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An Economic Study of the Current Situation of Contract Farming in Elbeheira Governorate

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ABSTRACT

Contract farming, which is sometimes called contract production, is represented in the production of agricultural commodities with future agreements, and they are usually withdrawn at pre-agreed prices. The problem of price variation and its decrease from the general averages of previous seasons and years appears due to the scarcity of information and the low levels of agricultural extension, especially when farmers adopt to increase the cultivated area as a result of the high prices of some seasons, which leads to increases that exceed the expected and appropriate supply in the following years. The research aims mainly to identify the current situation of contract farming in Buhaira Governorate through the sub-objectives. The primary data was collected by designing a questionnaire from personal interviews with some farmers in the Buhaira Governorate. By studying the time trend equation for the development of the cultivated area during the period (2000-2020), it was found that the total cultivated area took an increasing trend by a statistically significant annual amount of about 6.94 thousand feddans, representing about 0.79% of the average, which is about 875.8 thousand feddans. It became clear from the opinions of the farmers of the study sample the most important items that must be included in the contract for the agricultural season 2021/2022, as the first place came "providing production requirements" with the response of 102 farmers, representing about 92.7% of the total study sample.

Introduction

Agriculture is considered one of the most important aspect of economic development. That is why country implements many programs and projects related to horizontal and vertical growth to advance agricultural production. Contract farming is characterized by tremendous diversity, if it is properly implemented and managed. Contract farming represents a good opportunity to develop and develop markets and to achieve a beneficial shift in technical skills that in turn leads to providing economic gains for financiers,

investors and producer farmers. Contract farming, sometimes called contract production, is the production of agricultural commodities with future agreements in force, usually drawn at pre-agreed prices. These agreements based on the farmer's obligations to deliver a specific commodity (certain) in quantities and quality levels determined by the contracting buyer. The contract also includes a obligations on the part of the purchasers to provide technical extension and to provide material and financial (cash) advances to the contracting farmers. In the case of agreement on administrative inputs on the part of the financiers, the contractual system can be called directed contract farming

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Research problem

Agriculture in Egypt is the mainstay of the economic and social structure. However, the agricultural marketing system still represents an obstacle in achieving a profitable return for the farmer who loses

a large percentage of this return as a result of the exploitation of brokers and traders. The problem of price variation and its decrease from the general averages of previous seasons and years appears due to the scarcity of information and the low levels of agricultural extension, especially when farmers adopt to increase the cultivated area as a result of the high prices of some seasons, which leads to increases that exceed the expected and appropriate supply in the following years. This has led to a decrease in farmers' returns to very low levels, which exposes them to many material and economic problems

Objectives

The research aims mainly to identify the current situation of contract farming in Buhaira Governorate. This can be achieved through the following:

- 1- studying the Development of the total cultivated area and the cropped area at the level of Beheira Governorate
- 2- as preceded Development of the total cultivated area of the different loops at the level of Beheira Governorate
- 3- Identify the sources of information of the study sample farmers about the contract farming system
- 4- To Identify the extent to which the study sample farmers are familiar with the concept of contract farming
- 5- Identifying the advantages of contract farming from the point of view of the study sample farmers
- 6- Identifying the problems of contract farming from the point of view of the study sample farmers and their proposals to overcome them

MATERIALS AND METHODS

The study relied on qualitative and quantitative statistical analysis methods such as estimating

the time trend equation, in addition to using the percentage method.

The study relied on the available published data issued by government agencies such as the Central Department of Agricultural Economics at the Ministry of Agriculture and Land Reclamation, and the unpublished data from the agricultural directorate in Beheira Governorate. The primary data was adopted through the design of a questionnaire obtained from personal interviews with some farmers in Beheira Governorate

Results and Discussion

Development of the total cultivated area and the cropped area at the level of Beheira governorate:

A- Development of the total cultivated area:

Data of Table (1) shows that the cultivated area at the level of Beheira governorate during the study period (2000-2020) ranged between a minimum limit in € about 795.2 thousand feddans in 2000, representing about 10.2% of the total cultivated area at the level of the Republic and a maximum limit in About 949.7 thousand feddans in 2015, representing about 10.4% of the total cultivated area at the al-Buhaira governorate level, and the average annual cultivated area at the level of Buhaira governorate was about 875.8 thousand feddans during the study period.

