curve it is technically inefficient. There is a difference between technical and allocator efficiencies. The first means that production unit reaches the limits of the range of production potential. Allocation efficiency means how to reduce the cost of production to touch the production curve at certain points.

If the economic unit was to manufacture two types of production and one input was used under the condition of the stability of economies of scale, then (ZZ) represents the production possibility curve, and (DD) represents the line of incomes. The economic unit which produced at point (A) on the (OC) straight line is an inefficient economic unit because it is located below the production Possibility curve, which is the maximum limit that can be produced using the resource. Increase the production of this economic unit from outputs (w) to level B without any increase in input as shown in figure (1).

$$TE=\frac{OA}{OB}$$

Where:

TE: Technical efficiency of (A) economic unit

OA: The quantity of production achieved at point A

OB: The amount of production that achieves technical efficiency

The distance from A to B represents a lack of technical efficiency. Technical efficiency value ranges from zero to one. The (DD) straight slop represents the relative price of outputs. The specialized efficiency of the economic unit produced at point B can be calculated by the following percentage:

AE: Allocative Eollicieny of (A) economic unit.

$$AE=\frac{OB}{OC}$$

(OC) represents the input level achieved for the allocative efficiency {noting the stability of the economies of scale, which means the ratio between the input and the output is constant along the straight line (OC)}. The distance between B and C represents the amount of revenue that can be increased if production is at point B' instead of B. Economic efficiency calculated through the percentage, [2].

Economic efficiency can be obtained through the following:

$$EE=\frac{OA}{OC}$$

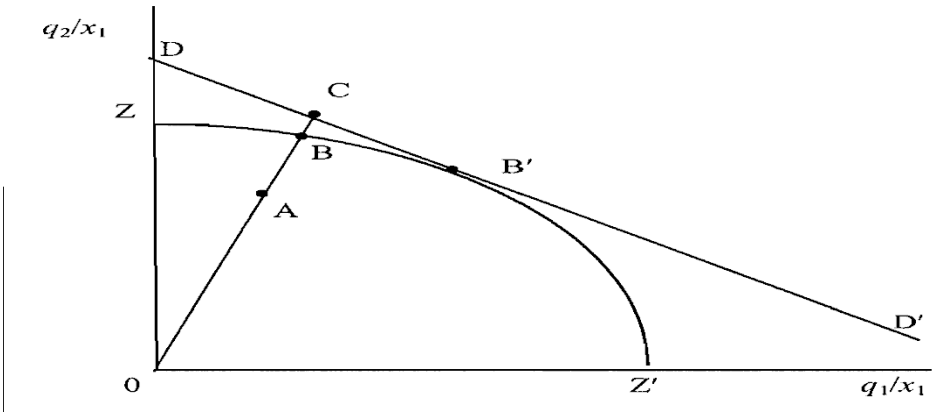

Figure (1): Economic efficiency of outputs in the case of single input and couple outputs [3].

A distinction must be made between technical efficiency and economic efficiency. Technical efficiency means choosing the technically efficient production method to maximize production, while economic efficiency means choosing an efficient production method to maximize profits. In other words, economic efficiency takes into account the price ratio of the two components of production as well as technical efficiency. This can be illustrated in figure (2).

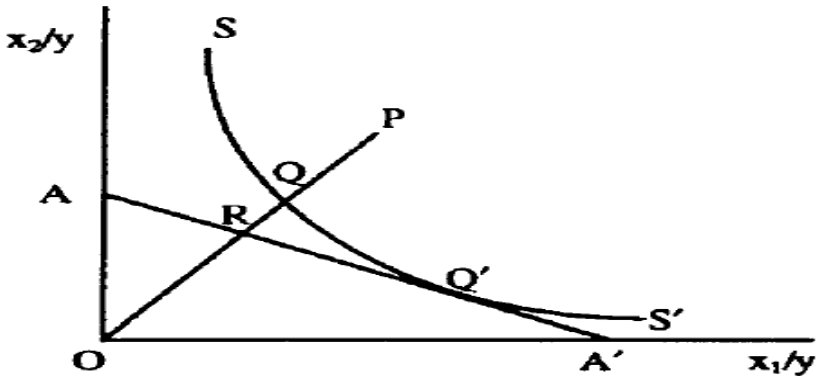

Figure (2): Technical efficiency, allocative efficiency and economic efficiency [3] .

