

Role of Dairy Cooperatives in Development: A Case Study of Haryana

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Abstract

The study was an attempt to analyze contribution of Dairy Cooperatives (DCs) to economic dimension of development and to draw lessons to strengthen contribution of Dairy Cooperatives (DCs) to economic dimension of Development, and to suggest recommendations to enhance role and recognition of Dairy Cooperatives (DCs) in achieving Development Goals.

Dairy Cooperatives (DCs) are value-based and principle-driven sustainable and participatory organizations with emphasis on democratic practices, social inclusion, gender equality, job security, better working conditions, competitive wages, additional income via profit-sharing and distribution of dividends, and self-help community facilities and services to support achievement of Development Goals.

Keywords:-Dairy Cooperatives, Economic Dimensions, Sustainable Development Goals, Lessons Learned, India.

Introduction

Cooperatives promote gender equality by expanding women's opportunities in local economies and empowering them to take leadership roles in decision making. Farmers' cooperatives increase small farmers' access to inputs, credit and market outlet, voice their concerns and interests, increase their negotiating power to influence policy making processes, food security and nutrition as well as incomes. Cooperatives generate sustainable employment opportunities, which are less likely to be negatively affected by cyclical downturns (Birchall 2013), thereby more likely to enhance longer-term financial and human capital investment (Brown 2014) based on democratic governance and joint ownership (Bajo and Roelants 2013). Cooperatives provide equitable opportunity for sharing of resources and promote greater role in decisions affecting the lives of members, fostering opportunities for decent work and social inclusion in participatory and transparent manner (ILO 2003). Promotion of cooperatives is widely viewed as the most important institutional arrangement for spurring dairy development in India.

Methodology

The study has identified targets that addressed economic dimension of Dairy Cooperatives (DCs), and among those to whose achievement Dairy Cooperatives (DCs) could make an important or useful contribution, and among those where contribution was seen as Dairy Cooperatives (DCs) specific.

The study has identified Dairy Cooperatives (DCs) - specific Development Goals targets linked with economies of scale, increased bargaining power, voice and representation of producers through a Dairy Cooperatives (DCs), the self-help and voluntary character of Dairy Cooperatives (DCs) to successfully deal with large and dispersed members and more outreach capacity and local rootedness and community orientation.

The present study was conducted in Haryana state of India. After selecting projects over, one representative District has been selected from within six geographical areas covered by District Dairy Cooperatives. Selection of representative State was based on resources allocated for dairy development at State level. 06 projects were taken for a representative sample by assigning due weights to completed projects and on-going projects. In consonance with objectives of study, a multi-site evaluation approach was adopted to collect necessary primary and secondary data and information. Multi-stage stratified sampling design was followed for selection of households for study. From each of selected villages, 20 households consisting of 15 beneficiaries and 5 non-beneficiaries households were interviewed. In all, a total of 1440 households were interviewed from 72 villages in 06 projects. Quantitative and qualitative information was generated by collection of primary and secondary data through structured interview schedules and focus group discussions with relevant stakeholders. Data has been analyzed using descriptive statistics and content analysis techniques.

Literature Review

Dairy farming involves high market dependency and socio-economic values (Bor, 2014), wherein Dairy Cooperatives (DCs) help dairy farmers to vertically

integrate to countervail power against oligopolistic powers in distribution and retailing (Van der Krogt, Nilsson and Host, 2007) by organizing dairy supply chains with better strategic logistics between production, processing and distribution (Berre et al., 2014) in emerging markets (D'antoni and Mishra, 2012) and reducing financial risk and economic uncertainty faced by members in a mature market (Maynard 2009) due to increasing volatility in milk and feed prices (Wolf and Widmar, 2014) and paying dairy farmers the milk price at levels that far exceeds market prices (Charlebois and Labrecque, 2009), when markets are volatile or even depressed (Yoo, Buccola and Gopinath, 2013) through democratic governance structure controlled by dairy farmers and managed by employees with appropriate skill sets, which help maximize returns and minimize costs of processing inputs, thereby reduce transaction costs (Labrecque, Dulude and Charlebois, 2015).

