

MOROCCO
NUTRITION GRANT
PHASE I - PPP

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I. THE PROBLEM:

With 46% of its population under 15 years of age and with more than 2.5 million children - or 16.3% of the population - between 0-4 years of age, Morocco faces enormous problems in maintaining an equilibrium between its population growth rate and its socio-economic development. In the last decade, the agricultural production in the country has increased by about 2% p.a. while the population has grown more than 3% annually, resulting in a devastatingly low nutritional status of its infant and child population. Several studies were conducted during this period in order to determine the nature and scope of malnutrition in Morocco.

In 1960, a United Nations Food and Agriculture Organization (FAO) survey demonstrated a deficiency in intake of total calories, proteins (especially animal proteins which counted only for 11.3% of the total protein intake), fats, calcium, and vitamins A and C. When broken down by income level, these deficiencies were highly prevalent among the lower income groups. The survey concluded that 1) 80% of the population had a poor nutritional status, 2) protein deficiency was the critical nutritional problem, 3) 80% of caloric intake was furnished by cereal products (mostly wheat and barley), and 4) the pre-school age child was the most vulnerable.

In 1967, the World Health Organization (WHO) and the Ministry of Health made a study of 1,412 children in the 0-14 age group, chosen by random sampling in the cities of Rabat and Casablanca and in the rural areas north of the Rif and south of the Tafilalet. In the study, the weight curves were normal at birth until six months, but well under the lowest 3 percentile curves from 6 months to 14 years. (In Morocco, the weaning period begins after the sixth month.) Of 277 children from 6 months to three years, 42 or 15% had edemas due to protein deficiency. When limited to the rural children, the incidence of clinically demonstrable protein malnutrition was 32.5%. In 29.3% of the children examined, clinical symptoms of D avitaminosis were detected.

In 1970, a Ministry of Planning and Development nationwide survey demonstrated the imbalance in the Moroccan diet.

In 1972, the Ministry of Health conducted a nationwide survey of children in the 0-4 years age group. 41.58% of the 7,000 children surveyed were suffering from second degree protein/caloric malnutrition, meaning that the children were between 20 and 40% under weight, due to insufficient intake of proteins and calories. Another 4.66% were victims of third degree malnutrition, a serious protein - caloric deficiency evidenced by a weight loss greater than 40 percent. Such children are threatened by death and require hospitalization.

These studies indicate that there is a qualitative and quantitative deficiency in the diet of a significant number of Moroccan children.

II. ACTIONS BEING TAKEN TO SOLVE THE PROBLEM:

Aware of these problems the Government established a Royal decree of May 8, 1959, an Inter-ministerial Commission for Food and Nutrition represented by the Ministries of Public Health; Youth, Sports and Social Affairs; Interior; National Education; and Agriculture. The Commission's mandate is to coordinate activities aimed at alleviating Morocco's nutrition problem on a national scale. While the Commission does not meet regularly as an entity, the member Ministries have been active in varying degrees in nutritional efforts. The Ministry of Public Health, through Maternal and Child Centers (MCH) attached to each neighborhood clinic, supervises health conditions of pre-school children. The children's growth is closely watched, involving some supervision of their feeding. Primarily, the role of MCHs is educational. The Ministry of Youth, Sports, and Social Affairs works through its existing network of Centres Feminins along parallel lines. The Ministry of Interior maintains the maisons communales where elementary nutrition and the problem of deficiency diseases are discussed. The Ministry of National Education has included elements of nutrition in the high-school science curriculum. Finally, the Ministry of Agriculture lends its support to projects in nutrition education or applied nutrition by supplying technical assistance, materials and equipment.

III. AID's PROPOSED CONTRIBUTION:

Since involvement by Morocco's Inter-Ministerial Commission in the wider field of nutrition is still in its early stages and not yet reflected in a strong institutionalized approach, assistance to the various ministries must be designed around targets of opportunity. This would involve mainly consultations, trial and demonstration projects in nutritional technology and training opportunities for Moroccan specialists.

In May 1974, a nutrition design team visited Morocco and recommended to the GOM the development of a national strategy that would:

- (1) identify and implement intervention schemes which will increase the nutritional intake of priority target groups such as infants, pre-school age children, and pregnant and nursing mothers,
- (2) increase the availability of nutritionally improved food for consumption by the lowest income segments of the Moroccan population and
- (3) alleviate malnutrition among a substantial segment of the target population and thus develop to the utmost the physical and mental potential of the disadvantaged.

