



FINANCIAL PERFORMANCE ASSESSMENT FOR PROJECTS OF TABLE EGGS PRODUCTION AND MEASUREMENT INVESTMENT RISK (DIYALA PROVINCE – A CASE STUDY)

Ali G. Zaidan¹ and Osamah K. Jbara²

¹College of Agriculture, University of Diyala, Iraq.

²College of Agricultural Engineering Sciences, University of Baghdad, Iraq.

Abstract

In general, projects of table eggs production in Iraq faced technical and economic problems, So it was necessary to carry out a financial analysis of these projects to know the performance of the producers, Diyala province has chosen as a case study, The study used cross-section data according to the comprehensive inventory method consist (44) of farmers from Diyala Province for the 2018 agricultural season, the study aimed calculation of economic criteria to assess the efficiency of the financial performance of the projects and measurement investment risk, and the sample divided into two, the large scale and small scale dichotomy of the farms is included. large farms are those with more than 10000 birds while small farms have 10000 or less birds.

The results of the study of the criteria for financial performance assessment indicated that the large scale achieved more economic efficiency than small scale and the study community as a whole, as the economic profit and net cash income increased with increasing the productive scale (number of birds) and large scale ranked the first for the criterion of the invested dinar turned and profitability percentage has achieved 1.33 , 0.33 Iraqi Dinar (ID) receptivity, the criterion of money refund and the operating ratio for the large scale about 3.06 years, 75% receptivity, the study found by analysis of neutralization a positive relationship between the net return (profit) with investment risk .In general, the study indicates that increasing the productive scale of table egg production projects led to increases their economic efficiency, which. the optimal use of the resources used.

Key words: Table eggs, financial assessment, risk.

Introduction

Food security has become the issue that concerns the economies of the world in general and the developing countries, including Iraq in particular, so we must consider the quality and quantity of food for this issue and with the increasing population, the need for food is doubling (Mohaddes, 2009). At the same time, some believe that nation's progress measure is related to the consumption of animal protein (Abo El-Enien, 2010). Hence the importance of the poultry industry as one of the important pillars in achieving food security policy and being a major source in the provision of animal protein, which is characterized by high nutritional value and cheap price (Soliman and Gergies, 2016). This industry is of great importance in most economies of the world. In addition to its nutritional value, it creates many job opportunities

not only for those who work in direct production, but also for workers in the field of production of chickpeas, fodder farmers, manufactures of incubators, building materials and traders who market the produce until it reaches the final consumer, as well as the use of poultry waste as animal fertilizer in agriculture (Altarawneh, 2013). The poultry industry projects are easily managed and the investment capital is low. At the same time, it produces quick returns. It also does not need a large amount of land compared to other productive projects. In addition, the industry is able to convert low-value production resources into high-value products, especially as these projects have a special place in terms of resource allocation (Gergies and Soliman, 2016). Therefore, became interested in the issue of evaluating the financial performance of these projects is very important in

obtaining the right decisions in the investment in addition to these projects are exposed to risk. Especially in light of the State's tendency to reduce the role of the public sector and the increasing role of the private sector in order to achieve the optimal use of available resources by channeling these resources to the best available or rational, use (Barbaz, 2014). The owners of these projects face technical and economic problems that led to the closure of many of them and their exposure to extinction, in addition to the existence of many of them do not work at full capacity and may be due to various reasons. The most important economic reasons related to the usefulness of those projects, according to statistics, which clearly affected the availability of this commodity is important to the consumer and having to plug through the import. The statistics indicate that the average per capita Iraqi eggs in the table was 15 eggs per year, while the average per capita consumption of the world was 186 eggs per year (AOAD, 2016), (FAO, 2016). Therefore, it is necessary to study the economic analysis in order to know the economic efficiency of these projects to benefit from the establishment of the right bases and provide an information base for those responsible for projects of the poultry industry to find out the most important obstacles that hinder those projects and the reasons why many of them stopped working. Diyala governorate was chosen as an applied model for this study. The research hypothesis is that the producers in this sector do not achieve profitable profits that encourage them to continue, as well as the high risk rates in these projects compared to their profit margins. The aim of this research is to identify the production costs, production and total revenues of the table egg production projects and the calculation of economic criteria to evaluate the efficiency of financial performance of the projects and measure the degree of risk using the method the neutralization analysis.

