

UNITED NATIONS
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AND
SOCIAL COUNCIL



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UNITED NATIONS CHILDREN'S FUND
Programme Committee

Recommendation of the Executive Director for an Allocation
SYRIA ^{a/}
Milk Conservation

1. The Administration recommends an allocation to Syria of \$550,000 to assist in the establishment of two milk processing plants in Damascus and Aleppo by the provision of equipment for the reception, sterilizing, bottling and refrigeration of milk and for the processing of milk products. Transport and engineering services would also be furnished by UNICEF.
2. The establishment of these two plants would provide reasonably priced and hygienically safe milk to the consumers in Damascus and Aleppo and would subsequently help to stabilize an otherwise extremely uncertain milk market in the two cities. When the two plants reach their daily capacity of 30,000 litres each, approximately 44,000 children would receive 1/4 litre daily for 200 days a year, through the Government departments concerned, in co-operation with the Municipalities of Damascus and Aleppo.
3. In conjunction with the establishment of these first two milk plants in Syria, the Government is submitting to the country's legislative body a special law calling for the constitution of a National Milk Council as a supreme co-ordinating and advisory body on all matters pertaining to the dairy industry, and setting the basic principles according to which dairy plants may be established and operated in Syria. Several cattle development schemes are also being initiated by the Government.

a/ First request for UNICEF aid to this programme.

4. The Government's matching for this programme is estimated at LS.8,562,000 (equivalent to US\$2,445,000) for the first five years of operation, including \$1,142,000 for capital expenditures and \$1,303,000 for the purchase of milk from the two plants for free distribution through the five years.

Milk Production in Syria

5. Syria's topography consists mainly of a central area of steppe-like tracts surrounded by a semi-circle of fertile fields and farm lands which begin with the Hauran Plateau in the South-West and end with the heavily watered plains of the Euphrates in the North-East.

6. In both parts of the country, actual and potential possibilities of milk production are extremely good. In fact, the central lands provide vast grazing grounds for some three million sheep and one million goats herded by nomadic tribes while in the peripheral areas rural communities tend large numbers of cows which, besides their worth as dairy animals, are valuable to the common farmer for working his field, and for the manure they produce. These cows are usually either of the "Damascus breed" renowned throughout the Middle East for its high productivity (2500 to 3000 litres of milk per year) or of the "Jaulani" type which is a more modest milk producer but a sturdy and useful animal.

7. The country's sheep and goat milk is partly consumed locally and partly exported to countries of the region in the form of white cheese (curdled milk), "samneh" (melted butter), yoghurt and yoghurt derivatives. Statistics in this connexion are not available but the records of the Syrian Ministry of Economy indicate that about 800 tons of samneh and 700 tons of white cheese are exported yearly under official Government licences. It is believed that an additional amount equal to at least 50 per cent of these quantities, cross the Syrian borders to neighbouring countries in small parcels through individual travellers, nomadic tribes and other channels.

/8. The cows' milk,...

8. The cows' milk, on the other hand, goes to the urban population, mainly in liquid form, and, for this reason, the largest numbers of cows are concentrated around the country's two principal cities, Damascus and Aleppo, which between them account for about a quarter of Syria's population of 3,500,000 inhabitants.

Milk Plants for Damascus and Aleppo

9. FAO/UNICEF survey teams who in 1954 and 1955 examined matters related to the production, handling, distribution and consumption of milk in Damascus and Aleppo, and in the areas surrounding these two cities, observed the following:

- a) A daily supply of approximately 20,000 and 14,000 litres of milk is at present available respectively to Damascus and Aleppo. For Damascus, this milk is supplied by the villages of the intensively cultivated Ghouta (Oasis) area which surrounds the capital within a radius of 35 to 40 kilometres, and is served by an excellent network of roads. Aleppo is served from small dairies established in the city itself or in its outskirts and from villages falling within a radius of 7 to 8 kilometres from the city.
- b) The child population in each of the two cities is estimated at between 120,000 and 130,000, and infant mortality varies between 150 and 250 per 1,000. Malnutrition and milk-borne diseases contribute to this high rate. With UNICEF's assistance (E/ICEF/L.780), a school feeding programme was started in Damascus in November 1955. Approximately 12,500 children received school rations in the 1955/1956 school year and the programme is to expand to reach 30,000 children in the 1956/1957 school year.
- c) The consumers and medical authorities in the two cities have little confidence in the local milk, either liquid or in the form of dairy products, as it is known to be handled with little regard to hygiene and sanitation besides being commonly skimmed and adulterated with water by the distributors.

/d) Under the present...

- d) Under the present conditions of an extremely uncertain market, the producers are getting only a meagre remuneration from the sale of milk. Their keeping of cattle seems to be motivated chiefly by their need for manure and for working their fields.

