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MARKETING AS AN APPROACH TOWARDS LIVESTOCK DEVELOPMENT IN EGYPT

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Introduction

This Article focuses upon milk production as a promising opportunity for rural development in Egypt. The concepts in this article are based upon several quantitative and emperical studies, made over the last 10 years.

Milk is a vitally important livestock product in Egypt particularly in rural areas, where it provides the cheapest source of animal protein. But Egypt's level of self-sufficiency in milk production has been declining. In 1985, only 60 percent of national consumption was produced locally. The question is: are there reasonable prospects for developing milk production in Egypt ?. Assuming that the basic economics appear to be favourable, then how ?, i.e. which system offers the most promising approach.

Milk Production Systems

Egypt has three, relatively, separate systems for producing milk: mixed farms, small comercial dairy herds and large commercial (private and public owned) dairy herds. 88 percent of Egypt's two million milking animals (over 3 years old) are held on the country's mixed farms of these, about three quarters are held

by small farms of 3 feddans or less in size. Most of these animals are multi-purpose (in addition to milk and meat, provide some draft power). A small farm of this type would hold one of three milking animals. Buffalo is the animal of choice for those who specialize in milk production. Most feeds are produced on the farm and consist, primarily, of berseem in the winter and straw and other crop residues in the summer. Animals held by mixed farms produce about 82 percent of Egypt's milk.

Small commercial dairy herds are normally, located on the fringes of large urban areas such as Cairo and are made up almost exclusively of water buffaloes. Herds of 15 to 30 animals are common. Most feeds are purchased and consist of clover and crop residues from near-by farms as well as food processing by-products in addition to feed concentrates purchased through private and government channels. These herds account for an estimate of 11 percent of milking animals and 17 percent of milk production.

Egypt has a number of commercial public sector and private dairy herds that range from 100 to 500 heads or more in size. Such herds are composed almost, exclusively of imported dairy breeds and locally cross-bred cows. To date frisian has been the breed of choice for importation. They provide their milk supply to the Egypt milk company (a large government-owned dairy firm). Some modern private dairy plants have been established during the last decade. However, all dairy plants still depend upon imported

powder milk as a food grant from the EEC. These commercial large dairy herds account for an estimated 1 percent of milking animals (over 3 years old) and produce about 2-3 percent of the country's milk.

Milk Production Efficiency

A comparative study was made to estimate the costs of milk production at 3 percent corrected fat content between seven types of enterprising from field surveys. These are: commercial small dairy buffalo farms, buffalo on mixed farms, native cows on mixed farms, frisien cows on specialized private farm, cooperative farm, new land farm and old land farm. The results showed that the state frisien enterprise receives the most support by government feed subsidies and price policies. At domestic prices, the water buffalo on the traditional mixed farm is the least cost producer of milk. This is followed by milk from buffalo cows kept on commercial herds. When the adjustments for feed price distortions are taken into account, the situation changes somewhat, it is the commercial dairy buffalo which ranks first and the mixed farm dairy buffalo second. This change in order shows the effect of correcting small farm buffalo production costs for the advantage of access to berseim clover which is made cheap by government policy. Now the cost of frisien farms is seen to be quite high, reflecting the effect of correcting for all of the special advantages in feed costs which government provides to such a unit as well as the burden of fixed costs due to construction and labor. The native cow is still the highest cost source of milk.

On the other hand, the cost of milk production from buffalo (5% corrected fat content) is just equal to the cost for reconstituted imported powder milk (3% fat) at the dairy plant in Cairo. Of course, there are differences in quality and location to be taken into account. The buffalo milk is fresh and therefore is preferable in taste, but it needs better handling and packing. The fact that the buffalo milk is priced at the farm gate, not delivered to Cairo, indicates that the reconstituted powder milk may be a cheaper source of milk for urban dwellers. But this ignores the developmental opportunity for rural society.

Therefore, the buffalo is apparently the best of the animals available in Egypt, but it could be improved. So far, Egypt's efforts to expand milk production have been concentrated on importing frisian cows. This study shows that, in economic terms, these animals don't seem to compete well with the buffalo. What about cross breeds ?. Presumably, these would out-perform the native cow. However, how do they compare to the buffalo ?. In fact, Egypt has several herds of improved water buffaloes on several centres, as well as a nucleus for A.I. network for cross-breeding of native cows. But these genes have not been effectively spread to the national herd. What kind of a program would it take to do so ?. Might it not make better sense to spend money on such a program as this, rather than continuing to spend funds importing relatively, inefficient frisien ?. From all above, the study raises the following concepts:

Marketing as an approach for development

Egypt has reasonable prospects for developing milk production on a comparative advantage base: The recommended approach is to devote the current agricultural policies towards development of the milk supply from the mixed farms, because this type of farming produces not only the cheapest source of milk, but also it provides better opportunities of employment and income generation for the farm household, particularly women. However, the success can not be achieved without having an implementation program. The corner stone of this program, from the student's view is the establishment of an efficient marketing system. Through such marketing system, the small farmer will have enough incentives to expand milk production. His demand for highly milk producible animal will be created. His acceptability for improved technology in order to raise the milk supply will be existed.

The milk marketing cooperatives to be established by the small milk producers are an alternative to expand the marketed surplus. This has been done with some success and under similar circumstances in India, where the cooperative system has been operating voluntarily as a social movement, for more than three decades and covering today more than 3 million holders. Cooperative units in the village serve as milk collection units and also provide veterinary and artificial insemination services, feeds and credits to member farms at cost price. The small farmers cooperative board in India made an agreement with the government to supply them

with a proportion of the powder-milk grants offered from the EEC as a food aid. Such proportion is processed in the processing plants owned by the cooperatives and the milk products are sold in the big cities. The return from sale finances the expansion and development of the milk marketing cooperatives. The cooperatives provide a fair transaction with respect of prices, weighing and quality control. They adopted the modern technology such as fat content measurement apparatus and transportation contours without spoiling the milk to be simple and adequate and cheap. Egypt in a better position to start such movement taking this experience into consideration.

The small farmer is market oriented enterpriser

However, unguements raised around the high proportion of milk produced that is consumed by the farm-household, which leads to a little contribution of the farm to the total milk supply, entering into commercial channels. The auther estimated the composition of the total milk consumption in Egypt. The estimates indicates that almost 40 percent of all milk consumption was farm-produced consumption. Another 25 percent come from: farm milk and farm processed products consumed off the farm and fam milk processed by small private dairy plants. 14 percent from commercial buffalo enterprises in the big city belts. 11 percent as the milk and milk products of the Egypt milk company, plus other privately owned modern dairy plants. 10 percent as imported cheeses and butter, plus imported powder milk sold directly to consumers. Total consump-

tion reaches about 3 million tones of 3% fat-milk equivalent.

Eventhough, there are strong evidences that the mixed farm is market oriented with respect to milk production and milk marketed surplus, if, and only if, the marketing incentives are available. These evidences showed that there is a minimum annual quantity of the mixed farm produced milk, (1238 kgs per year) is required for farm-household use. Expantion in farm milk production by 1-Kg above such minimum requirements, provides 0-83 Kg for sale, while leaving 0-17 Kg for home-use. Therefore, expantion in production increases not only the marketed surplus of milk but it increases also the nutritional status of the house hold by increasing the home-consumption quantity of milk produced, however at much lower proportion than the quantity devoted for sale. There are evidences that expantion in milk production is highly associated with availability of marketing incentives in a given region which lead to hold larger number of milking cows of higher yield than other regions which do not have marketing incentives. Availability, of marketing incentives, also increases the marketed surplus proportion.