
Poultry production in Turkey

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I. - Early developments in poultry production

The first attempts to develop modern poultry production in Turkey started with the establishment of the *Poultry Research Institute* in Ankara in 1930 but did not reach an appreciable level until 1951. Except for this institute and some poultrymen, there were almost no pure standard breeds in Turkey at that time when the approximately 20 million poultry population consisted of mixed local breeds only raised in villages under primitive conditions with very low egg production (i.e. 50-60 eggs/year). Therefore they cannot be considered as commercial flocks.

Modern poultry production really began in 1952 through the importation from the United States of pure breeds like White Leghorn, New Hampshire and Plymouth Rock (Barred and White) as daily chicks in group of 2,000-5,000 for use on farms of the Ministry of Agriculture. In order to organize the activities of poultry production, the *National Poultry Committee* was established in 1953. These pure breeds were then reproduced on the state institutions and distributed to small private poultry farms. The government also encouraged the establishment of private poultry units with a capacity of at least 250 hens and supported them through grants and new techniques. Besides this, responsibilities were given to every state to upgrade poultry units at least in one village, and to replace the primitive poultry population with modern standard breeds. In this way, until 1960, almost all agricultural institutions had a poultry section and some of them dealt only with poultry. Since 1952 some standard pure breeds such as Leghorn, New Hampshire, Plymouth, Rhode Island Red and Cornish were periodically imported and distributed to these institutions. Except for some research institutes which made a few selection and cross breeding studies, however, almost no research was carried out on them. They have only been reproduced and distributed to the private poultry farms.

Meanwhile, some supporting institutions like the feed industry and meat and fish organisations started to operate. Technicians were also sent abroad to get experience on poultry and some poultry specialists were invited to Turkey to provide advice on poultry production. The training of producers was emphasized with demonstrations, courses, several publications at the farmer's level in addition to other extension services that were offered by the Ministry of Agriculture.

As a result, there was a considerable increase in the demand for poultry products and, in order to meet it, modern poultry farms were established around big cities entailing major investments. Such development of intensive poultry production led to increasing expenditures and competition and the existing breeding stocks fell behind the needs. More productive poultry breeding stocks were thus needed. As a result of the pressure exerted by these needs, the importation of hybrid parent stocks was started in 1963. Because of the disadvantages of continuous import of breeders since 1965, research on obtaining hybrid parents was started and in 1968 a joint project of the University of Ankara, Faculty of Agriculture and the Ankara Poultry Research Institute, launched the first serious research project in this field. The aims of this research were to obtain broiler and layer parent breeders ; research on layers included brown egg layers and white egg layers. This breeding project is continuing and some parental lines are used to meet partly domestic demands.

II. – Present situation in poultry production

According to 1986 statistics, there are approximately 60 million poultry in Turkey and the production of consumable eggs is about 6 billion per year. It is noted that only one quarter of the poultry stock consists of highly productive commercial hybrids which are raised on private poultry farms. Annual poultry meat production is approximately 260,000 tons and nearly 40% of this comes from old hens that are unable to lay eggs.

As can be seen from the values indicated in **Table 1** poultry raising in Turkey has recently made great advances, especially since the 1970s. It has developed significantly and there has never been a shortage of poultry products in the domestic market since then. From the beginning of 1980, significant amounts of poultry products have been exported and this has increased gradually (**Table 2**). During this development process, important advancements have been made concerning the technological levels of poultry farms. In conclusion, it can be said that the base for easily enhancing the modern poultry industry in Turkey has been established (Anonymous, 1983).

The main market for the export of poultry products is the Middle East, especially Iraq. In 1985, the share of exports to Middle Eastern countries was 35,7% for consumable eggs and 0.9% for chicken meat (Un, 1985). The proximity of the aforementioned region facilitates exports.

Although Turkey exports consumable and incubating eggs as well as chicken meat, the annual consumption of 90-100 eggs and 5-6 kg of chicken meat *per capita* is far lower than that of developed countries. Hence the *per capita* consumption of poultry products should be rapidly increased.

In summary, poultry production in Turkey has developed enough to meet both local demand and exports. However, to sustain an increasing demand and consistent export levels, poultry production has to be further developed.

III. – Developing Directions of poultry

The consumption of daily animal protein *per capita* in Turkey is around 20 grams. The total consumption of meat *per capita* yearly is 20 kg. When a population growth of 2.5% is taken into account, importance must be given to stock breeding so that the animal protein needs of the growing population can be met and that the daily animal protein demand *per capita* can be increased. The consumption of poultry products could be increased through certain training programs.

It is accepted that in order to increase the daily animal protein consumption *per capita*, consumption of poultry products should be augmented. This view is stated in the current Five-Year Development Plan. In fact, although the yearly growth rate for animal production in the last Five Year Plan (1983-1988) was 4.7%, the targets for chicken meat and eggs were 9.5% and 9.4% respectively. Therefore, development plans for the country envisage rapid production increases for poultry. The production target for 1987 is 6.324 million consumable eggs and 310,000 tons of chicken meat (Anonymous, 1986).

There is sufficient potential to develop poultry production in Turkey which needs to import breeding chicks, some corn and soyabean meal while other items could be found in the domestic market. Parallel to the development of poultry, the production of corn and soya should also be increased.

There have been important developments over the past few years in the integration of broiler production. In the next five years, broiler production will reach a much wider integration level than today : five or six companies are active in the production of broilers.

Broiler production has developed foremost in the province of Bolu, accounting for 30% of total production. However, the capacities of the broiler houses vary between 2-5,000 which is very low.

The most widespread region of egg laying poultry is the Aegean with Izmir province being the leader. In this region, there are operations with capacities of 10-100,000 chickens which vary vastly from other regions of only 3-5,000 chickens. It is believed that in order to increase egg production in Turkey, village poultry production should be abandoned for larger-scale commercial egg laying poultry.

To sum up, there is sufficient potential for increased broiler and egg production and the development of both kinds of breeding is expected in the years to come.

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Table 1: Poultry stock and products in certain years in Turkey

Years	Number of Poultry (thousands)	Egg production (thousand tons)	Meat Production (thousand tons)
1950	24.2	45.3	18.0
1960	27.4	68.3	24.8
1970	32.2	112.6	32.0
1975	35.3	152.7	
1980	52.7	243.2	245.0
1985	54.9	343.4	260.0

Source : State Statistics Institute records. SPO reports.

Tableau 2: Turkey's poultry exports

Products	1983		1984		1985		1986		1987 (first 6 months)	
	Amount (tons)	Value (\$)	Amount (tons)	Value (\$)	Amount (tons)	Value (\$)	Amount (tons)	Value (\$)	Amount (tons)	Value (\$)
Consumable Eggs	22,172	20,467	49,611	43,100	38,172	30,013	15,722	10,895	8,762	7,165
Incubating Eggs	2,694	20,467	4,998	17,432	4,605	15,638	8,773	27,444	5,530	19,201
Chicken Meat	1,436	1,677	5,937	6,708	4,984	5,827	4,250	7,912	4,000	5,300
Others		0,602		0,492		1,073		1,400		1,700
TOTAL		42,913		67,732		52,551		47,651		33,366

Source : Undersecretary of Treasury and Foreign Trade.