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Using of the Supporting Awareness Program to Increase the Productivity of Wheat Crops During the Covid 19 Pandemic of Anbar Province/Iraq

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ABSTRACT

The COVID-19 pandemic has had a major impact on agricultural production. One of the most important strategic crops for agricultural production is wheat, which is of great importance to food security in general and is even included in the foreign policies of countries. Iraq seeks to increase the productivity of wheat crops by spreading the awareness program that supports the wheat crop. The study was conducted in the villages of (Kusaiba and Abu Flies) with a total number of (55 farmers), in Anbar province. Used the SPSS program to analyze the data. The results of the study showed that the majority of farmers under 45 years of age were 70.2%. As for educational attainment, most farmers had only or less primary education at a rate of 61.4%, and the majority of farmers were married, 84.2%. In the field of agricultural sources, their sources came from the Internet by 54.4%, and in the field of agricultural problems and obstacles, the problem of the delay in receiving the marketing amount, as for the effects of Covid 19, the most agreeable was the distance of the health centers from the villages. The relationship was significant with age, marital status, educational attainment, and land ownership at a significant level of 0.05. The researcher recommends that farmers should be encouraged to educate, also the necessity of providing support for agricultural requirements and providing a suitable environment for the agricultural market.

Keywords: Wheat, Support awareness program, Covid 19, Rural development. Anbar province.

INTRODUCTION

The Coronavirus pandemic is an infectious disease caused by the newly discovered SARS-CoV-2 virus. Where it first appeared in the Chinese city of Wuhan, at the end of 2019, the disease spread rapidly throughout the world and disrupted life in those cities, and this led to the disruption of basic and social activities alike, the most important of which are agricultural activities and food systems, and the reason for reluctance And it collapses in many of those cities, because of the sudden spread and the speed of its spread, and because of the closure between cities to reduce its spread. And the reason for this to the danger in the lives of many. The Corona virus pandemic continues to expand and spread in all countries of the world, as well as to the high number of infections in Iraq with the increase in the number of deaths. The World Health Organization (WHO) has reported 49,109 cases in Iraq with 1943 deaths as of June 30, 2020. The Iraqi government has been working continuously to prevent the spread of the pandemic, by completely closing down the cities where the pandemic is spreading. As well as providing food baskets to needy families [1]. The Corona pandemic has greatly and vitally affected food supplies, especially during the closure period between cities and countries, and therefore initially caused the loss of many agricultural products to stay away from local and

international markets, as well as because some fruits and vegetables need to be quickly marketed and remain for a few days will lead to damage [2]. The fact that the pandemic came suddenly and devastatingly to some cities was due to the rapid spread of the pandemic and the high number of deaths as well as increased injuries. In addition, many countries, including Iraq, have been relying on many products to import due to the recent wars in Iraq, as well as the migration of many farmers due to the unstable internal situation, which led to the migration and displacement of many families in Anbar province, many of which still live in camps due to the destruction of their homes and the destruction of infrastructure due to terrorism and wars that took place after the end of 2013, which led to the fall of these cities to ISIS.

Therefore, stability had to be restored and the displaced returned to their villages in order to be able to carry out their agricultural work and had to be supported so that they could buy basic materials for agriculture from seeds, pesticides, fertilizers and agricultural machinery. The Ministry of Agriculture in Iraq has therefore focused on providing support for wheat crops through ongoing annual programs to develop the cultivation of this vital crop to provide food security to the country's approximately 40,150 million people, with 50.50 men and 49.5 women [3]. Wheat is an important strategic crop to maintain food security and provide important food for the people. The Agricultural Statistics Bureau reports on various aspects of agricultural activity and considers the field harvest surveys carried out by the city of the largest and widest seasonal surveys carried out twice a year (winter season, summer season), to extract production indicators for the main and second field crops, and export the city t Its annual report of seven maintenance crops (wheat, barley, rice, cotton, and other harvesters of sunlight, maize and potatoes) as well as reports of the two harvesters and the addition of a mass harvester. The reporting of wheat and the production of wheat from important reports from which indicators of the food security of the country are produced are considered to be one of the oldest field harvesters known in the world as a primary source of food and grown in Iraq in large areas, especially in the northern and western provinces of Iraq [4].

