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# **OPERATION FLOOD PROGRAMME - AN OVERVIEW**

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### Introduction

Operation Flood was introduced in 1970, was a project of India's <u>National Dairy Development Board (NDDB</u>), which was the world's biggest dairy development program. It transformed India from a milk-deficient nation into the world's largest milk producer, surpassing the USA, with about 17 percent of global output. In 30 years it doubled milk available per person, and made dairy farming India's largest self-sustainable rural employment generator. It was launched to help farmers direct their own development, placing control of the resources they create in their own hands. All this was achieved not merely by mass production, but by production by the masses.

The <u>Anand pattern experiment at Amul</u>, a single, cooperative dairy, was the engine behind the success of the program. <u>Verghese Kurien</u>, the chairman and founder of Amul, was named the chairman of NDDB by the then Prime Minister of India Lal Bahadur Shastri. Kurien gave the necessary thrust using his professional management skills to the program, and is recognized as its architect.

### **Operation Flood Programme**

Operation Flood Programme was conducted in three phases-

### Phase I

Phase I (1970–1980) was financed by the sale of skimmed milk powder and butter oil donated by the European Union (then the European Economic Community) through the <u>World Food Program</u>. NDDB planned the program and negotiated the details of EEC assistance. During this phase, Operation Flood linked 18 of India's premier milksheds with consumers in India's major metropolitan cities: Delhi, Mumbai, Kolkata and Chennai, establishing mother dairies in four metros. Operation Flood – I was originally meant to be completed in 1975, actually spanned the period of about nine years from 1970–79, at a total cost of Rs.116 crores. At the start of Operation Flood-I in 1970 certain aims were kept in view for the implementation of the programs: Improving the organized dairy sector in the metropolitan cities Mumbai (then Bombay), Kolkata (then Calcutta), Chennai (then Madras) and Delhi through marketing, increasing producers' share of the milk market, and speeding up development of dairy animals in rural areas to increase both production and procurement.

# Objectives

- 1. Organizing the dairy co-operatives at the village level,
- 2. Providing the physical and institutional infrastructure for milk procurement, processing, marketing, and
- 3. Production enhancement services at the Union level and establishment of city dairies.

### Achievements

- 1. Establishment of 13,000 Dairy Co-operative Societies (DCS) in 39 milk sheds with membership of 18 lakh farmers.
- 2. Achievement of a peak milk procurement of 34 lakh litres per day and marketing of 28 lakh litres per day.

### Phase II

Operation Flood Phase II (1981–1985) increased the milk-sheds from 18 to 136; urban markets expanded the outlets for milk to 290. By the end of 1985, a self-sustaining system of 43,000 village cooperatives with 4,250,000 milk producers were covered. Domestic milk powder production increased from 22,000 tons in the pre-project year to 140,000 tons by 1989, all of the increase coming from dairies set up under Operation Flood. In this way EEC gifts and the World Bank loan helped promote self-reliance. Direct marketing of milk by producers' cooperatives increased by several million liters a day.

# Objective

- a. Government of India provided 273 crores in Sixth Five Year Plan.
- b. A financial help of 235.2 crores was provided by World Bank.
- c. EEC provided a food help of 1, 88,000 tonnes of SMP and 76,200 tonnes Butter Oil.
- d. NDDB itself financed 77.3 crores.

# Achievements

- a. The numbers of village level Co-operatives reached to 34,500 covering 36 lakh farmers in 136 rural milk sheds.
- b. The peak milk procurement increased to a level of 79 lakh litres per day and marketing to 50 lakh litres per day.

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# Phase III

Phase III (1985–1996) enabled dairy cooperatives to expand and strengthen the infrastructure required to procure and market increasing volumes of milk. Veterinary first-aid health care services, feed and artificial insemination services for cooperative members were extended, along with intensified member education. Operation Flood's Phase III consolidated India's dairy cooperative movement, adding 30,000 new dairy cooperatives to the 43,000 existing societies organized during Phase II. Milk-sheds peaked at 173 in 1988-89 with the numbers of women members and Women's Dairy Cooperative Societies increasing significantly. Phase III increased emphasis on research and development in animal health and animal nutrition. Innovations like vaccine for The ileriosis, by passing protein feed and urea-molasses mineral blocks, all contributed to the enhanced productivity of milk producing animals

### Objective

- a. This third Phase mainly focused on the strengthening of dairy co-operation.
- b. Institutional strengthening in the form of training, research market promotion, monitoring and evaluation.
- c. To expand the infrastructure in all major markets, linking them to milk sheds through the national milk grid (NMG).

### Achievements

- a. The no. of primary Dairy Co-operative Societies increased to 70,000 covering 170 milk sheds with 93.14 lakh farmer memberships.
- b. Sum of 26,000 tonnes of balanced feed, 24,000 tonnes of bypass protein feed was sold away through co-operatives.
- c. Average milk production per day reached to 115 lakh litres per day and total markets of milk is 100 lakh litres per day.

Features	OF-I	OF-II	OF-III
Period	July 1, 1970 to March	October 2, 1979 to March	April 1, 1985 to April
	31, 1981	31, 1985	30, 1996
Number of Milksheds covered	39	136	170
Number of Anand Pattern DCSs set up ('000)	13.3	34.5	72.7
Number of Members (in million)	1.8	3.6	9.3
Average Milk Procurement (Million Kg Per Day)	2.6	5.8	10.9
Processing Capacity in Rural Dairies (Million Ltrs Per Day)	3.8	8.8	18.1
Drying Capacity (Metric Tons Per Day)	261.0	508.0	842.0
Liquid Milk Marketing (Million Ltrs Per Day)	2.8	5.0	9.9

Source :- http://www.amuldairy.com

Here we see feature of operation flood programme as per phases  $1^{st}$ ,  $2^{nd}$  and  $3^{rd}$  from 1970 dairy capacity increase 261.0 (metric tons per day)to 842.0 in 1996 (metric tons per day). There are also increases average milk procurement four times much more in phase III than Phase I.

### Conclusion

Operation Flood was conceived and implemented as much more than a dairy programme. Rather, dairying was seen as an instrument of development, generating employment and regular incomes for millions of rural people.

### References

- 1. Development of Dairy Industry in India Article by Puja Mondal.
- 2. http://www.amuldairy.com.
- *3. www.nddb.org.*