RESEARCH ARTICLE

Emerging trend of Dairy based Producer Organizations: Case Studies from Himachal Pradesh

Devesh Thakur¹, Krishanender Dinesh², Manoj Sharma¹ and Madhu Suman³

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Abstract: Dairy farming, in spite of being a major livelihood source in the hilly state of Himachal Pradesh, often faces many issues such as lower price realisation for milk. The organized milk marketing structure of the state is one of the weakest in the country. Lower remunerative returns have affected the attitude of farmers towards dairy farming. As a solution to such problems, innovative farmer organisations are making progress in the state. These organisations offer input services at lower prices at farmers' doorstep. They also buy milk at prices higher than prevailing rates. The reported evidences of dairy interventions through farmer producer organizations are still minimal from this region. The present study assessed the functioning of dairy based producer organisations in hills of Himachal Pradesh. Three farmer producer organizations engaged in community mobilization through Self Help Groups were selected for the study. The benefits accrued by members of these organisations range from input availability, extension advisory, credit support and veterinary services.

Keywords: Dairy farming, Himachal Pradesh, Producer organisations

Introduction

Dairy farmers in the hills of Himachal Pradesh toil hard to secure livelihood from livestock keeping. Out of total 14, 83,280 households in the state, 52.65% own dairy cattle (GOI, 2019; HP, 2018). The gradual decrease in landholding size has necessitated

livestock keeping among households. The share of small and marginal farmers to total milk production in the state has increased from 89.9 % in 2003 to 92.7% in 2013 (Kumar et al. 2018). These smallholder farmers face numerous challenges in dairy production. Dairy sector remains underdeveloped and performs much below its full potential. The average dairy animal productivity is lower than the national average and even lower than adjoining hill state of Uttarakhand (Table 1). In addition to this, the milk price fetched by farmers across various marketing channels is one of the lowest in the country (Kumar et al. 2018). Poor bargaining power and difficulties in transportation forces farmers to sell milk at lower prices (Pathania and Sharma, 2016). The state has one of the weakest organised milk marketing structure (Kale et al. 2016) and the milk procurement by co-operatives in the state is very low (1.76%) (Table 1). The lower returns have affected the attitude of farmers towards dairy farming and the farmers are reluctant to sell milk leading to lowest marketed surplus. So, the activity remains non commercialized in the state (Dogra, 2016). The dairy processing activities by state owned milk marketing organisations have considerably underperformed (Kumar, 2018) and has limited marketing channels across or outside state (TOI, 2018). Low performance of state owned dairy co-operatives has given way towards innovative Farmer Producer Organizations (FPOs). These organisations combine the business principles of company and welfare aspects of co-operatives. There are evidence of better price realisation when farmers join together to form dairy based producer organisations (Jose et al. 2019a). Producer organization is a generic name that represents various cooperatives, self help groups, federation of SHGs, commodity interest groups, farmers club, producer company etc. (NABARD, 2005; Jose et al. 2019b). The reported evidences of dairy interventions through producer organizations are still very few in India in general and specifically in the state of Himachal Pradesh. With this background, this paper examines the functioning of three producer organizations of the state.

Materials and Methods

The present study was purposively conducted in the state of Himachal Pradesh. Three districts (Kangra, Bilaspur and Solan) of lower regions of the state were selected. Farmers of these regions have been traditionally engaged in rearing cattle. In each

¹Dept of Veterinary and AH Extension Education, DGCN, COVAS Palampur, Himachal Pradesh, India

²Dept of Animal Genetics and Breeding, DGCN, COVAS Palampur, Himachal Pradesh, India

³Dept of Animal Nutrition, DGCN COVAS Palampur, Himachal Pradesh, India

Devesh Thakur (✉)
Dept of Veterinary and AH Extension Education, DGCN COVAS Palampur
Himachal Pradesh India
Email: drdth4@gmail.com

district, one prominent farmer organisation was purposively selected. The primary data were collected from board of directors and members of these organisations. Semi-structured interview schedule and focused group discussions methods were used to collect data. The data was also supplemented through telephonic interviews with the managers, project officers, cluster co-coordinators and board of directors of these organisations. Secondary data were collected through reports of these organizations.

