

UNITED NATIONS  
ECONOMIC  
AND  
SOCIAL COUNCIL



LIMITED

E/ICEF/L.848  
2 February 1956

ORIGINAL: ENGLISH

UNITED NATIONS CHILDREN'S FUND  
Programme Committee

**FILE COPY**  
**DO NOT REMOVE**

Recommendation of the Executive Director for an Allocation  
IRAQ  
Extension of Milk Conservation Programme

1. The Administration recommends an allocation to Iraq of \$100,000 for the extension of a milk conservation programme for which the Board approved \$150,000 in September 1952. The proposed additional allocation would provide supplementary equipment to enable the sterilising plant now being established in Baghdad to operate at a capacity of 40,000 litres per day, or double the planned capacity in the original plan. The expanded plant would begin operation in December 1956 and free milk distribution would commence in January 1957. In the plan presented to the Board in 1952 it was foreseen that 18,000 children and mothers would receive free milk from the plant; under the expanded plan free distribution would be made to a total of 40,000 infants, children, nursing and expectant mothers. The Government's expenditures for the expanded programme over a seven-year period would be equivalent to a total of US\$2,093,000 including capital costs estimated at \$1,267,000 and \$826,000 for free milk distribution. (For details of Government commitments, see below para. 15.) These increased commitments represent proposed Government expenditures of an additional \$843,000 over the total matching foreseen in the original plan.

The Original Plan

2. Iraq's health and nutritional problems and the country's need for a milk conservation programme were outlined to the Board in September 1952 (E/ICEF/R.384). The plan approved at that time provided for the establishment in the area of Baghdad of a milk pasteurising and sterilising plant with a combined capacity of 20,000 litres per day. The plant was to serve as a training centre for technical /personnel who

personnel who would assist in developing milk processing facilities in other parts of the country and would provide free or subsidised low-cost milk for infants, children and mothers. One-third of the plant output was to be distributed free to selected priority groups; the remainder would be sold at cost price through retail distributors.

### Two Important Developments

3. Two important developments which have occurred since the date of the previous request to the Board have encouraged the Government to enlarge the scope of the original plan and to ask UNICEF for additional assistance.

4. The first of these developments relates to the availability of milk for processing and to the Government's desire to make maximum use of the total milk supply in planning for the needs of the community. As part of the overall scheme for the dairy, the Government decided to concentrate many of the milk animals in the Baghdad area in a series of compounds adjacent to the plant. As a consequence some 2,000 donums (500 hectares or 1,236 acres) will be added to the cattle allotment on the Government experimental farms at Abou-Ghreib. Moreover, the Iraqi Development Board's programme of highway construction is now linking rural communities more closely with urban centres, and this will have the effect of increasing the supply of raw milk from such nearby areas as Masayyab and Falloujah. The scheme for the cattle compound and the improved highway network, together with the rapid population growth in Baghdad, has influenced the Iraqi Government to enlarge the plan for the dairy to at least twice the capacity originally envisaged.

5. A second factor influencing the Government's decision arises from the increase of technical experience since the previous submission to the Board. When the programme was being planned, in 1952, the total experience in sterilisation of milk under semi-tropical conditions was limited and was confined largely to "batch sterilisation", a process which is not economical for large scale operation. Before final decisions were taken as to specifications for equipment for the Baghdad plant, results became available from a number of commercially operating sterilising plants in several countries, including some in the Mediterranean area. In addition, experimental tests were made on small lots of buffalo milk shipped

/by air

by air from Iraq to Holland for special testing to see whether buffalo's milk could be satisfactorily sterilised. On the basis of the results of these tests, UNICEF dairy engineers, and recognised dairy authorities outside the Fund who were consulted, advised that future development of fluid milk processing in Eastern Mediterranean climates should concentrate on the "continuous sterilisation" process where the volume of milk warrants it.

6. The proposed doubling of the capacity of the Baghdad dairy, and the application of the "continuous sterilisation" principle, would involve a larger expenditure for imported equipment than was foreseen in the original request. In estimating the total cost for equipment for the revised scheme, UNICEF must also take into account that prices paid by the Fund for dairy equipment have increased on an average over the past two years from ten to fifteen per cent.

