

CHALLENGES FACED BY THE DAIRY PRODUCT EXPORTERS IN COIMBATORE DISTRICT- AN INVESTIGATIVE STUDY

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ABSTRACT:

The study was conducted in Coimbatore district with objective of assessing challenges confronted by the dairy product exporters in Coimbatore district. India is the largest producer of milk. For the Indian dairy industry, effort need to be directed to accelerating the pace of application and adoption of modern technologies to improving productivity, and to reducing costs of operations and ensure greater availability of milk and milk products. To attain this, national development programs need to be tailed with state Governments programmes on animal husbandry and dairying, poverty alleviation programmes, R&D strategies, agricultural universities and other developmental agencies. Globalization remains a key force in driving Indian economy and India's dairy industries acknowledge the demands and preferences around the world by consumers. Involvement of intermediaries; lack of bargaining power by the producers and lack of infrastructure facilities for collection, storage, transportation and processing are the major constraints which affects the prices received by producers in milk marketing. The Indian dairy industry needs to focus simultaneously on the four-fold challenge of quality, product development, infrastructure support development, and global marketing. Government also have taken steps to encourage the dairy farmers to increase exports and by promoting schemes and subsidy for strengthening the dairy sector industry.

Keywords: Globalization, Constraints, Challenges, Schemes and Subsidy.

PREAMBLE OF THE STUDY

Globalization is one of the greatest strategic challenges for all industries as well as dairy industry. Globalization and Liberalization are the Mantras of the new economy today, which is now on the fast track. India is the world's largest milk producer. India ranks first in milk production as well as consumption in the world accounting for around more than 17% of the global milk production. India also stands distinct with the lowest milk production costs in the world. The world dairy market has undergone significant structural changes over the last two decades as the milk production has expanded by an annual average compound growth rate of almost 2 percent. Industry production is rapidly moving forward. The dairy industry is no exception. Dairy industry provides livelihood to millions of homes in villages, ensuring supply of quality milk and milk products to people both in urban and rural areas. In India, dairying has been considered as one of the activities aimed at alleviating the poverty and unemployment especially in rural areas. Dairy products are a major source of cheap and nutritious food to millions of people in India and the only acceptable source of animal protein for large vegetarian segment of Indian population, particularly among the landless, small and marginal farmers. Livestock has been appeared as subsistence sector dominated by small holders to fulfill their needs of milk, food and cash income on daily basis. In the rural areas, livestock is considered as a more secure source of income for the small farmer and landless poor people. The dairy sector in the India has shown remarkable development in the past decade and India has now become one of the largest producers of milk and value-added milk products in the world. Livestock production is the most useful way to improve the income of the landless and the small farmers. Nearly one third of world's intake of animal protein is provided by milk and milk products. Development of dairy sector is not only required to meet the increasing demands of animal protein but its development is necessary for social and economic reasons as dairy animals are good source of regular cash income, economically utilize the family labour, produce social security and supply growing markets.

OBJECTIVES OF THE STUDY

The researcher has framed the following factors as objectives of present study. They are as follows.

- To identify the major constraints faced by the dairy product exporters in Coimbatore district
- To know about the schemes, services and subsidy provided by APEDA for dairy milk exports.
- To study about the employment opportunities in Indian dairy industry.
- To offer valuable suggestions to dairy product exporters from the study.

STATEMENT OF THE PROBLEM

Milk products are a major source of cheap and nutritious food to millions of people in India and the only acceptable source of animal protein for a large vegetarian segment of Indian population.

Dairying provides livelihood to millions of small and marginal farmers. It also provides the main source of income next to agriculture. Dairying industry is crucial importance to India. It generates regular income not only to the rural but also to the urban and semi-urban population, especially to women folk by providing self-employment opportunity and thereby improving their life. Through changes in government policy, the number of privately-owned plants has increased substantially.

One of the major issues regarding dairy production is lack of proper extension services, causing low production due to non-adaptation of improved dairy technologies among the dairy farmers. Low productivity of milk animals is a serious constraint to dairy development. The dairy sector holds high promise as a dependable source of livelihood for the vast majority of the rural poor. Liberalization of world trade in dairy products under the new trade regime of the WTO poses new challenges and has opened up new export opportunities for the dairy industry. The dairy sector in India needs to enhance its competitive economic advantage in dairy products in terms of both quality and cost and its credibility in international markets. The Indian dairy industry needs to focus simultaneously on the four-fold challenge of quality, product development, infrastructure- support development, and global marketing.

In today's dairy industry many farmers are struggling to get half the price of market for their quality produce. Also considering complexity of milk distribution, milk becomes a commodity by the time it reaches final consumers.

RESEARCH METHODOLOGY

Research methodology is a way to systematically solve a research problem. It is a science of studying how research is done scientifically. Essentially it is the procedure by which the researchers go about their work of describing, evaluating and predicting phenomenon. It aims to give the work plan of research. It provides training in choosing methods materials, scientific tools and techniques relevant for the solution of the problem.

AREA OF STUDY

The research study was conducted only in Coimbatore district.

RESEARCH DESIGN

A research design specifies the methods and procedures for conducting a particular study. It is a map or blue print to which the research is to be conducted.

