

UNITED NATIONS
ECONOMIC
AND
SOCIAL COUNCIL



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UNITED NATIONS CHILDREN'S FUND

Programme Committee

RECOMMENDATION OF THE EXECUTIVE DIRECTOR
FOR AN APPORTIONMENT TO MEXICO FOR A CHILD FEEDING
AND MILK CONSERVATION PROGRAMME

1. In this paper the Administration recommends, subject to the availability of funds, the apportionment to Mexico of \$443,000 from the Latin American Area allocation for equipment for a milk drying plant (\$381,000), and the inauguration of a child feeding programme (\$62,000) for two years, prior to the expected date when the plant can be brought into operation. If this recommendation is approved, it will be the first allocation to Mexico for either child feeding or milk conservation.

The Problem of Child Nutrition

2. Studies made by the Institute of Nutrition of the Secretariat of Health and Assistance and other Mexican investigators, have shown the diets of large numbers of Mexican mothers and children to be significantly deficient in animal protein, Vitamin A, B Complex and C, and calcium.

3. Among the children included in these studies, of those from one to six years, 64% were underweight. In the children of 7 to 12 years of age the percentage was more limited, with 39% being underweight.

4. The following table shows the school age population and the infant and child mortality rates in those states in which the feeding programme is to be developed.

/ State

<u>State</u>	<u>School Age Population 6-14 years</u>	<u>Infant Mortality (Per 1,000 live births)</u>	<u>Child Mortality 5-9 years (Per 1,000 children).</u>
Nuevo Leon	167,939	109.2	4.1
Nayarit	34,377	128.9	6.5
Sinaloa	144,668	98.8	4.1
Coahuila	167,929	129.8	5.5
San Luis Potosi	210,395	102.8	7.4
Guanajuato	324,002	152.4	11.5
Jalisco	395,559	152.3	8.7
Michoacan	348,505	115.4	9.0
Puebla	383,361	140.5	10.4
Veracruz	495,981	87.5	8.2
Yucatan	107,087	119.1	6.3
Tlaxcala	<u>69,814</u>	143.1	7.0
	<u>2,849,617</u>		

Current Child Feeding

5. There is at present a school lunch program in Mexico City operated by the Asociacion Pro-Nutricion Infantil (APNI) and the Secretariat of Health and Assistance. Forty thousand school children are benefiting from these programmes. To date, this programme has been extended outside of Mexico City only to 4,000 children in Monterrey.

6. Approximately 60,000 additional children are being included in the programme at the beginning of 1954 and by the end of the year the programme will reach a total of 100,000 children.

/ 7. In the

7. In the programme sponsored by the Secretariat of Health and Assistance in Mexico City, children make a small contribution toward the cost of the breakfast.

8. While the development of child feeding services in Mexico City has been encouraging, there has not yet been a similar development in other parts of the country. Only in Monterrey has a regular child feeding service been established. It is now the desire of the Government to begin the distribution of supplemental foods to needy children in twelve states, using domestically produced milk for the conservation of which UNICEF aid is requested.

Milk Production

9. Milk production in Mexico is estimated at about 1.9 billion liters of milk annually. With a national population of 27 million, this allows an annual per caput consumption of about 70 liters. This is roughly 20% of the annual per caput consumption in the United States. Experts who have studied the situation state that there are considerable opportunities for increasing milk production in the country. However, of recent years the population increase has been more rapid than the increase in milk supplies because of the temporary set-back caused by the eradication programme for foot and mouth disease. Five percent of the adult cows and 50% of the calves below 6 months of age were slaughtered in 1947. Now the disease is believed to be fairly well under control except for localized outbreaks.

10. The area selected by the Government and visited by representatives of FAO and UNICEF consists of parts of the two states of Michoacan and Jalisco; the major portion lying in Michoacan. It extends roughly 50 kilometers east and west of Jilquilpan. The northern and southern radius is less extensive. The grazing lands west of Jilquilpan average about 500 meters higher in elevation than the flatlands to the east and northeast.

/ 11. Milk

11. Milk production in the area under consideration is estimated at 37,000 liters of milk daily in the dry months of March to June, and at 110,000 liters daily in the flush season, July to October. This is exclusive of the present local consumption of milk.

12. Present use of milk is primarily for making unpasteurized and uncured cheese on the premises of the local milk producers. Only 20,000 liters during the peak season are purchased by an existing private processing plant located in an adjoining region. Prices of milk containing approximately 3.5% butterfat average around 63 centavos (5.1 cents U.S.) per liter to the producers.

