

## A STUDY ON ENTREPRENEURIAL SKILLS AMONG DAIRY MSMES IN TENKASI DISTRICT

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### Abstract

*This research focuses on the entrepreneurial business skills of dairy-based Micro, Small, and Medium Enterprises (MSMEs) in the Tenkasi District of Tamil Nadu, with a particular focus on uncovering the primary factors that drive their development, sustainability, and competitiveness. Although most of the earlier research has concentrated on dairy farmers and female entrepreneurs in other regions, hardly any has focused on the entrepreneurial talents and skill enhancement of the MSME owners in the dairy sector. This research intends to fill that gap by entrepreneurial characteristics such as decision-making creativity risk-taking, and business management. A mixed-methods research strategy was used, combining qualitative and quantitative methodologies. A systematic questionnaire was used to collect primary data from 70 dairy MSME owners, while secondary data came from government papers, industry publications, academic journals, and market research studies. A simple random sample approach ensures fair representation among micro, small, and medium-sized businesses. The data were evaluated with SPSS software, which included percentage analysis and Chi-square tests. According to the findings, the majority of dairy MSMEs are small-scale, rural operations managed by male entrepreneurs with secondary or graduate degrees. Education appears to have a major impact on technology uptake, but not on financial planning, risk-taking, or management qualities.*

*Keywords: Dairy-based MSMEs, Skill Development, Business Management, Competitiveness.*

### Introduction

Dairy industry is a significant part of the global food system by providing essential nutrition and contributing to food security. India is the world's largest dairy-producing country and according to estimates, it will be responsible for approximately 24% of the global milk production by the end of June 2024. Most of the Indian dairy sector is severely fragmented with small farmers and cooperatives being the main stakeholders, particularly in rural development and women's empowerment. The involvement of all types of farmers - large medium small and tiny in milk production and marketing activities has resulted in an efficient and sustainable dairy farming sector in India. Dairying is one of the vital activities of the agricultural economy of Tamil Nadu. A number of segments have collectively contributed to the development of this sector including the co-operatives, the private dairies, and the Micro,

Small and Medium Enterprises (MSMEs). Nevertheless, the dairy sector is still very much exposed due to increasing input prices, inadequate cold chain facilities, shift in consumer tastes, and the rise of plant-based products as competitors.

### **An overview of Micro Small Medium Enterprises (MSME)**

The Government of India launched the Micro, Small, and Medium Enterprises (MSMEs) under the MSMED Act, 2006. These companies are primarily engaged in manufacturing, processing, and service operations. MSMEs are divided into two types: manufacturing firms, which create items, and service enterprises, which offer services. Prior to 2006, India lacked a clear definition of MSMEs and relied on staff counts. The MSMED Act of 2006 established a clear and standardised definition of MSMEs in the country.

### **New Definition of MSME**

The revised MSME Definition came into effect from April 1, 2025. This move is aimed at fostering growth, encouraging innovation, and creating a more enabling ecosystem for MSMEs to flourish. In this article, we will look into the New MSME Definition.

Category	Investment Limit	Turnover Limit
Micro	Up to ₹2.5 crore	Up to ₹10 crore
Small	Up to ₹25 crore	Up to ₹100 crore
Medium	Up to ₹125 crore	Up to ₹500 crore

Source: <https://msme.gov.in/>

### **Background of the study**

First and foremost, MSMEs contribute a lot in the Indian economy; especially we can see the impact in the rural development and employment generation sectors. For example, in Tenkasi District of Tamil Nadu, dairy based MSMEs are a large part of local economy, by producing not only milk but also various other value added products like curd, paneer and ghee. Entrepreneurial abilities of dairy entrepreneurs such as innovativeness creativity risk-taking and adaptation are very essential for their business success. However, the progress is being stopped due to several reasons like lack of financing, lack of technical knowledge and inefficient supply chain. This paper aims to examine the entrepreneurial skills of dairy based MSMEs in Tenkasi and identify the major enablers and constraints for their sustainability and competitiveness