Farrell gave an example of a farm using two variables (X1 and X2) to Product (Y) and represented in an Iso auant curve (SS') as in figure (2). Technical efficiency can be measured if the farm uses input at (P), it is produced at technical inefficiency and is represented by (QP) distance. In order for farm or facility to produce at the level of technical efficiency, some inputs must be subtracted to point (Q) on the (SS') curve. Technical efficiency (TE) is measured by [2]:

$$TE=\frac{0Q}{0P}$$

Technical efficeng taken avalue between zero and the correct one, and according to it, technical inefficiency values of the farm can be obtained. When technical efficiency is equal to one, the productive unit achieves full technical efficiency. In contrast, if it less than one, the production unit could reduce the input ratio to get the same amount of production [2]

(AA') line is the ratio of the price of inputs, which represents allocative efficiency.

$$AE=\frac{\mathbf{0R}}{\mathbf{0Q}}$$

The (RQ) distance represents the low production cost that occurs if production reaches the production efficiency at (Q) point. Overall economic efficiency can be obtained by:

$$EE=\frac{OA}{OB}*\frac{OB}{OC}=TE\,.AE$$

The total economic efficiency is composed of technical efficiency and allocative efficiency at (P) point.

$$TE*AE=\left(\frac{\mathbf{0Q}}{\mathbf{0P}}\right)\frac{\mathbf{0R}}{\mathbf{0Q}}*()$$

$$EE=(0R/0P)$$

Differentiation between total efficiency and net efficiency should also be distinguished. The first involves the efficiency that is resulting from improvements in the environment as well as increased skill of the staff. Net efficiency means improving resource productivity. Technical efficiency reflects the ability of the productive unit to obtain maximum production capacity using the available inputs optimally without waste. It also means the ability of the productive unit to achieve the greatest output using the available resources, [4].

In other words, this efficiency represents the ability of an enterprise to obtain the greatest amount or quantity of output regardless of its price, or to use as little input as possible, regardless of its cost. Technical competence expresses the appropriate choice of the production function among functions that producers actually used, [5].

III. Results and discussion

Quantitative economic analysis using the Data Envelopment Analysis on the specific data of the research sample was used to determine the objectives of the study. The DEA model was used with assuming that the volume returns

change (constant, decreasing, increasing). The constant value of the return are of production size (returea to soale) is excluded because this property is suitable for facilities operating at optimum volume.

That is it; the aim of the research is to use the least amount of production elements to provide a certain amount of output. So that, uses of the least amount of production elements involved in the production process and thus not to negatively affect the amount of production. To estimate the technical efficiency of the inputs and to assume that the Vary Return Size (VRS) yields for the broad bean growers in Al-Qadisiyah province with the statistical data represented by (K) variables, which represent explanatory variables affecting the quantities produced from this crop considering it as dependent variables can be affecting (Y)factor. The explanatory variables used in this study include variables of:(area dunum), family Labor (hour), mechanical Labor (hour), quantity of fertilizer (kg), and quantity of seed (kg). Data Envelope Analysis model that used to estimate the technical efficiency of the inputs, was used and assuming change in returns size as follows:

Subject to

$$Yi + y_{\lambda} - \cdot \leq$$

$$Xi - x\lambda \leq \theta$$

$$Ni , \lambda = 1$$

$$\geq \cdot \lambda$$

Where:

Xi= inputs vector

Yi= output vector

Y= outcome vector 1 × N for the constants that are associated with all efficient productive farms.

Θ= the value of the technical efficiency index of the farm, which take values between zero and one. If it is equal to one, the productive farm works very efficiently and is produced on the basis of the optimal production potential. If it is less, the productive farm is located under the curve of the optimal potential and the pointed value of the parameter expresses its technical efficiency.