Materials and Methods

The study used cross-section data according to the comprehensive inventory method consist (44) of fields in Diyala Governorate for the year 2018. The statistical data were collected by means of personal interviews of the producers, which included different information on production, costs, number of fields, number of birds produced, prices of produce, etc. The research method includes the use of economic criteria to evaluate the efficiency of financial performance of projects and measure the risk of investment using the method the neutralization analysis.

Economic profit criterion

Economic profit is one of the important economic

efficiency criteria on which a product is based when making its own productive decisions. The product always seeks maximum profit (Soliman and Gergies, 2016). This indicator is used to indicate the incentives for the possibility of expanding the industry for private investment in the face of full competition when capital is available. In the long run, this profit will disappear if the market reaches equilibrium (Ronald, 1981). And calculated according to the following formula:

$$\text{Economic Profit} = \text{Cash Income} - \text{Cash Costs}$$

Net cash income criterion

Is a measure of the farm's ability to generate cash and is a useful starting point for calculating the farm's ability to meet its debts and it is the difference between cash farm income and cash costs. (Variable costs), (Al-Kaisy, 2009). Net cash income is calculated through the following relationship (Izzi, 1988):

$$\text{Net cash income} = \text{cash income} - \text{cash costs (variable cost)}$$

Pay back period criterion

This standard measures the speed at which the project recovers its invested capital and the decision-making base is in favor of projects that recover the invested capital in a shorter period of time in accordance with this standard (Aboelwafa, 1992). The capital recovery period is also one of the most widely used methods of project evaluation because of its ease and simplicity and the capital recovery period is calculated by the following law (Izzi, 1989).

$$\text{Pay back period} = \text{Fixed Capital} / \text{Profit} + \text{Additions}$$

Invested dinar turned criterion

It is one of the criteria used as an indicator of the financial evaluation of the performance of the production units. It is calculated by dividing the annual revenue of the project against the annual costs, all at current value both in terms of revenues or costs. If the value of this criterion is greater than one means the financial success of the unit of production, and if this ratio is equal to the right one equates financially and less than the correct one predicts the existence of financial problems in production need to be handled by different procedures. calculated the return of investment of the dinar from the following equation (Al-Kaisy, 2009).

$$\text{Invested dinar turned} = \frac{\text{Annual project return}}{\text{Annual project costs}}$$

Operation ratio criterion

This criterion is one of the criteria of economic efficiency of the use of fixed and variable assets and the ability of the project to pay its monetary and non-monetary

obligations to the production process. If the ratio falls below the correct one, the economic efficiency of the project will increase and use its sources. This standard is calculated according to the following formula (Abo El-Enien, 2010):

$$\text{Operating ratio} = \text{Total Cost} / \text{Total Revenue.}$$

Profitability criterion

This measure is an indicator of economic efficiency, which indicates the efficiency of the project to achieve high profit and at the same time bear increasing production costs (Abo El-Enien, 2010). This criterion is calculated according to the following formula:

$$\text{Profitability} = (\text{Annual net profit}) / (\text{Gross cost}) \times 100$$

Break-event point criterion

A tie point is a tool and a means used by the farm manager to determine the quantity of production that represents the minimum units of cash or quantity so that the revenues generated from them are equal to the total costs of the total production to avoid loss without any profit or loss, that is, the profit at this level is zero (Barbaz, 2012). The good governance works that the production of the project exceeds the size of the draw, as the reduction of the production capacity of the project on the size of the equal signifies the entry into the area of losses (Aboelwafa *et al.*, 1992).

