

Economic Analysis of Dairy Production Under The Prevailing Technological Conditions in Fayoum Governorate

ABSTRACT:

Dairy and its products are considered basic food sources that play an important role in food security, because they contain high levels of the main nutritional elements that the body needs to build its structure. It is also an important source of animal protein, which many food industries are based on. The amount of dairy production in Egypt reached 5,675 thousand tons, and its value is 297.94 billion pounds, representing 23.8% of the value of animal production, as an average for the period (2008-2021), while the amount of dairy production in Fayoum reached 12.29 thousand tons, and its value is 33.79 million pounds, as an average for the period (2010-2021).

Despite the importance of dairy products, it was noted that there was a lack of use of modern technology in the production and reliance on traditional production methods. The study aimed to identify the current situation of dairy production and consumption in Egypt and Fayoum, estimate the most important indicators of the economic efficiency of dairy production under the prevailing technological conditions in Fayoum, and estimate the standard production and cost functions for dairy farms in Fayoum.

The study concluded that dairy production in Egypt and Fayoum depends on cows and buffaloes, and by estimating the most important indicators of economic efficiency for a ton of milk in Fayoum, the advantage of the first group in the technological farms category emerged, as it achieved the highest return on the invested pound and the highest relative profitability. Compared to the cow lean group in the traditional farms category, the buffalo milk group in the traditional farms category, and the first group in the technological farms category, The total margin per ton of milk in this group was 6,456.5 pounds, the average net return per ton of milk was 5,724 pounds, the average return on the invested pound was 1,085 pounds, and the ratio of total variable costs to total revenue was 41.3%, while The added value of a ton of milk 6035.4 pounds.

The study recommended the need to improve livestock breeds. This is done by providing a sufficient number of foreign breeds such as: Holstein, Brown, Simtal with the aim of increasing productivity, covering the milk gap in the short term, and achieving self-sufficiency in the long term, especially since these breeds adapt to the climate of Fayoum.