

ECONOMICS OF RABBIT INDUSTRY  
IN A.R.E  
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Preface:

Poultry is considered one of the most important Sources of animal protein which participates in raising the average of individual share as it is considered one of the most important substitutions of red meat. The state is greatly in poultry as it convertible efficiency than the other form animals in addition to the speedy circulation of capital in its projects. It is also possible to use the wastes of slaughters and fish as auxiliary foddors in feeding them. In addition, the last five-year plan has shown that Egypt has no relative advantage in producing red meat. In the coming period, the different substitutes specially white meat must be stressed on.

The Problem of the research:

The problem of food occupies the first place on top of problems in most countries of the world. These countries are exposed to lack of foodstuffs specially the products of animal origin such as poultry. This problem becomes acute year after year at a very speedy rate since the beginning of the seventieth. It is not that the poultry food gap becomes larger. This has induced the government to import frozen food from abroad Which has a negative effect on the balance of payment.

The objective of the research:

The research aims at studying the present position for producing rabbits in A.R.E, its increasing numbers, studying

the economic use of domestic breeding and the effect of spreading rabbit breeding on Egyptian economy. The problems of rabbits are relatively low than animals producing red meat such as cows, buffaloes and sheep and even the other kinds of poultry. Rabbits are mammals and grass eaters and do not need to add resources of animal protein for their feeders. Consequently, the cost of feeding them are much lower than the other kinds of poultry which compete man in his food on grains. Rabbit meat is very white and easy to digest. Its percentage of protein rises to 25% while it does not exceed 21% in other kinds of poultry, and prescribed for the patients and the old. The brains of rabbits are used in curing blood pressure. Their blood is also used in labs of vaccination. Rabbit skins are of great value. They may be tanned and manufactured as clothes, furs, gloves and toys.

Methods of research and collecting information:

In this research, we followed descriptive analysis using methods statistical analysis such as equation of simple regression and correlation taking into consideration the information issued by the central department of mobilization and statistics and the Economic Agricultural Research Institute as well as the information issued by the Parairies Investment Co. because the information about the production and economy of rabbits are quite limited.

Development in number of birds and poultry in A.R. of Egypt:

Table 1 shows the development in number of poultry during the period (1971-1985) it is noted that the local chickens exceeds in number all the other kinds. If the said period is divided into two the first (1971-1975) and the second (1976-1982) as shown in table 2, this indicates that the number of local chickens has increased from an average of 25458 to an average of 27292 during the second period i.e. with an increase of 7.2%. The number of turkey has also increased from an average of 678 during the first period to about 773 during the second period with an increase of 8.1%. The number of ducks has also increased during

Table (1): Increasing numbers of poultry producing while meat in A.R.E. during the period (1971 - 1982).

Year	Local chickens	Turcey	Ducks	geese	Domentic pigeons	Rabbits
1971	24847	661	3051	2517	1957	2088
1972	25152	670	3100	2541	1861	2080
1973	25458	678	3148	2565	1762	2072
1974	25764	687	3187	2589	1659	2063
1975	26069	696	3246	2613	1551	2053
1976	26375	705	3294	2637	1440	2043
1977	26680	715	3343	2661	1325	2032
1978	26986	724	3392	2685	1207	2020
1979	27292	733	3440	2725	1084	2012
1980	27567	742	3489	2734	1107	1994
1981	27903	751	3538	2758	1126	1983
1982	28208	761	3581	2782	1153	1966
average	26525	710	3318	2650	1436	2034

Sources: Collected from:

- 1- Central department for mobilization and statistics-Circulars of animal richness stistics years 1971 - 1982.
- 2- Central department for mobilization and statistics-annual book of statistics in A.R.E. 52-1976 , Oct. 1977.
- 3- Central department for mobilization and statistics-annual book of statistics in A.R.E. 52-1983 , Aug. 1983.

the two periods for about 9.3% Also, the number of geese has also increased from 2565 to 2712 (5.7%). The two tables show the continual decrease in producing domestic pigeons for about 550 pairs (31.4%) during the mentioned two periods. The number of rabbits has also decreased from 2071 to 2007 (about 3.09%).

Table 2: development in number of birds and poultry in A.R.E. during the periods (1971-1975) & (1976-1982).

Birds and Poultry	Average of annual number during (1971 - 1975)	1976-1982	
		Annual number	Percentage of change
Local chicken	25458	27292	7.2
Turkey	678	773	8.1
Ducks	3148	3440	9.3
Geese	2565	2712	5.7
domestic pigeons	758	1206	31.4
rabbits	2071	2007	3.09

Soures: Calculated from the table number one.

Secondly: The Financial use of breeding domestic rabbits

This part of study gives general indication to a project of breeding rabbits at home whout employing any worker except one of the family members. Thus accounts do include cost of labour. A suitable number has been chosen to suit the circumstances of breeding at home and at the same time gives income which encourages the continuation of the activity. This small project may be based on three assumptions. The first is that all the product will be sold alive in markets. The second, they will be sold as slaughtered meat and tanned furs, and the third, they will be sold as slaughtered meat, progeny and rabbit furs.

First assumption: Selling all the production alive cost:-(three mothers + male = 4 animals) cost per one L.E.40. The total will be L.E.160 - Battery for the four animals and their product for L.E.400. Fixed capital will be L.E.560 - Fooders for the mothers and the male: 4 animals X 150 gramme/day X 365 days X P.T. 40/ kgm = L.E.90 115 rabbits X L.E.2= L.E.230.

thus, the total cost of fooders = L.E. 320.