Iraq declined wheat production in 2018, recording production of just over 2 million tons, down nearly 1 million tons from the previous year, which reached 3 million tons. In 2010, Iraq launched a national wheat cultivation, development project through programs implemented by the Ministry of Agriculture, which rely on the production of salinity and drought-resistant, highly productive and disease-resistant seeds. Jul 28, 2019 .Iraq's wheat production (6,238,000 tons) for the 2020 winter season was estimated to be 6.43% higher than last year's production (4,343,000 tons). The area under cultivation in Anbar province were 660,000 dunums. The country needs 4.2 million tons per year to achieve self-sufficiency in the wheat crop. About 1 million tons of imported wheat are added to be mixed in quality with local wheat, which is not available for gluten, according to the Iraqi Ministry of Commerce [4].

The Ministry of Agriculture organized through the Anbar Agriculture Directorate a seminar on the importance of optimal use of irrigation systems in irrigation and fertilizing wheat crops in the province [5]. The presence of a number of farmers, farmers, experts and agricultural specialists. During the symposium, a scientific lecture was given on the subject, in which a number of topics were discussed, including the importance of the use of modern irrigation systems in the agricultural process. The types of irrigation systems, the advantages of axial and fixed spraying systems, the importance of their use in water-scarce areas, the proper irrigation and fertilization of wheat crops [5]. The implementation of the periodic control of insects and agricultural pests of various agricultural crop fields, as well as the organization of field viewing in which practical application was carried out on how to irrigate and fertilize wheat and maintain various irrigation systems. The seminar is part of the 2019-2020 agricultural season's supportive awareness-raising program to develop the skills and expertise of farmers and farmers in order to increase the productivity of agricultural crops in quantity and quality.

OBJECTIVES OF THE STUDY

The study also aimed to identify the obstacles and problems that prevent the continuity of agricultural development under the (Covid19) pandemic and the impact of the use of the supporting awareness program on increasing the productivity of wheat crops in Anbar province among the villages covered by this supporting awareness program. For the purpose of identifying the effects of Covid 19 on agricultural production and the extent of the relationship between Covid 19 and the independent variables studied in the research. including the following objectives of the study:

1- Identifying the personal characteristics of the targets.
2- Knowing the relationship between independent variables and the impact of Covid19 on agriculture.
3- Effects of the Corona Covid-19 pandemic on agriculture and food security.
4- Knowing the most important problems and obstacles in agricultural work.
5- Knowing the most important sources used by farmers.

MATERIALS AND METHODS

The experiment was conducted in Anbar province, which accounts for 33 percent of Iraq's total area. It is located in the western part of Iraq (Figure 1). The Department of Agricultural Extension and Training implements in each season the awareness program supporting the wheat crop, the purpose of which is to provide guidance, techniques and all appropriate information to increase the productivity of the crop and reduce the rate of loss. Through an integrated package that is implemented annually for farmers, and several years ago, training courses or seminars were held in the farming villages. And last year for the 2019-2020 season, demonstration fields were made under the supervision of a specialized agricultural guide who is chosen by the extension center to follow up the wheat crop from preparing the soil and leveling it for planting until the stages of plant growth and all the way to the harvest stage.

Figure 1: Locations of targeted villages in Anbar Governorate, Iraq.

The agricultural extension and training center in Anbar has chosen two villages (Kusaiba and Abu Flies) from the Anbar Governorate to complete the explanatory fields. A questionnaire was prepared to achieve the objectives of the study, and the apparent validity of the questionnaire was known by presenting it to specialists in social, psychological and agricultural sciences. The necessary modifications were made to achieve the purpose of the study, and then the research was conducted on 5% of the sample, provided that they are not included in the study when collecting recent data. A five-point Likert Scale was used to measure attitudes towards attitudes or opinions in questionnaires and statistics. The scale consists of five points: (strongly agree - agree - neutral - disagree - strongly disagree), were used on the impact of COVID-19 on agricultural realities [6].

Statistical analysis was used using the SPSS program for the social sciences. Where farmers' data and productivity were recorded for the 2019-2020 season, and the difference in productivity was known after the implementation of the supportive awareness program for the 2020-2021 season for planting wheat in light of the Corona pandemic (Covid 19). Data collection began on 15/10/2021, and data collection was completed on 15/11/2021, and the data was unloaded and analyzed using the Spss program for social sciences to know the relationship between the independent variables and the dependent variable and the extent of the impact of

the Corona pandemic on agricultural production with knowledge of the most important problems and obstacles in Agriculture from the perspective of farmers. The following research hypotheses were formulated as follows.

