural innovation system.

The item number in the questionnaire	items	MEANS	standard deviation	relative weight	arrangement	level of satisfaction
1	Satisfaction with the speed in responding and solving production and agricultural problems.	3.81	0.52	30.12	1	Highly satisfied
2	Satisfaction with benefiting from the information provided by employees in the agricultural innovation system.	2.89	0.53	22.84	2	Moderately satisfied
3	Satisfaction with workers' willingness to hear and discuss farmers' opinions.	2.84	0.56	22.45	3	Moderately satisfied
5	Satisfaction with workers' respect for the expertise and skills that farmers possess.	2.01	0.31	15.89	4	Slightly satisfied
4	Satisfaction with employees' communication with them at different times.	1.1	0.43	8.7	5	not satisfied
total sum				100		
overall mean for items		2.53	0.47	18		

from Table (3) that the item related to (satisfaction with the speed of response and solving productive and agricultural problems) came in the first place with an arithmetic average of (3.81) degrees, a standard deviation of (0.52) degrees, and a relative weight (30.12%) degrees, and it is located within the level of satisfied with a high degree, and the reason for this may be attributed to the interaction and understanding of workers in the agricultural innovation system to the need for rapid response in solving productive and agricultural problems at the beginning of their emergence and the possibility of solving them in light of the possibilities available to them before its breadth and difficulty in solving it or finding alternatives to solve it.

The item related to (satisfaction with the benefit of information provided by workers in the agricultural innovation system) came in second place with an arithmetic average of (2.89) degrees, a standard deviation of (0.53) degrees, and a relative weight of (22.84) degrees, followed by the item related to (satisfaction with the willingness of workers to hear and discuss

the opinions of farmers), which came in third place with an arithmetic average of (2.84) degrees, a standard deviation of (0.56) degrees, and a relative weight of (22.45%) degrees, both of which fall within the level of satisfaction with an average degree, and may be attributed The reason for this is that the information provided by the workers in the agricultural innovation system expresses their agricultural needs and problems, as well as the positive interaction of workers in exchanging views with farmers.

As for the item related to (satisfaction with the respect of workers for the experiences and skills possessed by farmers), it came in fourth place with an arithmetic average of (2.01) degrees, a standard deviation of (0.31) degrees, and a relative weight of (15.89%) degrees, and within the level of satisfaction to a means degree, and the reason for this may be attributed to the prevailing belief among workers in the agricultural innovation system that farmers have traditional agricultural experiences and practices inherited for the yellow corn crop, which are not suitable for the nature of modern technologies. While the item related to (satisfaction with the communication of workers with them at different times) came in the last order with an arithmetic average of (1.1) degrees, a standard deviation of (0.43) degrees and a relative weight of (8.7%) degrees, and within the level of dissatisfaction, and the reason for this may be attributed to the association of workers in the agricultural innovation system with official job timings in which working hours are specified and the large number of farmers who are difficult for them to contact them all, as well as the belief of workers in the agricultural innovation system of poor experiences and skills Which farmers own, which means that it is useless to continue communicating with them at different times, but only official times.

2- Satisfaction with agricultural financing

The (6) items related to the field of (satisfaction with agricultural financing) obtained mean ranging between (1.08-1.95) degrees, standard deviations ranging between (0.35-0.39) degrees, and relative weights ranging between (11.72% - 25.1%) degrees, as shown in Table (4).

Table (4): Distribution of respondents according to the items of the field of satisfaction with agricultural financing.

The item number in the questionnaire	items	MEAN S	standard deviation	relative weight	arrangement	level of satisfaction
4	Satisfaction with the fair distribution of agricultural financing among farmers.	1.95	0.35	25.1	1	Slightly satisfied
2	Satisfaction with the amount or size of the amount given to the farmer.	1.25	0.76	16.09	2	not satisfied
6	Satisfaction with interest on agricultural financing.	1.19	0.59	15.31	3	not satisfied
1	Satisfaction with the mechanism of granting agricultural financing	1.16	0.6	14.93	4	not satisfied