A break point can be used as units or as a value according to the following relations:

Tie point as units = total fixed costs TFC / (unit price PY - total cost variable TVC). The point of production is calculated as the value = (total fixed costs TFC) / [1 - (variable cost of production TVC / revenue generated TR)] (Izzi, 2000).

The Concept of Investment risk for Projects and their Estimation Using the Method of Analysis of Neutralization: The agricultural sector is characterized by the fact that it is the most vulnerable sector due to the nature of agricultural production, marketing methods and financing, and is influenced by many factors that will diversify the risks faced by this sector. Thus increasing the probability of loss, which would represent additional costs that would increase total costs and lower returns from project production. Risk is defined as a type of cost (Foad and others, 2016). Risk is also described as the projected portion of the expected income in order to obtain a more stable income. Therefore, the risk study contributes to estimating and classifying the expected loss if I assume that the product is at risk and thus predicts the future needs of the state which gives the opportunity to decision makers in the planning to take the necessary

caution in the event of such risks and determine. The best way to meet and estimate the compensation necessary for producers in the agricultural sector.

The risk assessment methods are based on several methods and vary according to the type of risk. The accuracy and efficiency of the estimation vary according to the methods used, but most methods enable the decision maker to choose the less risky alternative. The methods used in risk assessment are divided into statistical and mathematical methods such as variance, mathematical programming, Including sensitivity analysis and tie analysis (Emam, 2017, 386). But we will adopt the latest method of measurement of risk, where the analysis of neutralization is a measure both price risk and productive risk, as one of the most important things to decide on the production activities, or expansion and the neutralization price is as a measure of price risk, the neutralization quantity is as a measure of the Productive risk (Adam, 2013), (Al-Batran and Nassar, 2017), (Eldokla and others, 2014).

1. The Neutralization price is calculated as a measure of the price risk in two aspects:

- The Neutralization price to cover the total costs is calculated according to the following formula:

$$\text{The Neutralization price to cover the total costs} = (\text{Total costs} / \text{Total actual production})$$

An increase in the average selling price (actual) indicates to the parity price to cover the total costs indicates the project's ability to cover its total costs and make a profit.

- The Neutralization price to cover variable costs is calculated according to the following formula:

$$\text{The Neutralization price to cover variable costs} = (\text{Total variable costs} / \text{Total actual production})$$

This measure shows the average selling price that covers variable costs and the higher the selling price (actual) than the equalization price to cover the variable costs indicates the project's ability to cover its variable costs.

2. The Neutralization quantity is calculated as a measure of the Productive risk in two aspects:

- The Neutralization quantity to cover the total costs is calculated according to the following formula:

$$\text{The Neutralization quantity to cover total costs} = (\text{Total costs} / \text{Average selling price})$$

This measure shows the minimum quantity to be produced so that total costs can be covered, an increase in the actual production of a project on the amount of the parity to cover the total costs indicates the project's ability

to cover its total costs and achieve an economic surplus.

- The Neutralization quantity to cover variable costs is calculated according to the following formula:

The Neutralization quantity to cover changing costs = (Total variable costs / Average selling price)

This measure shows the minimum production that covers variable costs. An increase in the actual production of a project on the amount of the parity to cover variable costs indicates that the project can meet its variable costs at least, and therefore can continue to operate.

Results and Discussion

In order to calculate the criteria for financial assessment and measurement of risk, it is necessary to study the total costs and revenues for the production of table eggs in Diyala Governorate.

First: Total Costs

Statistical costs are important indicators in evaluating the economic feasibility of various projects in general and agricultural investment projects in particular because it is one of the most important measures of economic efficiency. This is because achieving economic efficiency means reducing the costs of production and thus increasing the difference between revenue and production cost, which results in higher profit (El-Kak, *et al.*, 2017).

