An economic Study of Production and Different Preservation Methods Dairy in Egypt

The agricultural sector is considered one of the main sectors of development in Egypt. This sector consists of two main parts which are plant production and animal husbandry that includes meat, dairy products and fish meanwhile dairy products are considered one of the most important main sources of protein, fat and vitamin rich nutrition.The study problem itself intervenes into the incapability of the local production to satisfy the increasing demand; consequently a dairy gap estimated by 1.3 million tons exists.This gap thrusts the government to import what fills that gap of dairy production. The study as well was conducted to verify the most important dairy manufactory and productionproblems in Egypt.This study aims at acknowledging the economical aspects of the dairy production and the different methods of milk preservation in Egypt. And to achieve these purposes, the study has focused on different topics which mainly consider the present status of dairy production in Egypt. It is a study conducted on sample dairy farms to scrutinize their production and economical efficiency and to identify the most important problems which face this sector.As a result, the study depended to achieve its aims on the method of quantity and descriptive analysis to the collected data such as statistic analysis for production functions and costSUMMARYfunctions and analyzing the variance analysis between them, aswell as, measuring their measurement of production and economical efficiency .Therefore, the study depends on two sources of data which are the secondary data published and unpublished in different resources and the primary data derived from a widesector of farms of dairy producers through a questionnaire and analyzing its data.This study includes Six Parts where the First Part approaches the Study Introduction, the Problem and the Purpose of the study, Research Method, the sources of collected data and at last the Study Methodology. As for the Second Part, it shows Review of Literature studies in the field of the production and the different methods of dairy preservation.The Third part approaches the present statuesque of milk production and consumption in the Arab Republic of Egypt. This part includes two chapters, the first of them deals with the production of milk and the most important factors which influence it. The second deals with milk consumption and the most important factors which affect it.The study illustrates the following results:The real value of milk production represents 9.8% and 27.4% of agricultural and animal production for the year 2003 respectively. The statistic significance proves the development the true values of agricultural and animal production of milk toreach an annual increase of 4449.9, 219.5, 29.1 million pounds respectively.SUMMARY-2-Buffaloes and cows represent approximately 97.5% of the total dairy production as the annual increase is estimated by 67.1 and 140.9 thousand tons respectively. As a result of studying the general time equation of the development of milk production and consumption and the gap of milk, it is obvious that they have adopted an increasing statistic significance estimated by an annual increase of 4.8%, 5.9%, and 26.1% respectively.The Fourth Part approaches the study field sample as a classified random sample that includes 378 milk farms (cows and buffaloes) was chosen from the villages of El Aba'adia and Sharnoub- Damnhour Central Area — Governorate of Bihera and the villages of Meshtour and Meet Kenana- Tokh Central Area-Kaliobia Governorate .The Fifth Part deals with the statistic analysis to the functions of production and the functions of cost in dairy farms in the study sample and it also includes two chapters:The First Chapter deals with the statistic analysis to the production functions of diary farms