After this description and model formulation, efficiency and yield size scales can be shown as follows:

1. Scale efficiency and technical efficiency

The nature of the return scale is determined by measuring capacitance because size economies determine the efficient and inefficient production units. This requires measurement of technical efficiency under the stability and change in yield of the scale. That is it, the scale efficiency of the production unit represents the ratio between the technical efficiency of the production unit in terms of return canstmf to the scale and technical efficiency of the same unit of production under changing the return of capacity.

Results in table (1) shows the technical efficiency, which it is noted that it ranged between (27 – 100) and averaged about 74%. Based on this, the sample works to increase the production by 26% till getting the ability to reach the correct one and reaching the optimum size. Thus, 30% of broad bean farmers have achieved 100% efficiency and can be identified as model farms for the rest of the inefficient farms. They can continue according to the current combination of elements, although the unfound size availability since it works at optimal size. In other words, the total output will increase by the same amount due to using the variable production factors. In this case, the rate of increase in total production is constant, indicating a constant percentage between used production inputs in the production process and the output size. While 13 farms, approximately 65%, operate with increasing returns and only one farm, approximately 5%, operate with declining returns, which is consistent with the law of declining proportions of production.

In terms of technical efficiency, it is clear that there are 14 farms that have achieved the best technical efficiency of 100%, which is the highest value reached by the technical efficiency.

This means that the farms have been able to reach the maximum output of the broad bean crop with a specified number of inputs. Thus, these farms take place on the possible production curve. These farms must follow the same

method of conserving their resources and productivity. The value was less as the return to scale was about (77%) and therefore, farmers of this crop should produce the same amount of current production or more using only 73% or less of the current inputs in order to achieve optimum efficiency.

The average technical efficiency is about 95% and the same level of production can be achieved by using only 95% of the actual combinations of the used resource. In other words, 5% of the resources can be saved without affecting the level of production. With this in mind, this average is under the assumption that these farms do not work at maximum scale, which is under the concept of variable returns to scale (VRS).

This index rose compared to the efficiency index according to the concept of constant return to scale (CRS), where the technical efficiency reached 77%. Thus, there are differences between the technical efficiency scores obtained from CRS and VRS, indicating that some farms suffer from capacity inefficiency that is equivalent to the difference between technical efficiency in VRS and CRS.only 6 farms achieved technical and size efficiency and operate at the maximum size of the inventory. While 8 farms were technically efficient only because they worked well They were technically inefficiency due to the small cultivated areas, not practicing modern technology methods and relying on old cultivation methods and lacking of used resources; therefore, development programs should be considered here.

Table (1): Results of technical efficiency assessments for farmers in the Al-Qadisiyah province / AL-Badair County for the agricultural season 2017 by DEA method.

Farm	Technical efficiency under constant return of Scale	Technical efficiency with variable Scale return	Scale efficiency	Yield size
١	٠. ٢٧	٠. ١	٠. ٢٧	Increase
٢	٠. ٨	٠. ١	٠. ٨	Increase
٣	٠. ٣٧	٠. ٨١	٠. ٤٦	Increase
٤	٠. ١	٠. ١	٠. ١	Constant
٥	٠. ٨٧	٠. ١	٠. ٨٧	Increase
٦	٠. ٧٤	٠. ١	٠. ٧٤	Increase
٧	٠. ١	٠. ١	٠. ١	Constant
٨	٠. ٥	٠. ١	٠. ٥	Increase
٩	٠. ١	٠. ١	٠. ١	Constant
١٠	٠. ٣٦	٠. ٧٧	٠. ٤٧	Increase
١١	٠. ١	٠. ١	٠. ١	Constant
١٢	٠. ٦٩	٠. ٨٧	٠. ٨	Increase
١٣	٠. ٥٦	٠. ١	٠. ٥٦	Increase
١٤	٠. ٥٩	٠. ٩٥	٠. ٦٢	Increase
١٥	٠. ١	٠. ١	٠. ١	Constant
١٦	٠. ٩٦	٠. ١	٠. ٩٦	Increase
١٧	٠. ١	٠. ١	٠. ١	Constant
١٨	٠. ٦٣	٠. ٧٣	٠. ٨٦	Increase
١٩	٠. ٦٣	٠. ١	٠. ٦٣	Increase

٢٠	٧٧	٠. ٨١	٠. ٩٦	Increase
Mean	%٧٤	%٩٥	%٧٧	
Highest value	١٠٠	١٠٠	١٠٠	
Lowest value	٢٧	٧٣	٢٧	

Source: From the researcher based on questionnaire data and the Deap statistical program.

