گۆڤاری کوردستانیی بۆ لێکۆڵینەوەی ستراتیجیی

Agricultural Resarch Obstacles Related to Conducting Researches in Sulaimani Governorate

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Abstract

This research aimed to determine the agricultural researcher's obstacles related to conducting researches in the Sulaimani governorate. The research population included researchers in agricultural colleges, institutes, and agricultural research centers, which are 282 agricultural researchers, the sample the researchers include (91) researchers representing 31% of the population, taken by a stratified random sampling method, the questionnaire was perpetrated as a tool for data collection, the data was collected, arranged and analyzed by using statistical tools and application of SPSS version22.

The results showed that (85.7%) of the respondents believe that the obstacles are medium tend to high, the most important obstacles fields are: Economic field was rated at the first rank with the relative importance (79.85%), while the social field was occupied the last ranking with a percentage of (61.05%). The researchers recommended reviewing the laws and instructions related to scientific research by the concerned authorities to facilitate the conduct of scientific research, reduce routine and administrative obstacles, provide the requirements of scientific research, especially in terms of economics and other fields, and then encourage researchers through rewards, thanks and appreciation in line with the researcher's requirements to conduct agricultural research.

KeyWords: Agricultural Research, Agricultural obstacles, Agricultural Researchers

INTRODUCTION

The impact of science and its discoveries began to grow in agriculture at the beginning of the twentieth century. This was followed by a clear view of the agricultural profession from being an inherited work based on experience and methods of trial and error to being an industry that relies on many of its operations on science and modern scientific discoveries in all fields (Othman. (1987), as well as in Iraq, the agricultural sector is one of the most important sectors contributing to the Iraqi economy, but some are considered by the first sector as a base that provides food to the population and absorbs manpower as well as other goods that are included in the Iraqi industries (Al-Aboud, 2011).

Science and scientific research are essential components in the process of development. Continued agricultural research is critical to the progress of countries that are agriculturally based. Disseminating the results of such research so that they can have a clear impact is also essential. However, a problem in many countries is that information is not easy to obtain – research results are ineffective unless they are put to some use (Youdeowe,P. stapleton and R.obubo., 2012).

Scientific applications and research results are some of the most important features of the current century (Al-Fattli,2008).

Scientific research is the main factor in the development of the societies, developed countries compete to allocate their budget to provide qualified staffs with high quality, and to provide all possibilities that help to improve population welfare for all citizens in the fields (Bedaa and Muhammad, 2017).

Organized and integrated scientific research is not new to the human thought. In the middle Era the traditional limits of thinking were passed by humanity. The methodology of scientific research was prepared on the observation and experimentation basis, also, qualitative and quantitative analysis was developed to measure the phenomena (Fadda, 2016).

Generally, in the Arab countries, the government sector is the main funding for scientific research by (80%), unlike with countries that rely on the private sector up to (70%) as in Japan, this may explain the low rates of spending on scientific research in the Arabic countries, as a result of the bureaucratic sequencing in government institutions, and the slowdown in decision-making. On the other hand, the private sector provides more funds and resources to support scientific research than the government sector, because of the speed of decision-making. On the other hand, the private sector provides more money and resources to support scientific research, in the standard time if compared with the government sector, because the making is made very quickly (UNESCO, 2010).

In light of this, the researches should be based on the set of constituents, which constitutes prerequisites for the planning and organization of the work in the institutions sponsoring these research, particularly universities and research centers. The results of these researches will be translated into decisions or projects applicable to the different sectors and economic activities. Thus, this research surveys the main requirements of scientific research that make it a scientific material that can be a form the nucleus from which the economic development process begins. (Ouda and Aljawareen, 2016). In spite of the need for scientific research and its economic, scientific importance, there are financial, technical management, and scientific challenges that faced the researchers in agricultural research centers in each of agricultural educational institutions and ministry of agriculture and water resources in the Kurdistan Region (Mustafa, 2019). as well as Al Nadwi (2013) points to the lack of financial resources for scientific research and the fundamental obstacle to its realization. With regard to obstacles that faced research and research in agriculture, Al-Abbasi (2005) and Tanash, (1995) refers to the most important obstacles are lack of laboratories, fields, equipment, materials teaching takes much of the research effort necessary, lack of encouragement of travel for scientific research and lack of adequate financial support for research.