DESCRIPTIVE RESEARCH

Descriptive research includes survey and fact-finding enquiries of different kinds. The survey to known about "Challenges Faced by The Dairy Product Exporters in Coimbatore District- an Investigative Study" collected by the researcher during February 2025 to August 2025 in the study area.

METHODS OF DATA COLLECTION

The data has been collected through internet and journals. The researcher has used both primary as well as secondary data. The research was conducted only in Coimbatore district.

Primary Data

The primary data have been collected through a structured questionnaire. The questionnaires were distributed to 55 dairy product exporters from Coimbatore district.

Secondary data

Secondary data have been collected from various sources namely from journals, magazines, other research work and also from other authentication websites.

SAMPLE SIZE:

Sample size is the number of items to be selected from the universe to constitute a sample. The sample size is 55 in numbers.

STATISTICAL TOOLS USED

- Simple Percentage Analysis
- Weighted Arithmetic Mean
- Ranking Method
- Chi- Square Test

SHORT COMINGS OF THE STUDY

- The research focusses only Coimbatore district with 55 respondents.
- The sample size was collected from 55 respondents due to busy working schedule of exporter.
- The study was mainly based on primary data. Therefore, the validity of data depends on the response by the respondents.

REVIEW OF LITERATURE:

Ashraf Imam (2011), Globalization is one of the greatest strategic challenges for all industries as well as dairy industry.

K. Rajendran (2004), Dairying is a century- old tradition for millions of Indian rural households; domesticated animals have been an integral part of the farming systems from time immemorial.

Muhammad Jamshed Khan (2013), Agriculture sector, with its important component viz. livestock (animal agriculture), is considered as most vital part of the national Agriculture has played a major role in Pakistan's economy as it provides employment to 45% population and also provides inputs for agro-based industry.

Asad Abbas (2013), Development of dairy sector is not only required to meet the increasing demands of animal protein but its development is necessary for social and economic reasons as dairy animals are good source of regular cash income, economically utilize the family labour, produce social security and supply growing markets.

Malede Birhan (2015), Despite the large cattle population and the prevailing favorable climatic conditions and resources for livestock production, current milk production is low which is reflected in the low per capita milk production and increasing trend in import of milk and milk products.

Shiv Kumar (2016), Indian dairy industry is one of the largest and fast-growing industries in the country which provide ample job opportunities and contribute significantly to the economy of the country.

B.N.Mathur, Presently, in the agriculture sector, milk is the largest contributor towards India's GNP. The unique feature is that 70 million rural families with holdings of 2-4 cattle are engaged in milk production.

Faezeh Rahmani, Globalization process, the creation of the WTO and integration of global markets, rapid and fundamental technological advances, new developments in information technology, increased rapid changes in consumption patterns and demand explanation of environmental pollution control and energy conservation, low resources and high costs, they are challenges that businesses and industries in the field of trade and economic activities and survival faced by them, subject to correct and timely decisions in the face of these changes.

Rinkal Patel, Packaging is an indispensable vehicle to deliver products to consumers. The definition of packaging says that it is a co-ordinate system of enclosing food to protect it from tampering or contamination from physical, chemical and biological sources.

Tadesse Guadu (2016), Ethiopia is one of the Sub-Saharan Africa's developing countries with a large potential in livestock, being 1st among African countries and 9th in the world. Dairying is one of the livestock production systems practiced in almost all over the world including Ethiopia, involving a vast number of small, medium or large-sized, subsistence or market-oriented farms.

Madhusudana Rao, The dairy sector promotes vital linkages and synergies between the two pillars of the economy, namely industry and agriculture.

M.N.Zadeh(2011), India is the world's largest milk producer, accounting for more than 13% of world's total milk production. Dairy products are a major source of cheap and nutritious food to millions of people in India and the only acceptable source of animal protein for large vegetarian segment of Indian population, particularly among the landless, small and marginal farmers and women.

Megan L. Bruch (2003), Recently, Increased interest in milk processing opportunities has been expressed by several dairy farmers in Tennessee.

Tomasz Rokicki (2015), According to the Polish standard, warehouse is defined as an operational and organizational unit designed for the storage of material goods in a separate space, storage building, in accordance with an established technology, equipped with adequate

technical devices and measures, managed and operated by a team of people with appropriate skills.

OVERVIEW OF DAIRY INDUSTRY IN INDIA

India is the highest milk producer in the entire globe. India is well known as the 'Oyster' of the global dairy industry, with opportunities galore for the entrepreneurs globally. It might be a dream for any nation in the world to capitalize on the largest and fastest growing milk and milk product's market. The dairy industry in India has been witnessing rapid growth with liberalization. It is the economy provides good opportunities for MNCs and foreign investors to release the full potential of this industry. The main objective of the Indian dairy industry is to manage the national resources in a manner to enhance milk production and upgrade milk processing using innovative technologies. The crossbred technology in the Indian dairy industry has further augmented with the viability of dairy units by increasing the milk production per animal. Then subsequently milk production has also increased at an exponential rate while the benefits of an increase in milk production also reached the consumers from a relatively lower increase in the price of milk. The favorable price environment for milk producers for the dairy industry in India however appeared to have weakened during the 90's, a decline in the real price of milk being noticed after the year 1992. And then slowly regained its glory after 1992 till now.