2. Allocative and economic efficiency of broad bean farms

The technical efficiency of crop farms has been estimated. In the absence of the information of used resources of production and the prices, the efficiency index does not depend on the actual cost of resources, which leads to the development of the method of analyzing the efficiency of the use of economic resources, which includes both the cost of combining the actual resources of the used economic resources. Therefore, the technical efficiency that can be measured to measure capacity efficiency, cost efficiency and allocative efficiency can be compared. Table (2) shows that Allocatire efficiency ranged between (0.13-1) and averaged of about (42%), which indicates that this percentage is relatively low and hence ability lacking of potential production for broad bean farmers to increase production.

Therefore, economic resources that provide 58% of the cost of production must be redistributed. This point is sufficient to move to the point of contact between the budget line and the equal output curve (Iso – quent) . The number of farms that achieved (100%) allocation efficiency was about 2 farms, accounting for about (10%) of the total sample.

Therefore, these farms do not have any surplus inputs because they are used all production inputs. The farms that achieved technical efficiency were 14 farms, while they were inefficiently allocated, due to higher production costs. As for the economic efficiency, which averaged about (40%) and the lowest value was (13)% and the highest value was (100)% . This indicates that broad bean fields achieved the same level of production in light of the reduction of costs by about 60%, which leads to a reduction in allocative efficiency and not to use according to the concept of economies of capacity when buying and selling. Thus, broad bean growers cannot choose the optimal stock mix, in addition to lack of government support and unprotected products.

Table (2): Results of economic efficiency estimates and their components (technical and allocative efficiency) for broad bean farmers in Al-Qadisiyah province/ AL-Badair County for the 2017 agricultural season using (DEA) Farms .

Farm	Technical Efficiency	Allocative Efficiency	Economic Efficiency
١	١	٠. ١٥	٠. ١٥
٢	١	١	١
٣	٠. ٨١	٠. ١٦	٠. ١٣
٤	١	٠. ١٣	٠. ١٣
٥	١	٠. ١٨	٠. ١٨
٦	١	٠. ١٩	٠. ١٩
٧	١	٠. ٣٨	٠. ٣٨
٨	١	٠. ٣٨	٠. ٣٨
٩	١	٠. ٤٤	٠. ٤٤
١٠	٠. ٧٧	٠. ٤٠	٠. ٣١

١١	١	٠. ٦٩	٠. ٦٩
١٢	٠. ٨٧	٠. ٣٧	٠. ٣٢
١٣	١	٠. ٣٠	٠. ٣٠
١٤	٠. ٩٥	٠. ٢٩	٠. ٢٧
١٥	١	٠. ٣٥	٠. ٣٥
١٦	١	٠. ٦٠	٠. ٦٠
١٧	١	١٠٠	١
١٨	٠. ٧٣	٠. ٦٦	٠. ٤٢
١٩	١	٠. ٣٧	٠. ٣٨
٢٠	٠. ٨١	٠. ٥٠	٠. ٤١
Mean	٠. ٩٥	٠. ٤٢	٠. ٤٠
Highest value	١٠٠	١٠٠	١٠٠
Lowest value	٧٣	١٣	١٣

Source: From the researcher based on questionnaire data and the Deap statistical program.

3. Resources size that achieved economic efficiency

Depending on the economic efficiency model and its components according to cost function variables, it is possible to calculate the optimal use of economic resource. It is done by obtaining the minimum amounts of resources that achieve the economic efficiency at the lowest average of total costs at the farm level.