Veterinary medicine = Suppose that every animal of the four costs L.E.1 every month. So, cost of veterinary medicine = 4 animals X 1 X 12 months: L.E.48

Circulating capital (Veterinary & Food = L.E.368

Instalments of exhaustion:

Exhaustion of original rabbits = 160 + 3 years = L.E.53.5

,, ,, battery 400 + 8 years =  $\frac{L.E.50.-}{L.E.103.5}$

Tncome: As this assumption is based on selling all the product alive meat, the income of the project represents the income of selling alive meal 115 rabbits X 2.25 Kgm X L.E.3.5/Kgm=LE 905.6

Profits:

We have assumed that the four original animals (3 mothers and a male) will be exhausted in 3 years and the battery will be exhausted in 8 years and we have not eotimated a limited value at the end of the project although<sup>n</sup> they must have a value as the battery can be renewed and the three mothers and the male can be sold abie so, the total cost are:

Fodders (mothers and products)	L.E. 320
Vetrinary medieine	"." 48
instalments of exhausting rabbits & battery	"." 103.50
Total	"." 471.50

Interest on aloan for L.E.1000 to be repaid in 2 years at 10% Interst will be L.E.100 in the first year and L.E.50 in the second year after setting the first instalment.

"." 150.-
"." 571.50

The income of the project in this assumption will be the price of selling all the product alive.

income amounts to L.E. 905.60

∴ Profits = 905.60 - 571.50 = L.E. 334.10

This is a yearly profit and it gives a high percentage.

∴ Percentage of interest to capital =  $\frac{334.10}{560} = 59.6 \%$

This means that in this project, the capital will be recovered in less than three years. It also gives a high profit.

The second assumption:

Selling the product as slaughtered meat and tanned furs:

The previous cost amounting to L.E.571.50 plus cost of salying and pocking P.T.10 for every unit, total L.E.11.5 in addition to the cost of tanning 100 units for P.T.50 for every unit totalling L.E.50. Thus total cost will be L.E.633.

Income: Selling slaughtered product by the breeder himself Every rabbit weighs after slaying 60% of gross weight. So, cost of selling the product:

115 X (2.25 X 60%)= L.E. 6/Kgm wholesale price = L.E. 931.5

- we asswne that 100 furs only will be tanned on account that 15 furs will be unsuitable<sup>le</sup> for being tanned. Every fur costs L.E.1.25.

100 furs X L.E. 1.25 =L.E. 125

Total income is =L.E.1056.50

Profits = 1056.50 - 633 =L.E. 423.50

Percentage of profits to fixed capital  $\frac{423.5}{560} = 75.6 \%$

∴ ∴ ∴ ∴ invested ∴  $\frac{423.5}{928} = 45.6 \%$

Thus, the profit will recover its capital in 2.2 years.

The Third ascumption: Selling slaughtered meat, pregony and furs. are : L.E.633

Income : Assume that 18 animals will be bred as prgony aged 2.5 months with the average of one pregnancy: We have three mothers and every mother gives birth 6 times every year. So,we can sell 18 pregony aged 2½ months for L.E.15 each. The income will be:

18 animals X L.E.15 = L.E.270

The income of slaughtered animals 1.35 kgm X L.E.6=8.1 X 18 animals i.e. L.E.145.8 from which we subtract total income.

Total income = 1056.50 + 270 - 145.80 = 1180.70

Net profit = 1180.70 - 633 = L.E.547.70

Percentage of profits to fixed capital =  $\frac{547.70}{560} = 97.8 \%$

„ „ „ „ invested capital =  $\frac{547.70}{928} = 59 \%$

The project will recover its capital in less than 2 years.

Thirdly: The economic benefit of breeding domestic rabbits.

We can study the economic benefit of breeding domestic rabbits, that is its effect on Egyptian economy. In this case, we can measure the effect of spreading the breeding of rabbits in the limit of 50% of total families whether they are rurals or arbans in A.R.E as it has a great economic effect on the balance of payment in saving quantities of substituted imported meat from abroad. The foreign currency paid for getting substituted meat or fodders necessary for producing other kihds of poultry.

Carrying out this project, about 50% of the Egyptian families about 4 million families in A.R.E. in the end of coming five-year plan (87/88-91/92) will produce about 620,000 tons slaughtred rabbit meat (Each family will produce about 155 kg. slaughtered rabbit meat amounting to 3720 million pounds in addition to the cost of furs (about 500 million pounds) totalling 4220 million pounds. This equates 4 times the value of imported meat and foodstaff, which estimated in 1984 about 955 million pounds. This creates on industry of rabbit fur textiles to satisfy the need of the country and exportation. This requires that information administration and agricultural instruction should spread the attention of the rural and orban families to enable then to make use of applying these projects to yield financial income for producers and social and economicacl ineome for all the Egyptians.

Applying this project will raise the average share of the individual of rabbit meat from 4 kgm/year to about 17.7 kgm/year. This affects the average consumption of the individual of red meat and poultry which are imported from abroad.

Many large projects can be carried out with the same capacity of the Parairies in Ismailia. These projects spread in the governorates of lower Egypt and Upper Egypt which enable to cover the needs of breeders with pregnancy and save rabbit meat to satisfy the need of consumption and exporting the surplus.

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