Table 1 shows the cost of fixed and variable costs and the average of the society of the study, noting that the total costs amounted to (18586115316.91) dinar and the total variable costs (17080554158.96) dinar and fixed costs (1505561157.95) dinar. As for the calculation of the average unit cost of the product, which is one of the most important economic indicators of production efficiency. Taking into account that the person carrying out and managing the farm is able to plan for the selection of combinations of production elements and the

Table 1: Cost items to the study society.

Average cost of bird (bird/dinar)	Average cost of layer egg (layer/dinar)	Total cost (dinar)	Total fixed cost (dinar)	Total variable cost (dinar)	Production capacity (bird)	Production capacity (1000 birds)
40385.59	3376.27	7602587318.41	704607396.12	6897979922.29	188250	Small capacity (1-10)
39651.73	3252.12	10983527998.50	800953761.83	10182574236.67	277000	Large capacity (10.5 and above)
39948.66	3301.80	18586115316.91	1505561157.95	17080554158.96	465250	Total

Table 2: Revenue items to the study society.

The importance of ratio (%)	Total revenue (Dinar)	The secondary income (Dinar)	The primary revenue (Dinar)	Production capacity (1000 birds)
41	9927273483.33	507156250.00	9432017233.33	Small capacity (1-10)
59	14568126388.89	913450000.00	13654676388.89	Large capacity (10.5 and above)
100	24507299872.22	1420606250.00	23086693622.22	Total

Source: Compiled and calculated by the researcher based on the questionnaire.

appropriate technological level of production in a decision to achieve the lowest production costs. The average cost of production per layer at the level of the research community was (3301.80) dinar. While the highest value in the small production capacity reached (3376.27) dinar, and reached the lowest value in the capacity of large capacity amounted to (3252.12) dinar. The table shows that the average cost per bird at the level of the research community amounted is (39948.66) dinar, the small capacity recorded the highest value of (40385.59) dinar, while in the large production capacity reached its lowest level reached (39651.73) dinar. This is consistent with economic logic. Reflecting the economies of production capacity in large enterprises to benefit from the advantages of large production.

Second: Total Revenues

Total revenue is an important indicator that reflects the outcome of the reaction of both the output and the unit price produced. The increase of one or both of them gives an indicator of the increase in the total revenue of the production unit and vice versa. The total revenue obtained from the table egg production projects includes the primary revenue represented by the sales of the quantities produced from the eggs and the secondary income represented by sales resulting from the sale of chickens at the end of productive life in addition to the value of waste (fertilizer).

As shown in table 2. A group of income items obtained from the production of table eggs, the total revenue amounted to (24507299872.22) dinar, the highest in the production capacity was (14568126388.89) dinar the importance of ratio (59%). While the lowest was in small experimental capacity at (9927273483.33) dinar by the importance of ratio (41%).

Third: Results of financial performance evaluation criteria used

Table 3: Economic Profit and Net Cash Income to the study society.

Net cash income (dinar)	Average Economic profit (dinar/ bird)	Economic profit (dinar)	Production capacity (1000 bird)
3029293561.04	12412.14	2336586164.93	Small capacity (1-10)
4385552152.22	12940.79	3584598390.39	Large capacity (10.5 and above)
7426745713.26	12726.89	5921184555.32	Total

Source: Compiled and calculated by the researcher based on the questionnaire.

After the completion of the study of fixed and variable cost items and the total revenue obtained from the production of table eggs. Economic criteria can be used for financial assessment:

1. Economic profit criterion: As shown in table 3, the criterion profit has been applied. It is clear that the economic profit at the level of the study society reached (5921184555.32) dinar. The large output capacity recorded the highest economic gain of (3584598390.39) dinar compared to the economic profit achieved by the small capacity of (2336586164.93) dinar. As shown in the table, the profit earned per bird reached (12726.89) dinar at the level of the study area, and recorded the highest value in the capacity of large (about 12940.79) dinar. While the lowest value in the small production capacity amounted to (12412.14) dinar. This means through the economic profit index that the large production capacity achieves economic efficiency in the resources used higher compared to the small capacity.