In India dairying from very much earlier is regarded as an instrument for social and economic development. The country's milk supply comes from millions of small producers, who are dispersed throughout the rural areas. All these farmers maintain an average herd of one or two milch animals, comprising cows and/or buffaloes. Mostly ample labour and a small land base encourage farmers to practice dairying as an occupation subsidiary to agriculture. As income from crop production is seasonal instead dairying provides a stable which is a year-round income and also an important economic incentive for the small farmer.

India had tremendous milk production in 40 years and has become the world's largest milk-producing nation with a gross output of 84.6 million tons in 2001. The Indian dairy industry has achieved this strength of a producer-owned and professionally managed cooperative system, despite the facts that a majority of dairy farmers are illiterate and run small, marginal operations and for many farmers, selling milk is their sole source of income. More than 10 million dairy farmers belong to 96,000 local dairy cooperatives, who sell their products to one of 170 milk producer's cooperative unions who in turn are supported by 15 state cooperative milk marketing federations. In India dairy business has been practiced as rural cottage industry over the years. The organized dairies in India have been successfully engaged in the routine commercial production of pasteurized bottled milk for Indian dairy products.

In India milk production is dominated by small and marginal land-holding farmers and also by landless laborers who aggregate own 70% of the national milch animal herd. Dairying as a subsidiary source of income and occupation is a real relief to most of the farmers in the

society. Usually, one or two milch animals enable the farmers to generate sufficient income to break the vicious subsistence agricultural- debt cycle.

INDIA'S MILK PRODUCTION MIX

Fluid Milk	46.0%
Ghee	27.5%
Butter	6.5%
Curd	7.0%
Khoa (Partially Dehydrated Condensed Milk)	6.5%
Milk Powders	3.5%
Paneer & Chhana(Cottage Cheese)	2.0%
Others, Including Cream, Ice Cream	1.0%

TOTAL CONTRIBUTION TO THE ECONOMY/SALES

The Indian dairy industry engages in the production and processing of milk and cream. This industry is involved in the manufacture of various dairy products like cheese, curd, yoghurt etc..., The Indian dairy industry specializes in the procurement, production, processing, storage and distribution of dairy products. India as a nation stands first in its share of dairy production in the international scenario. The industry contributes about Rs. 1, 15,970 to the national economy.

EMPLOYMENT OPPORTUNITIES:

The Indian dairy industry which is in the developing stage provides gainful employment to a vast majority of the rural households. It employs about 8.47 million people on a yearly basis out of which 71% are women. Jobs in the Indian dairy industry are mainly in the fields of production and processing of dairy products. An individual with a minimum of 60% marks who has a bachelor's degree course in the dairy technology can easily be availing an opportunity to work in this industry. For the graduation course in dairy technology, one has to qualify the All-India Entrance Test that is affiliated to the Indian Council of Agricultural Research. After that the person can continue with his masters in Indian dairy technology. Jobs would be for the following positions.

- **DAIRY SCIENTISTS:** The main job of the dairy scientists is to deal with collection of milk and taking care of the high yielding variety of animals.
- **DAIRY TECHNOLOGISTS:** The work of dairy technology requires procurement officers who take the responsibility of collecting milk from farmers, milk booths and cattle-rearers. This particular procurement officer should well understand the latest technology that is applicable in maintaining the quality of milk of the process of transporting it to the desired location
- **DAIRY ENGINEERS:** Dairy engineers are usually appointed to set up and maintain dairy plants.

- **MARKETING PERSONNEL:** These individuals deal with the sale and marketing of milk together with milk products.

DAIRY AND IT'S BY PRODUCTS:

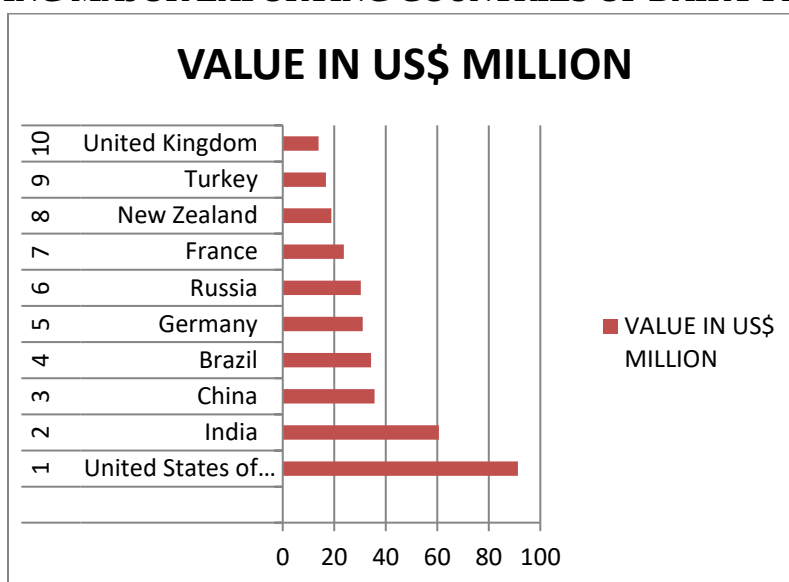
1. **MILK** – Milk after optional homogenization, pasteurization, in several grades after standardization of the fat level, and possible addition of the bacteria *Streptococcus lactis* and *Leuconostoc citrovorum*.
2. **CLOTTED CREAM** –Thick, spoon able cream made by heating milk.
3. **POWDERED MILK** – produced by removing the water from (usually skim) milk
4. **KHOA** – Milk which has been completely concentrated by evaporation, used in Indian cuisine including gulab jamun, peda, etc.,)
5. **BUTTER** – Mostly milk fat, produced by churning cream
6. **KHEER** – It is a popular Indian dessert which is made by partial dehydration of whole milk in a shallow pan over direct fire together with sugar and rice.
7. **KULFI** –It is similar to western dairy product counterpart ice-cream, though it contains more cream and is denser than ice cream. The reason of higher density of kulfi is due to no whipping, which results in solid, dense frozen dessert.
8. **GHEE** – It is the pure clarified fat derived from butter or cream. Ghee contains fat, which is a good source of energy. It is observed to improve the growth rate and digestibility. It is a valuable source of fat-soluble vitamins (A, D, E and K) which performs various physiological functions in the body.
9. **CURD** – Curd is the product obtained from pasteurized or boiled milk by souring, natural or otherwise, by lactic acid or other bacterial culture. Curd is a rich source of protein, calcium, riboflavin, vitamin B6 and vitamin B12 and others.
10. **SRIKHAND** – It is a semi-soft sweetish sour fermented dairy product that is made from strained curd, known as Chakka. Chakka is mixed to required amount of sugar to get srikhand.
11. **YOGHURT** – Yoghurt is a food produced by bacterial fermentation of milk. Cow's milk is commonly available worldwide, and, as such, is the milk most commonly used to make yogurt.
12. **LASSI** – It is the by-product obtained during the churning of curdled whole milk/ curd for production of makkhan. Lassi is consumed round the year, but most often drunk with ice, in the hot summer months.