1- The null hypothesis: there is no statistical significance between the independent variables in the research (village, age, educational level, marital status) and the dependent variable (the impact of the Corona pandemic on agricultural production).
2- The alternative hypothesis: There are statistically significant differences between the independent variables in the study and the dependent variable (the impact of COVID-19 on agricultural production).

RESULTS AND DISCUSSIONS

1- Descriptive Statistics

Rural development is essential to ending hunger and poverty, and important to achieve sustainable development goals. The Iraqi government has provided support for agricultural development by supporting projects that connect rural and poor people to markets and services in order to grow more and earn more. The Iraqi Ministry of Agriculture focused on providing a means of distributing agricultural food products among the Iraqi governorates, by providing seeds and fertilizers to farmers, as well as importing vegetable crops to cover the local market country. The provinces, including Anbar province, have taken several decisions, including supporting the local product and providing production requirements at a price subsidized by the province. It also launched the slogan "Our Food is Our Responsibility" in order to encourage farmers to cultivate their lands and provide vegetable products (tomatoes, onions, cucumbers, eggplant, potatoes, and the rest of the vegetables). Baghdad. In addition, the markets were allowed to sell their basic food products, such as rice, flour and other food products, as they were allowed to open their shops until six in the evening.

The results of the study indicated in Table 1 that the highest percentage of respondents in the awareness program was in the village of Abu Felies with a total ratio of 50.9%, while the village of Kusaiba were at a rate of 45.6%. The reason is due to the large distance of the village of Kusaiba from the city centers, which reaches more than 40 km. This will lead to a lack of available services due to the lack of guidance department employees and the lack of a guidance department in the Saqlawiya district, to which the village of Kusaiba belongs. Regarding the age groups of farmers, they were limited to three categories, for each category of ten years, it started from the age of (brother) one year upwards, which is the age at which most farmers are able to marry, become independent in their own home, and practice their agricultural work appropriately. This is consistent with the study [5], whose study referred to the effect of the age of the farmer on the capabilities and abilities of the farmers.

Table 1: Personal characteristics of farmers.

No.	Varibles		Number	Percent	Mean	S.D
1.	Village	Kusaiba	26	45.6	1.53	.504
		Abu Felies	29	50.9		
2.	Age	Between 25-35 years	16	28.1	1.98	.757
		From 35-45 years	24	42.1		
		From 45 years and over	15	26.3		
3.	Education Level	Illiterate	13	22.8	2.36	1.20
		Primary school	22	38.6		
		Middle school	12	21.1		
		Secondary school	5	8.8		
		Institute institute	1	1.8		

		College	2	3.5		
4.	Social Status	Marred	48	84.2	1.20	.557
		Single	3	5.3		
		Divorce	4	7.0		
5.	Land Ownership	Lease	29	50.9	1.58	.685
		Rent	20	35.1		
		Private property / taboo land	6	10.5		

The results of Table (1) indicated that the largest percentage was for the middle age groups (from 35 years to 45 years), and this category helps the labor force well, as the results showed that their percentage was 42.1%, and secondly came the age groups between (25 to 35 years) with a percentage College 28.1%, and this is also an indication that the ages are young. These groups need more experiences to gain knowledge and information, and they must be trained continuously so that they can obtain modern information and knowledge, in order to improve their productivity. In addition, the results of the table on the educational attainment of farmers indicated that the majority of farmers were among the category of having no access to any education and primary education in successive percentages (22.6%, 38.6%). The percentage of their access to intermediate education was (21.1%), followed by their obtaining the secondary education with the percentage of (pumping), and the percentage of obtaining a bachelor's degree was (3.5%), Anbar University. Concerning the social situation, the results of Table (1) indicated that the majority of farmers were married at a rate of 84.2%, while the unmarried were at a rate of (5.3%) and the divorced farmers were at a rate of 7% and with a standard deviation (.557).
Finally, the land ownership of the farmers (private ownership, agricultural contracts, and land lease) was studied for agricultural work. The results of the study for Table (1) indicated that the highest percentage was (50.9 %) the farmers' lands were from agricultural contracts, and they came in second place for land owners. Its tenants account for 35.1%. As for the land belonging to the farmers, which is the land owned by the farmers, their percentage was 10.5%, and the land in Iraq is called (Tabu), and these lands are mostly in the village of Abu Falis near the cities, according to the land system followed in Iraq, where most of the lands far from the cities are state-owned and are Making agricultural contracts for farmers. They can use it by paying a small annual fee to the government [5].

