

A STUDY OF CHALLENGES AND OPPORTUNITIES FACED BY MARGINAL MILK PRODUCERS IN GUJARAT STATE

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ABSTRACT

Dairying has become an important secondary source of income for more than 15 million rural families and has assumed an important role in providing employment and income generating opportunity for the most vulnerable sections of our population. For millions of small and marginal farmers as well as landless laborers, milk production provides ready cash in hand for fulfilling their daily household requirements. According to 2012 livestock census data, Gujarat had 9984 thousand cattle and 10386 thousand buffalo population. The daily milk yield per animal in the state for Cow (Crossbreed), Cow (indigenous) and Buffalo is around 9.08 kg/day, 4.19 kg/day & 5.15 kg/day respectively. The present study was conducted to evaluate the status of Marginal Milk Producers in Gujarat state. The study covered all districts of the state and information was collected by using a questionnaire. After analyzing the collected data it could be, it can be concluded that The main challenges faced by Marginal Milk Producers were- High cost of Milch animal, High cost of cattle feed and mineral mixtures, Price offered for milk is Low. The main Opportunities for Marginal Milk Producers, It provides milk for self-consumption, it provides an excellent source of secondary income, increasing demand of milk and milk products and constantly rising milk prices.

KEYWORDS: Marginal Milk Producers, Gujarat Dairy, Cooperative Dairies, Challenges and Opportunities in Dairy Farming

INTRODUCTION Indian Dairy Sector

The Indian Dairy cooperative structure has a huge contribution in raising the milk production in the country up to approximately 146 million tonnes in the year 2014-15 from a meager milk production 17 million tonnes in the year 1951. The per capita availability of milk in the country has increased to 340 g /day (GCMMF Annual Report 2015-16). Further, milk is the largest agricultural crop in India with market values exceeding Rs 4 lakh crore per annum and the milk group contributes the highest to the total output of our agricultural sector, surpassing the output value of wheat, rice and oilseeds.

India's livestock sector is one of the largest in the world. According to 2012 livestock census data, Gujarat had 9984 thousand cattle and 10386 thousand buffalo population, which comes to around 5.23% and 9.55% of cattle and buffalo population of the country. The daily milk yield per animal in the state for Cow (Crossbreed), Cow (indigenous) and Buffalo is around 9.08 kg/day, 4.19 kg/day & 5.15 kg/day, respectively; whereas that of India is 7.15 kgs, 2.54 kgs and 5.15 kgs for Cow (Crossbreed), Cow (indigenous) and Buffalo respectively. Gujarat is lucky to have good and high-yielding breeds of cattle and buffaloes. Gir and Kankrej breeds of cows and Mahesani, Jafarabadi, Banni and Surti breeds

of buffaloes are well known for their high milk yielding capacity. Kankrej bullocks are famous for their "Sawai-Chal" and the cows of this breed are good milk producers.

Dairying has become an important secondary source of income for more than 15 million rural families and has assumed an important role in providing employment and income generating opportunity for the most vulnerable sections of our population. For millions of small and marginal farmers as well as landless laborers, milk production provides ready cash in hand for fulfilling their daily household requirements.

In India, milk production is scattered in a large number of villages in small quantity of two to four liters by milch animals. The average milk production per animal per lactation is around 1400 liters which is much below the world average of 2300 liters. (Rajah, G.S.2013) The milk productivity of crossbred cows, Indigenous cows and of buffaloes in India is very low. It is 6.45, 1.97 and 4.3 Kg per day respectively. The unorganized sector is comprised of numerous small and /or seasonal milk producers/trader (popularly known as halves).

METHODOLOGY

The study was spread over the entire state and primary data were collected by way of a Questionnaire. The study covered all 26 Districts of Gujarat state, 227 talks and further, three villages were selected from each Taluka. In total 681 villages of the state were selected and data were collected from Marginal Milk producers (owning 1 to 2 animals) belonging to the villages.

RESULTS AND FINDINGS

The percentage column displayed in all the tables were for the respondents who said 'yes' for facing difficulties or who looked as an opportunity.

