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Role of dairy industry in upliftment of farmers: Present day scenario

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Abstract

Dairying in India has taken a major share of livestock sub-sector of agriculture as presently value of output from milk crossed the value of wheat and paddy together. It has been a boon for village economy and playing an important role by providing sustainable source of income to landless and marginal farmers including women. It is estimated that up to 60-65 percent of the income of this group (marginal and small-scale farmers) now comes from dairying. Since evolution of dairy industry, rural households are being provided with regular remunerations irrespective of season which in turn meeting growing demand of milk in urban households. The government of India has started dairy co-operative societies by providing value for money and value for money to producers and consumers respectively thus eliminating middlemen. Dairy Industry has been positively bringing significant socio-economic changes in the life of the people engaged in dairy farming.

Keywords: Dairy industries, Up-liftment, producer farmers, milk cooperatives, women empowerment, social impact and milk market

Introduction

Indian agriculture is predominantly an economic symbiosis of crop and cattle population. Dairy sector in India has shown a significant domestic growth in past 10 years with milk production increasing at the rate of 4.8% CAGR. The domestic milk production increased from 155.5 MMT in 2015-16 to 163.7 MMT in 2016-17 despite two consecutive backdrops of drought years during 2014-15 and 2015-16. The per capita availability of milk in India has increased from 337 gms per day to 355 gms per day during same period. India ranks first in milk production, accounting for 19% of world production. Livestock in general and dairying in particular play a vital role in socio-economic development of millions of rural households. Within Livestock sub-sector, dairying is an important economic activity accounting for about 67 percent of the value of output of Livestock sub-sector in agriculture, which is higher than the value of output of wheat and paddy together. The dairy sector today provides 80 million farm households with the triple benefits of nutritive food, supplementary income and productive employment for family labour, mainly for women. The three key drivers of increasing milk demand include population growth, urbanization and income growth. At present, 48% of total milk produced is either consumed at the producer level or sold to non-producers in the rural area. The balance 52% of the milk (marketable surplus) is available for sale to consumers in urban centres. Of this 52%, currently, about 40% of the milk sold is handled by the organised sector (Dairy Cooperatives & Producer companies-20% & Private Dairies- 19%) and the remaining 60% by the unorganised sector. The dairy industry has poised for a threshold leap moving to the forefront from its present position, where it is perceived as a subsidiary to agriculture. From the Operation Flood programme, which was launched during 1970, organizing dairy farmers' cooperatives in rural areas and linking them with urban consumers thereby creating a strong network for procurement, processing, and distribution of milk over a lakh villages in rural India. Now, the dairy industry is additionally providing latent benefits to farmers viz. cattle feeds & insurance, veterinary health services etc serving for socio-economic upliftment of rural households.

Role of Dairy Cooperatives

A cooperative is an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically controlled enterprise.

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Strong cooperatives are able to overcome many of the difficulties faced by the farmers especially in our country where 85% are small and marginal farmers. “Amul” - one of successful dairy cooperative model based on Anand Pattern (Fig. 1) in India has benefitted millions of farmer members by increasing milk production, generating regular employment, empowering women thus tackling problems of poverty alleviation & food security in a sustainable manner.

Presently, 210 Milk Producers' Cooperative Unions and 16 State Cooperative Milk Marketing Federations covering 177 thousand village dairy cooperative societies are procuring and selling 42.8 million kg & 33.1 million litres respectively of milk per day. Dairy Cooperatives have been instrumental in transforming the rural economy on the lines of cooperative sugar factories.



Fig 1: Anand Pattern

Role of Farmer Producer Organisations (FPOs)

Cooperatives across the developing world have been more of a failure than success and are alleged to have led to exclusion of really poor, elite capture of such bodies, promoting differentiation instead of equity in rural communities (Ebrahim, 2000) [3]. The only exceptions to the failure in India have been sugar and milk co-operatives in some states especially in Maharashtra and Gujarat (Baviskar and Attwood, 1991) [1]. Member based FPOs offer a proven pathway to successfully deal with a range of challenges that confront farmers today, especially small producers. These FPOs strive towards managing and owning of enterprises related to procuring, processing and retailing of their produce.