2- Problems and Obstacles in Agricultural Work

About 63 percent of the world's poorest people work in agriculture, the vast majority of whom work on small farms. Most of the poorest, hungriest and marginalized people also live in rural areas where the development community must now focus its efforts on the medium and long term. Investing in rural people is a long-term solution to many of the problems we face today. Hunger, poverty, youth unemployment and forced migration all have deep roots in rural areas, and all of these issues can be greatly improved through investment in small-scale agriculture and comprehensive rural development [7]. The results of Table 2 indicated in the field of problems and obstacles in terms of their importance. The results showed that the greatest importance was (the difficulty and delay in obtaining the amount of marketing), with a high percentage estimated at 52.7%. As most farmers, when asked, found that they did not receive the marketing amount for the last season, and this greatly affects their continuation of agricultural work, since most of them have limited capabilities and need money to continue agricultural work.
Secondly came the following problems (agricultural supplies are few and depend on favoritism, marketing vegetable allowances take more than what the farmer benefits from his products, the agricultural policy is unclear and ambiguous) with a high degree of 45.5% as farmers complain about the lack of access to agricultural equipment which is an important factor for obtaining production For example, the lack of fertilizer will directly affect the productivity of the wheat

crop, because wheat is stressful to the soil and needs to be fertilized in three batches [8]. The same applies to agricultural policy, which is unclear and not consistently engaged in the coming future. There must be a clear policy for farmers to be in line with the state in order to avoid conflicting interests. And it solved thirdly the importance of the problems (dealing with state departments, including agricultural ones), with a total percentage of 43.6%. The results showed that dealing with their agricultural supplies is complicated, except for their dealings with state departments. The necessity of facilitating dealing with farmers and providing them with their needs in an easy and simple manner without complication [9].

The beginning of a world without poverty and hunger is the countryside. It is estimated that about 3 billion people - roughly 40% of the world's population - live in rural areas of developing countries. Then, the problem of (the lack of smart mobile use in Iraq to use agricultural information) was solved, with a total percentage of 41.8%, as the Internet service is weak in the villages, in addition to the fact that owning a smart mobile need a large amount from the farmers' point of view [1]. The most important problems and obstacles can be observed from the farmers' point of view, according to what is shown in Table 2. In addition to the mean and standard deviations, they are explained in detail for all paragraphs related to agricultural problems and obstacles in table 2. Most rural people depend on small family farms for their income and sustenance, and they grow the food that nourishes their country, but they are also disproportionately poor for what they provide: 80% of the women, children, and men living in extreme poverty are rural, not urban. This is consistent with what was indicated by the study mechanism [10], which indicated that agricultural problems and obstacles must be greatly overcome so that the farmer can carry out his activities better. To ensure the success of agricultural activities, smallholders need to secure access to land and water, access to affordable electricity, improved access to financial services, smooth roads and transportation to get their products to market, and access to technology for up-to-date and reliable market information. It is also necessary to link them to working markets so that they have an incentive to invest in improving production. The Fund also supports projects that connect poor rural people to markets and services so that they can expand production and increase income [1].

Table 2: The most important agricultural problems and obstacles from the farmers' point of view

No	Name of problem	Impact level			Mean	S.D
		High	Medium	Low		
1-	Difficulty and delay in obtaining the marketing amount	52.7	40.0	7.3	1.54	.63
2-	Difficulty transporting agricultural products	32.7	7.3	60.0	2.27	.93
3-	Dealing with state departments, including agriculture, is complicated	43.6	43.6	12.7	1.69	.69
4-	Agricultural equipment is few and depends on favoritism	45.5	40.0	14.5	1.69	.71
5-	Agricultural equipment is more expensive than the local market	25.5	27.3	47.3	2.21	.83
6-	Poor internet in villages and no coverage in villages	38.2	40.0	21.8	1.83	.76
7-	The lack of use of smart phones in Iraq to use it in agricultural information	41.8	40.0	18.2	1.76	.74
8-	There is no support for fertilizers, pesticides or seeds	36.4	40.0	23.6	1.87	.77
9-	The seeds that are distributed are of poor quality	38.2	41.8	20.0	1.81	.74
10-	Marketing silos depend on nepotism and administrative corruption	38.2	34.5	27.3	1.89	.80
11-	Marketing vegetable premiums take more than the farmer benefits from his products	45.5	40.0	14.5	1.69	.71
12-	Agricultural policy is unclear and vague	45.5	40.0	14.5	1.89	.76

3- The Effects of Covid 19 on Agricultural Work and The Relationship Between Research Variables.

