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SWOT ANALYSIS AND STRATEGY FORMULATION FOR MILK PRODUCERS OF GUJARAT DAIRY SECTOR

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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 labourers, 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 Milk Producers in Gujarat state and for carrying out the SWOT analysis and subsequently suggesting suitable strategies and policies for development.. 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- composite policy which includes dairy & farming should be devised to address problems related to "Mixed Farming', Further policy to - develop indigenous cattle, remunerative price for raw milk and Thrust on scientific animal husbandry practices in terms of feeding and breeding the animal, should also be framed and effectively implemented in the dairy sector of Gujarat state

KEYWORDS: Milk Producers, Gujarat Dairy, Cooperative Dairies, Dairy Strategies

INTRODUCTION

Swot Analysis and Strategy Formulation

Although definitions differ, there is general agreement that a strategy describes the general direction in which an organization plans to move to attain its goals. Every well-managed organization has one or more strategies, although they may not be stated explicitly. A firm develops its strategies by matching its core competencies with industry opportunities. The following diagram lays out schematically the development of a firm's strategy. Kenneth R. Andrews advanced this basic concept. According to Andrews, strategy formulation is a process that senior executives use to evaluate a company's strengths and weaknesses in light of the opportunities and threats present in the environment and then to decide on strategies that fit the company's core competencies with environmental opportunities (Anthony and Govindrajan, 2011)

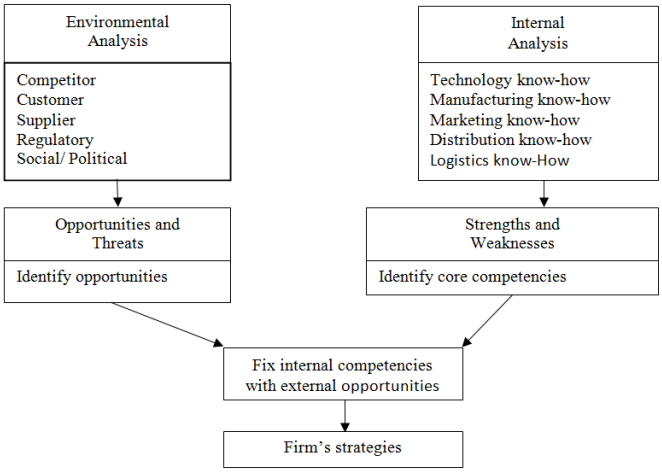

Figure 1

Strategy Formulation Process Source: Management Control Systems by Anthony and Govindrajan (2011), page 57.

Analysis of the strengths, weaknesses, opportunities, and threats (SWOT) that affect organizational performance

Strengths - Positive internal characteristics that the organization can exploit to achieve its strategic performance goals.

Weaknesses - Internal characteristics that might inhibit or restrict the organization's performance.

Opportunities-Characteristics of the external environment that have the potential to help the organization achieve or exceed its strategic goals.

Traits - Characteristics of the external environment that may prevent the organization from achieving its strategic goals.

Indian Dairy Sector

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. (Rajorhia, 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 comprises 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 Milk producers belonging to the villages.

Results and Findings

After analyzing the data, the following SWOT analysis was carried out.

Table 1

Internal Analysis		Environmental Analysis	
Strengths	**Weaknesses**	**Opportunities**	**Threats**
• Young and literate milk producers across all milk producer categories (viz. Marginal, Small, Medium, Large and commercial) • A high proportion of milk producers across all categories follow "Mixed Farming" practice which diversifies their business risk. • Leading milk producing state in the country.	• Low yield of milch animals. • Poor animal husbandry practices in terms of – Clean milk production, Feeding practices (Balanced Nutrition), Animal Health. • Low awareness of scientific dairy farming -quality aspects, Pesticide& antibiotic residue levels, etc. • Lack of scientific knowledge of AI services. • Poor Livestock extension network. • Lack of professionalism and business management skills (in terms of planning, monitoring and control of financial & human resources).	• Constantly rising milk prices, increasing demand of milk and milk products, increasing population and increasing incomes and changing lifestyles of consumers. • Opportunity to promote Buffalo milk – low cholesterol and protection from fluctuation in SMP prices. • Opportunity to promote Indian indigenous cow – for Medicinal, Ayurvedic purposes (e.g. there is a demand of cow urine). • Spread of Information and Communication Technology (ICT) in the country is favorable for any business in the present era. • Scope of Entrepreneurship in area of dairy farming, TIDP (Traditional Indian Dairy products) and other.	• Vagaries of climate can create fluctuations in milk production. • Global warming. • Entry of Foreign dairy players. • Lack of knowledge and no control over methane emission due to animal husbandry. • Rising cost of feed and fodder. • Supreme Court directive to take strict action on adulterators. • Decreasing land availability for animal husbandry – in terms of choice between fodder crop and other crops, urbanization, etc.