The design team proposed the establishment of a nutrition system study unit within the Ministry of Planning to assist in the formulation of a nutrition strategy. The work of this unit would last 24 months and the total U.S. input is estimated at \$230,000.

In addition, other project activities were proposed for early implementation and included:

✓ Training in Nutrition Analysis and Planning at MIT for 3 or 4 key Moroccan professionals. U.S. input: \$25,000.

Introduction of Intensified Nutrition Education into the Activities of Foyers Feminins (Women's Centers). There are 320 such centers that provide instruction and training in home economics, child care, and health education. It is proposed to bring a nutrition message to these centers via audio-visual media. Including technical services, the U.S. input would amount to \$60,000.

✓ Testing of a Pilot Food Fortification Scheme. This would include a feasibility study of the potential efficacy of food fortification in Morocco, identification of a desirable product mix, and a pilot project to simulate commercial production of the fortified food and to test its acceptability in terms of quality and unit price. A \$365,000 budget will be needed.

Upgrading the Capabilities of Provincial Supervisors and Monitrices to Teach Nutrition in Social Education and Maternal Child Health Centers.

Goal of project would be to reach 64,000 mothers directly in a one-year period with basic nutrition education affecting about 128,000 children. The project would comprise:

(a) addition of two professional nutritionists to the Catholic Relief Services staff for a 12-month period;

(b) provision of in-country training for 400 monitrices who are already managing the Entr'aide Nationale (Social Welfare Agency) MCH centers;

(c) payment of salary for the first two years of provincial supervisory monitrices and their third-country training in nutrition education. Two-year budget would be \$200,000 in the form of a grant to CRS. A three-year Nutrition Grant totalling \$880,000 has been requested to cover all components.

✓ IV. PHASE I - GRANT TO UPGRADE THE CAPABILITIES OF PROVINCIAL SUPERVISORS AND MONITRICES TO TEACH NUTRITION IN SOCIAL EDUCATION AND MATERNAL CHILD HEALTH (MCH) CENTERS:

The GOM organization responsible for social welfare services is "Entr'aide Nationale." "E.N." has established 150 MCH centers throughout

the country to provide nutrition education and food supplements to 95,000 children aged 2 to 5 and their mothers. The American voluntary agency, Catholic Relief Services (CRS) has been working very closely and very effectively with "E.N." in establishing these centers. C.R.S. has provided technical assistance and supervision, and distributes PL 480 Title II commodities at the centers. There are now 188 such centers reaching 95,000 women and children and providing basic training in nutrition, sanitation, hygiene, infant care, and related subjects through monitricies trained in CRS seminars. AID-provided weight charts are kept for the children. These centers are supported and operated by the Red Crescent Society, the National Union of Moroccan Women, private organizations, the Ministry of Interior, and the Ministry of Labor, Social Affairs and Youth and Sports. Center operations are supervised by "Entraide" and CRS staff and are unsophisticated but effective. CRS has requested a grant to upgrade these "E.N." MCH centers.

The objective is to enhance the capability of the monitricies who work in the 200 centers served and to establish for each province a more highly trained "area supervisor" to be in charge of the centers in each province. The goal is to reach some 64,000 mothers directly in a one-year period with basic nutrition education. About 128,000 children will be reached in the centers. Among subjects to be stressed will be the most efficient use of family budget and of local foods (and as available, appropriate use of PL 480 and new weaning foods). In rural areas, nutrition education will be combined with education in subsistence food production at the community and family level.

Specifically, the proposed activity would include:

- 1) In-depth training of 15-21 "supervisors" to direct the programs in the provinces. The training, of perhaps 3-months duration, might take place at the Tunisia Institute of Nutrition or in a similar institution. Payment of salary for the first two years would be paid under the grant as well as third-country training. Funding from other sources would be required beyond this period.
- 2) Short-term training of monitricies, both those joining the program and those already at work, will include two-week seminars held throughout the country. One or two CRS staff nutritionists would be in charge of training activities, assisted by two teachers, a translator and an aide. Since there are two monitricies in each center, a total of 400 monitricies would be trained or retrained during the one-year upgrading program.

Teaching materials and audio-visual aids will be provided as appropriate for each center as well as other equipment. The project would also have available to it the professional assistance of the CRS area nutritionist with long experience in materials development, and the coordinating counsel of the nutritionist in the Health Ministry.

The two-year budget for this activity would be \$200,000.

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