The item number in the questionnaire	items	MEAN S	standard deviation	relative weight	arrangement	level of satisfaction
	to farmers.					
3	Satisfaction with the timing of agricultural financing delivery.	1.14	0.55	14.67	5	not satisfied
5	Satisfaction with the speedy disbursement of financial dues to farmers when marketing the crop.	1.08	0.39	13.90	6	not satisfied
total sum				100		
overall mean for items		1.3	0.54	16.67		

from Table (4) that the item related to (satisfaction with the fairness of the distribution of agricultural finance among farmers) came in the first place with an arithmetic average of (1.95) degrees, a standard deviation of (0.35) degrees, and a relative weight of (25.1%) degrees, and it is located within the level of satisfaction with a means degree, and the reason for this may be attributed to the feeling of some respondents inequality in the distribution of funding due to favoritism and favoritism in these amounts.

As for the items related to (satisfaction with the amount or size of the amount granted to farmers), (satisfaction with the interest on agricultural financing), (satisfaction with the mechanism of granting agricultural financing to farmers), (satisfaction with the timing of delivery of agricultural financing), (satisfaction with the speed of disbursement of financial dues to farmers when marketing the obtained), they came in the second, third, fourth, fifth and sixth place respectively with mean(1.25) degrees, (1.19) degrees, (1.16) degrees, (1.14) degrees, (1.08) degrees, and standard deviations (0.76). Degree, (0.59) degree, (0.6) degree, (0.55) degree, (0.39) degree, and relative weights (16.09%) degree, (15.31%) degree, (14.93%) degree, (14.67%) degree, (13.90%) degree, and all these items mentioned above fall within the level of dissatisfied, and this may be due to several reasons, including the means amount of amounts granted to them, and the high interest on agricultural advances and loans and the long waiting period to obtain them, as well as the continuous delay and several agricultural seasons in The process of disbursing financial dues, which reflected negatively on their satisfaction with agricultural financing.

3- Satisfaction with agricultural extension services

The (4) items related to the field of (satisfaction with agricultural extension services) obtained mean ranging between (1.09 – 3.86) degrees, standard deviations ranging between (0.37 – 0.5) degrees, and relative weights ranging between (10.13% - 35.87%) degrees, as shown in Table (5).



Table (5): Distribution of respondents according to the items of the field of satisfaction with agricultural extension services.

The item number in the questionnaire	items	means	standard deviation	relative weight	arrangement	level of satisfaction
1	Satisfaction with the extension service topics related to the yellow corn crop.	3.86	0.5	35.87	1	Highly satisfied
2	Satisfaction with the guiding methods and means provided by the guiding organization (training courses, explanatory fields, guiding leaflets, etc.).	3.73	0.63	34.67	2	Highly satisfied
4	Satisfaction with the role of the media in promoting and persuading the application of elicited technologies in farmers' fields.	2.08	0.55	19.33	3	Slightly satisfied
3	Satisfaction with the timing of providing extension services.	1.09	0.37	10.13	4	not satisfied
total sum				100		
overall mean for items		2.69	0.51	25		

from Table (5) that the item related to (satisfaction with the topics of the extension service related to the yellow corn crop) came in the first place with an arithmetic average of (3.86) degrees, a standard deviation of (0.5) degrees, and a relative weight of (35.87%) degrees, followed by the item related to (satisfaction with the methods and means of guidance provided by the guiding organization (training courses, demonstration fields, guidance bulletins, etc.), which came in second place with an mean (3.73) degrees, a standard deviation (0.63) degrees, and a relative weight (34.67%). degree, and both fall within a highly satisfied level, and the reason for this may be due to the fact that the topics of the extension service related to the yellow corn crop express their needs and real problems that they suffer from and keep pace with these topics to the recent developments in the cultivation of yellow corn, as well as diversity in the use of methods and extension means that enhance and consolidate agricultural information among farmers, which helps them to apply it in their fields.

The item related to (satisfaction with the media role in promotion and persuasion in the application of technologies developed in the fields of farmers) came in third place with an arithmetic average of (2.08) degrees, standard deviation (0.55) degrees, and relative weight (19.33%) degrees, and is located within the level of satisfaction with a means degree, and the reason for this may be attributed to the lack of specialized media staff, as well as the weak investment of digital media in the delivery of ideas and modern developments to yellow corn growers.