This makes it easier to calculate the amount of surplus or deficit of economic resources by comparing the actual use of the resources in each farm and the amount of economic resources at the lowest average cost that achieves economic efficiency through the following equation: [6].

Amount of surplus or deficit = (Amount of used resources per farm) - (Amount of resources at the lowest point of average total costs).

If the difference is positive, this indicates that there are surplus resources were used, and so the farm should reduce the used quantities to achieve optimal economic efficiency. On the other hand, if the difference is negative, this would indicates deficit in the amount of used resources, which is required to reach the optimal use of economic resources. The surplus or deficit in the use of resources at the farm level is calculated according to the following formula: equation: [6]

Surplus or disability ratio = inereose or decrease in economic resources / Acual use of economic resources

4. Number of family Labor hours that achieve economic efficiency

Table (3) presents that broad bean growers used (112.5) hours with an average of (5.625) hours per farm. The number of human labour hours was at an average cost of (114.5) hours with an average of (5. 72) hours. The surplus of family work was about) 4.5)hours with an average of (0.225) hours.

Noting that only 4 farms have achieved surplus in resources usage and that only 2 farms have neither surplus nor deficit and have achieved full allocation and economic efficiency. In contrast, 14 of the farms were suffering of incapability. Perhaps one of the main reasons for the emergence of the deficit is the small cultivated areas.

Table (3): Results of the number of human Labour hours that achieved economic efficiency and the amount of surplus or deficit of broad bean farmers in the province of Al-Qadisiyah province / AL-Badair countyt for the (2017) agricultural season using method of of Envelope Data Analysis DEA.

Farm	Number of Famely hours achieved for economic efficiency	Number of actual hours human Labour	Amount of deficit or surplus	Ratio of deficit or surplus
١	٦	٥	-١	-٢٠
٢	٦	٦	٠	٠
٣	٦	٥	-١	-٢٠
٤	٦	٥	-١	-٢٠
٥	٦	٥	-١	-٢٠
٦	٦	٤	-٢	-٥٠
٧	٦	٢.٥	-٣.٥	-١٤٠
٨	٦	٥	-١	-٢٠
٩	٦	٥	-١	-٢٠
١٠	٦	5	1	٠
١١	7	٦	1	٠
١٢	٦	٥	-١	-٢٠
١٣	٦	٥	-١	-٢٠
١٤	٦	٥	-١	-٢٠
١٥	٦	٥	-١	-٢٠
١٦	٦	٨	٢	٢٥
١٧	٦	٦	٠	٠
١٨	٦	٨	٢	٢٥
١٩	٦	٨	٢	٢٥
٢٠	٦	٩	٣	٣٣
Total	١١٤.٥	112.5	-٤.٥	
Mean	٥.٧٢	5.625	-٠.٢٢٥	

Source: From the researcher based on questionnaire data and the Deap statistical program.

5. Mechanical work that achieves economic efficiency

The mechanization of the bean crop is used only in the preparation of the soil, i.e. in tillage, softening and levelling. Table (4) shows that 19 farms with (82.6%) of the total sample achieved a surplus of (44) hours at (2.2) hour per farm. The actual working hours were (74) hours at (3.7) hours, and the working hours achieved for economic efficiency were (29) hours at a rate of (1.45) hours; therefore the surplus ratio was 57%.

Table (4): Results of the number of mechanical working hours that achieved economic efficiency and the amount of surplus or shortage of broad bean farmers of the province of Al-Qadisiyah province / AL-Badair county during the (2017) agricultural season using analysis envelope data (DEA).

Farm	Number of hours of mechanical work achieved for economic efficiency	Number of actual mechanical hours	Amount of deficit or surplus	Ratio of deficit or surplus%
١	١	٤	٣	٧٥
٢	١	2	٠	٠
٣	١	٥	٤	٨٠
٤	٣	٥	٢	٤٠
٥	١	٢	١	٥٠
٦	١	٢	١	٥٠
٧	١	٣	٢	٦٧
٨	١	٣	٢	٦٧
٩	١	٣	٢	٦٧
١٠	١	٣	٢	٦٧
١١	١	٤	٣	٧٥
١٢	١	٣	٢	٦٧
١٣	١	٢	١	٥٠
١٤	١	٤	٣	٧٥
١٥	٢	٣	١	٣٣
١٦	٢	٦	٤	٦٧
١٧	٥	٥	٠	٠
١٨	١	٤	٣	٧٥
١٩	١	٤	٣	٧٥
٢٠	٢	٧	٥	٧١
Total	٢٩	٧٤	٤٤	١١٥١
Medium	١.٤٥	٣.٧	٢.٢	٥٧.٥٥

Source: From the researcher based on questionnaire data and the Deap statistical program.