Results and Discussion

Kamdhenu Farmer & Consumer Welfare Forum, Bilaspur

This dairy farmers' organization works in district Bilaspur, Himachal Pradesh. In 2001, the organisation started its work as association with 8-10 farmers with collection of 35-40 liters of milk in a day. At the time of data collection, organisation collects milk from 4700 families in 350 villages of 65 village panchayats. It runs five milk chilling centers and a central milk processing plant at Namhol, Bilaspur. Daily 31000 liters of milk is procured from 4700 families. This is substantial quantity, considering the fact that state milk marketing federation procures 70,000 liters of milk per day (HP, 2018). The milk procurement price offered by the organization (Rs 33.63 (4.1 % fat & 8% SNF)) is higher than the price provided by state milk marketing federation (Rs 27.80 per litre). It also ensures doorstep availability of cattle feed and feed supplements. The organisation has received support from District Rural Development Agency (DRDA), NABARD and state government to set up milk processing infrastructure.

Incentives for higher milk production

Milk producers are incentivized through bonus payments for increasing milk production (additional payment of Rs.25 per liter of milk for more production beyond 10 liters of milk). Milk

producers who bring more than 10 liters of milk to the society meet on monthly basis with the representatives of society to discuss issues and problems. Dairy farmers avail doorstep delivery of veterinary services during normal, odd hours and holidays from society. They also save their income from milk selling and avail loans at times of need from saving and credit unit of the society. The society uses Self Help Group approach for community mobilization. A cluster co-coordinator overlooks the formation of 15-20 SHG of farmers and manages them.

Amrit Dhara Farmer Producer Organisation, Darlaghat, Solan

This organisation has been supported by Ambuja Cement Foundation under Corporate Social Responsibility (CSR) program (Mahajani, 2016). Initially, the foundation trained a group of women dairy farmers with the support of veterinarians of state animal husbandry department. The training process initially focused on breeding and feeding management (Sharma, 2018). Later on, training was given in primary animal health care practices also so that the women can act as Pashu Sakhis in the community. In 2016, these women farmers formed a dairy FPO under co-operatives societies' act. The FPO now operates with 206 members in 60-70 villages.

Feed and implements support

The society acquired dealership of cattle concentrate feed. Bulk purchases by society helps it to reduce transportation and storage costs. Animal health volunteers ensure feed demand estimates at their respective village. This helps in direct wholesale purchase and sometimes direct transportation to farmers. Therefore, storage costs have been reduced and farmers receive feed at their doorstep. The society operates at lower price margin than local feed sellers. Farmers save Rs. 100 per quintal of feed and receive it at their doorstep. The region faces acute fodder scarcity as landholdings are limited. To solve this issue, the society

Table 1 Dairy production scenario in hills of Himachal Pradesh

Production Parameters	Himachal	Uttarakhand	All India
i) Milk Production (Thousand Tonnes)	1460.15	1792.37	187749.46
ii) Per capita availability	565 gm/day	455 gm/day	394 gm/day
iii) Total number of villages	17,882	15,745	649481
iv) Total number of milk potential villages	5290 (29.58%)	4610 (29.28%)	3,20,000 (52.25%)
v) Milch animal owning households	7,81,000	9,01,000	69100000
Livestock Productivity (Kg/Day)			
i) Cattle			
Exotic	9.24	11.01	11.67
Crossbred Exotic	5.00	7.13	7.85
Indigenous	3.58	4.76	3.85
Non-descript	1.96	1.85	2.50
ii) Buffalo			
Indigenous	4.43	5.33	6.34
Non-descript	3.26	4.01	4.35

Source: GOI, 2019

buys fodder in bulk from adjoining states and sells at lower price (Rs. 7-8/kg) than the fodder bought individually (Rs. 10-11/kg) by the farmers. The society keeps its margin for operational expenses. Members can buy farm implements also (chaff cutters, farrows) from the shop owned by the society.

Collective Milk Marketing

Amrit Dhara, dairy FPO collects 700 liters of milk every day and sells milk to neighboring town. The milk procurement price is Rs 31 and sold at Rs 38 per litre. Though the price received may appear lower, farmers can sell milk at their doorsteps. Mostly milk is sold as loose milk and provides *Dahi* and *Paneer* on demand. The organisation has opened a bulk milk cooling unit to store milk and now is planning to open to milk processing unit.

Self Help groups of Tata Himmotthan Society, Kangra

The Himmotthan society, an associate organisation of TATA trust, works in Shahpur and Baijnath blocks of district Kangra, Himachal Pradesh. The organization started its work in 2018 and has created 43 SHGs with 485 members. The basic unit of organizational work is individual families. One woman dairy farmer from each family is selected while forming SHG with 8-12 members. 15-20 such SHG form part of village cluster. Activities of 10-15 SHG's of each village cluster are managed by village co-coordinators. These functionaries ensure activities needed for

smooth functioning of SHG by conducting regular meetings, record keeping and encouraging regular saving and lending.