While the item related to (satisfaction with the timing of providing extension services) came in the last trip with an arithmetic average of (1.09) degrees, a standard deviation of (0.37) degrees, and a relative weight of (10.13%) degrees, and it is located within the level of dissatisfied, and the reason for this may be attributed to the fact that workers in agricultural extension provide their extension services to farmers within the timings of their official work only and not solve most of the problems of farmers in those deaths, as well as the inappropriateness of providing extension services with Farmers' rest times for their agricultural work.

4- Satisfaction with the marketing of the obtainer.

The (4) items related to the field of (satisfaction with the marketing of the obtainer) obtained mean ranging between (1.1-1.99) degrees, standard deviations ranging between (0.3-0.39) degrees and relative weights ranging between (10.13% - 35.87%) degrees, as shown in Table (6).

Table (6): Distribution of respondents according to the items of the field of satisfaction with the marketing of the quotient.

The item number in the questionnaire	items	means	standard deviation	relative weight	arrangement	level of satisfaction
2	Satisfaction with the quantity received.	1.99	0.3	32.1	1	Slightly satisfied
4	Satisfaction with marketed prices.	1.92	0.4	30.97	2	Slightly satisfied
1	Satisfaction with the mechanism of receiving the marketed crop by the yellow corn growers.	1.19	0.58	19.19	3	not satisfied
3	Satisfaction with the timing of receipt of the harvest.	1.1	0.39	17.74	4	not satisfied
total summation				100		
The overall average of the vertebrae		1.55	0.42	25		

from Table (6) that the item related to (satisfaction with the quantity received) came in the first place with an arithmetic average of (1.99) degrees, a standard deviation (0.3) degrees, and a relative weight (32.1%) degrees, followed by the item related to (satisfaction with the prices of the marketer), which came in second place with an arithmetic average of (1.92) degrees, a standard deviation of (0.4) degrees, and a relative weight of (30.97%) degrees, and both of them fall within the level of satisfied with a means degree, and this may be attributed to several reasons, including the lack of quantities Received by the authority responsible for receiving the crop marketed by the farmers due to the limited yards designated for receiving the yield and the foot of its laboratories.



The item related to (satisfaction with the mechanism of receiving the yield marketed by corn farmers) came in first place with an arithmetic average (1.19) degrees, standard deviation (0.58) degrees, and relative weight (19.19%) degrees, followed by the item related to (satisfaction with the timing of receiving the yield), which came in second place with an arithmetic average of (1.1) degrees, standard deviation (0.39) degrees, and relative weight (17.74%) degrees, both of which fall within the level of dissatisfied, and this may be attributed to several reasons, including the delay And waiting marketers (farmers) for long hours in queues in front of the centers to receive the yield, as well as the link to the process of receipt of the functional timings of workers in those centers and their means number compared to the receipt of quantities marketed of the yield of yellow corn.

In the light of the above values of the mean of the satisfaction of maize farmers with the performance of the agricultural innovation system, we reject the hypothesis that states that there is high satisfaction among farmers with the performance of the agricultural innovation system for the yellow corn crop in the Governorate of Babylon.

CONCLUSION

In light of the results of the research, the following is concluded:

- 1- Satisfaction is one of the important indicators that reflect the performance of the agricultural innovation system in providing its services to corn farmers in Babylon Governorate.
- 2- The satisfaction of maize farmers with the performance of the agricultural innovation system is not at the required level, and here indicates that there are some gaps between farmers and the agricultural innovation system in Babylon Governorate.

RECOMMENDATIONS

In light of the results and conclusions the researcher recommends the following:

- 1- Developing awareness among workers in the agricultural innovation system of the importance of the satisfaction of corn farmers with the performance of the agricultural innovation system, considering that satisfaction represents the positive interface for the survival of the targeted people's dealings with the constituents of the agricultural innovation system, as well as it represents one of the important conditions in achieving the overall quality of services provided to the targeted.
- 2- The need for the agricultural innovation system in the Governorate of Babylon to adopt the results of the research with regard to the fields and items that formed a state of dissatisfaction and a little dissatisfied with the performance of the agricultural innovation system and try to address them to ensure the continuity of the relationship between the government agencies that make up the agricultural innovation system and the corn farmers in the Governorate of Babylon.

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