

THE FATHER OF WHITE REVOLUTION

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(Late) Dr. Verghese Kurien

Our country has the largest cattle population of any nation in the world. Our people have traditionally venerated cows. Does this mean that we have a very efficient dairy industry? Unfortunately, the answer is *No*. Most of our cattle are deplorably fed and maintained and hence our yield of milk per animal is one of the lowest in the world. Nevertheless, there has been a considerable improvement in the situation over the past 25 years due to a remarkable programme *Operation Flood*, which has become irrevocably linked in the minds of discerning people with the moving spirit behind it, Dr. Verghese Kurien. It has been one of the outstanding successes that we have achieved since Independence.

Verghese Kurien was born in Calicut in Kerala on 26 November, 1921. In 1940 he obtained his Bachelor of Science (B.Sc.) degree and in 1943 the Bachelor of Engineering (B.E.) (Mechanical) degree, both from the University of Madras. He studied further at the Tata Iron and Steel Company Technical Institute in Jamshedpur and graduated from there in 1946.

In the period immediately preceding Independence the British Government offered a number of scholarships to study abroad to young Indian professionals. Kurien applied for it, hoping

to study nuclear physics and metallurgy. He was however offered Dairy Engineering. This gave a fateful turn to his career. He studied this subject in the Michigan State University in the U.S.A., obtaining the degree of Master of Science (M.Sc.) in 1948.

Kurien was yet to realise that he was being inexorably drawn into his life's work. On his return to India he was posted as a dairy expert in Anand in Gujarat and he took it up hoping to break free as early as possible and pursue his earlier interests. But he ran into a remarkable man, Tribhuvandas Patel, a freedom fighter and highly committed social worker.

One of the painful facts regarding the economic structure of our country must be mentioned here. In the case of many major commodities, such as grains, vegetables, edible oils etc., only a small fraction of what the customer pays reaches the actual producers. It is the rapacious middle men who take the lion's share. Milk was no exception. But the simple farmers of Kaira district in Gujarat decided to do something about it. On the advice of the inimitable Sardar Vallabhai Patel they formed in 1946 the Kaira District Cooperative Milk Producer's Union, destined to become famous for its brand name AMUL.

But the beginnings were quite humble. A handful of members contributed about 200 litres of milk a day. But the founders had two priceless assets. Firstly, a clear vision of their goal: the highest possible share of what the consumer pays should go to their members, the milk producers. Secondly, they had as their chairman Tribhuvandas Patel. Into this scenario Kurien was propelled by fate.

Close contact between Kurien and Tribhuvandas Patel made each realise the other's importance. Kurien came to appreciate that technological knowledge without an understanding of the farmers' problems and a commitment to their welfare ultimately brought no benefit to society. Patel on his part came to understand that ideals and commitments alone were not enough to raise the economic level of the poor milk producers to a higher level. They had to be backed by solid technical knowledge and professional management.

The gradual solidification of his emotional attachment to the milk farmers made Kurien realise that he could not break away from them as he had originally intended. The persuasion of Patel also played its part. He took great pains to procure the modern equipment that Kurien suggested. These included chillers and milk powder plants. The fact that a huge market, Bombay City, existed nearby also helped.

It is never easy to overcome entrenched vested interests with their supporters in the administration. But Kurien and Patel had the backing of the growing number of the co-operative members who came to realise that the organisation was being run for their benefit. Also the political leadership at the highest level, in

particular Prime Ministers Lal Bahadur Shastri and Indira Gandhi gave them powerful backing at the right stage.

Kurien also came to know how unreliable 'experts' are. A foreign dairy specialist asserted that buffalo's milk was unsuited to the production of milk powder. He had to be proved wrong by doing it successfully. This made Kurien form his half-humorous but wholly true dictum: "Listen carefully to the experts and then go ahead and do exactly what you feel is right".

The early period of any project to benefit the disadvantaged is always the most critical since it would have to meet the fierce resistance of vested interests, and powerful popular support to counteract it would not be available at that stage. The Anand Experiment was to have more than its share of teething troubles, but they were gradually overcome by the "enlightened stubbornness" of its leaders and the growing support of its members. Its success attracted the interest of other milk producers in Gujarat and finally the political leadership at the highest level. This latter factor was to prove crucial in its spread to the rest of the country.

In 1964, the then Prime Minister of India, Shri Lal Bahadur Shastri visited Anand and was so impressed that he requested Dr. Kurien to "transplant the spirit of Anand" to the rest of the country. Next year, the National Dairy Development Board (NDDB) was formed to realise this vision.