#### Progress of the Project

7. A plan of operations following the outline presented to the Board in September 1952 was signed with the Government in November 1953. Selection of a suitable location for the plant involved many complications but a site was finally chosen at a distance of twenty-five kilometres from the city, adjoining new livestock colonies and in line with the long term city expansion plan. Construction work began in March 1955. The main building is now in course of erection and will be ready for installation of equipment in the latter half of 1956.

8. A Milk Commission, as provided for in the plan of operations, was formed in 1953, but its powers have until now been somewhat restricted owing to lack of statutory support. Draft legislation was recently finalised for submission to Parliament, giving full legal powers to the Commission and defining its duties, which will include responsibility for implementing the signed plan of operations and for negotiating any subsequent agreements with UNICEF on milk conservation. Since the clarification of the initial difficulties, effective action has been taken by the Iraqi Development Board in co-operation with the Ministry of Agriculture.

9. Training of national personnel to manage the operation has been completed. The full-time technical director, the plant manager and a milk engineer have each spent periods abroad in training courses organised by FAO in co-operation with UNICEF technicians.

/10. Procurement of

10. Procurement of a major part of the equipment required has been initiated and, subject to the Board's approval of additional funds, delivery can be assured of all equipment required for the plant to begin operations late 1956.

11. At the time of approving assistance to Iraq for a milk conservation programme the Board also allocated 252,000 pounds of skim milk powder for distribution to 10,000 infants, children and pregnant and nursing mothers in the Baghdad area. Distribution of this milk has been co-ordinated with the assistance of an FAO nutritionist with the plans organised under the UNICEF-assisted MCW and school feeding programmes (E/ICEF/L.419 and L.812) and is being satisfactorily carried out.

#### Revised Plan of Operations

12. In order to expand and revise the original plan as discussed above, it would be necessary to amend the plan of operations as follows:

- a) establishment of a dairy with a total capacity of 40,000 litres per day, comprising 14,000 litres of pasteurised and 26,000 litres of sterilised milk;
- b) provision of milk collection and distribution facilities adequate to handle the enlarged capacity;
- c) increase of the quantities of free and heavily subsidised milk to be made available to mothers, infants and children. It is now calculated that at least 40,000 beneficiaries per annum will receive free milk when the plant is in full operation.

#### UNICEF Commitments

13. The revised total list of equipment to be provided by UNICEF would be as follows:

- a) Raw milk reception and storage equipment
- b) Milk processing equipment
- c) Cream and butter equipment
- d) Refrigeration equipment
- e) Boilers
- f) Laboratory equipment
- /g) Equipment for

- g) Equipment for collecting centres
- h) Supervision of installation

The total estimated cost to UNICEF of above items (exclusive of freight) is \$242,000.

14. The additional funds required for the expanded plant are calculated as follows:

a) Total cost (exclusive of freight)	\$242,000
b) Previous allocation	<u>150,000</u>
c) Balance required for equipment	92,000
d) Freight on additional equipment	<u>8,000</u>
e) Additional allocation recommended	<u>\$100,000</u>

Government Commitments

15. The estimated cost to the Government to carry out the expanded plan is equivalent to U.S.\$2,093,000, including the following capital and recurring costs:

	<u>U.S. \$ equivalent</u>
a) <u>Non-recurring costs</u>	
Capital expenditures, land, buildings services, etc.	1,000,000
Working capital	200,000
Cost of distributing dried milk already supplied	<u>67,000</u>
Total non-recurring costs.....	1,267,000
b) <u>Annual recurring costs</u>	
Free milk distribution to 40,000 beneficiaries @ \$118,000 per year for seven years.....	<u>826,000</u>
Total Government expenditures for the seven- year period of the plan of operations.....	\$2,093,000

In addition to these expenditures, the Government is investing an even larger sum in the development of cattle colonies adjacent to the dairy which will form the main future milk source for Baghdad.

/FAO Participation

FAO Participation

16. A dairy production expert provided by FAO recently took up an assignment in Iraq and the Government has further requested the services of an FAO dairy plant manager to advise during the early stages of plant operations.

Target Time Schedule

17. The revised target dates for the remaining steps covered by the proposed expanded plan are as follows:

- |  |                |
|--|----------------|
| a) Signature of amendments to the plan of operations | May 1956       |
| b) Completion of deliveries of UNICEF equipment      | September 1956 |
| c) Completion of installation of equipment           | November 1956  |
| d) Beginning of plant operations                     | December 1956  |
| e) Beginning of free milk distribution               | January 1957   |