In India, Dairy Cooperatives (DCs) led to a significant increase in milk production and yield, decrease in cost of milk production, and reduce transaction costs of accessing inputs, information, technology, and markets, and a realization of higher prices and profits (Kumar, Staal, and Singh, 2011). In India, Dairy Cooperatives (DCs) are yet to fully utilize dairy plant capacity for business prosperity by diversifying their products to open new avenues for milk production and marketing (Subburaj, 1987). Establishment of milk producers cooperative societies (MPCSs) in rural areas had positive impact on marketable surplus of milk (Singh and Rai, 1998) and provided more employment to young milk producers (Kakade and Bagade, 2001). Therefore, MPCSs can include more dairy farmers to increase membership, purchase and supply high yielding varieties of milch animals, benefit local population, start new retail sales outlets, conduct awareness camp, collect waste dung to utilize as manure and fuel, and produce gas for cooking (Muruganandan, 2004). Some women managed Dairy Cooperatives (DCs) are successfully engaged in milk processing and marketing based on scientific training in cattle-farming, management of collection centers and use of automated devices and computerized billing system (Kolte, 2010).

Findings

The study reveals that 61.7% and 32.8% of households' members of Dairy Cooperatives (DCs) have educational attainment up to secondary and post-secondary level respectively in beneficiary category compared to 53.2% and 37.5% households respectively in non-beneficiary category. About 16.3% of beneficiary households were self-employment in animal husbandry. Average annual income of beneficiary households stood at 32% higher than non-beneficiary households. Dairy contributes 25% and 30.21% to total income and

total agricultural income of beneficiary households. Dairy Cooperatives (DCs) have resulted in significant improvement in income of 60% of members and 83% of them were above poverty line, 69% food secure, 58% with better housing condition, 89% with access to electricity, 73% depending on tap water, 44% with subsidized self-help micro credit, 56% with comparatively more assets, 66% with improved nutritional and health services, and 83% of women members of Dairy Cooperatives (DCs) were actively participating and making decisions in meetings. Therefore, dairy has a vital role in increasing the income and reducing poverty and food security, better housing, electricity and water access, sustainable financial inclusion and asset possession, improved nutritional and health security and improved gender equality and women empowerment of the farming community and sustaining agriculture in the wake of ongoing agrarian crisis and economic slowdown and needs to be strengthened.

Value of milk per liter for beneficiary households was comparatively low except milk of local buffalo because they were selling their produce to Dairy Cooperatives (DCs) at lower prices, whereas non-beneficiary households were selling their milk directly to retailers or other middlemen at somewhat higher prices. Middlemen have kept their milk procurement prices slightly higher to attract more dairy farmers towards them, though they were fraught with numerous problems like delay in payment and even non-payment which caused severe hardships to dairy farmers, however, farmer members of Dairy Cooperatives (DCs) were receiving regular for their milk supplies. Beneficiary households were consuming a significant part of milk produce within family thereby adding to nutritional security of households, specifically children. Thus, Dairy Cooperatives (DCs) has not only increased income and financial status and reduced poverty but also contributed significantly in improving nutritional status.

On average, each DC has 108 members, comparatively more male than female members. There were 06 Dairy Cooperatives (DCs) with exclusive membership of women, which were spread throughout the state. Democratic process of formation of Dairy Cooperatives (DCs) has been adopted in 41.9% of Dairy Cooperatives (DCs), where they were formed through proper election of the executives including the President, the Secretary and other members. In 39.2% and 18.9% of Dairy Cooperatives (DCs), they were formed by selection and nomination respectively. Democratically formed and functioning institutional arrangements are more viable, equitable and sustainable, which should be promoted and strengthened. About 80% of members have attended Dairy Cooperatives (DCs) meetings regularly and of them a significantly high proportion (90.9%) has participated in decision making, which

clearly reflects democratic functioning and decision making process adopted in Dairy Cooperatives (DCs) and needs to be strengthened further. Significantly, women members of Dairy Cooperatives (DCs) were reportedly participating in meeting and influencing their functioning in case of all Dairy Cooperatives (DCs). Greater participation of women in affairs of Dairy Cooperatives (DCs) has helped in addressing their genuine grievances and addressed gender inequality in decision making.