FPOs have enabled member control throughout the dairy value chain- i.e. milk procurement, processing & marketing and are seen to address issues such as inclusion, income and livelihood. FPOs offer smallholder farmers a better market opportunity for their produce and provide them with services such as better training in natural resource management, better access to information, technologies, innovations and extension services. Examples of Milk FPOs include Bapudham Milk Producer Company Ltd., Motihari, Bihar; Sagar Shri Mahila Dugd Utpadak Producer Company, Sagar, M.P. etc The key differences between a cooperative & producer company are highlighted in Table-1 below:

Table 1: Difference between a Cooperative & FPO

Feature	Cooperative	FPO
Registration under	Co-op societies Act	Companies Act
Membership	Open to any individual or co-operative	Only to producer members and their agencies
Professionals on Board	Not provided	Can be co-opted
Area of operation	Restricted	Throughout India
Relation with other entities	Only transaction based	Can form joint ventures and alliances
Shares	Not tradable	Tradable within membership only
Member stakes	No linkage with no. of shares held	Articles of association can provide for linking shares and delivery rights
Voting rights	One person one vote but RoC and government have veto power	Only one member one vote and non-producer can't vote
Reserves	Can be created if made profit	Mandatory to create reserves
Profit sharing	Limited dividend on capital	Based on patronage but reserves must and limit on dividend
Role of government	Significant	Minimal
Disclosure and audit requirements	Annual report to regulator	Very strict as per the Companies Act
Administrative control	Excessive	None
External equity	No provision	No provision
Borrowing power	Restricted	Many options
Dispute settlement	Through co-op system	Through arbitration

Source: Kumar, *et al.*, 2007; Mondal 2010; and NABCONS, 2011.

Role of private dairies

Post liberalisation, the private sector companies have made an tremendous growth in building capacities for processing milk and milk products. Their investment in dairy sector surpassed the combined capacity of the dairy cooperatives and the government dairies in past 20 years. Few large and medium scale private sector companies like Hatsun Agro, Heritage Foods, Dodla Dairy, Paras Milk Foods, Prabhat Dairy, and VRS Foods have now started investing in building village-level collection capacities, which is similar to the co-operative model. Increasing focus from the private sector on

establishing last-mile linkages will complement the dairy development initiatives of the co-operatives and thereby lead to a larger share of the organised sector in milk processing. The table-2 below gives the coverage under organized sector by Dairy Cooperative, Producer Company (PC)/FPO and Private dairies. There are 210 Dairy Cooperative Milk Unions and five major Milk Producer Companies in India, together covering about 1.86 lakhs villages, reaching out to 16.1 million milk producers and procuring about 460.7 LLPD of milk.

Table 2: Coverage under Organized Sector (as on 2015-16)

No.	Particular	Unit	Cooperative	Producer Company	Private
1.	DCS/ MCC organised	Lakh	1.76	0.067	1.43
2.	Members covered	Lakh	155	3.33	50.17
3.	% of women member	%	31%	—	—
4.	Milk Procured	LLPD	440.7	20	430

Source: National Action Plan for Dairy Development, Vision-22

Social Impact of Dairy Industry

Women empowerment

Livestock sector provides employment to 18 million people and nearly 70 percent of them are women. The involvement of women in dairy cattle can be as high as 95% as others forms of agriculture. Women are largely responsible for dairy productive tasks, such as feeding, milking, shed cleaning and watering. Several studies have been conducted to study development of rural women engaged in dairy business. Results related to empowerment in terms of enhanced income, access to cash & credit, confidence in financial transactions and aspiration for economic autonomy have been observed. Some other success stories for women empowerment include FPOs such as Mulukanoor Women's Mutually Aided Milk Producers Cooperative Union Ltd (MWCD), Andhra Pradesh which is the first community-based enterprise managed completely by women with the primordial mission to improve the economic status of dairy producers and consumers. Another example - Madmaheshwar Valley Association in Ukkimath village in Rudraprayag where the village women

formed groups and started trading milk through a self-selected collector's network.