10. In view of the above, it is clear that the establishment of milk processing plants in Damascus and Aleppo is needed to provide pure safe milk at a reasonable price to consumers in both cities. This would promote a growing demand for milk and, subsequently, ensure a regular market and a steady income to the producers. The plan would increase consumption of milk by the low wage earners, and within 3 or 4 years time when the output of the plants should reach this rated capacity approximately 44,000 children would directly benefit from the free milk distribution scheme which is to be part of the Government's undertaking. It is also anticipated that this regularization of the milk trade would put in motion the great potentialities for increased production in the Damascus and Aleppo areas and cause the present supply of milk in these two localities to double within four to five years.

Development Prospects

11. The Government is making great efforts in the development of dairy animals and in general promotion of the dairy industry. The following are a few aspects of the Government's plan in this regard:

- a) The Government has recently submitted to the country's legislative body for approval a special law establishing a National Milk Council to co-ordinate and advise on Government and private actions in all matters pertaining to the production, processing, handling, distribution and sale of milk and milk products. This law also sets the basic principles that will govern the functioning of the two plants covered by this

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recommendation and, in a more general way will govern other dairy plants to be set up in the future in other parts of the country. The stipulations of this law call also for the creation of milk producers' syndicates and provide for producers' co-operatives to participate in the ownership and operation of plants initially instituted with Government funds.

- b) In addition to the existing Veterinary School and the Veterinary Laboratory attached to it, arrangements have been made by the Government for a Central Livestock Breeding Station and for an Artificial Insemination Station to be instituted near Damascus. These Stations will give particular care to the development of the Damascus breed of dairy cattle which, according to a report prepared on the subject by the FAO Veterinary Adviser to the Syrian Government, is "the finest dairy animal among the unimproved breeds of the tropics and sub-tropics". A country-wide bovine vaccination campaign against tuberculosis has also been undertaken by the Government with the assistance of FAO experts.
- c) Plans are being made by the Government for making available in a regular manner to milk producers advisory services on such matters as hygienic procedures in production and handling of milk, proper maintenance of barns, homes, etc., improvement of pastures, preventive and curative care and better nutrition of cattle.

Plan of Action

12. Two milk processing plants, each with a capacity of approximately 30,000 litres per day, will be established, one in Damascus and one in Aleppo. These plants will be organized, owned and operated as public institutions (institutions reconnues d'interet public) by the respective municipalities.
13. The management of each plant will be vested in a Board of Management composed of the following:
- a) the mayor of the City as Chairman;
 - b) two citizens chosen for a term of three years by the Municipal Council;
 - c) two representatives selected by producers furnishing milk to the plant;
 - d) the plant manager (without vote) appointed on the recommendation of the National Milk Council;
14. The capital cost of the two plants will be covered by the Government as a loan which remains valid until its amortization by instalments takes place. In addition, the Municipalities will provide the sites for the plants.
15. During the flush season, each of the two plants is expected to reach a daily intake of raw milk of 30,000 litres (estimated to contain an average of 3.25% butter fat). The daily output of each plant during this season is estimated as follows:
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|---|---------------|
| a) Sterilized milk standardized at 2.5% butter fat | 18,000 litres |
| b) Sterilized milk for free distribution standardized at 1.5% | 3,000 " |
| c) Flavoured sterilized milk for retail sale | 3,000 " |
| d) Cheese for retail sale | 500 kgs. |
| e) Butter for retail sale | 250 " |
16. Should the demand for fluid milk exceed the quantity of raw milk available to the plant, the Government may import sufficient skim milk powder to blend with the fluid milk to fill the need and meet the market demand. When this toning is necessary, the quantity of butter may be reduced by the amount of butter fat required. The only milk which will be used for cheese will be the surplus, if any, over and above the fluid milk requirements of the city.

17. Ten per cent of the total annual output of the two plants will be heat-treated and standardized at a butter fat content of 1.5 per cent for free distribution through schools, maternal and child welfare centres and dispensaries. Sterilized and bottled milk will also be good for use outside the two city areas. The 44,000 beneficiaries mentioned in Paragraph 10 above is calculated on the basis that each child would receive $\frac{1}{4}$ litre fluid milk per day for 200 days per year from the plants. A supplementary detailed plan of operations covering the maternal and child feeding programmes under this proposal would be entered into when the plant is ready to start operations. At that time it is expected that as large a proportion of the free milk as possible will be channeled to pre-school children, including bottled milk of 2.5 per cent fat content for infants. To the extent that larger daily rations or higher fat content milk will be required by children in this age group more local funds will be needed or the overall numbers of beneficiaries will have to be correspondingly reduced.

18. Through the medium of the National Milk Council, the Government will develop and co-ordinate its national milk policy. This will cover progressively all aspects of milk production, processing and distribution, including prices and standards for milk. The Council will make suitable recommendations for Government action and legislation.

19. The price paid to farmers for raw milk and the price at which it will be sold on the market after being processed in the plant will be determined by the Board of Management. Factors to be taken into consideration in determining the buying and selling prices for the milk will comprise:

- a) A sufficient price to the producer which, together with agricultural extension work, will stimulate milk production in the area to meet the anticipated increased demand in milk and milk products.
- b) Operating costs including the building up of reserves for replacement of depreciated equipment, and for reserves for normal growth and expansion of plant.