Bedaa and Muhammad, 2017, refers to the obstacles ranking that came to the administrative obstacles at the first then subjective as well as social obstacles came at the last rank.

In this context, the research addresses its importance by raising an important topic and has a role in monitoring and analyzing

the obstacles that faced research in institutions, agricultural education, and research centers, and the individual, and revealing these obstacles that obstruct scientific research for its development and making policies in a scientific method away from random planning, in the light of this perspective, In light of the above, the research problem has been formulated as follows: what are the agricultural researcher's obstacles related to conducting researches in the Sulaimani governorate in the fields of Economic, social, administrative, and technical, and its obstacles paragraphs ?

Research objectives:

Determine the agricultural researcher's obstacles related to conducting researches in the Sulaimani governorate.

Identify the agricultural researcher's obstacles related to conducting researches in the Sulaimani governorate in the fields of Economic, social, administrative, and technical obstacles.

Determine the paragraphs obstacles that related to conducting researches in the following fields: Economic, social, administrative, and technical.

MATERIAL AND METHODS:

Research Methodology: Descriptive approach was used for this research which aims to determine the obstacles that faced agricultural researchers in the Sulaimani governorate.

Research area: The research included agricultural research departments and centers in the Directorate of Agriculture and educational institutions in the Sulaimani Governorate.

Population and Sample research: The population of researchers in educational institutions and agricultural research centers included (282) agricultural researchers*, and the sample included (91) researchers representing 31% of the population, who were taken in stratified simple random sampling method*.

Perpetrate tools and Data collection: The questionnaire was prepared as a tool to collect the data about the subject of the research, dependent factors were identified after the researchers were briefed on the relevant literature and reviewed some studies related to the location of the research in addition to consulting specialists in this field, This part included four fields (administrative, technical, economic and social) comprising of (41) Paragraphs which includes: Technical (18), Administrative (8), economic (7) and social Paragraphs (8). Likert Scale alternatives were assigned to each field as an indicator to determine the level of achievement of the field. The alternatives of achievement levels (very. high, high, Medium, Low, very. low) were detected with the scores of 1, 2, 3, 4, and 5, respectively.

To verify the validity of the questionnaire, it relied on the opinions of some experts in this field. The paragraphs of the questionnaire were reformulated and made ready for the initial test.

To determine the reliability of the questionnaire, using the Cronbach's alpha coefficient outside the population (Al-Abbasi, 2018). The result of the reliability coefficient (0.77) appeared. It was shown that the scale had a mean value of more than 0.70, which indicates acceptable reliability.

Then the data was collected during the period (3 Jun - 8 Jul , 2021) and the data were arranged and analysed through SPSS version 22 Software. The statistical tools are frequency, weight percentage, arithmetic averages, standard deviation, Cronbach's alpha.

RESULTS AND DISCUSSION:

First: Determine the agricultural researchers obstacles related to conducting researches in Sulaimani governorate.

To determine the degree of obstacles, the respondents were classified into three levels depending on the actual range described

in (Table 1).

Table 1:   Total level of Agricultural obstacles are facing researchers

Obstacles	frequency	%	Mean
(Low (82-117	13	14.3	106.08
(Medium (118-153	55	60.5	138.43
(High (154-189	23	25.2	165.08
Total	91	100	

Mean=140.54   SD= 20.39

In table 1 shows that (85.7%) of the researchers indicated that the total obstacle tends from medium to high. This result indicates lack of application policy about agricultural research problems and its requirements.

Second: Determine the obstacles that related to conducting researches in the following fields are: Technical, Administrative, Economic and Social.

Table 2: The agricultural researcher's obstacles related to conducting researches regarding fields.

Obstacles field	Mean	S.D	Mini	Maxi	Standerd Mean	Relative Importance	Rank
Economic	27.95	5.00	11	35	35	79.85	1
Technical	61.06	9.11	33	83	90	67.84	2
Administrative	27.09	6.38	8	40	40	67.72	3
Social	24.42	4.91	11	38	40	61.05	4

In Table 2, The results show that the degree of obstacles related to conducting researches in each field arranged according to the level of their achievement. It is appeared that the Economic obstacles occupied the first rank with the relative importance (79.85%), while the social obstacles were occupied the last rank with a percentage of (61.05%). This result referred to the lack of interest in the field of agricultural research, as well as the weak provision of the requirements for conducting agricultural research, while the social obstacles have little influence on to conduct of the research.