And by studying the equation of the general time trend for developing

the cultivated area in table (2 We explain the results of the statistical estimate during the time period (2000-2020)), and from it it is clear that the total cultivated area at the level of Al-Buhaira governorate took a general trend increasing by a statistically significant annual amount at a significant level of 0.01, which amounted to about 6.94 thousand feddans It represents about 0.79% of the average, which is about 875.8 thousand feddans.

The coefficient of determination (R^2) was about 0.81, which means that 81% of the changes in the cultivated area at the level of the governorate of Beheira are due to

the factors whose impact reflects the element of time, and this has proven the significance of the model used for measurement in general, using the calculated (F) value.

Table 1. Deveopment of the total cultivated area, the cropped area in thousand feddans, and the intensification factor at the level of Beheira governorate, and its percentage from the Arab Republic of Egypt during the period (2000-2020)

Years	The cultivated area		Crop area		condensation coefficient*
	Area	%from the Republic	area	%from the Republic	
2000	795.2	10.2	1546.5	11.1	1.94
2001	829.4	10.4	1584.8	11.3	1.91
2002	818.2	10.0	1537.1	10.7	1.88
2003	809.4	10.0	1575.3	10.9	1.95
2004	823.9	10.0	1607.9	11.0	1.95
2005	849.0	10.1	1650.8	11.1	1.94
2006	853.7	10.2	1637.6	11.0	1.92
2007	841.1	10.0	1742.6	11.5	2.07
2008	840.2	10.0	1720.0	11.3	2.05
2009	864.0	9.8	1674.7	10.8	1.94
2010	895.2	10.2	1694.2	11.0	1.89
2011	875.7	10.2	1683.2	11.0	1.92
2012	889.2	10.1	1691.6	10.9	1.90
2013	928.0	10.4	1711.3	11.0	1.84
2014	943.0	10.6	1770.7	11.3	1.88
2015	949.7	10.4	1786.2	11.4	1.88
2016	930.5	10.2	1921.1	12.2	2.06
2017	922.5	10.1	1863.2	11.6	2.02
2018	891.7	9.7	1609.4	10.0	1.80
2019	913.2	9.8	1597.4	9.9	1.75
2020	928.8	9.8	1752.5	10.8	1.89
average	875.8	10.1	1683.7	11.0	1.92
minimum	795.2	9.7	1537.1	9.9	1.75
maximum	949.7	10.6	1921.1	12.2	2.07

Intensification coefficient = cropped area / cultivated area

Source: Collected and calculated from: Ministry of Agriculture and Land Reclamation, Economic Affairs Sector, Central Administration of Agricultural Economy, publication of Agricultural Economy, various issues

B- Deveopment of the total cropped area

We conclude from the study of table indicators (1) shows that the cropped area at the level of Beheira governorate during the

study period (2000-2020) ranged between a minimum of about 1537.1 thousand feddans in 2002, representing about 10.7% of the total cultivated area at the level of the Republic, and a maximum It reached about 1921.1 thousand feddans in 2016, representing about 12.2% of the total cultivated area at the level of the Republic, while the average cropped area at the level of Beheira Governorate annually amounted to about 1683.7 thousand feddans during the study period

And by studying the equation of the general temporal trend for the developing the cropped area at the level of Al-Buhaira governorate, Table (2) shows the results of the statistical estimate during the period (2000-2020), and from it it is clear that the total cropped area took a general trend increasing by a statistically significant annual amount at a significant level of 0.01 and reached about 10.02 thousand feddans It represents about 0.60% of the average, which is about 1,683.7 thousand feddans. The coefficient of determination (R^2) was about 0.38, which means that 38% of the changes in the cropped area at the level of the governorate of Beheira are due to factors whose effect reflects the time element. This has proven the significance of the model used for measurement in general, using the calculated (F) value.

C- Develepment of the condensation coefficient:

We conclude from the study of table indicators (1) shows that the condensation coefficient at the level of Al-Buhaira governorate during the study period (2000-2020) ranged between a minimum of about 1.92 times in 2006 and a maximum of about 2.07 times in 2007, with an annual geometric average of about 1.92 times during The study period.

And by studying the equation of the general time trend for the development of the condensation coefficient at the level of the governorate of Beheira in Table No. (2), it is clear from the results of the statistical estimate during the period (2000-2020) that the statistical significance was not proven for any of the recognized statistical images, which indicates that the data of the condensation coefficient at the level of the governorate of Beheira It revolves around its geometric mean of about 1.92 times.