20. At the appropriate time, i.e. following the establishment of adequate facilities for processing and bottling sterilized milk to cover normal retail market requirements, the Government will prohibit the retail sale of raw milk in the areas concerned.

21. The National Milk Council will have full responsibility for co-ordinating the programme and for liaison with UNICEF through its Executive Director who will also be responsible for co-ordinating the work of the various Ministries concerned with the fulfilment of this plan.

UNICEF commitments

22. UNICEF would provide each milk processing plant with the following equipment and services, it being understood that modifications to this list may, if required, be agreed between the Government and UNICEF.:

- a) Equipment for reception (weighing, can-washing and milk cans), cooling, clarifying, storage of raw milk;
- b) Equipment for standardizing, homogenizing, bottling and sterilizing of milk;
- c) Equipment for cream processing and butter-making as well as cheese-making;
- d) Equipment for refrigeration, steam generation and laboratory control;
- e) The necessary transport for collection of milk ;
- f) Supervisory engineering services for installation of the above. ;
- g) Travel and per diem costs of a Syrian architect while developing plant lay-outs and specifications outside Syria, including a visit to the UNICEF office at Paris ;

23. The total cost to UNICEF for each plant is estimated at \$250,000

or, for the two plants \$500,000

plus freight 50,000

Total recommended allocation \$550,000

FAO participation and technical approval

24. This project has the technical approval of FAO. Subject to a Priority I Government request to TAB, FAO will provide the following:

a) For 1957

A three months' fellowship for the Executive Director of the National Milk Council

b) For 1958

2 fellowships for plant managers

2 fellowships for plant engineers

2 fellowships for quality control technicians

c) For 1959

An adviser to the plant manager

Commitments of the Government

25. The Government will provide all personnel, materials, supplies, equipment and financing necessary for the execution of this plan of operations except as provided by UNICEF. Matching costs for the first five years of operation are estimated at £ S 8,562,000 equivalent to U. S. \$2,445,000, including \$1,142,000 for capital expenditures and \$1,303,000 for free milk distribution. This assumes the plants will reach full rated capacity within five years after start of operations and that during that period they will operate on an average at 70 per cent of full capacity.

26. Non-Recurring Items: The Government will provide:

- a) Land for the sites of the two plants (to be given by the two Municipalities).
- b) A suitable building to house each plant.
- c) All services including water, sewage, electrical power and lighting.
- d) Necessary work services for the plant site such as roads, levelling, fencing, etc.
- e) A six months' supply of bottles, crown corks and crates.
- f) Erection and installation of equipment, including equipment provided by UNICEF.
- g) Working capital, which shall include a reserve sufficient to cover losses during the initial period of operations until the plant is brought into full production.

(The estimated cost of these items is LS.4,000,000 for two plants.)

27. Recurring Items: The State guarantees that the two plants will continue to function at full capacity once the rated throughput is reached and will take any necessary measures to that effect.

28. The following shall be considered as integral parts of the basic operational costs of the two plants:

- a) The maintenance of working capital at the level required for meeting normal and unforeseen running expenses throughout the fiscal year.
- b) The accumulation of reserves for depreciation and replacement of equipment, vehicles, buildings and other capital assets.
- c) Funds for normal growth and expansion of facilities.

/29. Beginning in 1959...

29. Beginning in 1959 not less than 10 per cent of the annual fluid milk output of each plant will be purchased and distributed free to children and mothers by the Ministries of Education and Health and the Municipalities of Damascus and Aleppo. The Municipalities will contribute not less than 1% of their yearly income for this purpose, provision for the remainder to be made in the budgets of the two Ministries.

Target time schedule

30. The proposed schedule for development and implementation of the plan is as follows:

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| a) Signature of Plan of Operations between the Government and UNICEF | December 1956 |
| b) Syrian architect to visit Paris to prepare basic plans for plant | February 1957 |
| c) Establishment of National Milk Council | February 1957 |
| d) Establishment of Boards of Management for the milk processing plants in Damascus and Aleppo | May 1957 |
| e) Placing of contracts for buildings | August 1957 |
| f) Start of building construction | October 1957 |
| g) Fellowships: | |
| i. Executive Director of National Milk Council (FAO-TAA) | Aug.-Oct.1957 |
| ii. 2 Plant Managers (FAO-TAA) | Feb.-Apr.1958 |
| iii. 2 Plant Engineers (FAO-TAA) | Jan.-June 1958 |
| iv. 2 Milk Quality Control Experts(FAO-TAA) | June-Sept.1958 |
| h) Buildings ready to receive equipment and delivery of UNICEF equipment | June 1958 |
| i) Installation of equipment to start | July 1958 |
| j) Equipment to be installed | December 1958 |
| k) Plant to start operations | March 1959 |
| l) Free distribution of milk to start | April 1959 |