Community Fodder Interventions

The organisation has been working for development of fodder base in wastelands and community lands. The SHG members are encouraged to use clean wastelands through MGNREGA and improved fodder varieties are grown and harvested them. Recently, the organisation is working with veterinary college Palampur and NABARD and they support these interventions on a larger scale. Besides this, support for building improved cattle houses on cost sharing basis (50:50) have been initiated among the community.

Comparative evaluation of services received through Dairy Producer Organizations

Input Services

As evident from table 3, farmers of Vyas Kamdhenu Farmer and Consumer Welfare Forum received input support in the form of feed and fodder seeds at lower prices at doorsteps. Farmers of this organisation received cattle feed, while farmers of Himotthan society received fodder seeds. Vyas Kamdhenu Farmer and Consumer Welfare Forum, being a bigger organisation offers more benefits to producer members.

Veterinary service provision

Table 2 Comparative evaluation of services received by Dairy Producer Organizations

	Vyas Kamdhenu Farmer & Consumer Welfare Forum, Bilaspur	Amrit Dhara FPO, Darlaghat, Solan	Himotthan Society, Kangra
I) Input Provision			
Input supply at lower Rates	Yes	Yes	Partially yes
Input supply at door step	Yes	Yes	No
High quality of inputs	Yes	Yes	Yes
Provision of extension information	Yes	Yes	Yes
Provision of veterinary services	Yes	Partial	No
II) Financial Services			
Financial education	Yes	Yes	Yes
Savings	Yes	Yes	Yes
Credit	Yes	No	No
III) Milk Marketing			
Products	Milk, Paneer, Ghee, Curd	Milk	No
Market channels	Sold to major towns and districts of State and Chandigarh	Local Shopkeepers	No
Milk Storage	Yes	Yes	No
Milk Transport	Yes	Yes	No
Milk processing (Sold in packets)	Yes	No	No
Value addition (Ghee/Paneer)	Yes	No	No
Branding	Yes	No	No

Considering veterinary service provision, Vyas Kamdhenu Farmer and Consumer Welfare

Forum offers timely veterinary services to producers. Amrit Dhara FPO provides basic veterinary aid to members through trained women primary animal health workers and depend on state veterinary institutions for major services. Synergisms in activities of both have been seen in vaccination where women members of FPO guide dairy farmers for vaccination and even aid in cattle handling. Himmotthan society does not provide such services from their organisation and depend on government veterinary institutions. However, regular animal health camps are organized by society through state animal husbandry department and veterinary college Palampur.

Extension and advisory services

The extension advisory services are offered by conducting regular discussions on various animal husbandry topics in monthly group meetings of Vyas Kamdhenu Forum and Amrit Dhara FPO. Himmotthan society organises regular extension advisory camps in collaboration with state veterinary college.

Financial services

Members of Vyas Kamdhenu Farmer and Consumer Welfare Forum receive benefits of financial education, savings from their sale of milk as well as credit for their dairy and other requirements. This organisation has a credit unit to meet these requirements of farmers. Amrit Dhara and Himmotthan society offers financial education and ensures regular saving and self lending among members.

Milk marketing

Vyas Kamdhenu Forum sells milk and other processed products like paneer, ghee and curd to major towns and districts of Himachal Pradesh. Milk processing and value addition is being done by the forum. It runs five milk chilling centers and a central milk processing plant at Namhol, Bilaspur. Amrit Dhara FPO sells milk and prepares Dahi and Paneer only on demand basis. It has a chilling centre of 2000 liters capacity. Members of Himmotthan society do not receive any support on milk marketing till now.

Conclusions

The three FPOs considered in the present study are successful in addressing different challenges of dairy farmers in the state. However, their performance and scale of operation depend upon number of years in operation and membership size. Among all these farmer organisations, Vyas Kamdhenu Forum was established earlier and has a larger farmer member base. Therefore, it works on a larger scale with well better input support and established milk marketing to farmers. Amrit Dhara FPO has gradually increased its foray into milk marketing and processing.

Himmotthan society has focused on input interventions to improve dairy development in the region. Thus, it can be concluded that during initial stages of formation of FPO, the benefits accrued may be limited to input availability. Later on, with larger member base, the scale of operation widens up and newer activities of dairy value addition, provision of veterinary services, dairy extension and credit facilities to the farmer members are offered. Investing sufficient time and effort in mobilizing the farmers through SHGs, sound leadership, transparency in operations, accounting, record keeping, and resource management are key factors determining the efficiency and effectiveness of these organisations. It is imperative that such types of Farmer Producer Organisations are encouraged to improve the state of dairy development in hills of India.

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