Suggested Strategies

To promote atleast one "Model dairy entrepreneur" per village who will be (hand held) supported by the VDCS, Milk Union and local bank branch.

An officer from milk union must be designated per village (or group of villages) who will be responsible for improvement in milk production and quality. He will disseminate scientific dairy farming and clean milk production practices and will be authorized to carry out surprise checking at milk producer and VDCS doorstep. His remuneration must be linked to increase in milk production and improvement in quality.

ICT tools (mobile, internet, CD, whatsapp, etc.) based knowledge and information dissemination programmes must be initiated with focus on – Livestock Extension, Scientific Dairy farming, Government schemes, and quality.

Give the responsibility of Promoting Biogas plant in each village (even of small capacity) to VDCS. Any VDCS (may be equipped with BMC) which is powered fully on non-conventional forms of energy (Biogas, solar, wind, etc.) must be appreciated and awarded. This will help in reducing pollution and maintaining cleanliness.

To provide a "record book" (which records financial transactions of the milk producer) of milk producers to each VDCS member. The VDCS member must be given training of how to maintain the record book. Maintaining of record book must be compulsory for medium and higher categories..

(This will help in evaluation of business performance, generation of data which is very essential for cooperative dairy growth)

(In later stages, the record keeping can be computerized and software can be developed. The milk producer can get user & password and log on to the website fill the data. Then only the payment for the milk should be made).

Establishing Dairy VikasKendras (DVKs) in each District for resolving dairy related issues.

Milk Producers (Common Policies)

In order to ensure that most of the above mentioned strategy get implemented in the intended area, the following policy /policy guidelines have been framed. Responses from Five categories of Milk producers have been indicated in the table below (Marginal, Small, Medium, Large and Commercial Milk Producers)

Table 2

Sr. No	Findings	Marginal	Small	Medium	Large	Commercial	Suggested Policy	Output
1	Age group of 20 to 49 years	75%	72%	69%	73%	69%	As All categories of milk producers are mostly Young, male, educated and mainly carrying out "mixed Farming", their profile is quite favourable hence a policy should be formed which focuses on training programmes,	Organizing individual milk producers into homogenous groups (SHGs) will help in understanding the problems/ bottlenecks/ issues in a better way and also help in addressing common
2	Male dairy farmers	83%	83%	84%	83%	83%		
3	Educational Background of SSC to Post Graduation	57%	50%	56%	54%	51%		
4	Main Business as Animal Husbandry + Farming	79%	77%	79%	81%	74%		

5	Milk Producers who are **landless** and who have **below 10 vigha** land **Respectively**	18% & 43%	10% & 43%	8% & 43%	11% & 44%	10% & 38%	animal husbandry support schemes, credit facilities, marketing facilities. Looking into the dairy business which requires less land and more labour, even landless farmers or small farmers can carry out profitable dairy business. A composite policy which includes dairy & farming should be devised to address problems related to "Mixed Farming'.	issues in a more effective and efficient manner. Mixed Farming proves to be an advantage in the event of failure of farming due to vagaries of climate.
6	Irrigation Facility on their land	85%	85%	85%	87%	89%		
7	Milk Producers who have **Only buffaloes**, **Only cows** and **Both buffaloes and cows Respectively**	63%, 27% & 9%	51%, 21% & 28%	47%, 19% & 34%	35%, 17% & 48%	29%, 18% & 54%	There is enormous opportunity to develop indigenous cattle. It is more suitable to our environment. There is an opportunity to develop indigenous buffalo which will help against menace of "fluctuation in SMP prices"	Benefits of both cow milk and buffalo milk can be availed.
8	Milk Producers having **Crossbred Cattle** and **Indigenous Cattle (Gir and Kankrej)**Respectively	36% & 64%	47% & 53%	30% & 70%	28% & 72%	37% & 63%		