Table 2. Equations of the general temporal trend for the development of the total cultivated area, the cropped area in thousand feddans, and the intensification factor at the level of Buhaira governorate during the period (2000-2020)

M	Dependent variable	Estimated model	R^2	F	%Annual change
1	The cultivated area	$\hat{Y}_i = 799.5 + 6.94 X_i$ **(8.98) **(82.4)	0.81	80.6	0.79
2	Crop area	$\hat{Y}_i = 1573.5 + 10.02 X_i$ 43.1) ** (2.9)**)	0.38	11.9	0.60
3	condensation coefficient	None of the conventional images were depressed			

Where: \hat{Y}_i : the estimated value of the dependent variable.
 X_i : time variable where $i = (1, 2, 3, \dots, 21)$.

The value in brackets indicates the calculated (T) value, (R^2) the coefficient of determination, and (F) the significance of the model as a whole.

(**) indicates the significance of the regression coefficient at the significance level 0.01.

Source: Calculated from the data of Table (1) in the search.

Development of the total cultivated area from different loops at the level of Beheira Governorate:

This part deals with the development of the area of each of the total winter crops, the total summer crops, the total Nile crops, the total perennials, and the total alfalfa crops at the level of Al-Buhaira governorate during the study period (2000-2020).

A- Development of the total area of winter crops:

We conclude from the study of table indicators (3) shows that the total area of winter crops at the level of Beheira governorate during the study period (2000-2020) ranged between a minimum of about 549.5 thousand feddans in 2004 and a maximum of about 763.5 thousand feddans in 2016, with an annual average of about 674.6 thousand feddans during the study period.

And by studying the equation of the general temporal trend for the development of the total area of winter crops at the level of Beheira governorate, table (4) shows the results of the statistical estimate during the period (2000-2020). Significant 0.01 amounted to about 11.9 thousand feddans, representing about 1.76% of the average, which is about 674.6 thousand feddans. The coefficient of determination (R^2) was about 0.75, which means that 75% of the changes in the total area of winter crops at the level of the governorate of Beheira are due to factors whose effect reflects the Development of time.

B- Development of the total area of summer crops:

A study of the indicators of Table (3) shows that the total area of summer crops at the level of Beheira governorate during the study period (2000-2020) ranged between a minimum of about 528.6 thousand feddans in 2003 and a maximum of about 933 thousand feddans in 2016, with an annual average of about 688.9 thousand feddans during the study period.

And by studying the general temporal trend equation for the development of the total area of summer crops at the level of Beheira governorate, Table (4) shows the results of the statistical estimate during the period (2000-2020). Significant 0.01 amounted to about 15.4 thousand feddans, representing about 2.23% of the average, which is about 688.9 thousand feddans. The coefficient of determination (R^2) was about 0.65, which means that 65% of the changes in the total area of summer crops at the level of the governorate of Beheira are due to factors whose effect reflects the time element

C- Development of the total area of Nile crops:

A study of the indicators of Table (3) shows that the total area of Nile crops at the level of Beheira governorate during the study period (2000-2020) ranged between a minimum of about 14.7 thousand feddans in 2020 and a maximum of about 71.1 thousand feddans in 2007, with an annual average of about 51.4 thousand acres during the study period.

And by studying the equation of the general time trend for the development of the total area of Nile crops at the level of the governorate of Beheira in table (4) shows the results of the statistical estimate during the period (2000-2020), and from it it is clear that the total area of Nile crops took a general decreasing trend by a statistically significant annual amount at a significant level of 0.01,

which amounted to about 1.25 thousand feddans, representing about 2.44% of the average, which is about 71.1 thousand feddans. The coefficient of determination (R²)

was about 0.27, which means that 27% of the changes in the total area of Nile crops at the level of the governorate of Beheira are due to factors whose effect reflects the time element

Table 3. The Development of the total cultivated area of different loops in thousand feddans at the level of Buhaira Governorate during the period (2000-2020).

