

AGRIBUSINESS POTENTIAL IN DAIRY FARMING: SELECTED CASE STUDIES

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Abstract: The study has been undertaken to assess the growth potentials and challenges of dairy business in unorganized sector. It has been conducted at Bagalkot city, randomly two dairy farms have chosen; one is from suburban (Case- A) and another one is from urban (Case- B) of Bagalkot city. The structured questioner was employed for owner/manager of farm to investigate the issues with dairy and Focused Group Discussion (FGD) was conducted for labour community. The study approach is more appropriate to investigate contemporary phenomena viz. growth potentials of dairy farm, capital management, farm maintenance, labour management on dairy farms and marketing of milk etc.

Key Words: Agribusiness, Dairy Farming, Focused Group Discussion(FGD), Farm Management

Introduction:

World milk production increased from 800.2 MMT in 2016-17 to 811.9 MMT in 2017-18, a growth rate of 1.46 per cent; at the same period in case of India's milk production it increased from 165.40 MMT to 176.35 MMT, a growth rate of 6.62 per cent. Since 2000 India retained its position as the highest milk producing country of the world (NDDDB, 2018). The study on livestock ownership across operational land holdings in 2003 showed that the marginal farm households with less than 1 hectare of land, comprising 47 percent of the farming households, possessed more than 51 percent of the country's cattle and buffalo population and 66 per cent of the small ruminants, against their share of 24 percent in land (NSSO, 2003). Livestock population is more equitably distributed than the land (Kumar and Singh, 2008). This distributional pattern of livestock in favour of the poor indicates that development of this sector will result in a more equitable development of economy. Moreover, recent decades have witnessed radical shift in consumption pattern in favour of animal based food products on account of increasing trends in urbanization, income growth and globalization. It is indicating that substantial opportunities for demand driven growth in the livestock sector, including poultry and fisheries (Baral and Bardhan, 2016).

Unorganized players account for nearly 75 percent of the entire dairy industry and dominate key segments like liquid milk, ethnic products, ghee, and yoghurt. A majority of the marketable surplus (about 70 percent) continues to be handled by the unorganized players, while cooperatives and private dairies handle only about 20 percent and 10 percent respectively. In this connection the present study having great significance to assess the importance and growth potentials of dairy business in unorganized sector. Further, the present study chosen two case studies; its approach is more appropriate to investigate contemporary phenomena viz. growth potentials of dairy farm, capital management, farm maintenance, labour management on dairy farms and marketing of milk etc.

Methodology:

The proposed study has been conducted at Bagalkot city, randomly two dairy farms have been chosen; one is from suburban (Case- A) and another one is from urban (Case- B) to study the growth potentials and challenges of dairy farming. The structured questioner was employed for owner/manager of farm to investigate the issues with dairy and Focused Group Discussion (FGD) was conducted for labour/employee community. Interview has been conducted in private with owners and managers. While conducting FGD, detailed interaction was made with 05- outside fulltime labourers, 06- local fulltime labourers, 05- part-time labourers and 03- women labourers (including both Case studies)

Table 1: A Brief Profile of Selected Case Studies

Descriptions	CASE-A	CASE-B
Size of Land holding	40 acre	15 acre (on lease based)
Use of land for Dairy Farming	06 acre	4 acre
Establishment of Dairy Farm	2011	2004
Location of Farm	Near by the Bagalkot city (5 k.m. distance)	Within the Bagalkot city
Family Owned and Operated	Yes	Yes
Ancestors and traditional knowledge	Yes	Yes
Professional formal Dairy degree/training completed	Yes	No
Number of Buffaloes	80	25
Number of Cows	00	02 (H.F)

Purchase of Buffaloes	Haryana State	Haryana State
Number of hired labourer from outside (full-time)	03- Haryana	02- U.P
Number of local hired labourer (full-time)	04	02
Number of part-time labourer	05	03

Source: Field Survey

Table 1, represents the profile of selected case studies, it observed that there are differences between both the case studies by size of land holding, size of dairy farm, structure of labour, knowledge, cost and expenditure etc. Even the owner qualification and training about the dairy farming are not uniform in nature.

Table 2: Establishment (Base) Capital Expenditure of Selected Case Studies (in Rs.)

Descriptions	CASE-A	CASE-B
Purchase of livestock animals	56,00,000	24,00,000
Shed construction	15,00,000	1,50,000
Purchase of Machineries (Fodder Cutter machine)	90,000	85,000
Total	71,90,000	26,35,000

Source: Field Survey

It is considered that establishment costs mainly on purchase of dairy animals, construction of dairy shed and purchase of fodder cutter machine etc. It also varies between both the cases according to size of farm (Table 2).