The proportion of households aware of various services provided by Dairy Cooperatives (DCs) stood at 81.9% (improved cattle), 77.9 (breeding animal), 75.1% (AI), 73.7% (marketing), 73% (basic knowledge of animal health care), 71.1% (quality fodder) and 58% (milk processing). However, the level of awareness differs significantly across selected states. Awareness regarding dairying services being offered by Dairy Cooperatives (DCs) was reportedly very high throughout the state. Thus, there is need to take concerted efforts to improve awareness regarding services being offered by Dairy Cooperatives (DCs) so that more and more beneficiary households may avail those services and improve the outcomes. Due to modest level of awareness of various dairy services and consequent low provisioning of services like supply of cattle feed and green fodder seed, AI, and vaccination against diseases is really worrisome and calls for concerted efforts to make the existing institutional arrangements more robust and efficient and Dairy Cooperatives (DCs) should be equipped with all necessary basic facilities and infrastructure to perform their tasks effectively, failing which intended goals of the programme will be a distant dream to be realized.

Dairy Cooperatives (DCs) have been provided with facilities of managerial grant, purchase of milk testing machine, furniture, milk cans and construction of dairy and chilling plants. However, these facilities have not been provided on uniform and universal basis to each Dairy Cooperatives (DCs) in selected District. Assistance for purchase of milk testing machine, assistance for purchase of milk testing machine and furniture, assistance for construction of dairy and chilling plants has been provided to Dairy Cooperatives (DCs) in the state.

State has improved its performance comparatively more after the scheme than other states. Low performing district have to take vigorous efforts to improve their performance further so that overall performance of programme could be increased. Increase in dairy outcomes, impact indicators, qualitative outcomes and impact on women has also been comparatively more in beneficiary households than non-beneficiaries households and nearly two-third of beneficiary households were satisfied by functioning of Dairy Cooperatives (DCs) in the state.

However, Dairy Cooperatives (DCs) have faced numerous managerial problems in its smooth functioning in selected states, which includes large gap between milk procurement and market prices, diversion of marketed milk surplus, inadequate transport facility, and factional tendencies among Dairy Cooperatives (DCs) officials and above all misappropriation of benefits by Dairy Cooperatives (DCs) officials and their associates with varied degrees across selected states. All this calls for strict regulation and its monitoring and implementation for ensuring reasonable gap between milk procurement and market price and minimum diversion of marketed milk surplus away from the Dairy Cooperatives (DCs) . Besides, transport facilities needs to be improved vigorously to ensure speedier procurement and disposal of milk and milk based products. Factional disputes and conflicts as well as misappropriation of benefits of the scheme need to be curtailed to optimize the outcome.

Overall, the objectives of programme have not been realized to fuller extent. Since, in the successful cases, the scheme has rendered the intended benefits (income/employment/poverty reduction), the programme holds the potentials if success stories are multiplied. Three aspects are critical to the success of programme, which includes raising the local milk production for adequate marketable surplus, effectiveness of Dairy Cooperatives (DCs) as facilitators for delivery of inputs and procurement of marketable surplus, and viability and sustainability of the operation of Dairy Cooperatives (DCs).

Conclusion

The cooperative enterprises are best suited to meet economic dimensions of Development Goals such as reducing poverty and exclusion by identifying economic opportunities for their members, empowering the disadvantaged to defend their interests, providing food, nutritional and health security to the poor by allowing them to convert individual risks into collective risks, and mediating member access to assets that they utilize to earn a living. Dairy Cooperatives (DCs) are value-based and principle driven sustainable and participatory organizations with emphasis on democratic practices, social inclusion, gender equality, job security, better working conditions, competitive wages, additional income via profit-sharing and distribution of dividends, poverty reduction, food, nutritional and health security, women empowerment and increased decision making and self-help community facilities and services to support achievement of Development Goals. Poverty alleviation was one of the goals of Dairy Cooperatives (DCs) by mobilizing self-help mechanisms to create opportunities and social protection and facilitating empowerment of unprotected dairy farmers through joint, equitable and democratic ownership and management of

resources, enhanced resilience by reducing financial and economic uncertainty based on the principles of mutuality, solidarity and reciprocity. Dairy Cooperatives (DCs) have been built upon a common and universal set of values and principles by building horizontal networks (unions) and vertical structures (federations) to enhance voice and representation of members and primary dairy cooperative societies. Dairy Cooperatives (DCs) and dairy-specific self-help groups enable the poor members to purchase food at lower prices and sometimes against credit. The values and principles of Dairy Cooperatives (DCs) motivate their members to sell only healthy and nutritious milk by increased milk supply and thus decreased milk prices due to enhanced dairy productivity by generating economies of scale and scope through the joint use of modern and/or expensive equipment, the division of labour between members, joint pre- and post-production services like input supply and output marketing, and the exchange of knowledge and innovation. Dairy unions and federations have shared information on prices and markets, which limited extreme milk price volatility.