in the study sample villages themselves as well as the variance of production and the various internal production categories within the single village. The study shows that nutrition, labor, veterinarian care and the producers' experience are the most important factors which affect the amount of production. That was attained using a liner regression and the double logistics for the functions of production which in turn shows the following results:SUMMARY -3--4-According to the total results of the sample of Aba'adia village:Using the liner regression it was manifested that the marginal ph sical product of the effective factors on the amount of cow and 'uffalo milk production has reached 1.82 starch unit , 2.58 day/l: bor and 27.6 average year experience for the producer, as it reaches approximately 1.231 starch unit , 6.4 day/labor an 40.4 average year experience for the producer respectively. As by using the double regression logistics, the flexibility of production factors which affects production has reached app ximately 0.258, 0.172 and 0.195 and the total flexibility ha reached 0.625 for buffalo milk as for the other it has reached approximately 0.263, 0.255, 0.172 so the total flexibility ha reached about 0.690 for cow milk which in turn means that t e farmers of the sample are working in theeconomical st ge of production.the total results of the sample of Sharnoube liner regression it was manifested that the cal product of the effective factors on the amount ffalo milk production has reached 0.227 starch /labor and 24.3 average year experience for the reaches approximately 0.498 starch unit , 3.23 25.7 average year experience for the producer s by using the double regression logistics, the roduction factors which affects production has imately 0.272, 0.191 and 0.06 and the total eached 0.523 for buffalo milk as for the other itAccording to village:Using marginal phys of cow and b unit , 3.66 da producer as it day/labor and respectively. flexibility of reached appro flexibility hashas reached approximately 0.569, 0.132, 0.18 so the total flexibility has reached about 0.781 for cow milk which in turn means that the farmers of the sample are working in the economical stage of production.According to the total results of the sample of Meshtour village:Using the liner regression it was manifested that the marginal physical product of the effective factors on the amount of cow and buffalo milk production has reached 0.347 starch unit, 2.9 day/labor and 35.2 average year experience for the producer, as it reaches approximately 0.395 starch unit , 4.27 day/labor and 27.9 average year experience for the producer respectively. As by using the double regression logistics, the flexibility of production factors which affects production has reached approximately 0.396 m 0.154 and 0.113 and the total flexibility has reached 0.635 for buffalo milk as for the other it has reached approximately 0.393 , 0.153 , 0.125 so the total flexibility has reached about 0.671 for cow milk which in turn means that the farmers of the sample are working in the economical stage of production.According to the total results of the sample of Meet Kenana village:Using the liner regression it was manifested that the marginal physical product of the effective factors on the amount of cow and buffalo milk production has reached 0.224 starch unit , 3.75 day/labor and 26.9 average year experience for the producer, as it reaches approximately 0.417 starch unit , 0.10SUMMARY -5-day/labor a respectively. flexibility o reached ap flexibility h has reached flexibility h means that economical sd 10.6 average year experience for the producer As by using the double regression logistics, theproduction factors which affects production has roximately 0.268, 0.197 and 0.17 and the total s reached 0.535 for buffalo milk as for the other it approximately 0.448, 0.181 m 0.06 so the totalreached about 0.689 for cow milk which in turnthe farmers of the sample are working in the age of production.The Sanalysis to study sample the villages categories.cond Chapter of this part approaches the statistic e cost functions for dairy farmS included in the as well as analyzing the variance of costs amongf the study sample and the different productionAccording to studying the functions of cost of the total sample of El Aba'adia village it is obvious that the optimum rate of output which reduces the cost, reaches about 3613kg of buffalo milk and2663 kg of cow milk meanwhile the total maximization f profit has reached about 4183 kg buffalo milk and 2941kg ow milk respectively. Also the average sample production ha reached 3884kg buffalo milk and 21687 kg cow milk.59% and 2% of the sample producers have exceeded the civil amount f cost as 14% and 14% of dairy producers have reached the maximization of profit rate in buffalo and cow milkfarms respectively.According to studying the functions of cost of the total sample of Sharnoub village it is obvious that the optimum rate ofSUMMARY-6-output which reduces the cost, reaches about 3210kg of buffalo milk and 2380 kg of cow milk meanwhile the total maximization of profit has reached about 3621 kg buffalo milk and 2608kg cow milk respectively.