9	Share of **Mehsani**, **Surti**, **Jafrabadi**&**Banni** Buffaloes Respectively	47%, 20%, 23% & 10%	50%, 22%, 20% & 9%	50%, 20.7%, 22% & 7.6%	50%, 21%, 22% & 7%	47.5%, 20.8%, 21.9% & 9.8%		
10	Average Daily Milk Production (Litre per day) for 95% of the respondents	below 20 liters per day.	below 30 liters per day.	below 40 liters per day.	below 60 liters per day.	below 70 liters per day.	A policy to thrust "Scientific Animal Husbandry practices" is must and moreover, follow up research studies should be undertaken to evaluate the extent of "technology adoption". At present, in Gujarat Cooperative dairies are already paying highest price of milk to milk producers. This policy to give remunerative price for raw milk will encourage milk producers to increase his milk production. This type of policy should be maintained to motivate dairy farmers. NDDB is implementing NDP in order to increase milk production in the country.	Increased milk production and increased motivation for milk producers.
11	Milk Collection in Morning and Evening Session	Almost Same	Almost Same	Almost Same	Almost Same	Almost Same		
12	FAT Range of 4 to 8% and Greater than 8% Respectively	81% & 16%	85% & 13.5%	60% & 15%	61% & 14%	56% & 15%		
13	Average Milk Production (Litres per day per Milk Producer)	9.6	15.18	22.06	30	42.93		
14	% sold to VDCS	66%	73%	70%	72%	73%	Spread of VDCS and/or	Growth of organised

	Self-Consumption	20%	15.38%	12.3%	12%	11%	BMC should be increased. Awareness should be created regarding the ***care to be taken*** while consumption of raw milk.	dairy sector Increased awareness about Safe Consumption of Milk.

VDCS - Village Dairy Cooperative Society. BMC- Bulk Milk Cooler

Table 3: Cost Structure for Various Categories of Milk Producers

Cost Item	Marginal	Small	Medium	Large	Commercial
Green Fodder	26.02%	23.56%	21.50%	19.11%	20.10%
Dry Fodder	20.02%	20.20%	19.75%	19.80%	18.61%
Cattle Feed	23.56%	26.53%	27.61%	28.20%	28.28%
De oiled cake	11.98%	12.27%	13.49%	13.90%	14.01%
Mineral Mixture	3.19%	3.61%	3.17%	4.21%	4.55%
(A) Feed Cost	84.77%	86.17%	85.51%	85.22%	85.54%
Medicine	1.93%	2.13%	2.66%	2.84%	2.87%
Vaccination	0.31%	0.28%	0.23%	0.22%	0.22%
AI Cost	0.58%	0.52%	0.58%	0.53%	0.61%
Insurance	1.55%	1.37%	1.65%	2.12%	2.14%
Labour	10.87%	9.52%	9.36%	9.07%	8.62%
(B) Non Feed Cost	15.23%	13.83%	14.49%	14.78%	14.46%
Total	100.00%	100.00%	100.00%	100.00%	100.00%

Suggested Policy

- Thrust on scientific animal husbandry practices in terms of feeding the animal including -
- Balance rationing, use of chaff cutter, animal stage wise (age, dry, lactation stage, etc) feeding.

Expected Output

- Reduction in methane emission
- Efficiency in feeding cost.

CONCLUSIONS

After analysing the collected data it could be it can be concluded that- composite policy which includes dairy & farming should be devised to address problems related to “Mixed Farming’, Further policy to - develop indigenous cattle, remunerative price for raw milk and Thrust on scientific animal husbandry practices in terms of feeding and breeding the animal, should also be framed and effectively implemented in the dairy sector of Gujarat state.

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