TOP MAJOR EXPORTING COUNTRIES OF DAIRY PRODUCTS

S.NO	COUNTRY	VALUE IN US\$ MILLION
1	United States of America	91.3
2	India	60.6

3	China	35.7
4	Brazil	34.3
5	Germany	31.1
6	Russia	30.3
7	France	23.7
8	New Zealand	18.9
9	Turkey	16.7
10	United Kingdom	13.9

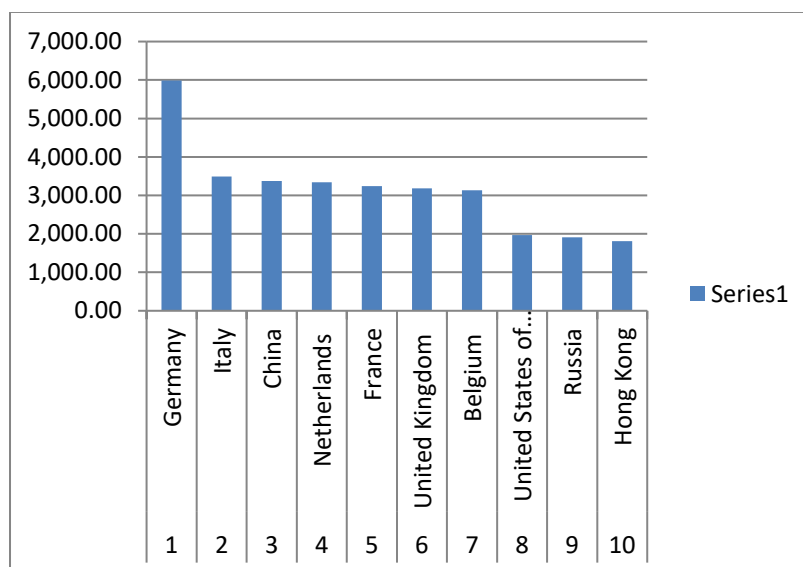
CHART SHOWING MAJOR EXPORTING COUNTRIES OF DAIRY PRODUCTS



TOP MAJOR IMPORTING COUNTRIES OF DAIRY PRODUCTS

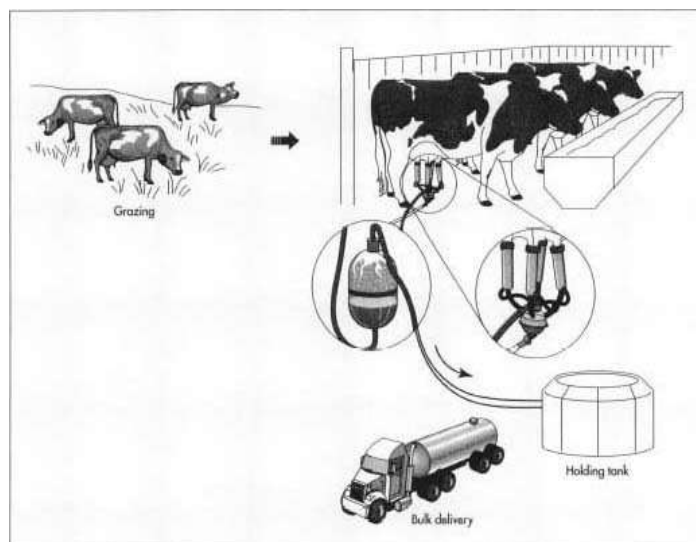
S.NO	COUNTRY	VALUE IN US\$ MILLION
1	Germany	5,991.00
2	Italy	3,488.00
3	China	3,371.00
4	Netherlands	3,345.00
5	France	3,242.00
6	United Kingdom	3,180.00
7	Belgium	3,134.00
8	United States of America	1,966.00
9	Russia	1,907.00
10	Hong Kong	1,808.00

CHART SHOWING MAJOR IMPORTING COUNTRIES OF DAIRY PRODUCT



MIL COLLECTION PROCESS:

Milk is a perishable commodity. For this reason, it is usually processed locally within a few hours of being collected.