## Literature Review

A review of numerous studies on entrepreneurial activity among dairy farmers in India finds a consistent pattern: most dairy entrepreneurs engage in medium-level entrepreneurial conduct, affected by various socioeconomic and psychological variables. Gatum (2016) discovered that cosmopolitanism, coordination ability, and success drive were important attributes, with education, affluence, landholding, and market orientation favourably impacting behaviour and age negatively, Influencing it. Similarly, Kavitha (2016) found that women dairy producers were highly inventive and coordinated, with modest drive and risk-taking abilities. Despite relatively low self-confidence, Bhanuprakash Reddy (2021) identified planning ability as the most significant feature, emphasising the need for capacity development, training, and market exposure. Dwarka Prasad (2021) also found a medium level of entrepreneurial activity among farmers, with innovativeness and decision-making being the most relevant characteristics. The study emphasised the importance of training in risk-taking and market orientation. Similarly, Gayathri (2023) emphasised the need for skill development and mentorship to close the gap between entrepreneurial enthusiasm and aptitude. Porchezhiyan (2016) confirmed similar findings, citing great desire and confidence but lacking planning skills due to characteristics such as age, limited training, and tiny landholdings. He promoted scientific dairy methods and expert coaching. Durgga Rani (2015) emphasised that creativity, risk orientation, and decision-making all impact entrepreneurial activity, with education and dairy experience having important roles. Ananthi (2020) discovered a substantial link between entrepreneurial qualities and conduct, implying that government initiatives like the NPDD, NDP-I, and DIDF should prioritise entrepreneurial growth. Puttaswamy (2018) studied rural women dairy producers and identified decision-making, accomplishment motivation, and social participation as major predictors of success. She also urged for institutional assistance from cooperatives and banks. Lawrence (2012) reported low levels of creativity and risk-taking among farmers but high levels of cooperation and self-confidence and suggested awareness programs and field visits to increase capacity. Parvez Rajan (2024) made a valuable contribution by creating a verified and reliable scale for measuring entrepreneurial activity, which can be used by researchers and policymakers. Vinay Kumar (2021) described medium entrepreneurial behaviour as a combination of innovativeness, risk orientation, and self-confidence. Similarly, Vishal Raina (2016) discovered that education, landholding, money, and extension contact all had a

favourable effect on entrepreneurial conduct; however, age had an adverse effect. Subarna (2024) discovered several common entrepreneurial characteristics, including innovativeness, scientific orientation, communication abilities, and resource organisation. The majority of farmers exhibited medium-level conduct, which was impacted by age, education, landholdings, income, and training. Finally, Godse (2014) found that, while 70% of farmers exhibited a medium degree of entrepreneurship, important favourable variables included education, occupation, herd size, milk yield, and extension contact.

### **Research Gap**

Most of the extant research is on entrepreneurial behaviour among dairy farmers from various states and districts, with certain studies emphasising the role of women in dairy entrepreneurship. However, there has been little focus on entrepreneurial skills, particularly among dairy-based MSMEs. Recognising this gap, the current study seeks to analyse abilities among dairy-based MSMEs in Tenkasi district, therefore giving insights that might help them grow and develop.

### **Objectives of the study**

1. To study the socio-economic profile of the respondents
2. To analyse the factors influencing entrepreneurial skills in the dairy MSME sector.

### **Hypothesis of the Study**

H1: There is no significant association between the education level of respondents and their Technology adoption in dairy MSMEs.

H2: There is no significant association between the educational qualification of respondents and their financial management skills in dairy MSMEs.

H3: There is no significant association between the experience of respondents and their planning ability in dairy MSMEs.

H4: There is no significant association between the gender of respondents and their risk-taking propensity in dairy MSMEs..

### **Scope of the Study**

This research looks into entrepreneurial skills of dairy-based MSMEs located in the Tenkasi district. The researchers have analysed how the major contributors to the growth and sustainability of these enterprises work. The study covers the primary entrepreneurial skills needed such as financial management marketing innovation, and decision-making. At the same time, it reveals the difficulties these enterprises experience in getting hold of the latest business practices. Problems studied are lack of financial resources, inconvenience of using

technology, etc. Besides, it discusses how governmental regulations, financial aid and training programs can help with entrepreneurship. The results are intended to be a guide for decision makers, financial service providers and business owners to make improvements in the competitiveness and the longevity of dairy-based enterprises in the region.

## Research Methods

### Research Design

This study adopts a descriptive and analytical research design to assess entrepreneurial skills among dairy-based MSMEs in Tenkasi district. The research focuses on understanding key entrepreneurial traits, skill requirements, challenges in business operations, and factors influencing growth and sustainability.

### Data Collection

Primary data for this study was collected through a structured questionnaire. In addition, secondary sources such as government reports, industry publications, academic journals, and market analysis reports were utilised to provide context and support for the primary findings. The total sample size for this study was 70 respondents.

### Sampling Method

A simple random sampling method was used to ensure representation from various sizes of dairy-based MSMEs in Tenkasi, Tamil Nadu. The sample included micro, small, and medium enterprises involved in the dairy sector.

### Tools analysis

The researcher used the following tools for the study: percentage Analysis, and Chi-square Test, through SPSS packages.

## Analysis and Interpretations

**Table - 1 Percentage analysis for demographic variables**

Variable	Category	Frequency	Percent (%)
Educational Qualification	Primary	16	22.9
	Secondary	27	38.6
	Graduate	22	31.4
	Postgraduate	5	7.1
Gender	Male	50	71.42
	Female	20	28.58
Experience (Years)	Less than 1 year	11	15.71
	1 – 5 years	42	60.00
	6 – 10 years	14	20.00
	More than 10 years	3	4.29
Land Size (Acres)	Less than 1 acre	8	11.4
	1 acre	41	58.6

	6 – 10 acres	17	24.3
	More than 10 acres	4	5.7
<b>Monthly Income (₹)</b>	Below 15,000	14	20.0
	15,000 – 20,000	17	24.3
	20,000 – 25,000	28	40.0
	Above 25,000	11	15.7
<b>Age Group (Years)</b>	Below 25	5	7.1
	25 – 36	18	25.7
	36 – 45	26	37.1
	46 – 55	19	27.1
	Above 55	2	2.9
<b>Type of Business</b>	Small-scale Producer	50	71.4
	Medium-scale Producer	20	28.6
<b>Location</b>	Urban	6	8.6
	Semi-Urban	16	22.9
	Rural	48	68.6

The Table 1 shows that, the majority of dairy-based MSME respondents are middle-aged males with secondary or graduate degrees. The majority has 1-5 years of experience and work on around one acre of land. The average monthly salary ranges from ₹15,000 to ₹25,000. Women have minimal engagement in the industry, which is largely small-scale and rural. Overall, the data reveal a burgeoning but under-resourced industry that may benefit from targeted assistance to improve its development and sustainability.

