

## The White Revolution In India That Created A Milk History

Ranita Ray Updated: November 23, 2022 19:11 IST

India's story as the largest producer of dairy milk is eventful. There was a phase when the country's milk production hit an all-time low. In 1970, with Operation Flood under the leadership of Verghese Kurien, India embarked on a journey to create history by replicating the 'Anand Pattern'

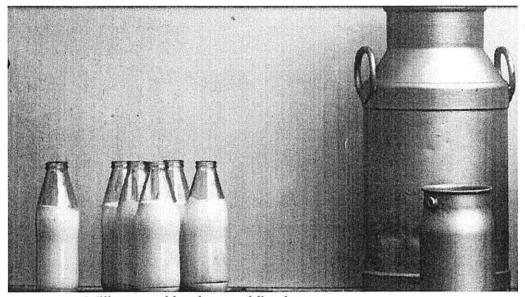


Image credits: Milk can and bottles, worldbank.org

Every year on November 26, India celebrates National Milk Day honouring the birth anniversary of Verghese Kurien. What is the story behind it? We need to do a bit of time travel. From a sluggish milk output in the 1950s and 1960s, India accounts for 23% of global production (2020-21). In 1964, India had to import 55,000 tons of milk powder annually. Despite having a large cattle population, the milk production was at an all-time low. It started the affecting the countrymen's health, especially economically underprivileged class. The evolution of India's dairy sector and the remarkable role played by dairy cooperatives since the commencement of Operation Flood are vital elements of the country's growth account. India is now the world's largest milk producer and contributes 21% to global milk

<u>oroduction</u>. And a major credit goes to Verghese Kurien, popularly called the "Father of White Revolution", who took charge of Operation Flood in 1970.

## The milk crisis

During the 1950s and 1960s, India's dairy sector was drastically hit since it was a milk-deficient country that relied heavily on imports. Despite possessing the world's highest cattle population, the industry was struggling to exist. In 1950-51, the country's per capita milk consumption was only 124 grammes per day. By late 1960's, this figure had fallen to 107 grammes per day, one of the world's lowest and much below the basic dietary guidelines.

## **Emulating Anand Pattern and genesis of Operation Flood**

Meanwhile, the dairy farmers were fighting another battle. Tribhuvandas Patel, who voiced their concerns against unfair treatment, approached Sardar Ballavbhai Patel. Ballavbhai advised him to form a cooperative and supply milk directly to the Bombay Milk Scheme. That was when Tribhuvandas founded Kaira District Co-operative Milk Producers' Union or KDCMPUL. The Amul cooperative was founded on December 19, 1946, in reaction to traders' and agents' exploitation of small-town milk producers. The KDCMPUL had begun pasteurising milk for the Bombay Milk Scheme by June 1948.



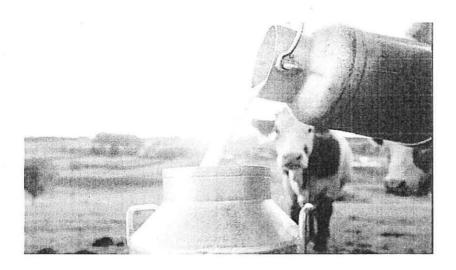
Verghese Kurien arrived in Anand in 1949 to work as an officer in the dairy division for five years. The Indian government assigned him to Anand's rundown experimental creamery and he met Tribhuvandas Patel. Eentually, Patel convinced him to stay and assist him in improving his dairy cooperative. His technical knowledge brought drastic transformations.



Verghese with PM Shastri at Anand, Image Source: LiveHistoryIndia@YouTube

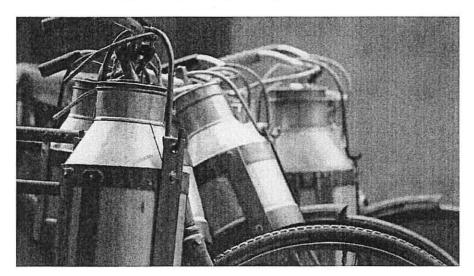
In 1964, the late Prime Minister Lal Bahadur Shastri went on a tour to Anand in Gujarat's Kheda district. This visit was going to change India's history forever. Shastri was so convinced that he wrote letters to Chief Ministers of all the Indian states expressing to replicate Amul's model. That one visit was the impetus for establishing the National Dairy Development Board (NDDB) in 1965. It issued a mandate to encourage launching the 'Anand pattern' of dairy cooperatives pan India under the Operation Flood (OF) initiative. OF was supposed to be executed in stages. The 'Anand Pattern' was a cooperative organisation comprised of village-level Dairy Cooperative Societies (DCSs) that supported district-level unions and promoted state-level marketing federation. Beginning in 1970, the NDDB duplicated the Anand Pattern cooperatives throughout India.

## India's White Revolution



Milk can at dairy farm, Image Source:Istock

Operation Flood heralded India's White Revolution. The first chairman of the NDDB was Verghese Kurien. From 1970 until 1996, the OF operated in three periods. It aided in the delivery of high-quality milk to consumers in 700 towns and cities via a National Milk Grid. It eradicated the need for middlemen, eliminating seasonal price changes. The cooperative structure enabled the entire process of producing and distributing milk and milk products to be commercially viable for farmers to do on their own. It also put an end to India's reliance on imported milk solids. India was able to meet its own dairy needs and began exporting milk powder to several other countries.



Traditional milk supply in India, Image Source: LiveHistoryIndia@Youtube

Kurien pioneered the Anand model of dairy cooperatives, which he then duplicated across the country using various "top-down" and "bottom-up" approaches. In these arrangements, no milk from a farmer was refused.

They functioned as dairy owners and took charge of the marketing, procuring, and processing of milk and milk products.

When Verghese completed his term as Chairman of the NDDB in 1998, the country had 81,000 dairy cooperatives similar to Amul. By 2019, India had over 1,90,000 dairy coops, including brands like Aavin, Nandini, Vijaya, and Mother Dairy.