Table 1: Challenges Faced By Milk Producers (Marginal Category) (N=567)

| Statement No | Challenge Statements | Percentage (%) respondents saying Yes |
|--------------|--|---------------------------------------|
| 3 | Do you face problems due to "High cost of Milch animal"? | 40 |
| 8 | Do you face problem of High cost of cattle feed and mineral mixtures? | 35 |
| 18 | Do you think the price offered for milk is Low? | 35 |
| 15 | Do you have poor knowledge of Clean Milk Production techniques? | 33 |
| 1 | Do you have problem of Lack of availability of Milch animals for purchase in nearby area/town/ villages? | 33 |
| 9 | Do you face problem of non - Availability of veterinary hospital/ dispensary in nearby area? | 31 |
| 6 | Do you face problem of Unavailability of green fodder throughout the year? | 30 |
| 22 | Do you think that the next generations of dairy farmers are not interested in dairy business? | 28 |
| 5 | Do you face problem of Low average milk yield of the milch animals? | 27 |
| 4 | Do you face problem of Limited availability of water? | 25 |
| 2 | Do you have problem of "False claims by seller of milch animal"? | 23 |
| 7 | Do you face problem of High cost of green fodder? | 23 |
| 11 | Do you face problem of High cost of veterinary services? | 21 |
| 23 | Do you think that Early waking up for milking, etc.is a big drudgery in dairy business? | 17 |
| 14 | Do you face problem of Poor conception rates through AI? | 16 |

| | | |
|--------------------------|---|----|
| 16 | Do you think there is Lack of testing facilities at VDSCS? | 15 |
| Table 1: Contd... | | |
| 21 | Do you think dairy farmers have a problem of Marriage of their sons due to their involvement in dairy business? | 15 |
| 10 | Do you face problem of High incidence of diseases in animal? | 14 |
| 12 | Do you face problem of Non- availability of semen at AI Centres? | 14 |
| 17 | Do you think there is Wrong / non-transparent measurement of Fat at VDSCS? | 12 |
| 13 | Do you face problem of Unavailability of high genetic merit bull? | 11 |
| 20 | Do you think you lack of market for the milk produced by you? | 3 |
| 19 | Do you think you lack the skill of professionally marketing? | 2 |

The main challenges faced by Marginal Milk Producers were

- High cost of Milch animal
- High cost of cattle feed and mineral mixtures
- Price offered for milk is Low

Table 2: Opportunities Faced By Milk Producers (Marginal Category) (N=567)

| Statement No | Opportunity Statement | Percentage |
|--------------|---|------------|
| 2 | Do you think that dairy farming is good because it provides milk for self-consumption? | 74 |
| 1 | Do you think that dairy business is good because it provides an excellent source of secondary income? | 62 |
| 6 | Do you think Dairy business is good because of Increasing demand of milk and milk products? | 57 |
| 3 | Do you think Dairy business is good because of Constantly rising milk prices? | 57 |
| 4 | Do you think Dairy business is good because of increasing population? | 52 |
| 7 | Do you think Dairy business is good (in India) because of Predominantly vegetarian population | 50 |
| 5 | Do you think Dairy business is good because of Increasing incomes? | 45 |
| 8 | Do you think the increase in health awareness will increase sales of Value added Dairy products? | 36 |
| 10 | Do You think Dairy business is good nowadays because of Easy- establishment of commercial dairy farms (e.g. support by GCMMF) ? | 34 |
| 11 | Do You think the Increasing Export opportunities is good for dairy business? | 28 |
| 9 | Do You think the Opening up of economy (Liberalization) & entry of international fast food chains – McDonald, etc. & Growth in urbanization& Changing lifestyles will increase demand of milk in India? | 25 |

The main Opportunities for Marginal Milk Producers

- It provides milk for self-consumption
- It provides an excellent source of secondary income
- Increasing demand of milk and milk products and constantly rising milk prices.

CHALLENGE WISE THE TOP 3 MOST AFFECTED DISTRICTS

Table 3: Challenge Statement Wise Top 3 Affected Districts for Marginal Milk Producer