Table 3: Income and Expenditure of Selected Case Studies of Dairy Farms (in Rs per annum)

Sources	Income	Sources	Expenditure
CASE-A			
Milk production	54,00,000	Purchase of Fodder	4,00,000
Manure production	1,70,000 (200 tractors)	Purchase of <i>Chinni</i> (Concentrated feed)	7,20,000
Sale of Calves	2,24,000	Vehicle Cost (Transport Cost)	84,000
		Local hired labour cost	3,20,000
		Outside hired full-time labour cost	2,88,000
		Purchase of Maize for concentrated feed	5,10,000
		Purchase of <i>Hindi</i> (Concentrated feed)	23,76,000
Total	57,94,000	Total	46,98,000
CASE-B			
Milk production	15,84,000	Purchase of Fodder	2,00,000
Manure production	1,10,000 (98 tractors)	Purchase of <i>Chinni</i> (Concentrated feed)	2,15,000
Sale of Calves	50,000	Vehicle Cost (Transport Cost)	1,20,000
		Local hired labour cost	1,44,000
		Outside hired full-time labour cost	2,64,000
		Purchase of Maize for concentrated feed	--
		Purchase of <i>Hindi</i> (Concentrated feed)	1,92,000
Total	17,44,000	Total	11,35,000

Source: Field Survey

Table 3 depicts that the income and expenditure structure of the both cases. Income is included that sale of milk, calves and by products like manure. Whereas, expenditure consist cost of fodder, concentrated feed like *Chinni*, *Hindi* and concentrates from maize, transportation cost of milk, insemination and labour cost. It is observed that slight variation in income and expenditure pattern between the both cases according to differences in farm size, capital management, farm maintenance, labour management on dairy farms and marketing of milk etc.

Labour problem:

It is observed that in both the case studies availability of labour is basic problem for the dairy farming; but the magnitude is slightly differs; the skills and knowledge required to work on a dairy farm are different from what is required to work on other types of farms. Jobs on dairy farms also vary widely, as employees specialize in different tasks, such as milking, feeding, or calf rearing. In one case (Case-B) the manager was running the farm with untrained labour; employees' competencies across the two cases were heterogeneous due to individual internal differences in their knowledge, abilities, training, skills, experience, education and commitment.

The managers of both cases were running their dairy farm on knowledge and experience learned from their ancestors and they were not having any dairy science degree or diploma education. In case of (Case-A) three labour hired from Haryana state are well trained and experienced in the dairy farm management.

Farm Management:

The issues of labour shortage and difficulties in maintenance of farm restricted the managers to expand the farm; they wanted to maintain current size. In both cases absence of long run strategies viz. establishment of processing unit, cold storage house and marketing yard have been observed; the managers have to develop business strategies.

Marketing Issues:

The owners/managers are much aware about the requirement of consumers in relation to milk; consequently they manage to supply the quality of milk; are maintaining hygienic cattle shed to avoid infection to cattle. The concentrated feed, tonic is being given and regularly following medical checkups to cattle. Marketing of milk is concerned, manager of CASE-A leased a person with vehicle to sell the milk; a person (vendor) identified two different particular places in residential area of Bagalkot city to sell milk and all the consumers visits on time to purchase the milk on instant payment of rupees; within an hour vendor finish off his business. Another dairy farm i.e. CASE-B having more advantageous in marketing of milk; because the farm is located within the Bagalkot city and consumers directly visit the farm to purchase the milk.

Results and Discussions:

Retaining of trained local/outside labours/employees has become one of the utmost challenges in dairy farming. Trained labours/employees have higher replacement costs because they supply services that cannot immediately provide by newly hired labours. Managers strive to retain those employees through offering job security, higher compensation and good interpersonal relationships that lead to their immobility.

Retaining of local labours (full time and part time) is also difficult factor in both (CASE-A and CASE-B) cases; they objecting about the disparities of wages, benefit packages and insecurity of job; consequently they were more mobile from one occupation/farm to another occupation/farm.

Lack of knowledge about the long run business strategies are seriously found in both cases; since long run business strategies are growth potential of dairy farming and much required for agri-business. The non-accessibility of capital, training of establishing processing units is major stumbling blocks of the issue.

The selected case studies may not acutely facing the problem of marketing; even thou establishment of independent cold storage unit (minor/major) and dairy processing unit are required to expand the dairy business; but distribution of fresh and chilled/frozen dairy products remains a challenge. Further the critical aspects viz. breeding services, health care, accessibility to feed and credit are scare in both the cases; for sustainable dairy farming these issues must be addressed immediately.

The issue of farm management is concerned, trust-based relationships and cohesive work teams are a key factor in utilizing labours'/employees skills, knowledge and experience for competitive advantage. During the hiring process, selection criteria which emphasize not only job tasks but also fit with the current workforce and the overall mission facilitate team building; the task of farm management is effectively performed following the trust based relationship and team building aspects.

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