Years	Winter total	summer total	total indigo	Total centenarians	clover molestation
2000	572.8	537.7	45.7	222.4	167.9
2001	569.8	546.4	46.5	259.6	162.5
2002	561.2	557.2	52.0	257.0	175.7
2003	578.8	528.6	59.5	230.6	177.8
2004	549.5	560.8	60.6	274.4	162.6
2005	585.4	584.9	54.2	263.6	162.7
2006	597.0	572.5	57.0	256.7	154.4
2007	592.0	663.3	71.1	249.1	167.1
2008	614.0	653.8	70.7	226.2	155.3
2009	731.9	742.3	68.4	132.1	121.6
2010	763.3	734.6	64.5	131.9	97.1
2011	742.2	757.7	49.8	133.5	108.7
2012	754.0	751.6	50.8	135.2	122.1
2013	740.7	726.2	57.1	187.3	97.6
2014	755.1	768.0	59.7	187.9	89.5
2015	763.5	797.3	39.2	186.2	85.1
2016	746.7	933.0	57.7	183.8	60.0
2017	736.8	895.9	44.8	185.8	69.1
2018	716.2	677.2	40.4	175.6	67.2
2019	738.1	668.5	15.7	175.1	71.9
2020	758.4	809.1	14.7	170.4	53.8
Average	674.6	688.9	51.4	201.2	120.5
Minimum	549.5	528.6	14.7	131.9	53.8
Maximum	763.5	933.0	71.1	274.4	177.8

Source: Collected and calculated from: Ministry of Agriculture and Land Reclamation, Economic Affairs Sector, Central Administration of

Agricultural Economy, Bulletins of Agricultural Economy, various issues.

Table 4. Equations of the time trend for the development of the total cultivated area of different loops in thousand feddans at the level of Buhaira Governorate during the period (2000-2020).

M	Dependent variable	Estimated Model	R ²	F	%Annual change
1	The total area of winter crops	$\hat{Y}_i = 543.8 + 11.9 X_i$ **(7.5) **(27.2)	0.75	55.7	1.76
2	The total area of summer crops	$\hat{Y}_i = 520.01 + 15.4 X_i$ (6.02) ** (5.94)**	0.65	35.2	2.23
3	The total area of Nile crops	$\hat{Y}_i = 65.2 - 1.25 X_i$ (-2.63)** **(10.9)	0.27	6.9	-2.44
4	The total area of settlements	$\hat{Y}_i = 255.7 - 4.96 X_i$ (-3.71)** **(16.8)	0.42	13.8	-2.47
5	Total area of clover harassment	$\hat{Y}_i = 193.9 - 6.67 X_i$ **(-13.55) ** (31.4)	0.91	183.6	-5.54

Where: \hat{Y}_i : the estimated value of the dependent variable

X_i : time variable where $i = (1, 2, 3, \dots, 21)$

(**) indicates the significance of the regression coefficient at the significance level 0.01

Source: Calculated from the data of Table (3) in the search

D- Develepment of the total reclaimed area:

A study of the indicators of Table (3) shows that the total area of built-up areas at the level of Buhaira governorate during the study period (2000-2020) ranged between a minimum of about 131.9 thousand feddans in 2010 and a maximum of about 274.4 thousand feddans in 2004 with an annual average of about 201.2 thousand acres during the study period..

By studying the equation of the general temporal trend for the development of the total area of reclaimed areas at the level of Al-Buhaira governorate, Table (4) shows the

results of the statistical estimate during the period (2000-2020). An feddan represents about 2.47% of the average, which is about 201.2 thousand acres. The value in brackets indicates the calculated coefficient of determination (R²) was about 0.42, which means that 42% of the changes in the total area of settlements at the level of the governorate of Beheira are due to factors whose effect reflects the time element.

E- Develepment of the alfalfa mowing area:

A study of the indicators of Table (3) shows that the area of alfalfa irrigation at the level of Al-Buhaira governorate during the study period (2000-2020) ranged between a minimum of about 53.8 thousand feddans in 2020 and a maximum of about 177.8 thousand feddans in 2003, with an annual average of about 120.5 thousand acres during the study period.

And by studying the equation of the general time trend for the development of the area of alfalfa vegetation at the level of Al-Buhaira

governorate, Table (4) shows the results of the statistical estimate during the period (2000-2020). One thousand feddans represents about 5.54% of the average, which is about 120.5 thousand feddans. The coefficient of determination (R²) was about 0.91, which means that 91% of the changes in the area of alfalfa vegetation at the level of the governorate of Beheira are due to factors whose effect reflects the time element.

