

# Growth and the Way Forward: a Study on Women Entrepreneurs of Kerala

**Ruby S.**

Assistant Professor, PG Dept. of Commerce, BJM Govt. College, Chavara, Kollam, Kerala, Affiliated to University of Kerala  
E-mail: rubysivanandini1984@gmail.com

**Biju T.**

Professor, Dept. of Commerce, School of Business Management & Legal Studies, University of Kerala, Thiruvananthapuram, Kerala

---

## Abstract

The proliferation of microenterprises initiated by rural women has garnered significant attention as a strategy for generating employment opportunities and alleviating poverty across India, with a particular focus on the state of Kerala. In order to fulfil their objectives, it is imperative for microbusinesses led by rural women, which are designed to alleviate poverty and generate employment opportunities, to sustain themselves through the implementation of intelligent strategies. The present study represents a sincere endeavour to elucidate the progression, significance of training, and prospects of rural micro enterprises established by women in the state of Kerala. The objectives of this study are to gain a comprehensive understanding of the present status and growth of women entrepreneurs in Kerala, to evaluate the effectiveness of institutions that facilitate the advancement of women entrepreneurs in Kerala, and to project the future potential of the female entrepreneurial community in Kerala. This descriptive study aims to examine the evolution of women-owned businesses in Kerala prior to and during the process of globalisation. Additionally, it seeks to explore the training needs and future growth prospects of these firms. The present study is founded upon primary data collected from a sample of 420 registered women-owned enterprises in Kerala. Additionally, secondary data has been sourced from various published materials, such as journals, government publications, websites, and other relevant sources. The findings of the study suggest that female entrepreneurs exhibit deficiencies in many managerial competencies that are crucial for the achievement of organisational success. Hence, it is crucial that training programmes prioritise the development of managerial capabilities to effectively operate entrepreneurial entities, enhance managerial proficiency, and foster a sense of motivation towards attaining goals. The findings of this study are expected to provide valuable insights for policymakers in formulating initiatives and policies aimed at fostering industrial development within the state. Specifically, the study focuses on the role of women entrepreneurship and the strategic orientation required for such development.

**Keywords:** Women Entrepreneurship, Micro Enterprises, Rural Entrepreneurs, Development, Kerala

SMS Journal of Entrepreneurship & Innovation (2023)

**DOI:** <https://doi.org/10.21844/smsjei.v10i01.30005>

**Corresponding Author:** Ruby S., Assistant Professor, PG Dept. of Commerce, BJM Govt. College, Chavara, Kollam, Kerala, Affiliated to University of Kerala, E-mail: rubysivanandini1984@gmail.com

**How to cite this article:** Ruby S. & Biju T. (2023). Growth and the Way Forward: a Study on Women Entrepreneurs of Kerala. *SMS Journal of Entrepreneurship & Innovation*. 2023; 10(1):50-68

**Source of support:** Nil.

**Conflict of interest:** None

---

## Introduction:

The inclusion of women at the core of a nation's growth is important for its prosperity and advancement. Entrepreneurship emerges as a very efficacious economic empowerment method for women due to its provision of numerous opportunities for self-esteem enhancement and personal progress. The projected growth in the population of female entrepreneurs is expected to have a transformative impact on the global business landscape, as their successful ventures are anticipated to bring about significant changes in conventional business practices. (Sushma, 2015).

Kerala Industrial Policy 2023's primary goal is to create a vibrant startup ecosystem that will support the emergence of options for self-employment and, ultimately, the establishment of aspirational jobs for all (Directorate of Industries and Commerce, n.d.). With the goal of establishing one lakh MSMEs in Kerala, the financial year 2022–23 was designated as the "Year of Entrepreneurship." (Uncategorised, 2023). With its great connection, communication network, availability of highly qualified human resources, and relatively solid infrastructure, Kerala is well suited for the growth of entrepreneurship and start-ups. Next to China, India has the biggest number of micro, small, and medium-sized businesses (MSME) with more than 63 million business owners. Only 20.37% of these, however, are held by women. (Nune, 2022)

Small and Medium Enterprises (SMEs) play a crucial role in the Indian economy, serving as its backbone. Given their significant presence and substantial workforce contribution within the country, it is worthwhile to explore and examine their performance. During the 1960s, women micro, small, and medium enterprises (MSMEs) embarked on the establishment of small-scale firms driven by their desire to find personal fulfilment and make economic decisions. During

the 1970s, female entrepreneurs exhibited not only aspirations, but also ambitions, as they actively pursued self-employment and sought to assume diverse responsibilities. During the 1980s, there was a notable increase in the educational attainment of women in advanced technologies, which subsequently led to the establishment of small-scale boutiques and firms engaged in manufacturing and garment exports. During the 1990s, female entrepreneurs challenged conventional gender norms and actively contributed to the expansion of businesses, aiming to attain economic autonomy and enhance their self-worth. In the twenty-first century, women have established firms in several sectors such as information technology, telecommunications, and finance. Overcoming the barriers, they have changed from 3Ks (Kids, Kitchen and Knitting), 3Ps (Pickle, Papad and Powder) and 3Es (Electronics, Engineering and Energy) to the new millennium 3Fs (Fortune, Fame and Flourish).