Third: Determine the paragraphs obstacles that related to conducting researches in the following fields

2.1 Paragraphs related to the economic field:

Table 2.1: Arranging the Paragraphs of obstacle related to economic fields.

ParagraphS	Arithmetic mean	Relative Importance	Rank
.The lack of support researchers from private sectors	4.12	82.55	1
.Research costs publishing obstacle	4.08	81.50	2
.Lack of disbursement of private allocations to researchers	4.07	81.48	3
.The obstacle of having barriers to paying for research costs	4.04	80.85	4
.Lack of incentives and impulses from the competent authorities	3.97	79.57	5
.The high cost of doing research	3.94	78.93	6
Weakness of the financial capabilities of the researcher, who cannot devote himself to research	3.79	75.95	7

Table 2.1 Show that the lack of support researchers from private sector occupied the first rank with the relative importance

(82.55%), it may be due to the reason that the scientific research centers are generally independent of the government sector, weakness of the financial capabilities of the researcher, who cannot devote himself to research occupied the last rank with the relative importance (75.95%). It may be attributed the researchers have the willingness and desire despite their few financial possibilities .

2.2 Paragraphs related to the technical field:

Table 2.2: Arranging and ranking obstacles of the Paragraphs related to the technical fields.

Paragraphs	Arithmetic mean	Relative Importance	Rank
.Lack of agricultural database in in agricultural education institutions and research centers	4.12	82.55	1
.lack of interest of the local universities to introduce the researchers to the international universities	4.01	80.21	2
.The lack of suitable places for conduct research	3.67	73.40	3
.Lack of scientific research resources in libraries	3.65	73.19	3.5
.Weakness of the researcher's relationship with the world scientific center for Publication	3.65	73.19	3.5
.The obstacle is the lack of a plan to recruit by research centers and universities specific to research	3.59	71.91	6
.The obstacle of lack of scientific criteria for evaluating research	3.48	69.78	7
.The obstacle of not benefiting from scientific research	3.46	69.36	8
.The difficulty of publishing research in foreign languages	3.37	67.44	9
.The obstacle of conducting individual research	3.36	67.23	10
.Lack of a clear plan to rank the research according to its importance by the scientific committees	3.34	66.80	10.5
.The obstacle of lack of trust in scientific journals	3.34	66.80	10.5
.Lack of trust in research proposals to solve obstacles	3.29	65.95	13
.The obstacle of avoiding researchers from conducting new research topics	3.25	65.10	14
.in publishing scientific research Lack of journals specialized	3.19	63.82	15
.The obstacle of foreign language to search for scientific resources	3.14	62.97	16
.The obstacle of not having enough time to conduct agricultural research	2.71	54.25	17
.Weak of qualification computer using by researchers	2.27	45.53	18

Table 2.2, show that the agricultural database in agricultural education institutions and research centers occupied the first rank with the relative importance (82.55%), it may be due to the lack of attention in information and data sources, while qualification of computer using by researchers occupied the last rank with the relative importance (45.53%). This result indicate that the majority of researchers have skill experience about computer using.

2.3 Paragraphs related to the administrative field:

Table 2.3: Arranging and ranking obstacles of the Paragraphs related to the administrative fields.

ParagraphS	Arithmetic mean	Relative Importance	Rank
Weakness availability of opurtunity to send researchers for abroad	3.69	73.82	1
The obstacle of having a strategic plan for distance research by the Ministry of Higher Education.	3.68	73.61	2
.Weakness of the relationship between higher education and research centers	3.57	71.48	3

.The obstacle of government support in the field of scientific research	3.54	70.85	4
.The obstacle of accessing data from the competent authorities	3.21	64.25	5
The obstacle of the relationship of agricultural education centers with research centers and vice .versa	3.154	63.19	6
.Lack of opportunities for science sabbatical for researchers	3.12	62.55	7
.The subject of acceptance by the scientific committees in universities in choosing research titles	2.96	59.36	8

Table 2.3, shows the opportunity to travel abroad for doing research occupied the first with the relative importance (73.82%), It is attributed to the difficulty of the instructions and routine in travel by the responsible authorities for researchers, while the subject of acceptance by the scientific committees in universities in choosing research titles occupied the last rank with the relative importance (59.36%), it may be due to not being taken into consideration neutrality and objectivity in approving research.

