Agriculture by Susan Brady

Building India's dairy industry

The National Dairy Development Board's "Operation Flood" will raise per capita milk production 40 percent by 1986.

Foodgrain production in India is expected to reach 134 million tons this year, a new record, and the most prominent indicator of India's progress in agricultural development. Less well known but as impressive is the country's progress in developing a modern dairy industry—a task accomplished through the kind of program of producerorganization and parity pricing that has made the U.S. dairy industry the most efficient in the world.

What is involved is a 30-year organizing process to educate and organize individual dairy farmers into cooperative production and marketing associations, break up the combined milk-dealing and money-lending operations run by urban contractors, and establish processing and distribution facilities in the major market centers, as well as build up the range of veterinary, improved feed, and related essential services.

The effort is synonymous with AMUL, Anand Milk Union Limited, and with AMUL's general manager since 1949, Dr. Verghese Kurien, also first chairman of the National Dairy Development Board set up in 1965.

The tough and knowledgeable Dr. Kurien and his colleagues built up AMUL in the western part of India near Bombay as a model of what was possible throughout the country. The AMUL union is made up of 890 village societies.

Milk is collected twice a day, its value determined on the basis of fat

content, and taken to the district dairy owned by the societies comprising the union. At the district dairy the milk is pasteurized and then sent to the government-owned city dairy. Excess milk is siphoned off and converted into milk products.

AMUL provides its members with mixed cattle feed daily. The service not only enhances productivity but is essential for the many small producers who do not own sufficient land to maintain cows or buffaloes. But before producers could take advantage of this they had to be convinced that the hard, dry, machine-made pebbles were really adequate substitute for green fodder!

AMUL also has 76 veterinarians in five centers throughout the district who visit each village once a week providing services to members and nonmembers alike.

The village societies use the annual surplus they earn to invest in the construction of schools, roads, wells, and dispensaries in their villages, in addition to distributing a bonus to members.

In 1970 the NDDB drafted and won ministerial approval for a program called "Operation Flood." The overall objective: to build an efficient dairy industry capable of meeting India's needs. The core strategy was to gain a dominant share of the milk markets in the country's four largest cities—Bombay, New Delhi, Calcutta and Madras—by means of establishing

cooperatives on the AMUL model in 17 milkshed districts of ten states around these centers.

Only by securing these markets could a steady demand for the output of the rural dairies be guaranteed, in turn guaranteeing farmers a fair return. The second stage of "Operation Flood" will extend the industry co-ops to 27 milksheds, supplying milk to all towns with a population over 100,000.

Operation Flood was ingeniously financed by the reconstitution and sale of butter oil and dried skim milk donated by the U.N. World Food Program.

The results of Operation Flood are lawful. The country's milk-processing capacity has increased sixfold since the project began, and the capacity of the four major-city dairies alone nearly tripled. Rural milk procurement through the co-ops increase more than sixfold. The annual growth rate of milk production, which was 1.6 percent in the fifties, and .5 percent in the sixties, was 4.5 percent throughout the seventies. Production in 1980 was 30.2 million tons.

Milk prices have risen, but, just as in the United States, the price increases have actually lagged behind rises in the Indians' consumer price index. And Dr. Kurien is not inclined to be defensive about the industry in the face of the same consumerist campaign U.S. dairymen faced this year.

"The pivotal point of my program is the pricing of agricultural inputs and outputs," he stated. "India is a rural country. Our urban citizens must accept that food prices, cotton prices, and other farm goods' prices keep pace with the prices of goods and services produced in urban areas."