2. Net cash income criterion: This criterion represents the minimum measure of production efficiency for productive activity. When applied, as shown in table 3. The net cash income at the level of the studied society was (7426745713.26) dinar. The large output capacity recorded the highest net cash income estimated at (4385552152.22) JD compared to the net cash income achieved by the small capacity of (3029293561.04) dinar, an increase of 44% about its theory. This means through the net cash income index that the large production capacity achieves higher production efficiency compared to small capacity.

3. Pay back period criterion: The results showed that the capital period was about 3.14 at the level of the studied society but ranged from (3.25) maximum in the small production capacity and (3.06) as the minimum for the large capacity. That all the productive capacities in the study area have been able to recover their capital in a period of more than (3) years and encouraging investment, *i.e.* economic feasibility in this area. But the large experimental capacity achieves the shortest period of time (3) years. As in table 4.

4. Invested dinar turned criterion:

This criterion is expressed in the overall economic efficiency of its importance in the evaluation of projects, as shown in table 4. Both of these two methods achieved a return greater than the correct one. In the studied society, it reached (1.32). The best was the return of the dinar invested in the large

production capacity (1.33), while the lowest return in the capacity of small productive reached (1.31). The study of this indicator shows that increasing the production capacity of the table egg production projects increases the economic efficiency of these projects.

5. Operating ratio Standard: Table 4 shows that all the consumables have achieved less than one percent.(0.76), while according to the experimental methods, the largest production capacity recorded the lowest operating rate (0.75) While the highest operating capacity in the small capacity (0.77), which means that the product spend (770) Fals for a total of JD of revenue. Then gain a profit of 230 Fals per dinar of total revenue

6. Profitability standard: Shown in table 4, all the productive capacities achieved a profitability, which reached the studied society about (32%), the best of which was profitable in the large production capacity (33%), while the small experimental capacity recorded a lower profitability rate (31%).

7. Break-even point standard: Table 5, shows that the break-even point at the level of the society as a whole amounted to (4968157010.00) dinar and in the form of quantity units amounting to (1820507.98) eggs layer. According to the statistical use, the break-even point reached about (2302785077.00) and (2660644596.00) dinar for the capacity of small and large in the same order. The break-even point in the units of quantity reached a break point (624006.06) and 808565.59) egg layer for the small and large production capacity in the same order.

Fourth : Measurement the degree of risk of investment for the production of table eggs in Diyala governorate using the method of Analysis of Neutralization

The method of analysis of neutralization was adopted to measure the price and productivity risk of the table egg production projects in Diyala governorate as follows:

1. The Neutralization price is calculated as a measure of the price risk in two aspects:

- Neutralization price to cover the total costs: The increase in the average selling price (actual) indicates to

Table 4: The pay back period and invested dinar turned, operating ratio, profitability to the study society.

Profitability (%)	Operation ratio (Dinar)	Return of the invested dinar (Dinar)	Pay back period (year)	Production capacity (1000 birds)
31%	0.77	1.31	3.25	Small capacity (1-10)
33%	0.75	1.33	3.06	Large capacity (10.5 and above)
32%	0.76	1.32	3.14	Total

Source: Compiled and calculated by the researcher based on the questionnaire.

the equalization price of covering the total costs indicates the farm's ability to cover its total costs and achieve profit, as shown in table 8. That the price of equalization to cover the total costs at the level of the study community amounted to about 03301.8 dinar / layer and represents about 80% of the average selling price of 4128.79 dinar / layer eggs. Which means that there is a possibility to bear the community projects to lower the average prices of egg production table by about 20% of the average selling price is actual and should be noted that this percentage actually represents the threshold of price security. At the level of capacity, the price of the tie was estimated to cover the total costs at the level of small and large capacity, which amounted to about 3376.27 and 3252.10 dinar / layer, representing about 80% and 81% of the average selling price of 4192.53 and 4005.60 dinar / layer in the same order. This means that the price limit is 20% and 19% for the small and large production capacity. There is a tolerance for low table egg production rates of 20% and 19% in the same order of the average selling price without any of them being exposed to the loss assuming that the total value of the costs is constant. This gives an indication that there is an appropriate possibility to bear the production of table eggs for price risk, with the possibility of reducing the projects of the small capacity of its prices relatively more than the capacity of large production. Which indicates that the degree of price risk in the large production capacity is high because of the low price safety limit compared to the small production capacity with high price security.