COLLECTING

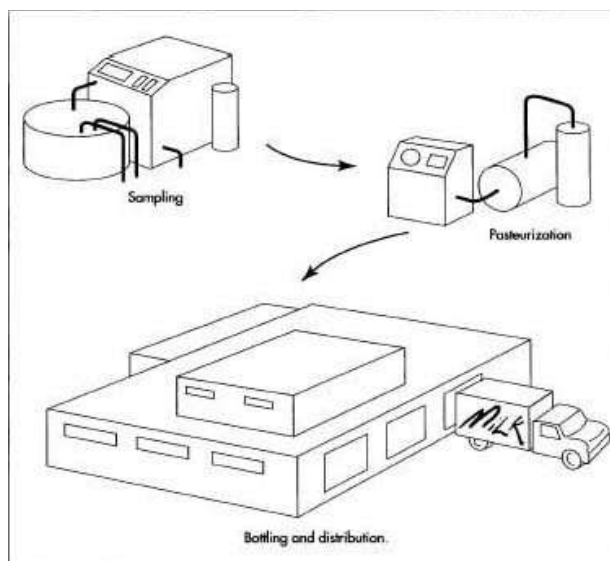
Dairy cows are milked twice a day using mechanical vacuum milking machines.

SEPARATING

The cold raw milk passes through either a clarifier or a separator, which spins the milk through a series of conical disks inside an enclosure.

FORTIFYING

Vitamin A and D may be added to the milk at this time by a peristaltic pump, which automatically dispenses the correct amount of vitamin concentrate into the flow of milk.



PASTEURIZING

The milk either whole milk, skim milk or standardized milk is piped into a pasteurizer to kill any bacteria. There are several methods used to pasteurize milk.

HOMOGENIZING

Most milk is homogenized to reduce the size of the remaining milk fat particles. This prevents the milk fat from separating and floating to the surface as cream.

PACKAGING

The milk is pumped into coated paper cartons or plastic bottles and is sealed. The bottles or cartons are stamped with a “sell by” date to ensure that the retailers do not allow the milk to stay on their shelves longer than it can be safely stored.

CLEANING

To ensure sanitary conditions, the inner surfaces of the process equipment and piping system are cleaned once a day.

QUALITY CONTROL

Milk quality control is the use of approved tests to ensure the application of approved practices, standards and regulations concerning the milk and milk products.

PACKAGING MATERIALS USED:

PRODUCT	PACKAGING MATERIAL
Liquid Milk	➤ Glass Bottles ➤ Paper Laminate for Tetra Packs ➤ Flexible Pouches
Milk Powder	➤ Tin Plate Containers ➤ Metalized Aluminum Foils ➤ Lined Cartons ➤ Bag-in-Box: Powder Filled in Laminates
Butter	➤ Duplex Board with Parchment Paper ➤ Tin Plate Containers ➤ Aluminum Foil
Cheese	➤ Tin Plate Containers ➤ Aluminum Foil in Duplex Board Carton
Ice Cream	➤ Plastic Containers ➤ Duplex Board Cartons ➤ Laminates
Yoghurt	➤ Multi Pack ➤ Flexible Pouches ➤ Yogurt Case
Milk Sweets	➤ Paper Cartons ➤ Polypropylene Boxes
Khoa	➤ Tin cans ➤ Rigid plastic container
Ghee	➤ Tin plate container ➤ Flexible ghee pouches ➤ Paper cartons ➤ Sachets

SHELF LIFE OF DAIRY PRODUCTS:

Shelf life is the period of time that a food may be stored before it starts to deteriorate or become potentially unsafe.

PASTEURISED MILK 12-14 days if kept below 4 degrees Celsius.

- **YOGHURT** 4 to 6 weeks.
- **HARD AND SEMI-HARD CHEESES** Depending on the type, it may be kept for several weeks to months.
- **COTTAGE CHEESE** Store in the original, covered container or foil wrapping and consume within 1-2 weeks
- **BUTTER** Unsalted butter has a shelf life of 2-3 weeks.

➤ **ICE CREAM AND FROZEN YOGHURT** In the freezer 2-6 months.