Also the average sample production has reached 3363kg buffalo milk and 2419 kg cow milk.40% and 45% of the sample producers have exceeded the civil amount of cost 0 and 14% of dairy producers have reached the maximization of profit rate in buffalo and cow milk farms respectively.According to studying the functions of cost of the total sample of Meshtohur village it is obvious that the optimum rate of output which reduces the cost, reaches about 290 lkg of buffalo milk and 2243 kg of cow milk meanwhile the total maximization of profit has reached about 3305 kg buffalo milk and 2496kg cow milk respectively. Also the average sample production has reached 2975kg buffalo milk and 2261 kg cow milk. 40% and 41% of the sample producers have exceeded the civil amount of cost as 11% and 9% of dairy producers have reached the maximization of profit rate in buffalo and cow milk farms respectively.According to studying the functions of cost of the total sample of Meet Kenana village it is obvious that the optimum rate of output which reduces the cost, reaches about 2945kg of buffalo milk and 2.480kg of cow milk meanwhile the total maximization of profit has reached about 3.537 kg buffalo milk and 3.157kg cow milk respectively. Also the average sample production has reached 3.052kg buffalo milk and 2.561 kg cow milk. 26% and 34% of the sample producers have exceeded theSUMMARY-7-civil amount reached the m farms respectiThe Si efficiency in two chapters: measurements farms in the st1) The aver animal:if cost as 7% and 11% of dairy producers have ximization of profit rate in buffalo and cow milk ely.th Part approaches production and economical e study sample dairy farms. This part includes the First Chapter approaches the most important of production and economical efficiency of dairy dy sample.ge of production measurement of a singleIt has reached 3884 and 3363 kg of buffalo milk and 2687 and , 2419 kg of cow milk for the villages of El Aba'adia and Sharnoub resp ctively.It has reached 2561 kg of c Kenana respec2975 and 3052 kg of buffalo milk and 2261 and w milk for the villages of Moshtohor and Meet ively.2) The measu ement of net return:Net ret m has reached 3499.3 LE and 2145.3 LE for the single Buffalo head milk provider as it has reached 1633.4, 1138.1 and L for the single cow head milk provider for the villages of El ba'adia and Sharnoub respectively.Net return has reached 1788 LE and 2655.2 LE for the single Buffalo ead milk provider as it has reached 1037.6 and lh1521 LE for th single cow head milk provider for the villages of Moshtohor and Meet Kenana respectively.SUMMARY-8-3)The measurement of net return compared to costs:It has reached about 0.539 and 0.322 for a buffalo as reached about 0.417 and 0.273 of cows in the villages of El Aba'adia and Sharnoub respectively.It has reached about 0.269 and 0.452 for a buffalo and as reached about 0.217 and 0.327 of cows and in the villages of Moshtohor and Meet Kenana respectively.4)The cost measurement of the productive milk unit:It is estimated by about 1.671 LE and 1.981 LE/kg buffalo milk and about 1.517 LE and 1.721 LE/kg cow milk in the villages of El Aba'adia and Shamoub respectively.It is estimated by about 2.235 LE and 1.925 LE/kg buffalo milk and about 2.115LE and 1.815 LE/kg cow milk in the villages of Moshtohor and Meet Kenana respectively.The Second Chapter approaches the most important methods of milk preservation in Egypt which are cooling, freezing, sterilization, adding preservatives, ante-manufacturing procedures of yeast dairy products, cheese manufacturing and fat products. Moreover, this section approaches the financial evaluation for the products of Egyptian Dairy Company using the economical evaluation schemes represented in the index of profit the scheme of net present value and the internal return average at the price discounts of 10%, 15% and 20% for the most important products of the company.SUMMARY-9-1)According to the Profit Index:Resulits have shown that some products of the company are quite profitable and economically accepted as the Profit Index has re ched more than whole one at the discount prices of 10% and as 't has reached 1, 02 and 1 for pure drinking milk and 1. 01 for yo hurt and for saturated fats it has reached 6.003 and1.001 and 1 105 for white cheese at the price discount of 10% only.2)The Net resent Value measurement:The r attained a p profitable an and 465.3 fe 110.8 for b respectively. white cheese only.3)The Intersults have shown that the net present value has sitive value which denotes that the products areaccepted economically as it proves to be 1563.9 r pure milk, 382.1 and 39.6 for yoghurt, 568 and tter at the discount prices of 10% and 15% Also it has reached 117.4 for ice-cream, 131.8 for and for creamy cheese at the price discount of 10%al Rate Return:Result Internal Rat which has re milk, yoghurt price discoun 15%, 20% t for pure milk,have shown that the profitable products whoseReturn surpasses the suggested alternative cost ached about 17.1, 15.6, 16.2, 16.1, 11.2 for pure , butter,

ice-cream, white cheese respectively at the of 10%, 15% .Moreover, for the price discount of e internal rate return has reached 18.3, 15.9, 16.8 yoghurt, butter respectively.SUMMARY-10-