Hygiene and Cleanliness

The milk collection centres are run by farmers & collection is done under hygienic conditions. All the producers are frequently kept informed on the importance of observing hygiene and cleanliness of animals and milkers at the time of milking thereby inculcating such learning into daily living habits.

Resolving Social Inequity

Caste barriers are gradually eroding in equalizing the progression in prior to the milk collection centre. Untouchables could not have even dreamt of commercialism milk for common use in the traditional societies. The advent of dairy cooperatives have significantly succeeded in breaking down social barriers as farmers from different caste, creed, gender, age or income pour milk into same society.

Remarkable new awareness has been developed and observed among the producers.

Health Care

The privilege of collecting the milk from members places an obligation on the cooperatives to provide inputs to increase the milk production. Accordingly, the unions operate elaborate veterinary services at their doorstep to take care of cattle health. Exposure to various modern technologies and their applications by the veterinarians to treat their animals has made farmers more aware of healthcare for their family members as well.

Economic impact of dairy industry

Employment generation & poverty alleviation

Dairy sector is the major source of income for an estimated 27.6 million people (65 to 70 percent are small, marginal farmers and landless farmers). The dairy sector supports around 16 million farmers through 17 lakh cooperative societies existing in the country. The SGSY (Swarnajayanti Gram Swarajgar Yojana), the only self-employment programme for rural areas, about 35 percent swarogaries opted for dairy farming as income generating activity. The incremental employment generated was 11 man-days per month and the incremental net income generated was Rs. 865 per month per person (Nationwide Study on SGSY, NIRD, 2005). Moreover, there is 24% rise in income of dairy farmers in 2014-17 against milk output rise of 19% indicating that there is vast opportunities for development of farmers engaged in dairy business. The cooperative societies act as potent tool to ameliorate the economic and social change in the rural regions of the country with positive impact on alleviation of poverty from the countryside.

Progress of Drought Prone Districts

Livestock rearing especially cattle and came is a means for sustainable livelihoods in rural India. As per Indian Meteorological Department (IMD), 15 drought years were registered during the past 5 decades registering one out of every third year as drought year. As per MGNREGA 2015-16 surey, around 248 districts are are drought prone in ten large states of India. Some of the districts in these drought prone areas made spectacular progress in dairying in terms of contribution to the share of agriculture economy and in ensuring sustainability of the rural livelihoods of the resource poor farmers. About 80 million of working draught animal provides about 40 million of electrical energy equivalent power the rural sector of agricultural activities. With the regularization of standards for camel milk in India, its demand is also expected to increase as dairy industries started to venture into this business. Thus rearing of camel will generate additional income for farmers of draught prone area.

Manure & Biogas Production

The cow dung and urine have been used as valuable manure in farms. The dung is a source of energy which is equivalent to Rs.43.47 billion annually. It is used for extracting biogas and well-digested manure at the same time, and also killing the seed and weeds.

Improving Nutrition

Milk, a complete food, is a significant source of both energy and protein, including many essential amino acids lacking in carbohydrate-based diets. Milk also contains many essential micro-nutrients, such as Vitamins A and D. Increasing milk

consumption is therefore improve nutritional outcomes for households.

Conclusion

In India, about 16 million households are directly getting benefit of dairying through cooperatives & FPOs. The major socio-economic developments observed in rural areas due to intervention of Dairy Cooperatives are increase in farmers' income, employment generation, availability of credit to poor farmers, women empowerment, improved technology and enhanced nutritional security. There is growing demand for premium dairy products viz. organic and camel milk in urban markets due to their nutritive and health attributes which in turn is paving way for farmers to enter into such ventures wherein they can expect increase their income upto 50%. Dairy promotion among marginal and landless farmers would not only augment their sources of income and employment but also provide them security against drought, disease and hunger.

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