ECONOMIC IMPACT OF USE OF HEAT STRESS ALLEVIATION IMPOSED ON CATTLE UNDER EGYPTIAN CONDITIONS

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ABSTRACT

Food security is the main objective of all countries that seek through their various economic policies to try to achieve their social and economic security and stability. The agricultural sector is one of the leading sectors of the national economy and one of the main pillars of economic development. The agricultural production in Egypt includes three main activities: plant production Livestock production fish production, and the value of animal production in Egypt is about 36.5% of the total value of agricultural production. Undoubtedly, the heat stress on livestock under Egyptian conditions is one of the most important constraints for the production of milk in Egypt at various levels of cattle breeding in general and at the level of commercial farms in particular, which requires studying the economic return of the use of this technique and study the impact on the economics of dairy production. The objectives of the study were to study the current status of the development of the number of cattle producing milk in Egypt, as well as the development of the production quantities of dairy cows, the relative importance of each dairy production and the numbers of warheads, and to see the impact of the use of technology has been studying the statistical estimate of the production functions of milk sample study, as well as the statistical estimate of the terms of use of these costs Technology study sample. The most important results of what has resulted in the following: there is a growing trend year for the number of cows wholesale heads in Egypt during the study period, as they have increased by amounted to 104.24 thousand head annually, has been estimated coefficient of determination about 0.266, meaning that 26.6% of the changes occurring to the number due to Factors that reflect the effects of time. It may be shown that the increase in the number of dairy cattle heads in Egypt during the study period as an average is due mainly to the number of mixed cattle heads due to the apparent stability in the numbers of domestic and foreign cattle. It also shows that there is an increasing general trend of milk production for cows Wholesale in Egypt during that period, increasing by about 84.597 thousand tons per year. The R² is estimated to be about 0.324, which means that 32.4% of the changes occurring in the milk production of cows are due to the factors that reflect the time component. Egypt. Scenarios for the statistical estimation of the cow dairy production function were carried out in the sample of 100 cows before using the technique and 100 cows after using the technology. The elasticity of production prior to the use of the technology was about 0.24, after the use of 0.22 technology. Finally, return in Milk production for dairy cows increased by 27.7 kg / day after the use of the technology at an increase rate of about 18.7% with an expected yield of about 97.7 pounds per cow per day for 87.4 pounds per cow before using the technology. The impact of the use of clear technical and increase the expected return of the cows used in our farms under study, which requires dissemination of the use of the technology on the rest of the cattle farms in all parts of the country because of its great economic returns.