2.4 Paragraphs related to the social field:

Table 2.4: Arranging the Paragraphs obstacle related to the social field.

Paragraphs	Arithmetic mean	Relative Importance	Rank
Community awareness issues from the usefulness of research resultS	3.55	71.06	1
.The obstacle of providing a suitable social environment for research	3.20	64.04	2
.The obstacle of determine research topics based on the obstacles of the society	3.17	63.40	3
.Inappropriateness of social conditions within universities and research centers	3.12	62.55	4
.Lack of researchers' confidence in the importance of the role of their research	3.03	60.63	4
.The obstacle of the seriousness of conducting some sensitive research	2.97	59.57	6
.The obstacle of social norms in providing information to researchers	2.90	58.08	7
.Incompatibility and harmony of some research with the traditions and customs of society	2.44	48.93	8

Table 2.4, show the community awareness issues from usefulness of research results occupied the first rank with the relative importance (71.06%), This is due to the lack of concerned parties in presenting the results of the research to the field reality and showing its usefulness, whereas incompatibility and harmony of some research with the traditions and customs of society occupied the last with the relative importance (48.93%).This is due to our adherence to customs and traditions, and the lack of openness and social awareness.

Conclusion:

The obstacles are facing Agricultural researchers in general nearly medium tends to high. We conclude there is no awareness and understanding the importance of scientific agricultural research and its results and the lack of facilities and supporting which provided by the authorities. Economic field occupied the first rank We conclude from this that the most important requirements for research are the financial aspect.

 The lack of support for researchers from the private sector ranked first, we conclude that the private sector does not encourage research and they do not benefit from its results and do not trust them to invest their money. lack of database occupied the first rank, we conclude from this that the basics of research and its credibility depend on sources, books and references. The paragraph of the opportunity to travel abroad to conduct research ranked first, and we conclude from this the lack of travel facilities and visas or the weakness of international relations, especially with Iraq. Community awareness issues from the usefulness of the research results ranked first, and we conclude from this that the results of the research did not enter into application in our daily lives and our lack of understanding to treat many of our problems in the scientific way and through scientific research,

Recommendation:

Funding all requirements for scientific researches by the concerned authorities in terms of Financial and moral support.

Encouraging researchers through rewards, thanks, and appreciation in a manner appropriate to the researcher, and its side effect of researchers which not be able to convince the stake holders to be partner and benefit from its results and use for investment and development projects.

Review laws and instructions with legislation related to scientific research by the responsible authorities to facilitate conducting scientific research, and reduce administrative routines.

References:

Al Nadwi, M. (2013), an article on Heba Press website, The Crisis of Scientific.

Al-Abbasi, A, F, K. (2005), Obstacles to scientific research of teaching staff at the College of Agriculture and Forestry/ University of Mosul, Al- Rafidain, Agriculture Journal, Iraq, 2009, Volume 37, Issue 3, Pages 2-11 (In Arabic).

Al-Abbassi, A. F. (2018) "Methods of Scientific Research and Statistical Analysis in Behavioral Sciences", First Edition, Alnoon For Printing and Press, Mosul, Iraq. (In Arabic)

Al-Abboud, Abd Al-Ameer Rahima (2011) The Agricultural Sector and Its Problems and Prospects for Development, Amman, Jordan. https://www.iasj.net/iasj/download/13c44501e5620533

Al-Fattli, H, H. (2008), Obstacles facing the researcher in Iraqi universities, Journal of Al-Qadisiyah College in Arts and Educational Sciences, Issues (3-4), Volume (7), pp. 229-240. (In Arabic).