RESULTS AND DISCUSSION OF THE STUDY

Table Number: 01 Opinion of the respondents

S.No.	Statements	Manufacturer Exporter	Merchant Exporters	Total
01.	Kind of Exporter	36	19	55
02.	Capital Investment pattern of dairy Export Business persons	Own capital	Financial institution	55
		27	28	
03.	Year of Experience in Dairy Products Export	Up to 10 years	More than 10 years	55
		42	13	
04.	Frequency Exporting Dairy Products	Weekly	Monthly	Based on order received
		18	27	10
Value Added Dairy Products Exporting		RESPONDENTS	PERCENTAGE (%)	
Milk		8	14.5	
Butter		10	18.2	
Cheese		4	7.3	
Custard		4	7.3	
Yogurt		7	12.7	
Ghee		15	27.3	
Clotted Cream		7	12.7	
TOTAL		55	100	
Annual Turnover of Exporters		RESPONDENTS	PERCENTAGE (%)	
Up to 10 Lakhs		13	23.6	
11-25 Lakhs		17	30.9	
26-50 Lakhs		21	38.2	
Above 50 Lakhs		4	7.3	
TOTAL		55	100	
Dairy Products Exporting Countries		RESPONDENTS	PERCENTAGE (%)	
United Arab Emirates		11	20	
Pakistan		6	11	
Bangladesh		12	21.8	
Bhutan		8	14.5	
Nepal		8	14.5	

Others Specify	10	18.2
TOTAL	55	100
Mode of Transportation Used by the Dairy Exporters	RESPONDENTS	PERCENTAGE (%)
Road Ways	6	10.9
Air Ways	16	29.1
Rail Ways	4	7.3
Sea Ways	8	14.5
Multimodal	21	38.2
TOTAL	55	100
Mode of Payment for Exporting Dairy Products	RESPONDENTS	PERCENTAGE (%)
Advance Payment	10	18.2
Letter of Credit	28	50.9
Document against Payments	7	12.7
Document against Acceptance	10	18.2
TOTAL	55	100
Types of Packaging Prefer for Customer While Exporting	RESPONDENTS	PERCENTAGE (%)
Carton Box	10	18.2
Polyethylene	11	20
Aluminum Foil	1	1.8
Glass Bottles	5	9.1
Flexible Pouch	15	27.3
Tetra Packs	13	23.6
TOTAL	55	100
Selection of Packaging Material for Dairy Products	RESPONDENTS	PERCENTAGE (%)
Contamination of Food	4	7.3
Storage Conditions	12	21.8
Transportation	10	18.2
Perishability	4	7.3
Product Range	7	12.7
Market	6	10.9
Consumer Needs	12	21.8
TOTAL	55	100

Services Availing from the Government by the Dairy Exporters	RESPONDENTS	PERCENTAGE (%)
Dairying Information Services Kiosk	7	12.7
Dairy Farm Consultancy Services	10	18.2
Animal Husbandry and Animal Veterinary Services	5	9.1
Dairy Industry Services	15	27.3
Quality and Safety Services for Dairy Products	18	32.7
TOTAL	55	100
Opinion on the Services Rendered by Government	RESPONDENTS	PERCENTAGE (%)
Excellent	6	10.9
Good	20	36.4
Average	25	45.4
Bad	4	7.3
TOTAL	55	100
Dairy Exporters are Permanent Member of APEDA	RESPONDENTS	PERCENTAGE (%)
Yes	40	72.7
No	15	27.3
TOTAL	55	100
Problems Faced by the Dairy Exporters While Using the Warehouse	RESPONDENTS	PERCENTAGE (%)
Storage space utilization	17	31
Product handling problems	6	10.9
Labour intensity	13	23.6
Warehousing equipment's problems	12	21.8
Costing and budgeting	7	12.7
TOTAL	55	100
the Marketing Challenges Affecting Government Policies and Support	RESPONDENTS	PERCENTAGE (%)
Very often	34	61.8
Often	21	38.2
TOTAL	55	100

Marketing Challenges Affecting Small Scale Dairy Exporters by Road Infrastructure	RESPONDENTS	PERCENTAGE (%)
Very Often	34	61.8
Often	21	38.2
TOTAL	55	100
Marketing Challenges Affecting Small Scale Dairy Exporters for Milk Consumption	RESPONDENTS	PERCENTAGE (%)
Very often	33	60
Often	22	40
TOTAL	55	100
Marketing Challenges Affecting at the Time of Marketing Dairy Products	RESPONDENTS	PERCENTAGE (%)
Very Often	19	34.5
Often	36	65.5
TOTAL	55	100

Marketing Challenges Affecting Larger Dairies	RESPONDENTS	PERCENTAGE (%)
Very Often	24	43.6
Often	31	56.4
TOTAL	55	100
Marketing Challenges Affecting Weather, Space Constraints	RESPONDENTS	PERCENTAGE (%)
Very Often	41	74.5
Often	14	25.5
TOTAL	55	100
Marketing Challenges Affecting Distribution Channels	RESPONDENTS	PERCENTAGE (%)
Very Often	23	41.8
Often	32	58.2
TOTAL	55	100
Schemes Availing From APEDA for Dairy Product Exports	RESPONDENTS	PERCENTAGE (%)

National Programme for Bovine Breeding and Dairy Development	4	7.3
Intensive Dairy Development Programme	7	12.7
Strengthening Infrastructure for Quality & Clean Milk Production	21	38.2
National Mission For Protein Supplements	6	10.9
National Agriculture Development Programme	11	20
Venture Capital Scheme for Dairying	6	10.9
TOTAL	55	100
Eligibility for NABARD Subsidy in Dairy Farming	RESPONDENTS	PERCENTAGE (%)
New Starters	7	12.7
Milk Federations	10	18.2
Individual Entrepreneurs	8	14.5
Agricultural Farmers	11	20
NGOs	4	7.3
Milk Union and Dairy Cooperative societies	11	20
Firms	4	7.3
TOTAL	55	100
Dairy Products Export Awareness Program Conducted by the Government	RESPONDENTS	PERCENTAGE (%)
Yes	28	50.9
No	27	49.1
TOTAL	55	100
Pricing Policy Adopted by Dairy Concern	RESPONDENTS	PERCENTAGE (%)
Competitive Pricing	16	29.1
Target Pricing	8	14.5
Cost Plus Pricing	16	29.1
Bundle Pricing	15	27.3