6. Seeds quantity that achieve economic efficiency

Seed supplier is one of the important resources for the production of broad bean crop. Total seed quantity were (7.86) tons, while the total seed quantity achieved for economic efficiency were (8.9) tons with an average of (0.4) tons. Thus, there is a surplus in the quantities of total seeds for the total farms of the research sample, which was about (5.55) tons

and an average of (0.27) tons. Statistical analysis shows that all farms have a surplus, while two farms were economically viable and achieved the economic efficiency as shown in table (5).

Table (5): Results of the quantity of seeds that achieved economic efficiency and the amount of surplus or shortage of broad bean farmers in the province of Al-Qadisiyah province / AL-Badair county for the (2017) agricultural season using Data envelope (DEA) analysis.

Farm	Number of seeds achieved for economic efficiency	Number of actual seeds	Amount of deficit or surplus	Ratio of deficit or surplus
١	٠.٤	٠.١٥	٠.١١	٧٣
٢	٠.٤	٠.٤	٠	٠
٣	٠.٤	٠.٢٠	٠.١٦	٨٠
٤	٠.٦	٠.٢٠	٠.١٤	٧٠
٥	٠.٤	٠.٤٠	٠.٣٦	٩٠
٦	٠.٤	٠.٣٥	٠.٣١	٨٩
٧	٠.٤	٠.٢٥	٠.٢١	٨٤
٨	٠.٤	٠.٨	٠.٤	٥٠
٩	٠.٤	٠.١٢	٠.٨	٦٧
١٠	٠.٤	٠.١٧	٠.١٣	٧٦
١١	٠.٤	٠.٥	٠.١	٢٠
١٢	٠.٤	٠.١٦	٠.١٤	٨٨
١٣	٠.٤	٠.١٠	٠.٦	٦٠
١٤	٠.٤	٠.١٢	٠.٨	٦٧
١٥	٠.٥	٠.٢٤	٠.١٩	٧٩
١٦	٠.٥	٠.٧	٠.٢	٢٩
١٧	٠.٨	٠.٨	٠	٠
١٨	٠.٤	٠.٧	٠.٣	٤٣
١٩	٠.٤	٠.٨	٠.٤	٥٠
٢٠	٠.٥	٠.٧	٠.٢	٢٩
Total	٨.٩	٧.٨٦	٥.٥٥	١١٤٤
Mean	٠.٤	٠.٣	٠.٢٧	٥٧

Source: From the researcher based on questionnaire data and the Deap statistical program.

7. Fertilizers quantities that achieved economic efficiency

Table (6) shows that broad bean farmers used (1740 kg) with an average of (87 kg) per farm, while the quantity of fertilizer that achieved economic efficiency about (452 kg) with an average of (23 kg) per farm. The surplus was (1288 kg) at an average of (64 kg) as all farms had a surplus, while 2 farms had achieved economic efficiency.

Table (6): Results of the amount of fertilizer that achieved economic efficiency and the amount of surplus or shortage of broad bean farms in the province of Al-Qadisiyah province / AL-Badair District .