| 1 | Do you have problem of Lack of availability of Milch animals for purchase in nearby area/town/ villages? | | |
|---|--|----|------------|
| | Districts | N | Percentage |
| | Kheda | 13 | 77% |
| | Chota-Udepur | 14 | 69% |
| | Banaskantha | 14 | 64% |
| | | | |
| 2 | Do you have problem of "False claims by seller of milch animal"? | | |
| | Districts | N | Percentage |
| | Valsad | 7 | 71% |
| | Kheda | 13 | 46% |
| | Morbi | 36 | 43% |
| | | | |
| 3 | Do you face problem due to "High cost of Milch animal"? | | |
| | Districts | N | Percentage |
| | Narmada | 12 | 100% |
| | Bharuch | 34 | 79% |
| | Valsad | 7 | 71% |
| | | | |
| 4 | Do you face problem of Limited availability of water? | | |
| | Districts | N | Percentage |
| | Botad | 20 | 100% |
| | Surendranagar | 33 | 88% |
| | Banaskantha | 14 | 79% |
| | | | |
| 5 | Do you face problem of Low average milk yield of the milch animals? | | |
| | Districts | N | Percentage |
| | Botad | 20 | 95% |
| | Banaskantha | 14 | 93% |
| | Valsad | 7 | 71% |
| | | | |
| 6 | Do you face problem of Unavailability of green fodder throughout the year? | | |
| | Districts | N | Percentage |
| | Botad | 20 | 90% |
| | Banaskantha | 14 | 79% |
| | Jamnagar | 34 | 67% |
| | | | |
| 7 | Do you face problem of High cost of green fodder? | | |
| | Districts | N | Percentage |
| | Kutch | 23 | 86% |
| | Surat | 18 | 44% |
| | Patan | 22 | 41% |
| | | | |
| 8 | Do you face problem of High cost of cattle feed and mineral mixtures? | | |
| | Districts | N | Percentage |
| | Narmada | 12 | 92% |
| | Banaskantha | 14 | 86% |
| | Kutch | 23 | 82% |
| | | | |

| 9 | Do you face problem of non - Availability of veterinary hospital/ dispensary in nearby area? | | |
|----|--|----|------------|
| | Districts | N | Percentage |
| | Banaskantha | 14 | 93% |
| | Jamnagar | 34 | 82% |
| | Bhavnagar | 17 | 81% |
| | | | |
| 10 | Do you face problem of High incidence of diseases in animal? | | |
| | Districts | N | Percentage |
| | Dahod | 12 | 58% |
| | Surendranagar | 33 | 42% |
| | Gandhinagar | 8 | 38% |
| | | | |
| 11 | Do you face problem of High cost of veterinary services? | | |
| | Districts | N | Percentage |
| | Valsad | 7 | 71% |
| | Chota-Udepur | 14 | 62% |
| | Dahod | 12 | 50% |
| | | | |
| 12 | Do you face problem of Non- availability of semen at AI Centres? | | |
| | Districts | N | Percentage |
| | Banaskantha | 14 | 79% |
| | Botad | 20 | 70% |
| | Dahod | 12 | 33% |
| | | | |
| 13 | Do you face problem of Unavailability of high genetic merit bull? | | |
| | Districts | N | Percentage |
| | Gir-Somnath | 9 | 44% |
| | Kheda | 13 | 38% |
| | Botad | 20 | 35% |
| | | | |
| 14 | Do you face problem of Poor conception rates through AI? | | |
| | Districts | N | Percentage |
| | Banaskantha | 14 | 79% |
| | Botad | 20 | 45% |
| | Gir-Somnath | 9 | 44% |
| | | | |
| 15 | Do you have poor knowledge of Clean Milk Production techniques? | | |
| | Districts | N | Percentage |
| | Narmada | 12 | 92% |
| | Bhavnagar | 17 | 81% |
| | Jamnagar | 34 | 70% |
| | | | |
| 16 | Do you think there is Lack of testing facilities at VDCA? | | |
| | Districts | N | Percentage |
| | Valsad | 7 | 86% |
| | Dahod | 12 | 67% |
| | Patan | 22 | 41% |
| | | | |
| 17 | Do you think there is Wrong / non-transparent measurement of Fat at VDCA? | | |
| | Districts | N | Percentage |
| | Valsad | 7 | 71% |
| | Dahod | 12 | 58% |
| | Kheda | 13 | 38% |
| | | | |
| 18 | Do you think the price offered for milk is Low? | | |
| | Districts | N | Percentage |