One of the important things at the present time is to study the effects of Covid 19 on food security, and to know the most important effects that have been caused by the Corona pandemic [11]. Through the results of Table (3), it was found that the most important effect that occurred as a result of the pandemic is (the distance of the health centers from the villages greatly affected the difficulty of identifying and treating the infected with Covid-19), with a high approval rate of 36.4%. After the health and diagnostic centers of Covid 19 are considered an important factor in limiting the spread of the pandemic, as well as diagnosing cases for the purpose of providing the necessary treatment and preventing deaths, as happened in some villages, due to the rapid spread of the pandemic and the lack of mobile health centers to diagnose cases and their non-proliferation. It was noticed that the village of Kusaiba is more than 40 km away from the nearest health center. Secondly, the two obstacles came (the effect on the marketing of products to other governorates, the impact of the Corona pandemic will be on food security in general) with a strongly agreed rate of 20%. In addition to the farmers' approval of the above, the pandemic will have a direct impact on food security, especially for villages and remote countryside, where it was noted that it was difficult to market farmers' products for their agricultural products, as most of them used to market their products to the capital, Baghdad and the rest of the Iraqi provinces, because these agricultural areas are considered the Baghdad food basket Providing vegetables and other agricultural products [12]. The reason for this is due to the blocking of roads between other cities to prevent the spread of the pandemic. And it came in third place in terms of the effects of Covid-19 (its impact on the crop due to marketing delays during urban days and road cuts, and the policy of road and urban cuts, which greatly affected the marketing of our products and damaged many of them) with a strongly agreeable rate of 18.2%. Where, as we mentioned earlier, the policy of cutting roads between cities to prevent the spread of the pandemic between other regions and cities. For this, it is necessary to facilitate the marketing of products more so that farmers can market the product to other cities with appropriate prices to market their agricultural products. Table 4 can be seen to know the importance of the rest of the effects of COVID-19 on food security from the farmers' point of view. In addition to the averages and standard deviations, they are explained in detail for all paragraphs related to the impact of the COVID-19 pandemic on agriculture and food security in table 4. This is consistent with what was indicated by the study mechanism [2], which showed a clear impact of Covid 19 on agricultural production. The agricultural problems and obstacles must be greatly overcome so that the farmer can carry out his activities in a better way [8].

When testing the research hypotheses in this study, the first hypothesis indicated (There is no statistical significance between the independent variables in the research (village, age, educational level, marital status) and the dependent variable (the impact of the Corona pandemic on agricultural production) was positive at a significant level of 0.05, so the research hypothesis is rejected and the alternative hypothesis accepted (There are statistically significant differences between the independent variables in the study and the dependent variable (the impact of COVID-19 on agricultural production). She indicated that there is a significant impact on food security in general. The results of Table (3) on the relationship between the independent variables (age, marital status, educational attainment, land ownership), using Anova One Way, indicated that the relationship was positive between them and Covid 19. As mentioned in the under table 3.

The results of table (3) regarding the ownership of the land and what was mentioned in the paragraphs showed, where all the paragraphs indicated that the relationship was positive at the level of significance 0.05. In addition, the relationship was also positive between social status and the impact of Covid 19 for some paragraphs. Where the relationship was positive in the paragraph (its significant impact on the rise in the price of raw materials in the local market, the impact on the marketing of products to other governors). Its impact on the use of manpower in agricultural fields Its impact on the crop due to the delay in marketing during urban days and road blocks. The same applies to the paragraph (high transportation costs due to the COVID-19 pandemic), [1].

Table 3: The impact of the COVID-19 pandemic on Agriculture and Food Security.