Field study of farmers' opinions about contract farming in Buhaira Governorate:

Al-Buhaira governorate includes sixteen administrative centers: Damanhour, Abu Al-Matamir, Abu Homs, Al-Dalanjat, Al-Mahmudiyah, Itadi Al-Baroud, Hosh Issa, Rashid, Shabrakhit, Kafr Al-Dawar, Kom Hamada, Wadi Al-Natrun, Al-Rahmaniyah, Idku, Badr, Al-Nubaria and Janaklis. In order to choose the administrative centers that will be an area for applying the field study in Buhaira governorate, a random sample was selected from the Dalanjat center and a deliberate sample from the Badr center farmers, where the choice is due to the researcher's residence and the ease and possibility of compiling the questionnaire, where 110 individuals were randomly

Table 5. The relative distribution of the opinions of the study sample farmers on their knowledge of their concept of contract farming

M	Item	Repetition	%	arrangement
1	A method that can contribute to increasing farm income and doubling the profitability of agricultural entities	62	56.36	1
2	Oral or written contractual arrangements between farms and other parties	16	14.55	3
3	Oral or written contractual arrangements between farms and other parties	20	18.18	2
4	Lack of knowledge of the concept of contract farming	12	10.91	4
	sample total	110	100.0	

The source is: the results of the 2021/2022 season questionnaire

Opinions of the study sample farmers on the source of their knowledge of contract farming:

selected from the centers of Dalanjat and Badr. The following is a presentation of the results of farmers' opinions about contract farming. Opinions of the study sample farmers for their knowledge of the concept of contract farming

It is clear from table (5) the opinions of the farmers of the study sample because of their knowledge of their concept of contract farming for the agricultural season 2021/2022, where the first place came "a method that can contribute to increasing the income of farms and doubling the profitability of agricultural entities" with the response of 62 farmers, which represents about 56.36% of the total study sample, while in the second place came "a partnership between agricultural entities and farmers", with a response of 20 farmers, representing about 18.18% of the total study sample, while in the third place came "verbal or written contractual arrangements between farms and other parties" with a response of 16 farmers, representing about 14.55% of the total study sample, while in the fourth and last place came "I do not know", with the response of 12 farmers, which represents about 10.91% of the total study sample.

It is clear from table (6) the opinions of the farmers of the study sample about the source of their knowledge of contract farming for the agricultural season 2021/2022, where the "merchant" came in the first place, with the

response of 51 farmers, representing about 46.36% of the total study sample, while the second place came in “seminars and affiliated bodies.” to the Ministry of Agriculture, with the response of 38 farmers, representing about 34.55% of the total study sample, while in the third place came "He has no knowledge", with the response of 15 farmers, representing about 13.64% of the total study sample, while in the fourth and final place came "Family and Neighbors". With the response of 6 farmers, representing about 5.45% of the total study sample

Table 6. Percentage distribution of the study sample farmers’ opinions of the source of their knowledge of contract farming

M	Item	Repetition	%	Arrangement
	Seminars and destinations			2
1	affiliated with the Ministry of Agriculture	38	34.55	
2	merchant Parents	51	46.36	1
3	and neighbors	6	5.45	4
4	I have no knowledge	15	13.64	3
The total sample		110	100.0	

Source: Results of the 2021/2022 season questionnaire.

Opinions of the study sample farmers on the source of their knowledge of contract farming:

It is clear from Table (7) the opinions of the farmers of the study sample according to the degree of the contracted crop for the agricultural season 2021/2022, where the “crop as a whole” came in the first place with the response of 72 farmers, representing about 65.45% of the total study sample, while the “sorting” came in the second place The

first was the response of 38 farmers, representing about 34.55% of the total study sample.

Table 7. The relative distribution of the opinions of the study sample farmers according to the degree of the contracted crop

M	The degree of the contracted crop	Repetition	%	Arrangement
1	The first screening	38	34.55	2
2	the crop as a whole	72	65.45	1
sample total		110		100

Source: Results of the 2021/2022 season questionnaire.