TOTAL	55	100
Factors of Testing the Dairy Products	RESPONDENTS	PERCENTAGE (%)
Density of Milk	8	14.5
Creaminess	7	12.7
Freshness	17	31
Hygiene	15	27.3
Taste	8	14.5
TOTAL	55	100
Type of Advertising Adopted to Popularize Dairy Product	RESPONDENTS	PERCENTAGE (%)
T.V Channels	11	20
Website Add	9	16.4
Samples	21	38.2
Trade Fair and Exhibitions	7	12.7
Brochures	7	12.7
Others Specify	0	0
TOTAL	55	100
Dairy Exporters Participation in Trade Fairs	RESPONDENTS	PERCENTAGE (%)
Yes	20	36.4
No	35	63.6
TOTAL	55	100

Source: Primary Data

WEIGHTED AVERAGE MEAN

Table No.02: Showing Opinion about Critical Issues in Carrying out Dairy Products

S.NO	CRITICAL ISSUES	SA	AG	N	DA	SDA	TOTAL	MEAN
		5	4	3	2	1		
1	Cleanliness and Hygiene	49	6	0	0	0	55	4.9
		245	24	0	0	0	269	
2	Cooling Temperature	33	18	3	1	0	55	4.5
		165	72	9	2	0	248	
3	Time	23	21	10	1	0	55	4.2
		115	84	30	2	0	231	
4	Humidity	6	13	23	8	5	55	3.1
		30	52	69	16	5	172	

5	Cost	8	14	18	12	3	55	3.2
		40	56	54	24	3	177	
6	Distance	5	12	11	19	8	55	2.8
		25	48	33	38	8	152	
7	Meeting Demand	23	15	5	6	6	55	3.8
		115	60	15	12	6	208	

Source: Primary Data

RANKING METHOD

Table No: 03 Problems faced by during Exports

S.NO	PROBLEMS FACED BY DURING EXPORTS	11	10	9	8	7	6	5	4	3	2	1	TOTAL	MEAN	RANK
1	Government Control	8	3	4	4	4	8	3	10	7	3	1	55	6.3	IV
		88	30	36	32	28	48	15	40	21	6	1	345		
2	Difference in Laws and Policies	2	7	7	4	7	6	4	4	7	1	6	55	6.1	VI
		22	70	63	32	49	36	20	16	21	2	6	337		
3	Difference in Payment	5	3	6	7	2	6	1	4	4	8	9	55	5.5	IX
		55	30	54	56	14	36	5	16	12	16	9	303		
4	Custom Duty	4	5	2	3	5	1	7	11	7	6	4	55	5.3	X1
		44	50	18	24	35	6	35	44	21	12	4	293		
5	Economic Dependence	2	5	4	3	5	6	13	5	5	4	3	55	5.7	VIII
		22	50	36	24	35	36	65	20	15	8	3	314		
6	Poor Milk Quality	3	8	3	5	5	2	2	3	11	4	9	55	5.4	X
		33	80	27	40	35	12	10	12	33	8	9	299		
7	High Transportation Cost	9	2	9	4	5	2	5	2	2	7	8	55	6.2	V
		99	20	81	32	35	12	25	8	6	14	8	340		

8	High Operating Cost	5	10	6	4	3	5	5	5	1	6	5	55	6.5	II
		55	100	54	32	21	30	25	20	3	12	5	357		
9	Fragmented Milk Supply	6	5	4	6	7	9	8	4	3	3	0	55	6.8	I
		66	50	36	48	49	54	40	16	9	6	0	374		
10	Price Fluctuation	4	4	9	8	6	4	3	3	4	6	4	55	6.4	III
		44	40	81	64	42	24	15	12	12	12	4	350		
11	Lack of Timely Refrigerator	5	5	2	8	5	6	4	4	5	6	5	55	5.9	VII
		55	50	18	64	35	36	20	16	15	12	5	326		

Source: Primary Data

CHI- SQUARE TEST:

Table No.: 04 Showing the Experience in Dairy Product Exports and Problems Faced While Using Warehousing

Ho: “There is no significance relationship between the year of experience in exports and Problems faced while using warehousing”.

Ha: “There is significance relationship between the year of experience in exports and problems faced while using warehousing”.