No	Effects of COVID-19	Scale		

		Strongly Agree	Agree	Neutral	Disagree	Disagree Strongly	Mean	S.D
		1	2	3	4	5		
1-	Impact on obtaining production inputs.	16.4	36.4	30.9	9.1	7.3	2.54	1.10
2-	Influencing the marketing of products to other governors	20.0	29.1	29.1	18.2	3.6	2.56	1.11
3-	Its impact on the use of manpower in agricultural fields	16.4	30.9	27.3	18.2	7.3	2.69	1.16
4-	Its impact on the crop due to the delay in marketing during urban days and road blocks	18.2	23.6	38.2	14.5	5.5	2.65	1.10
5-	Its effect is through the lack of any materials in the local market / the greed of the traders	10.9	30.9	30.9	21.8	5.5	2.80	1.07
6-	Corona pandemic I benefited from by marketing my products at a good (high) price	12.7	41.8	29.1	10.9	5.5	2.54	1.03
7-	The distance of the health centers from the villages had a significant impact on the difficulty of identifying and treating the infected person with Covid-19.	36.4	38.2	16.4	5.5	3.6	2.01	1.04
8-	The policy of banditry and the lack of insurance on the agricultural product affected the marketing of the products and damaged many of them.	18.2	30.9	30.9	14.5	5.5	2.58	1.11
9-	The impact of the Corona pandemic on food security in general will be.	20.0	21.8	29.1	20.0	9.1	2.76	1.24

On the contrary, the rest of the paragraphs mentioned in Table (4) did not have a positive relationship, as the relationship was not positive at a moral level of 0.05, and this indicates its weak impact on agricultural production, according to the farmers' point of view. The results of table (4) on the relationship between age and the effects of Covid 19 indicated that the relationship was positive for some important paragraphs, namely (the effect on marketing products to other governorates), as marketing agricultural products to other cities will give greater freedom to obtain appropriate prices, as well as the paragraph (Its effect is through the lack of some materials in the local market (the greed of traders), as this paragraph is important, as it was noticed that some agricultural materials and supplies were not available through the greed of traders to obtain higher prices [7].

Therefore, were the positive relationship between age and Covid 19 in the field (because of the pandemic, the fear of planting some vegetable crops due to the inability to sell them because they are far from the market (for the wholesale market/vegetable market), and this factor is due to cutting roads during closure periods to prevent the spread of the pandemic, which gives a character Farmers feared that they might sell their agricultural products to the local market. In addition, the relationship between the following paragraph and the Corona pandemic (the pandemic was greatly affected by the high food prices (low prices for agricultural products).

On the contrary, the relationship was not positive for the rest of the paragraphs and age. Observe the paragraphs accurately through the table (4) more clearly. As for the relationship between the educational level of farmers and the impact of the Corona pandemic, the relationship was also positive at a moral level of 0.05. Where all the paragraphs of the Corona pandemic and the educational level refer to the positive relationship with the exception of the following

paragraphs (I believe that the Corona pandemic will help to rely on the local product instead of the imported, influencing the marketing of products to other governorates, I think that the Corona pandemic will help to rely on the local product instead of the importer) and the reason is attributed to the reason.

Table 4: The relationship between the effects of COVID-19 and the independent variables

No	Effects of COVID-19	P-Value /Sig			
		Land Owner	Soci-Stu	Age	Edu
1-	Impact on obtaining production inputs.	.020	.673	.191	.000
2-	Influencing the marketing of products to other governors	.000	.014	.025	.225
3-	Its impact on the use of manpower in agricultural fields	.146	.107	.196	.002
4-	Its effect is through fear of going to the market and getting infected	.004	.002	.016	.672
5-	Its effect is through the lack of any materials in the local market / the greed of the traders	.000	.034	.006	.002
6-	Corona pandemic I benefited from by marketing my products at a good price	.062	.931	.654	.033
7-	The distance of the health centers from the villages had a significant impact on the difficulty of identifying and treating the infected person with Covid-19.	.000	.999	.935	.000
8-	The policy of banditry and the lack of insurance on the agricultural product affected the marketing of the products and damaged many of them.	.026	.495	.249	.013
9-	The impact of the Corona pandemic on food security in general will be.	.034	.532	.628	.000

Correlation is significant at the 0.05 level (2-tailed).
Correlation is significant at the 0.01 level (2-tailed).