Bedaa, H, & Muhammad, B. (2017), Obstacles to Scientific Research in Some   Scientific Research Centers of the University of Baghdad as a Model, Al- Mustansiriya Arts Journal, Volume, Issue 77, Pages 1-35 https://www.iasj.net/iasj/download/36ba792955599979

Fadda, E, H. (2016), Scientific Research Obstacles – Jordan Experiment, Journal of Arts & Social Sciences, Sultan Qaboos University, Jordan. https://journals.squ.edu.om/index.php/jass/article/view/2466/2372

https://magrj.mosuljournals.com/article_35751.html#citeTab

Mustafa, R, A. (2019), Obstacles of Researchers in Agricultural Educational Institutions in the Kurdistan Region, Scientific Symposium held in Polytechnic University of Sulaimani, Strategic Studies for Agricultural Research and Development. In Kurdistan Region of Iraq.

Ouda, B, H. & Aljawareen, A, F. (2016), the Impediments to Scientific Research and Requirements of develop it in Arab Countries (In Arabic).

Research in the Arab World, Reality and Challenges, Available at: www.hibapress.com/page-3.html

scientific-writing-for-agricultural-research-scientists-a-training-resource-manual.pdf (authoraid.info)

Tanash, S. (1995), the scientific research of faculty members at the University of Jordan, goals, incentives, satisfaction, and obstacles, Yarmouk Research Journal - Human and Social Sciences Series, 87-43: (4) Jordan, 1 .

Tonight, Zaki Hassan and Samir Abdul Azim Othman. (1987), Principles of Agricultural Extension, Dar al-Atheer for Printing and Publishing, University of Mosul, Iraq. https://www.iasj.net/iasj/issue/8919

UNESCO (2010), Studies science- report, Avalable at: http://www.unesco.org/new/ar/natural-sciences/science-technology/pro-spective

Youdeowei, A., P.Stapleton,. and R.Obubo. (2012). Scientific Writing for Agricultural Research Scientists – A Training Resource Manual, Wageningen, The Netherlands: CTA. ISBN 978-92-9081-506-8.

* Colledge of agricultural engineering science, agricultural institute, agricultural research center in sulaymanyah governorate(2021).

معوقات البحوث الزراعية المتعلقة بإجرائها في محافظة السليمانية

المستخلص:

استهدفت الدراسـة إلى تحديـد معوقـات التـي تواجهـه الباحثيـن الزراعييـن المتعلقـة بإجـراء البحـوث الزراعيـة في محافظة السـليمانية. شـمل مجتمـع البحـث الباحثيـن في الكليـات والمعاهـد الزراعيـة ومراكـز البحـوث الزراعيـة ، و البالـغ عددهـم ٢٨٢ باحثًـا ، وشـملت عينـة البحـث ٩١ باحثا تـم واختيارهـم بطريقـة طبقيـة عشـوائية بسـيطة و بنسـبة (٣٢٪) مـن مجتمـع البحـث .تـم اسـتخدام اسـتمارة الاسـتبيان كأداة لجمـع البيانـات بعـد التحقـق مـن صـدق الاسـتبيان مـع الاختبـار الاولي. تـم جمـع البيانـات و ترتيبهـا وتحليلهـا باسـتخدام الأدوات الإحصائيـة وتطبيـق برنامـج SPSS..وأظهرت النتائـج أن (٨٥,٧٪) مـن الباحثيـن يعتقـدون أن المعوقـات متوسـط يميـل الارتفـاع ، وأن أهـم مجـالات المعوقـات هـي: مجـال المعوقـات الاقتصاديـة واحتلـت المرتبـة الأولى وكانـت اهميتهـا النسـبية. (٧٩,٨٥٪) ،بينـما جـاء مجـال المعوقـات الاجتماعيـة في المرتبـة الأخـيرة و كانـت اهممتهـا النسـبية (٦١,٠٥٪). وأوصى الباحثـون بمراجعـة القوانيـن والتعليـمات المتعلقـة بالبحـث العلمـي مـن قبـل الجهـات المعنيـة لتسـهيل إجـراء البحـث العلمـي وتقليـل الروتيـن والعقبـات الاداريـة وتوفـير متطلبـات البحـث العلمـي خاصـة مـن الناحيـة الاقتصاديـة والمجـالات الاخـرى ثـم تشـجيع الباحثيـن مـن خـلال المكافـآت والشـكر والتقديـر بمـا يتناسـب مـع متطلبـات الباحـث لاجـراء البحـوث الزراعيـة.

الكلمات الافتتاحية: البحث الزراعي ، معوقات البحث الزراعي ، الباحث الزراعي