13. The principal reasons for the Government wishing to convert this area from cheese production to milk drying are:

- a) The desire of the Government, particularly the Ministry of Health, to extend school feeding programmes to children in rural areas.
- b) The desire on the part of the Secretariat of Health and Assistance to enforce the National milk code which prohibits the sale of unpasteurized cheese.
- c) The belief on the part of the Government that the establishment of a modern milk drying plant will favourably influence future milk production in the area. This area has great potentialities in that direction.

Proposed Plan of Operations

14. The long-range objective of the Government is to improve the diet of the country's children particularly in the rural areas, by providing a protein rich supplementary food to their present diet which is based principally on corn and beans.

/ 15. The immediate

The immediate objectives of the project are :

- a) To establish a milk drying plant in the state of Michoacan, with a 6,000 liter per hour drying capacity. This plant is from two to four times the capacity of previously authorised UNICEF assisted plants, but is not considered as exceptionally large by commercial milk drying companies. This large capacity is required to meet the requirements of the distribution plan envisioned, and is made possible by the contemplated large-scale shift out of cheese manufacture. The capacity would be fully used during the flush season, which it is planned to lengthen progressively by improved animal husbandry.
- b) To organize a national child feeding programme until the plant begins production based on UNICEF-furnished dried skim milk, with bread and fruit provided for by the Government. The feeding programme would be started immediately with UNICEF milk in the following states for a total of 160,000 children as indicated below :

Through Schools

Nuevo Leon	10,000
Nayarit	5,000
Sinaloa	5,000
Coahuila	10,000
San Luis Potosi	10,000
Guanajuato	10,000
Jalisco	10,000
Michoacan	10,000
Puebla	10,000
Veracruz	10,000
Yucatan	5,000
Tlaxcala	5,000
	<u>100,000</u>

/Through

Through Maternal Child Welfare Centres

Coahuila - Comarca Lagunera	1,500
Sonora - Valle de Yaqui	1,000
Tamaulipas - Valle Bajo del Rio Bravo	1,500
Guanajuato - Salamanca	2,000
San Luis Potosi - Zona de las Huastecas	1,500
Veracruz - Zona de los Tuxtlas	1,500
Tlaxcala - Humantla	1,000
	<u>\$10,000</u>

In addition to the children to be reached through the above distribution centres, the programme would include 50,000 children in kindergartens, day care centres and rural centres.

16. By 1955 the number of school children to be aided would be increased to a total of 150,000.

17. The coordination and administration of the feeding program will be under the Secretariat of Health and Assistance. Through a special office which has been created for this purpose the work of the state committees will be developed in keeping with policies and technical supervision to be extended to all states participating in this programme. Emphasis will be on aiding school children, using teachers and community groups to assist, and it is anticipated that wherever this programme is undertaken, it will serve to stimulate and develop as fully as possible related activities for improving nutrition.

18. The Secretariat of Health and Assistance will have overall responsibility

/for the

for the child feeding programme, as well as for the milk conservation programme including:

- (a) financing, organizing and establishing the drying plant;
- (b) enforcement and control of all health and sanitary measures required in the production and distribution of the dried milk;
- (c) distribution of the dried milk provided by UNICEF and that produced by the plant.

19. The eventual ownership and responsibility for operation of the plant may be vested in the Cattlemen's Association of Jiquilpan which would function as a producer's co-operative. The Government, however, through the Secretariat of Health and Assistance, will have overall responsibility for organizing and financing this plant through the co-operative.

20. All of the milk powder produced by the plant during the life of the plan of operations (five years from the start up of the plant) will be used by the Ministry of Health in the child feeding programme. The plant in addition to approximately 1,721,500 kgs. of skim milk powder annually will also produce about 808,000 kgs. of pasteurized butter for sale on the domestic market. It is estimated that revenue from the sale of butter will offset about 75% to 80% of the total cost of operating the plant, including the purchase of the milk from producers. It is anticipated that the output of the plant may be increased by one-third during the first five years of plant operation by stimulating year-round milk production.

21. The number of beneficiaries planned each year is as follows:

(a) UNICEF milk for:

1954 - Schools	100,000
MCW centres	10,000
Kindergartens, etc.	<u>50,000</u>
Total	<u>160,000</u>
1955 - Schools	150,000
MCW centres	10,000
Kindergartens, etc.	<u>50,000</u>
Total	<u>210,000</u>

/(b) Milk from

(b) Milk from drying plant:

1956-1960	Schools	175,000
	MCW Centres	10,000
	Kindergartens, etc.	<u>50,000</u>
	Total	<u>235,000</u>

22. If the anticipated increases in output of powder is achieved during the five-year period, an additional 95,000 school children could benefit from it.