• **Neutralization price to cover variable costs:**

This measure shows the average selling price that covers variable costs, the increase in the average selling price (actual) indicates to the parity price to cover variable costs on the farm's ability to cover its variable costs. As shown in table 8. The rate of equalization to cover variable costs at the community level of the study amounted to about 3034.33 dinar / layer, which represents about 73.5% of the average selling price of 4128.79 dinar / layer eggs. This means that the projects of the studied society will be able to bear the average price of producing table eggs

at 26.5% of the actual selling price. At the level of production capacities, the price of the tie was estimated to cover variable costs at the level of small and large capacity productive, which amounted to about 3063.36 and 3015.00 dinar / layer. Representing about 73% and 75% of the average selling price of 4192.53 and 4005.60 dinar / egg layer in the same order. This means that each

of the small and large capacity projects can bear the low prices of producing table eggs by 27% and 25% sequentially from the average selling price without any of them being exposed to a loss exceeding the value of the fixed costs assuming the stability of the variable cost value. There is an appropriate possibility to bear projects to produce table eggs for price risk, with the possibility of reducing the projects of the small production capacity of their prices relatively more than the large capacity, which indicates that the degree of price risk in the large production capacity is high compared to the capacity of small production.

2. The Neutralization Quantity is calculated as a measure of the productivity of risk in two aspects:

• The Neutralization Quantity to cover the total costs: This indicator is a measure of production risk, and this measure shows the minimum quantity assumed to be produced so that the total costs can be covered. The increase in the actual production of table egg production projects indicates the amount of the draw to cover the total costs of the farm's ability to cover its total costs and achieve an economic surplus. The study estimated the amount of equalization to cover the total costs at the level of the community of the study, which amounted to about 4501591.2 egg layer, representing about 80% of the total actual production of 5629107.40 egg layer, which means that the sustainability of community projects to production risk. The possibility of a decrease in the actual production of table eggs by 20% with the assumption that the value of the total costs is constant. At the capacity level, the amount of the tie was estimated to cover the total costs at the level of small and large production capacity, which amounted to about 1813365.58 and 2742073.56 eggs, representing about 80 and 81% Actual of 2251768.40 and 3377339.00 layer of eggs in the same order. This means that each of the small and large capacity projects can withstand a decrease in the total production of table eggs by about 20% and 19% respectively of the total actual production without any loss, assuming that the total cost value is constant. The results obtained indicate that there is an appropriate possibility to bear the production

Table 5: Shows a break-even point for the study community.

Tie Point as units (Eggs layer)	Point break as revenue (Dinar)	Production capacity (1000 birds)
624006.06	2302785077.00	Small capacity (1-10)
808565.59	2660644596.00	Large capacity (10.5 and above)
1820507.98	4968157010.00	Total

Source: Compiled and calculated by the researcher based on the questionnaire.

of table eggs for production risk, with the possibility of reducing the projects of the small capacity production relatively more than the large capacity. The risk of production in the large production capacity is high compared to the small production capacity.

