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जा.क्रं.जीएरीसी/12/11/2012-13 दिनांक :– / /2012

22 AUG 2012

To,

D.B. Ghotekar,
C.D. Jain College of Commerce,
Shrirampur
Dist. Ahmednagar,

Sub.:- **Publication of Research Paper in U.G.C. National Seminar on 10th & 11th August, 2012**

Respected Sir,

Congratulation, We are pleased to inform you that your paper has been accepted for U.G.C. Sponsored National Seminar which was conducted by our College on 10th & 11th August, 2012.

Your paper entitled **Operation Flood Programme** for Dairy Industry is published in the proceeding of U.G.C. Sponsored National Seminar on " **New Challenges Before the Indian Dairy Industry** ".

We are sending herewith the **Proceeding Books of this Seminar.**

Warm Regards,

Your faithfully,

(Dr. V.B. Kodag)
PRINCIPAL
G.A. College of Commerce
Sangli

L.E.S.'s G.A. COLLEGE OF COMMERCE * SANGLI

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Operation Flood Programme

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Introduction:

India has the largest number of cattle population (199 million) which include 33 million cross breeds to suit to different categories of farmers in various agro climatic conditions. Despite low genetic potential of Indian cattle breeds and shrinking feed resources, India continue to remain as largest milk producer (114 MMT, year 2010-2011) in the world.

Commercial dairying is a non farm activity which offers potential for generating additional income and employment opportunities for the rural households and improving their nutritional standards. Realising this The Government of India has attached special importance to its development. With a view to exploiting the potential for diary development Board launched Operation Flood (OF) programme in the year 1970.

Statement of Problem:

India ranks first in production of milk in the world but per capita consumption of milk is less than requirement.

Objectives of Study:

1. To study the Operation Flood Programme.
2. To study the role of NDDB in promoting the diary business
3. To study the reasons behind less milk consumption

Research Methodology :

The information necessary for research is collected from the secondary sources such as published and unpublished data, Use of library method, Use of websites related to dairy development in India.

Hypothesis:

1. India is having satisfactory cattle population
2. The role of NDDB is important in dairy development
3. The impact of Operation Flood scheme is favourable

Operation Flood Programme:

The Operation Flood programme is introduced by NDDB in 1970. The OF programme covered

262 of the total of 478 district in the country. The approach of linking the potential milk unions under operation flood yield rich dividends in the form of increased availability of milk to the urban consumers and remunerative prices to the rural milk producers through the mechanism of milk cooperatives. Now, India is the largest producer of milk in the world. The step up in the production of milk can be attributed mainly to the intensive efforts under operation flood programme supported by an improvement in the genetic stock through cross breeding and effective control of diseases.

Pre operation flood (pre-independence through 1960):

Outside of purely traditional systems, the earliest attempt at dairy development in India can be traced back to British rule, when the Defence Department established military dairy farms to ensure supply of milk and butter to the colonial army. With the growth of population in urban areas, consumer had to depend on milk vendors who kept cattle in these areas and sold their milk often door to door.

In the post independence era, with the initiation of India's first five year plan in 1951 modernisation of the diary industry became a priority for the government. The goal was to provide hygienic milk to the country's growing urban population. Initial government action in this regard consisted of promoting state owned diary plants to handle milk procurement, processing and marketing. In the first five year plan, the key village scheme (KVS), Integrated Cattle Development Project (ICDP) and some other programmes were launched to improve and strategies continued in the second five year plan.

Operation flood and pre-reform period (1970-1980):

The disappointing performance of the diary sector during the 1950s and 1960s concerned policy maker and the government of India undertook new policy initiatives in this sector. Diary development through producer cooperatives and milk production based on milk sheds in the rural areas; modelled on the successful experience of diary co-operatives in Gujarat became the corner stone at the new diary development policy. This policy initiative helped to turn the Indian dairy sector around and also led to several unarticulated spread effects. The strategy for organised dairy development in India was conceived in the late 1960s after the National Dairy Development Board (NDDB) was founded in 1965 and rested on the operation flood programme.