Dr. Kurien and his associates drew up an imaginative action plan, destined to become famous as Operation Flood. Here the aid extended by the European Economic Community (EEC) is to

be acknowledged. The huge surplus of milk powder in the EEC was donated and its sale in India formed the seed capital for the programme. During Phase I of Operation Flood, started in 1970 with Dr. Kurien as the Founder Chairman, 18 of India's best milk producing regions (Milk Sheds in the jargon of the trade!) were linked to the four principal cities, Delhi, Bombay, Calcutta and Madras. The cooperatives established under the programme guaranteed to accept all the milk delivered by the farmers at a mutually agreed price. They also provided the farmers veterinary services, expert advice and means of upgrading their cattle breeds by crossing them with superior milk yielding foreign cattle. But its greatest achievement was in channeling the bulk of the sale proceeds to the actual producers instead of to exploitative middlemen.

It is a well established fact that a change in the physical living conditions of people changes their attitudes too. Operation Flood was no exception to this. Increasing prosperity brought about a remarkable change in the attitude of the cattle farmers of the Cooperatives. They began looking to the future with confidence and realised that their fate lay in their own hands. Improved housing, hygiene and better education for their children followed as a matter of course.

During Phase II of Operation Flood, implemented during 1981-85, 136 milk producing regions were linked to over 290 urban markets. More than 4 million cattle farmers became members of the cooperatives.

Phase III of the project, from 1985-1996, consolidated the gains by building up the basic

infrastructure for procurement and distribution of milk and by providing better veterinary services and even health care services to the members. Today more than nine million farmers belong to dairy cooperatives and they pour in more than 11 million litres of milk every day into the network, to be distributed to our cities and also to be converted into milk powder and other products. Today India's per capita milk consumption is double that at independence in spite of a near tripling of the population. India is now the second largest and possibly even the largest producer of milk in the world (still it must be remembered that our per capita milk consumption is far below that of developed nations. There is a long way to go yet).

Dr. Kurien himself emphasises that the success of the programme was not a little due to the integrity and robust commonsense of the mass of simple farmer members. His respect for them increased with the years. He recounts how the belief of the farmers in the efficacy of feeding cottonseed mash to the cattle (which he did not share) was much later confirmed by scientific research. He feels that there is a lot in such folk wisdom that is being ignored or lost due to progress.

The success of Operation Flood led the central leaders to ask NDDDB to bring about a similar change with regard to some other critical commodities, namely edible oils, vegetables and fruits, salt and trees for fodder and fuel. Accordingly, the Oil Seeds Growers Cooperative Project was launched in 1979 and now covers nearly a lakh of farmers. In 1986, a pilot project was initiated through Tree Growers Cooperatives. The Sabarmati Salt Farmers Society was set up in 1987. The Fruit and Vegetable Project was initiated

in 1988. Thus the revolution in milk production that Dr. Kurien helped to launch is producing an enormous multiplier effect.

Dr. Kurien's basic conviction with regard to technological development can be summed up in one sentence: It must bring prosperity and welfare to the mass of the people (this is precisely what Gandhiji meant when he declared that what India needs is not mass production but production by the masses). Dr. Kurien is strongly against Market Economics which aims at a mindless increase in production (and profits to the big producers!) without regard to its repercussions on the bulk of the population and on the environment. He points out accurately that the advanced nations that shout themselves hoarse about "Free Markets" heavily subsidise their own farmers and protect them from foreign competition. He is all for utilising effective technology developed abroad but is against receiving massive foreign handouts that kill our own initiative. He has a profound respect for the wisdom and integrity of our farmers and feels that they only need expert guidance and effective organisation to succeed.

Dr Kurien is convinced that as long as the world is divided into haves and have nots there can be no peace. It will only mean the ultimate impoverishment of everybody.

Dr. Verghese Kurien's contributions have been widely recognised both in India and abroad. Among the honours that the nation has bestowed on him are Padma Shri (1965), Padma Bhushan (1966) and Krishi Ratna (1986). Among the International honours are the Ramon Magsaysay Award (1963) and the World Food Prize (1989).

Apart from the success of his efforts, Dr. Kurien has also served the nation greatly by setting a glowing example for the younger generation. In the earlier stages of his career, Dr. Kurien had to repeatedly face the scepticism and contempt of foreign dairy experts who felt that Indian dairy men were incapable of measuring upto modern technological standards. He used to react strongly to such taunts and vowed that he would prove them wrong - and he did. If more Indian scientists and technologists follow his footsteps, the days of India and Indians being treated with condescension will come to an end.