UNICEF Commitments

23. UNICEF will provide the following:

- (a) equipment for reception, pasteurizing, cooling, separating, clarifying, bottling, storage, evaporating, drying and powder packaging; steam generation, electric generation, refrigeration, air compressor; laboratory equipment for milk quality control;
- (b) supervisory installation and erection engineering services;
- (c) fellowships for 3 senior plant staff personnel to be administered through FAO;
- (d) 6,200,000 pounds of skim milk powder to be used prior to operation of the drying plant.

24. Cost of items (a) and (b) in paragraph 23 above is estimated at \$375,000. The cost of fellowships is estimated at \$6,000; and the imported dried milk at \$62,000, making a total cost to UNICEF of \$443,000.

Government Commitments

25. The Government of Mexico undertakes, in connection with the plant, to provide or arrange to have provided by the producers cooperative.

- (a) Site, buildings and service roads for the plant;
- (b) Necessary local service (water, electricity, drainage, etc.);
- (c) Personnel necessary for the proper operation of the plant;
- (d) All packaging materials for plant products;
- (e) Inland freight, storage and handling charges for all equipment and supplies provided by UNICEF;
- (f) Installation costs of all equipment;
- (g) Butter-making equipment;
- (h) Necessary transport.

The cost of the above items is estimated at \$425,000.

/ The Government

26. The Government undertakes to purchase, or cause to be purchased by the several states or by cooperating private organizations, the total output of dried skin milk produced by the plant during at least the first five years of its operation and to use this milk in child feeding programmes. Production of the plant is estimated at 1,721,500 kg. per year with an estimated value of 4,648,050 pesos (\$537,350). This estimated quantity may increase by one-third within a five year period. The cost of producing milk powder in this proposed factory has been calculated to be in line with such costs in presently operating plants elsewhere.

27. The transport and other distribution costs for the powder are estimated at 500,000 pesos (\$57,800) annually.

28. The estimated cost of distributing the 6,200,000 pounds of milk powder to be provided by UNICEF, and the value of other local foods used in the school lunch programme, plus the cost of supervisory personnel is estimated at 3,577,500 Pesos (approximately U.S. \$413,600) for the first year and at 5,077,500 Pesos (approximately U.S. \$587,000) for the second year.

FAO Participation

29. The plan for the milk drying plant proposed herein has been developed with the assistance of FAO and has its technical approval. If this recommendation is approved, FAO is prepared to work with the Ministry of Agriculture and other responsible Governmental agencies in a coordinated milk improvement programme in the area. FAO is prepared to administer the UNICEF-financed fellowships.

Target Time Schedules

30. (a) The target time schedule for the plant is as follows:

Approval by UNICEF Executive Board	March 1954
Selection of fellows for training	May 1954
Plan of Operations signed	June 1954
Start Building	September 1954
Contracts UNICEF equipment	August 1954
Contracts Government equipment	August 1954
Building completed	May 1955
Local services completed	August 1955
Equipment installed	November 1955
Start operation	December 1955

/(b) The target

(b) The target schedule for the feeding programme is as follows:

First shipment of UNICEF milk to arrive	April 1954
Initiation of programme	May 1954

31. The feeding programme with UNICEF-furnished milk is to be continued over a two year period. Preceding the arrival of the first supplies, the staff of the newly created office will make the necessary preparations so that the actual programme can be initiated in accordance with the above schedule.

UNICEF Representation and Basic Agreement

32. The Area Office for Central America and the Caribbean will continue to cooperate with the Mexican Government in the development of this project. In addition, milk conservation engineers from the Headquarters office will visit Mexico when necessary to assist with the technical phases of the project. The signing of the Basic Agreement is under discussion with the Government.

Previous UNICEF Aid

33. Previous UNICEF aid to Mexico totals \$257,800 as follows:

	<u>Approved</u>	<u>through 1953</u>	<u>Shipped</u> <u>1954 & after</u>
Malaria Control	Sept. 1953	-	200,000
BCG (Joint Enterprise)	Nov. 1949 & Nov. 1950	<u>57,800</u>	-
		\$57,800	<u>\$200,000</u>

Recommendation

35. The Administration recommends, subject to the availability of funds:

(a) The apportionment to Mexico from the Latin American Area Allocation of the following amounts:

- | | |
|--|------------------|
| (1) For supplies, equipment and related services for a milk drying plant to be located in the State of Michoacan | \$375,000 |
| (2) For fellowships to be administered in 1954 by FAO in cooperation with UNICEF | 6,000 |
| (3) For starting and continuing a child feeding programme until the above plant comes into operation | <u>62,000</u> |
| | <u>\$443,000</u> |

(b) That the Administration be authorized to approve plans of operation as outlined above.