Factors	Storage Space Utilization	Product Handling Problems	Labour Intensity	Warehousing Equipment's Problems	Costing and Budgeting	TOTAL
Below 2 Years	5	2	2	2	1	12
3-5 Years	4	1	4	3	1	13
6-8 Years	5	2	6	5	2	20
Above 8 Years	3	1	1	2	3	10
TOTAL	17	6	13	12	7	55

Source: Primary Data

Experience in Dairy Product Exports and Problems Faced While Using Warehousing

O	E	O-E	(O-E)²	(O-E)²/E
5	3.71	1.29	1.6641	0.4485
4	4.02	-0.02	0.0004	0.0001
5	6.18	-1.18	1.3924	0.2253
3	3.09	-0.09	0.0081	0.0026
2	1.31	0.69	0.4761	0.3634
1	1.42	-0.42	0.1764	0.1242
2	2.18	-0.18	0.0324	0.0148
1	1.1	-0.1	0.01	0.0091
2	2.84	-0.84	0.7056	0.2484
4	3.07	0.93	0.8649	0.2817
6	4.73	1.27	1.6129	0.3409
1	2.36	-1.36	1.8496	0.7837
2	2.62	-0.62	0.3844	0.1467
3	2.84	0.16	0.0256	0.0090
5	4.36	0.64	0.4096	0.0939
2	2.18	-0.18	0.0324	0.0149
1	1.53	-0.53	0.2809	0.1835
1	1.65	-0.65	0.4225	0.2561
2	2.54	-0.54	0.2916	0.1148
3	1.27	1.73	2.9929	2.3566
ΣO= 55	ΣE= 55			Σ(OE)²/E=6.0182

Degree of Freedom = (R-1)*(C-1)

= (5-1)*(4-1)

= (4)*(3) = 12

Level of Significance = 0.05

Table value = 21.026

Calculated Value = 6.0182

MAJOR OBSERVATIONS OF THE STUDY

A survey of dairy product exporters revealed several key findings. The majority of respondents (40%) are manufacturer exporters, with a significant number (36.4%) having 6-8 years of experience. Most (36.4%) have invested their own capital into their exporting business. A majority of the respondents (32.7%) export dairy products weekly or based on orders, with ghee being the most exported product at 27.3%. Cheese and custard received the least preference. The annual turnover for most respondents (38.2%) was between 26-50 Lakhs, and Bangladesh was the most common export destination (21.8%).

Regarding logistics, 38.2% of exporters prefer multimodal transport, while some use railways. The most common mode of payment is a letter of credit, used by 50.9% of respondents. A notable number (27.3%) prefer flexible pouches for packaging, with 21.8% selecting packaging materials based on storage conditions and consumer needs.

Respondents' interactions with government and organizations showed that 32.7% avail government services for quality and safety, although a large proportion (45.4%) rated these services as "average." The vast majority of respondents (72.7%) are permanent members of the APEDA. Awareness programs by the government were viewed positively, with 50.9% of respondents satisfied. Additionally, 38.2% of respondents are availing schemes from APEDA related to infrastructure for quality and clean milk production, and 20% are eligible for NABARD subsidies.

The exporters face several challenges, with 23.6% citing labor intensity during warehousing. Many are significantly affected by factors such as government policies (61.8%), road infrastructure (61.8%), and low milk productivity (60%). Marketing difficulties affect 65.5% of respondents, and 56.4% are affected by larger dairies. A substantial majority (74.5%) are affected by weather and space constraints at the time of exporting. Distribution channels also pose a challenge, affecting 58.2% of respondents.

Finally, 29.1% of respondents adopted competitive pricing and cost-plus pricing. To strengthen their products, 38.2% give samples, and 31% maintain the quality and freshness of their products during testing. While the majority of respondents (63.6%) have not participated in trade fairs, 36.4% have, primarily to create awareness among dairy farmers.

RECOMMENDATIONS OF THE STUDY

❖ Global Perspective

Indian dairy industry should plan for reach out to newer markets, but the strategy here is more products specific.

Constraints in Milk Marketing

The main constraints for small scale household dairy production were land shortage, feed shortage and inefficient veterinary service, low genetic potential of indigenous cows, disease prevalence, and high feed cost fluctuation and poor transportation access to sell produced milk.

Challenges

The Indian dairy industry needs to focus simultaneously on the four- fold challenge of quality, product development, and infrastructure support development, and global marketing.

❖ Employment Opportunities

Increase rural employment opportunities through entrepreneurship. Agriculture has played a major role in Indian economy as it provides employment to 45% population and also provides inputs for agro-based industry.

Government Services and Schemes

Role of credit institutions is limited towards small livestock farmers due to which the influential people get the credit. Government of India is making efforts for strengthening the dairy sector through various central sector schemes like “National Programme for bovine breeding and dairy development” National dairy plan and “Intensive dairy development Programme” and also government should take steps regarding dairy farmers for promoting various services and schemes.

❖ Subsidy for Dairy Farming

Subsidy is a form of financial support from government to promote dairy farming in India.

CONCLUSION OF THE STUDY

The primary purpose of developing efforts is improvement of production per animal per head. The major constraint in milk marketing is the involvement of the unorganized sector. Changing the dairy-cooperative laws and regulations can reduce the unorganized sector's milk marketing. The main cause of low milk production of our dairy animals is the poor availability of nutrients in quality as well as quantity. This is major issue for development of dairying. By enhancing the quantity and quality of feeds, livestock production can be improved up to 50% from exiting genetic pool of animals. Indian dairy industry is one of the largest and fast growing industries in the country which provide ample job opportunities and contribute significantly to the economy of the country. The dairy sector in the India has shown remarkable development in the past decade and India has now become one of the largest producers of milk and value-added milk products in the world. Governments also have taken steps to encourage the dairy farmers to increase exports and by promoting schemes and subsidy for strengthening the dairy sector industry.

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