Opinions of the study sample farmers about the items that must be included in the contract:

It is clear from Table (8) the views of the farmers of the study sample regarding the items that must be included in the contract for the agricultural season 2021/2022, where the first place came in “providing production requirements” with the response of 102 farmers, representing about 92.7% of the total study sample, while it came in the second place "Determining the selling price of the crop according to the market price" with the response of 96 farmers, representing about 87.3% of the total study sample, while the third place came "Determining the selling price of the crop during the contract", with the response of 85 farmers, representing about 77.3% of the total study sample, while In the fourth place came “determining the quantity of the product”, with the response of 72 farmers, representing about 65.5% of the total study sample, while the fifth place came in “determining the date for marketing the crop”, with the response of 58 farmers, representing

about 52.7% of the total study sample. In the sixth place, "Setting a penalty clause for the non-compliant party," with the response of 51 farmers, representing about 64.4% of the total study sample, while in the seventh place came "Determining the quality and quality of the product," with the response of 28 farmers, representing about 25.5% of the total study sample, while In the eighth place came

"Providing means of transporting the crop through the contracting authority," with the response of 23 farmers, representing about 20.9% of the total study sample, while in the ninth and last place came "Determining the duration of the contract and how to terminate it," with the response of 16 farmers, representing about 14.6% of the respondents. The total study sample.

Table 8. The relative distribution of the viewpoint of the study sample farmers of the items that must be included in the contract

m	Items	Repetition	%	arrangement
1	Determining the selling price of the crop during the contract	85	77.3	3
2	Determine the selling price of the crop according to the market price	96	87.3	2
3	Determine the quality and quality of the product	28	25.5	7
4	Providing production requirements	102	92.7	1
5	Determine the date of marketing the crop	58	52.7	5
6	Providing means of transporting the crop through the contracting party	23	20.9	8
7	Determine the quantity of the product	72	65.5	4
8	Determine the duration of the contract and how to terminate it	16	14.6	9
9	Setting a penalty clause for the non-compliant party	51	46.4	6

Source: Results of the 2021/2022 season questionnaire.

Opinions of the study sample farmers for the appropriate contracting periods:

It is clear from Table (9) the opinions of the farmers of the study sample according to the appropriate contracting periods for the agricultural season 2021/2022, as it came in

the first place "before planting" with the response of 62 farmers, representing about 56.36% of the total study sample, while it came in the second place "after maturity crop" with the response of 33 farmers, representing about 30% of the total study sample, while the third and last place came in "during cultivation", with the response of 15 farmers, representing about 13.6% of the total study sample.

Table 9. The relative distribution of the viewpoint of the study sample farmers about the appropriate contracting periods

M	Role	Repetition	%	arrangement
1	before planting	62	56.36	1
2	during cultivation	15	13.64	3
3	after crop maturity	33	30.00	2
sample total		110	100.0	

Source: Results of the 2021/2022 season questionnaire.

Opinions of the study sample farmers about the most important advantages of contract farming

It is clear from table (10) the views of the farmers of the study sample about the most important advantages of contract farming for the agricultural season 2021/2022, where the first place came “providing agricultural services to farmers to increase the quality of the crop,” with the response of 98 farmers, representing about 89.1% of the total study sample, while it came in The second place came to “Ensuring the Marketing of the Crop” with the response of 89 farmers, representing about 80.9% of the total study sample, while the third place came in “Marketing at a Rewarded Price”, with the response of 76 farmers, representing about 69.1% of the total

study sample, while it came in the fourth place. The contracting party does not violate the price specified in the contract" with the response of 67 farmers, representing about 60.9% of the total study sample, while the fifth place came "commitment to market the crop according to the date specified in the contract" with the response of 55 farmers, representing about 50% of the total study sample, in When it came in the sixth and last place, "Increasing the profit and income of farms," with the response of 43 farmers, representing about 39.1% of the total study sample.

Table 10. The relative distribution of the viewpoint of the study sample farmers of the most important advantages of contract farming

M	Advantages	Repetition	%	Arrangement
1	Warranty the marketing of the crop	89	80.9	2
2	Marketing at a price perfect.	76	69.1	3
3	Commitment to marketing the crop according to the date specified in the contract	55	50.0	5
4	Providing agricultural services to farmers to increase the quality of the crop.	98	89.1	1
5	The contracting party shall not breach the price specified in the contract.	67	60.9	4
6	Increase the profit and income of the farms.	43	39.1	6

Source: Results of the 2021/2022 season questionnaire.