References

- [1]. Acosta, A., & Valdes, A. (2014). Vertical Price Transmission of Milk Prices: Are Small Dairy Producers Efficiently Integrated Into Markets?. *Agribusiness*-30, 1, pp. 56-63.
- [2]. Bajo, C. S. & Roelants, B. (2013). Capital and the Debt Trap: Learning from Cooperatives in the Global Crisis. Palgrave Macmillan, Hampshire.
- [3]. Bernard, T., Taffesse, A. S. & Gabre-Madhin, E. (2008). Impact of Cooperatives on Smallholders' Commercialization Behaviour: Evidence from Ethiopia. *Agricultural Economics*, 39, pp. 147-61.
- [4]. Berre, David., Blancard, Stephane., Boussemart, Jean-Philippe., Leleu, Herve & Tillard, Emmanuel. (2014). Finding the Right Compromise between Productivity and Environmental Efficiency on High Input Tropical Dairy Farms: A Case Study. *Journal of Environmental Management*, 146, pp. 235-44.
- [5]. Birchall, J. (2013). Resilience in a Downturn: the Power of Financial Cooperatives. International Labor Organization, Geneva.
- [6]. Bor, O. (2014). Economics of Dairy Farming in Turkey. *International Journal of Food and Agricultural Economics* 2, 4, pp. 49-62.
- [7]. Brown, R. (2014). The Performance of Employee-Owned Businesses in Scotland: Some Preliminary Empirical Evidence. Fraser of Allander Institute Economic Commentary: 37, 3, pp. 108-17.
- [8]. Faysse, N. & Simon, C. (2015). Holding All the Cards? Quality Management by Cooperatives in a Moroccan Dairy Value Chain. *The European Journal of Development Research* 27, 1, pp. 140-55.
- [9]. Grau, A., Hockmann, H. & Levkovych, I. (2015). Dairy Cooperatives at the Crossroads. *British Food Journal* 117, 10, pp. 2515-31.
- [10]. Kakade, V. B. & Bagade D. S. (2001). Profit and Loss of Dairy Industry: A Case Study of Malshiras Taluka. *Cooperative Quarterly* 34, pp. 60-62.
- [11]. Kolte, S. B. (2010). Women Empowerment: A Study of Hirkani Women's Multi-State Dairy Cooperative. *Journal of Commerce and Management Thought* 1, pp. 285-95.
- [12]. Labrecque, J., Dulude, B. Charlebois, S. (2015). Sustainability and Strategic Advantages Using Supply Chain-Based Determinants in Pork Production. *British Food Journal* 117, 11, pp. 2630-48.
- [13]. Marcos-Matas, G., Hernandez-Espallardo, M. Arcas-Lario, N. (2013). Transaction Costs in Agricultural Marketing Cooperatives: Effects on Market performance. *Outlook on Agriculture* 42, 2, pp. 117-24.
- [14]. MoA & FW. (2018). National Action Plan for Dairy Development, Vision 2022. Ministry of Agriculture and Farmer's Welfare, Government of India, New Delhi.
- [15]. Singh V. & Rai, K. N. (1998). Economics of Production and Marketing of Buffalo Milk in Haryana. *Indian Journal of Agricultural Economics* 53, pp. 41-52.
- [16]. Subburaj, B. (1987). Production and Sale of Dairy Products in Trichy District Cooperative Milk Producers Union Tamil Nadu: A Break-Even Analysis. *Indian Cooperative Review* 25, pp. 307-15.
- [17]. Trebbin, A. (2014). Linking Small Farmers to Modern Retail through Producer Organizations: Experiences with Producer Companies in India. *Food Policy* 45, pp. 35-44.
- [18]. Verma, A. (2008). Working Capital Management in Dairy Industry. *Cooperative Perspective* 42, 4, pp. 49-54.
- [19]. Washington, A. A., Kilmer, R. L. & Weldon, R. N. (2002). Practices Used by Dairy Farmers to Reduce Seasonal Production Variability. *Agricultural and Resource Economics Review* 31, 1, pp. 127-37.
- [20]. Wolf, C. A. & Olynk Widmar, N. J. (2014). Adoption of Milk and Feed Forward Pricing Methods by Dairy Farmers. *Journal of Agricultural and Applied Economics* 46, 4, pp. 527-41.