- The Neutralization quantity to cover the variable costs: This indicator is a measure of production risk. This measure shows the minimum production which covers the variable costs. The actual increase in production of table egg production projects indicates the amount of the tie to cover variable costs on the ability of the farm to cover its variable costs at least and thus the possibility of continuing to work. The study estimated the amount of equalization to cover variable costs at the community level of the study at about 4136,941.56 eggs. Representing 73.5% of the total actual production of 5629107.40 egg layer, which means that the community projects can bear the production risk and the actual production of table eggs by about 27.5% without loss of the value of fixed costs assuming the stability of the value of variable costs. At

the capacitance level, the amount of equalization was estimated to cover the variable costs at the level of small and large capacity, which amounted to about 1645302.96 and 2542112.80 egg layer, representing about 73 and 75% of the total actual production of 2251768.40 and 3377339.00 egg layer in the same order. Which means that both small and large capacity projects can bear the total decrease in table egg production by about 27% and 25% sequentially from the total actual production without any loss of more than the value of fixed costs assuming constant variable value. The results obtained indicate that there is an appropriate possibility to bear the production of table eggs for production risk. with the possibility of reducing the projects of small capacity production relatively more than the capacity of large production. It is indicated that the degree of risk production in large capacity is high compared to the capacity of small production. We conclude from the study of equalization analysis of table egg projects in Diyala governorate that the degree of price and production risk has decreased with the small experimental capacity because it achieves a lower economic profit, but it increased with the large potential capacity because it achieves a higher economic profit and this is consistent with the economic logic where the net return (profit) is consistent with the degree of risk in terms of height or decline the relationship between them. These projects are at risk for the current period because of the technical conditions of epidemiological diseases such as avian influenza and economic conditions, including price fluctuations, such as importation (Izzi, 1988) (Abozaid and Eldeeb, 2013).

Table 6: Measuring the degree of risk of investment for the production of table eggs in Diyala governorate using the method of Analysis of Neutralization.

Total		Large capacity (10.5 and above bird) 1000		Small capacity (1-10) bird) (1000)		The indicator
4128.79		4005.60		4192.53		Average sell (dinar / layer)
5629107.40		3377339.00		2251768.40		Average actual production (Layer)
17080554158.96		10182574236.67		6897979922.29		Variable cost (dinar)
18586115316.91		10983527998.50		7602587318.41		Total cost(dinar)
%	The indicator	%	The indicator	.*%	The indicator	The neutralization Price and Quantity
80	3301.79	81	3252.10	80	3376.27	The neutralization price to cover the total costs (Dinar / layer)
73.5	3034.33	75	3015.00	73	3063.36	The neutralization price to cover the variable costs (Dinar / layer)
80	4501591.23	81	2742073.56	80	1813365.58	The neutralization Quantity to cover the total costs (layer)
73.5	4136941.56	75	2542112.80	73	1645302.96	The neutralization Quantity to cover the variable costs (layer)

Source: Compiled and calculated by the researcher based on the questionnaire. *The importance of ratio for The neutralization Quantity form Average actual production and the neutralization price form Average sell .

Conclusions and Recommendations

Conclusions

1. The study of financial performance evaluation criteria has proved that the economic efficiency of the projects of producing table eggs is increasing by increasing production capacity (number of birds). This is a reflection of the large-scale production capacity of achieving more economically efficient compared to the production capacity of the small class and the study community as a whole.
2. The study of equivalence analysis of the studied projects has shown that large-scale projects are more exposed to price and productivity risk than small-scale projects.
3. The study showed a positive relationship between the net return (profit) and the degree of risk in terms of high or low returns of table egg production projects.

Recommendations

1. The study recommends that producers expand their production capacity (number of birds) both at the level of one hall or increase the number of halls in one field or adopt modern systems in education such as education with clips or batteries, because of their economic return. Which can be through the expansion in size Farm Achieve economic efficiency for egg production projects.
2. In order to expand production capacities, the necessary procedures for obtaining the necessary loans should be made available to motivate farm owners to increase their productive capacities in order to maximize the efficiency of the use of resources.
3. Activating the role of extension centers by transferring the recommendations of research and studies to the owners of farms producing table eggs from benefiting from them in raising economic efficiency for them.