**Table 2: Chi-Square Test Results for Education and Technology Adoption**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	30.880 <sup>a</sup>	12	.002

Table 2 shows a significant correlation between the variables, with a p-value of .002, which is less than the conventional threshold of 0.05. This shows that the association between the variables has statistical significance.

**Table 3: Chi-Square Test Results for Education Qualification and Financial Effectively Management**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.598 <sup>a</sup>	9	.575

The Chi-Square test result shows a p-value of .575, which is greater than 0.05. This indicates that there is no statistically significant association between the variables.

**Table 4:Chi-Square Test for Experience and Planning Ability**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	24.816 <sup>a</sup>	16	.073

The Chi-Square test shows a p-value of .073, which is slightly above the 0.05 threshold. This suggests that there is no statistically significant association between the variables, though the result is close to significant

**Table 5:Chi-Square Test for Gender VS Risk Taking Propensity**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.373 <sup>a</sup>	4	.849

Chi-Square test shows a p-value of .849, which is much higher than 0.05. This indicates that there is no statistically significant association between the variables.

## Discussion

### Percentage Analysis

From the figures, the majority of the persons polled (38. 6%) were at the secondary level of education, while only 31. 4% have finished their studies. A significant gender gap exists, with 71. 42% of the male participants and 28. 58% of the female ones. Most (60%) have dairy-based MSME sector work experience for 1-5 years only, showing they have just recently joined this industry. More than half (58. 6%) are owners of tiny landholdings measuring an area of about one acre. On the other hand, 40% of them consist of earning 20,000-25,000 per month, which indicates a medium-level income. Age-wise, the largest segment is 36-45 years (37. 1%) age, which points at the existence of a middle-aged workforce. The producers at the small-scale level constitute 71. 4% of the sample, and the sector is mostly rural as 68. 6% of the respondents live in rural areas. When taken as a group, these figures point to the fact that dairy-based MSMEs are usually small in size, rural, and quite new at work, besides having low levels of income and education.

### Chi-Square Test

Table 2 reveals a very clear link between education and technology adoption ( $p = .002$ ), meaning that the level of education plays a role in technology adoption among dairy-based MSME respondents. However, Table 3 records the ( $p = .575$ ) showing no significant

correlation between academic qualification and financial management effectiveness, so it is unlikely that one's educational background would be a major factor in how well their finances are managed. On the other hand, Table 4 illustrates that the p-value for the link between experience and planning ability is ( $p = .073$ ), which is more than the 0.05 level of significance. It seems that statistically there is no significant relationship between the two however since the result is very close to being significant, it might be worthwhile to carry out a further study. Also, Table 5 indicates that there is no significant association between gender and risk-taking ( $p = .849$ ). In other words, male and female respondents' risk-taking behaviors are not very different from each other in the sector. All in all, the results show that education mostly influences technology adoption but other aspects like financial management, planning ability, and risk-taking propensity are not strongly impacted by education, experience, or gender in this case.

### Suggestions

#### Percentage Analysis

The percentage analysis shows that most respondents have only a secondary education, are predominantly male, relatively inexperienced, and operate on small landholdings with moderate incomes. This suggests a need for targeted capacity-building initiatives, such as tailored training programs and extension services that focus on improving technical skills, financial literacy, and business management for a predominantly young, rural, and small-scale entrepreneur base.

#### Chi-Square Test

The Chi-Square test results indicate that education is a major factor in technology adoption. The implication of this is that the incorporation of technology training and digital competencies in curriculum may be the way to enhance technology use. On the other hand, as there was no major association between education and financial management, planning skills, or willingness to take risks, it may be that future interventions will concentrate on training components in these practical areas rather than exclusively relying on formal education.

### Conclusion

Briefly, this research found that dairy-related MSMEs are largely small-scale, local business establishments that are operated by a male-dominated, but not very experienced group of people. Most of the individuals participating have schooling from secondary to university level, and education plays a very significant role in technology adoption. Apart from the

slight differences in entrepreneurial behavior throughout the sector, moderate income levels and small landholdings are some of the features that characterize the sector. Chi-Square tests reveal that, while education is a major factor in technology adoption, aspects such as financial management, planning ability, and risk-taking propensity are not significantly influenced by education, experience, or gender. Overall, such results warrant skill development and technology infusion as necessary interventions for enhancing the production and existence of dairy-based MSMEs.

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