Operation flood programme was designed to develop dairying by replicating the Anand model dairy development. The Anand pattern including primary village cooperative societies linked to district and state cooperative unions for milk and processing and also for provision of animal health and breeding services.

The first phase of operation flood was launched in 1970 and involved organising dairy cooperation at the village level; creating physical and institutional infrastructure for milk procurement, processing, marketing and production enhancement services at the district/ union level and establishing dairies in India's major metropolitan centres. The initial targets were India's best milk sheds, linking them with the four main cities Bombay, Calcutta, Delhi and Madras. The second phase of the

operation flood programme was implemented between 1981 and 1985 designed to build on the foundation laid in the first phase; it integrated the Indian diary Association assisted dairy development project being implemented in some Indian States into the overall programme.

The third phase of Operation Flood which was completed in 1996 aimed at ensuring that the cooperative institution become self- sustaining and envisaged substantial expansion of processing and marketing. Facilities extended milk procurement infrastructure, increased outreach of production enhancement activities and professionalization of the management in dairy institutions.

During operation flood average milk procurement through cooperatives increased from 2.56 million kg per day during phase I to nearly 11 million kg per day during phase III, which was only about 6-7% total milk production in the country. However, there are variations in the proportion of milk procured to total milk production across states. The striking pattern that emerges is the predominance of cooperatives in Gujarat and Maharashtra. In some other states, the success of operation flood cooperative development was mixed due to variety of factors including political interference in cooperative governance and competition from informal/ traditional and private sector players.

Table-I: India's milk production and per capita availability (1950-51 to 2011) :

Year	Milk production (million tonnes)	Per capita availability	
		Gram/day	Kg/year
1950-51	17.0	132	48.1
1955-56	19.0	130	47.4
1960-61	20.0	127	46.3
1968-69	21.2	113	41.3
1973-74	23.2	111	40.5
1980-81	31.6	128	46.7
1985-86	44.0	160	58.4
1990-91	53.9	176	64.2
1995-96	66.2	197	71.9
1999-2000	78.3	217	79.2
2004-05	90.7	232	84.7
2010-11	114.2	240	88.0

Conclusion:

Dairying in India has witnessed tremendous growth during the last few decades and has come to be recognised as a potent instrument to bring about socio-economic changes in the urban and rural sectors alike. Dairying contributes a major share which is more than paddy and wheat, in the total GDP of the agriculture sector. This remarkable success of Indian dairy sector can be attributed to the constant effort of scientist, planners and million farm families across the country. The strength of Indian dairy sector lies in the fact that; despite limited investment it has shown consistent and substantial growth. The role of the National Dairy Development Board, Operation

Flood and National Dairy Research Institute as the apex R&D institution for spreading the growth of dairying on the sound scientific lines in quite significant and substantial.

Suggestions:

Following suggestions are made for the dairy development:

1. The next step of Operation Flood should be by production of milk and its production, packaging, marketing and export policies.
2. Since 58% of total milk produced in India is from buffaloes, there is a great scope for value addition by capitalising on inherent virtues of buffalo's milk for production of certain dairy products, health foods and naturaceuticals.
3. Considerable value addition can be realised by improving the availability of raw material i.e. milk. Well-laid standards of availability together with farmer's training in clean milk production and attractive remuneration to them.
4. There is an urgent need for software development and sampling instrumentation for reception of raw milk in cans.
5. There is a need to create an "Innovation Fund" to which Industry can contribute. This fund may be utilised for solving research problems for the industry. Government of India should give tax-concession to industries contributing to this fund.
6. There is strong need for constant contact of academia and industry and there should be an annual meeting in this regard.
7. Good quality milk can be obtained only from disease free animals. Training of dairy farmers in clean milk production is essential.

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