Opinions of the study sample farmers about the problems of contract farming:

It is clear from table (11) the views of the farmers of the study sample on the problems of contract farming for the agricultural season 2021/2022, where it came in the first place “the increase in the price of the crop in the market after contracting” with the response of 86 farmers, which represents about 78.2% of the total study sample, while it came in the center The second is "lack of technical advice provided by the contracting authorities," with the response of 82 farmers, representing

about 74.5% of the total study sample, while the third came "non-compliance with the agreed crop price," with the response of 69 farmers, representing about 62.7% of the total study sample. While in the fourth place came "wasting a large percentage of sorting during the marketing of the crop," with the response of 67 farmers, representing about 60.9% of the total study sample, while in the fifth place came "non-compliance with collecting the crop on time," with the response of 46 farmers, representing about 41.8 percent. % of the total study sample, while the sixth place came in "the contracting party's non-compliance with the terms of the contract" with the response of 44 farmers, representing about 40% of the total study sample, while in

the seventh place came "rejection of the crop as a result of disease" with the response of 38 farmers, which represents About 34.5% of the total study sample, while in the eighth and last

place came "forcing farmers to harvest the crop early," with the response of 28 farmers, representing about 25.5% of the total study sample.

Table 11. The relative distribution of the viewpoint of the study sample farmers on the problems of contract farming

M	Advantages	Repetition	%	arrangement
1	Lack of technical advice provided by the contracting authorities	82	74.5	2
2	Wasting a large percentage of sorting during the marketing of the crop	67	60.9	4
3	The high price of the crop in the market after contracting	86	78.2	1
4	Non-compliance with harvesting the crop at the specified date	46	41.8	5
5	Crop rejection due to disease	38	34.5	7
6	Non-compliance with the agreed crop price	69	62.7	3
7	Forcing farmers to harvest crops early	28	25.5	8
8	Non-compliance of the contracting party with the terms of the contract	44	40.0	6

Source: Results of the 2021/2022 season questionnaire

Suggestions of the study sample farmers to solve the problems of contract farming:

It is clear from table (12) the proposals of the farmers of the study sample to solve the problems of contractual farming for the agricultural season 2021/2022, where the first place came "Determining a fair price for the crop" with the response of 104 farmers, representing about 94.5% of the total study sample, while it came in the second place. The need for extension authorities or agricultural cooperative societies to supervise the contract and implement its provisions, with the response of 100 farmers, representing about 90.9% of the total study sample, while the third place came in "supporting production requirements," with the response of 97 farmers, representing about 88.2% of the total study sample. While in the fourth place came "the need to set special specifications for the product before planting,"

with the response of 91 farmers, representing about 82.7% of the total study sample, while in the fifth place came "setting a minimum price for the crop," with the response of 90 farmers, representing about 81.8% of the total. The study sample, while in the sixth place came "the need to provide technical advice to farmers from the contracting authorities" with the response of 87 farmers, representing about 79.1% of the total study sample, while in the seventh place came "technical follow-up and supervision of all production and marketing operations of the crop" with the response of 82 farmers Representing about 75.5% of the total study sample, while in the eighth place came "the need for the contracting parties to commit to receiving the crop and paying the price on time" with the response of 80 farmers, representing about 72.7% of the total study sample, while in the ninth place came "necessity Fulfillment by the contracting

authorities of the concluded contracts" with the response of 62 farmers, representing about 56.4% of the total study sample, while in the tenth and last place came "the need for

the extension authorities to provide technical advice" with the response of 52 farmers, representing about 47.3% of the total study sample.

Table 12. Percentage distribution of the proposals of the study sample farmers to solve the problems of contract farming

M	Proposals	Repetition	%	arrangement
1	The necessity of the contracting parties' commitment to receive the crop and pay the price on time	80	72.7	8
2	The need for the contracting parties to fulfill the contracts concluded	62	56.4	9
3	The need to provide technical advice to farmers from the contracting authorities	87	79.1	6
4	The need for extension authorities or agricultural cooperative societies to supervise the contract and implement its provisions	100	90.9	2
5	The need for the extension authorities to provide technical advice	52	47.3	10
6	The need to develop special specifications for the product before cultivation	91	82.7	4
7	Determine a fair price for the crop	104	94.5	1
8	Support for production requirements	97	88.2	3
9	Set a minimum price for the crop	90	81.8	5
10	Follow-up and technical supervision of all production and marketing operations of the crop	82	74.5	7

Source: Results of the 2021/2022 season questionnaire.

Recommendations

1. Expansion of seminars and workshops for farmers in Buhaira governorate in order to raise awareness of contract farming.
2. Work on developing a clear and explicit vision of how to determine the price of the contract between the farmers and the other party to the contract.
3. Work to increase the role of the contract farming center and establish branches within the governorates.

4. The existence of a dispute settlement committee supervised by the agricultural associations, and the determination of a judicial body for that

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