References

- Abozaid, D.E. and S.M. Eldeeb (2013). Cropping Pattern in North Sinai Under Risk and Uncertainty Factor. *J. Agric. Econom. and Social Sci., Mansoura Univ.*, **4(5)**: 939-946.
- Abo El-Enien, S.M. (2010). Economics of Shrimp of Production and Feasibility of Performance of its Farming Projects in Egypt. *J. of Agricultural Economics and Social Sciences.*, **1(1)**: 1-12.
- Al-Batran, M.M. and Z.I. Nassar (2017). Financial Evaluation and Economic Hatcheries Fresh Water Fish in Egypt. *J. Agric. Econom. and Social Sci., Mansoura Univ.*, **8(3)**: 181-188.
- Adam, H.H.A. (2013). Economic and Financial Evaluation for Fish Hatcherer in Egypt. *J. Agric. Econom. and Social Sci., Mansoura Univ.*, **4(5)**: 841-853.
- Al-Kaisy, E.H.A. (2009). An Economic Return of Peanut Farms (Diyla Province - Case Study). A Thesis of Master, Dep. Agriculture Economics. The College of Agriculture. University of Baghdad.
- Al-Tarawneh, M.S. and others (2013). Economics of Broiler Production in Amman City, Jordan. *J. of Economics and Business Studies.*, **21(1)**: 507-517.
- AOAD (2016). Arab Organization for Agricultural Development, Statistical Yearl Book., **36**: 468.
- Barbaz, D.S. (2012). Evaluation of Efficiency Projects Performance of Greenhouses in the Governorate of Karbala. M.Sc. Thesis, Dept. of Agric. Economics. Coll. of Agric., Univ. of Baghdad. 64.
- Barbaz, D.S. (2014). The Economic Evaluation of Producing Wheat at Al-Abaichi. *The Iraqi Journal of Agricultural Sciences.*, **45(2)**: 165-173.
- El-Kak, A.A. *et al.*, (2017). Production and Cost Functions for Wheat Crop in Dakahlia Governorate. *Alexandria Science Exchange Journal.*, **35(3)**: 243-259.
- Eldokla, A.A.R. *et al.*, (2014). The Impact of the use of Agricultural Mechanization on the Economies of the Wheat Crop in El-Beheira Governorate Economic Study. *Alex. J. Agric. Res.*, **59(3)**: 379-394.
- El-Gendi, M.S. and A. Abas. Elham (2012). Evaluation of The Performance and Efficiency of Dairy Products Firms Using Data Envelopment Approach (DEA). *J. Agric. Econom. and Social Sci., Mansoura Univ.*, **3(11)**: 1607-1631.
- Emam, M.S. (2017). An Economic Study of Risk and Uncertainty for Agricultural Production in New Land. *J. Agric. Econom. and Social Sci., Mansoura Univ.*, **8(6)**: 385-390.
- FAO (2016). Food & Agriculture Organization. Retrieved from www.faostat.org.com.
- Foad, A.A.Z., F.E. Zidane and A.A. El Shater (2016). Analytical Study of The Supply Response of Cropping Winter Tomatoes and Summer Maize Under The Risk. *Alex. J. Agric. Res.*, **61(6)**: 871-890.
- Izzi, J.M. (1988). Farm Management, Theory and Practicing. Higher Education Press. Univ. of Baghdad. 223.
- Izzi, J.M. (1989). Introduction in Evaluation of Agricultural Projects. Higher Education Press, Al-Hikma Press. Baghdad, Iraq. 272.
- Mohaddes, S.A. (2009). Productivity Analysis of Eggs Production in Khorasan Razavi Province, Iran. *International Journal of Poultry Science.*, **(8)(12)**: 1209-1213.
- Ronald, D.K. (1981). Farm Management Planning, Control and Implementatio" International Student Education McGraw-Hill international Book company, Auckland London, Inc., Tokyo, Japan.
- Soliman, S.A.A. and M.R. Gergies (2016). An Economic Study of the Efficiency of Broiler Production Farms in Kalubia Governorate. *J. of Egyptian Agricultural Economics.*, **26(1)**: 1-17.