Farm	Quantity of fertilizers that achieved for economic efficiency	Quantity of actual fertilizers/ KAG	Amount of deficit or surplus/KAG	Ratio of deficit or surplus%
١	١٥	١٥٠	١٣٥	٩٠
٢	١٥	١٥	٠	٠
٣	١٨	٢٠٠	١٨٢	٩١
٤	٣٣	٥٠٠	٤٦٧	٩٣
٥	٢٠	١٠٠	٨٠	٨٠
٦	١٨	٥٠	٣٢	٦٤
٧	٢٣	٥٠	٢٧	٥٤
٨	١٨	٥٠	٣٢	٦٤
٩	٢٣	٥٠	٢٧	٦٤
١٠	٢٠	٤٠	٢٠	٥٠
١١	٢٣	٣٠	٧	٢٣
١٢	٢٠	٥٠	٣٠	٦٠
١٣	١٦	٥٠	٣٤	٦٨
١٤	١٩	٧٥	٥٦	٧٥
١٥	٢٥	٥٠	٢٥	٥٠
١٦	٢٨	٥٠	٢٢	٤٤
١٧	٥٠	٥٠	٠	٠
١٨	٢٠	٥٠	٣٠	٦٠
١٩	١٩	٥٠	٣١	٦٢
٢٠	٢٩	٨٠	٥١	٦٤
Total	٤٥٢	١٧٤٠	١٢٨٨	١١٤٦
Mean	٢٣	٨٧	٦٤	٥٧

Source: From the researcher based on questionnaire data and the Deap statistical program.

8. Pesticides quantities that achieved economic efficiency

The results of Table (7) showed that the actual quantities of used pesticides were about (2693) liters, while the quantities that achieves the economic efficiency at all the farms were (78. L/d) with an average of (39. L/d). Thus, the surplus amount was (1908 L/d) with an average of (95 L/d). All farms had surplus, but for 2 farms that made economic efficiency.

Table (7): Results of the quantity of pesticides that achieved economic efficiency and the amount of surplus or shortage of broad bean farms in the province of Al-Qadisiyah / AL-Badair county for the (2017) agricultural season.

Farm	Quantity of pesticide that achieved for economic efficiency (L/d)	Quantity of actual pesticide (L/d)	Amount of deficit or surplus (L/d)	Ratio of deficit or surplus%
١	٢٠	١٠٠	٨٠	٨٠
٢	٢٠	٢٠	٠	٠
٣	٢٨	١٥٠	١٢٢	٨١
٤	٧٣	٢٠٣	١٣٠	٦٤
٥	٣٥	٢٢٠	١٨٥	٨٤
٦	٢٨	٢٥٠	٢٢٢	٨٨.٨
٧	٤٣	١٠٠	٥٧	٥٧
٨	٢٨	١٠٠	٧٢	٧٢
٩	٤٣	١٠٠	٥٧	٥٧
١٠	٣٥	٢٠٠	١٦٥	٨٢.٥
١١	٤٣	١٠٠	٥٧	٥٧
١٢	٣٥	١٥٠	١١٥	٧٧
١٣	٢٤	١٥٠	١٢٦	٨٤
١٤	٣١	١٥٠	١١٩	٧٩
١٥	٥٠	١٥٠	١٠٠	٦٧
١٦	٥٨	١٢٥	٦٧	٥٣.٦
١٧	١٢٥	١٢٥	٠	٠
١٨	٣٥	١٥٠	١١٥	٧٧
١٩	٣١	١٥٠	١١٩	٧٩
٢٠	٦١	٢٥٠	١٨٩	٧٦
Total	٧٨٥	٢٦٩٣	١٩٠٨	١٢٣٩.٩
Mean	٣٩	١٣٥	٩٥	٦٢

Source: From the researcher based on questionnaire data and the Deap statistical program.

IV. Conclusions

1. Broad bean crop is one of the unsustainable crops because of its low prices at peak production.
2. Not using the optimal recommended quantities as it was noted wastes in most of the used resources in the production process.
3. The research concludes that both the area and the production of this crop during the period under study decrease annually.

V. Recommendations

a. Using production inputs in the recommended quantities and ways of applications, especially the quantity of seeds and fertilizers, in accordance with the crop requirement to reach optimum efficiency.
b. Studying output prices and input quantities when developing production plans that ensure the optimal combination of resources that achieve the economic efficiency and required growth rate.
c. Establishment of typical farms that are specialized for broad bean crop cultivation and the possibility of using modern technology and advanced machinery.

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