Therefore, were the positive relationship between age and Covid 19 in the field (because of the pandemic, the fear of planting some vegetable crops due to the inability to sell them because they are far from the market (for the wholesale market/vegetable market), and this factor is due to cutting roads during closure periods to prevent the spread of the pandemic, which gives a character Farmers feared that they might sell their agricultural products to the local market. In addition, the relationship between the following paragraph and the Corona pandemic (the pandemic was greatly affected by the high food prices (low prices for agricultural products). The policy of cutting roads during the pandemic has its advantages in preventing the spread of the pandemic. But this greatly affected the farmers' products and the difficulty of marketing, as well as the lack of insurance on agricultural products, and the cause of great concern about the product, and this leads to risking their agricultural product, and this will affect their decision to continue agricultural work.

On the contrary, the relationship was not positive for the rest of the paragraphs and age. Observe the paragraphs accurately through the table (4) more clearly. As for the relationship between the educational level of farmers and the impact of the Corona pandemic, the relationship was also positive at a moral level of 0.05. Where all the paragraphs of the Corona pandemic and the educational level refer to the positive relationship with the exception of the following paragraphs (I believe that the Corona pandemic will help to rely on the local product instead of the imported, influencing the marketing of products to other governorates, I think that the Corona pandemic will help to rely on the local product instead of the importer) and the reason is attributed to the reason.

This is due to the differing opinions of farmers due to the fact that the pandemic was sudden, and changed many of the concepts of farmers, in addition to the fear of some of the possibility of selling their products with the appropriate return for them or their loss without marketing, as happened to some farmers where due to the complete closure led to the damage of some of their crops, due to the difficulty of marketing between cities [13].

Accordingly, the research hypothesis is rejected and the alternative hypothesis (There are statistically significant differences between the independent variables in the study and the dependent variable (the impact of COVID-19 on agricultural production) accepted, which indicated that there is a positive relationship between the independent variables (Age, educational level, marital status, land ownership) and the dependent variable (the impact of Covid 19) on agricultural production [9].That is why farmers must be guided through awareness, seminars and training [6], so that farmers, have a good perception of Covid 19 and prevent its spread among them. As well as knowing the most important factors that will contribute to the spread of the pandemic, and encourage farmers to continue their agricultural work without fear As facing risks, and not having insurance on crops, farmers face risks, which result from the pandemic and any risks [14].

CONCLUSIONS AND RECOMMENDATIONS

Through the mechanism of the results of the study on the effects of Covid 19 on agriculture and food security in general, the direct impact on the marketing of agricultural products is noted due to the policy of cutting roads between cities, in addition to the damage of many of their agricultural products due to the delay in their marketing of agricultural products. The study indicated that the policy of cutting roads, and the lack of insurance on the agricultural product, will greatly affect the farmers' continuation of their cultivation, due to the fear of marketing the products and caused damage to many of them. The new investment in rural villages, the use of e-marketing, and knowledge of the local market near the farmers' cities, as well as the market for neighboring cities, will encourage farmers to farm and obtain the appropriate economic return so that they can continue to grow more extensively for the coming seasons, and thus the Corona pandemic will not affect their reluctance to farm. If we do not invest in rural areas and develop strong rural economies with attractive possibilities for young people, they will be forced to migrate - first in the city - and then if they do not find suitable work; They will migrate across the border to neighboring or distant countries .
Furthermore, young people are the basis of the future, which must pay attention to their needs and focus on a promising future for them. Also, the necessity of the necessary facilities for marketing agricultural products, between various Iraqi cities, during the pandemic period, by providing the necessary facilities. As well as providing the necessary information necessary for marketing without delay for products for fear of crop damage. It is also necessary to facilitate the procedure for obtaining production requirements such as seeds, fertilizers, pesticides and agricultural equipment. In addition, the study recommends providing the necessary and continued support for production requirements while supporting the local product during the pandemic period.

Limitations of the Article and Future Studies

The limitations of the study were due to the remoteness of the villages from the city center and the difficulty of moving and caution due to Covid 19. As well as because of Iraq's security situation, and the large number of security controls between villages, and this needs special approvals at a high level, in order for the researcher to be able to move between villages, in addition to the limited use of the awareness program supporting the wheat crop, due to the weak financial capabilities of the Agricultural Extension Department funded for the program where the choice was only for two villages per Iraqi governorate. The researcher did not have the opportunity to study the effects of Covid 19 on providing extension services to all agricultural villages, especially those far from city centers. Also, we did not have the opportunity to know the effects of Covid 19 on employees working in the agricultural sector, especially agricultural extension workers, to know the most important obstacles to their extension work.

Conflict of Interests

The authors declare that they have no competing interests.

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