| | | | |
|-----------|--|----------|-------------------|
| | Valsad | 7 | 100% |
| | Narmada | 12 | 92% |
| | Kutch | 23 | 73% |
| 19 | Do you think you lack the skill of professionally marketing? | | |
| | Districts | N | Percentage |
| | Dwarka | 19 | 22% |
| | Kheda | 13 | 15% |
| | Botad | 20 | 15% |
| 20 | Do you think you lack of market for the milk produced by you? | | |
| | Districts | N | Percentage |
| | Kheda | 13 | 38% |
| | Tapi | 14 | 36% |
| | Dwarka | 19 | 22% |
| 21 | Do you think dairy farmers have a problem of Marriage of their sons due to their involvement in dairy business? | | |
| | Districts | N | Percentage |
| | Amreli | 20 | 50% |
| | Sabarkantha | 14 | 50% |
| | Patan | 22 | 41% |
| 22 | Do you think that the next generation of dairy farmers are not interested in dairy business? | | |
| | Districts | N | Percentage |
| | Amreli | 20 | 65% |
| | Bharuch | 34 | 61% |
| | Narmada | 12 | 58% |
| 23 | Do you think that Early waking up for milking, etc. is a big drudgery in dairy business? | | |
| | Districts | N | Percentage |
| | Valsad | 7 | 71% |
| | Amreli | 20 | 55% |
| | Gandhinagar | 8 | 50% |

Table 4: Opportunity wise the top 3 districts

| | | | |
|-----------|--|----------|-------------------|
| S1 | Do you think that dairy business is good because it provides an excellent source of secondary income? | | |
| | Districts | N | Percentage |
| | Gir-Somnath | 9 | 100% |
| | Kutch | 23 | 100% |
| | Tapi | 14 | 100% |
| 2 | Do you think that dairy farming is good because it provides milk for self-consumption? | | |
| | Districts | N | Percentage |
| | Jamnagar | 34 | 100% |
| | Navsari | 6 | 100% |
| | Valsad | 7 | 100% |
| 3 | Do you think Dairy business is good because of Constantly rising milk prices? | | |
| | Districts | N | Percentage |
| | Navsari | 6 | 100% |
| | Valsad | 7 | 100% |
| | Amreli | 20 | 95% |
| 4 | Do you think Dairy business is good because of increasing population? | | |

| | Districts | N | Percentage |
|-----------|--|----|------------|
| | Navsari | 6 | 100% |
| | Valsad | 7 | 100% |
| | Amreli | 20 | 95% |
| 5 | Do you think Dairy business is good because of Increasing incomes? | | |
| | Districts | N | Percentage |
| | Navsari | 6 | 100% |
| | Valsad | 7 | 100% |
| | Amreli | 20 | 95% |
| 6 | Do you think Dairy business is good because of Increasing demand of milk and milk products? | | |
| | Districts | N | Percentage |
| | Narmada | 12 | 100% |
| | Navsari | 6 | 100% |
| | Tapi | 14 | 100% |
| 7 | Do you think Dairy business is good (in India) because of Predominantly vegetarian population | | |
| | Districts | N | Percentage |
| | Navsari | 6 | 100% |
| | Valsad | 7 | 100% |
| | Banaskantha | 14 | 93% |
| 8 | Do you think the increase in health awareness will increase sales of Value added Dairy products? | | |
| | Districts | N | Percentage |
| | Navsari | 6 | 100% |
| | Valsad | 7 | 100% |
| | Amreli | 20 | 95% |
| 9 | Do You think the Opening up of economy (Liberalization) & entry of international fast food chains – McDonald, etc. & Growth in urbanization& Changing lifestyles will increase demand of milk in India? | | |
| | Districts | N | Percentage |
| | Valsad | 7 | 100% |
| | Amreli | 20 | 95% |
| | Banaskantha | 14 | 79% |
| 10 | Do You think Dairy business is good nowadays because of Easy- establishment of commercial dairy farms (e.g. support by GCMMF)? | | |
| | Districts | N | Percentage |
| | Navsari | 6 | 100% |
| | Valsad | 7 | 100% |
| | Amreli | 20 | 95% |
| 11 | Do You think the Increasing Export opportunity is good for dairy business? | | |
| | Districts | N | Percentage |
| | Navsari | 6 | 100% |
| | Amreli | 20 | 95% |
| | Banaskantha | 14 | 86% |

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CONCLUSIONS

After analysing the collected data it could be concluded that The main challenges faced by Marginal Milk Producers were- High cost of Milch animal, High cost of cattle feed and mineral mixtures, Price offered for milk is Low. The main Opportunities for Marginal Milk Producers, It provides milk for self-consumption, It provides an excellent source of secondary income, Increasing demand of milk and milk products and constantly rising milk prices.

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