## Literature Review

There are several statistics and pieces of relevant material available on the Indian women micro enterprises. A small percentage of women were said to be using government schemes and programmes to help them launch businesses due to a lack of policy efforts and support (Shah, 2013; Vatharkar, 2011). When women entrepreneurs in India are considered as a whole, this might be the case. Many of the studies also found issues and obstacles that affected how they operated and were maintained (Lavanya, 2010; Vatharkar, 2011; Deshpande & Sharma, 2013; Paramashivaiah & Suresh, 2014; Ahmed, 2002; Goyal & Parkash, 2011; Shihabudheen, 2012; Vasanthakumari, 2012; Yasmeen & Gangaiah, 2014). Santos et al. (2018) and Deng et al. (2020) conducted two important recent bibliometrics-based literature reviews of women entrepreneurs. Santos et al. (2018) analysed the citation data of articles from

the Web of Science indexed database that were written in the fields of management, sociology, psychology, and other social sciences and published over a forty-year span (1976–2017). They identified three research clusters, including the entrepreneurial process setting, gender identity and theoretical conceptualizations, and the entrepreneurial profile, and they indicated areas that may be further researched.

Economic improvement of households in Kerala indicates that the Kudumbashree development programme in Kerala, which addresses motivation and aspiration, overcoming fear of authority, confidence in one's own abilities, autonomy in resource use in households, and involvement in household decision-making, is having a positive effect (Dhanya, M.B. & Sivakumar, P, 2010). Through micro enterprises, women have succeeded in creating a social network. Economic improvement indicates that the Kudumbashree development programme in Kerala, which addresses motivation and aspiration, overcoming fear of authority, confidence in one's own abilities, autonomy in resource use in households, and involvement in household decision-making, is having a positive effect (Dhanya, M.B. & Sivakumar, P, 2010). The women's confidence and independence have increased as a result of their participation in microbusiness operations (Cyriac, 2008). The idea of microenterprises should be integrated with the SHG lending system so that individuals who have been denied credit can get it all. In addition to Iran, SHGs can be very helpful in resolving social issues, advancing education, creating jobs, fulfilling credit requirements, encouraging people to take an active role in solving their own problems, and bringing about a knowledge revolution in all nations (Nabavi, 2009). SHGs through the development of microenterprises are acknowledged as a crucial mechanism for empowering women (Vasanth Kumari, 2012).

## Research Gap

Earlier studies show that women who can start their own enterprises have more economic power and can contribute more to national prosperity. Industrial progress, technological advances, foreign direct investments, and export potential have given women entrepreneurs many socioeconomic possibilities. With the rise of mass media and higher, professional, and technical education, women are becoming increasingly aware of their right to economic independence. Kerala and India saw a huge surge in female entrepreneurs due to many support programmes. Most female entrepreneurs focus on MSMEs. Kerala promotes female entrepreneurs the most in India. The Fourth All India Census of MSME found 21.88 women entrepreneurs in urban Kerala and 26.92 in rural Kerala. Research on women-owned microbusinesses emphasises empowerment and livelihoods. However, this study examines the growth trend, the success of institutions that foster women's entrepreneurial development, and Kerala's future women-owned business possibilities.

## Research Objectives

- To understand the present scenario and growth of women entrepreneurs in Kerala
- To find out the effectiveness of supporting institutions for the promotion of women entrepreneurs in Kerala
- To determine Kerala's future potential for female entrepreneurs

## Research Methodology

This study used primary and secondary sources. Primary data for the study came from interviewing women entrepreneurs. Due to the large population, the Multi Stage Stratified Proportionate Random

Sampling Method was utilised to generate 420 representative samples. The sample size was set at 95% confidence using Cochran's Sample Size Calculation Formulae. We tested the study instrument's internal consistency using reliability analysis. All constructs had Cronbach's alpha above 0.80, which was satisfactory. Women business owners were given a five-point scale with 20 questions to rate the effectiveness of supporting institutions for training, their satisfaction, the adequacy of the topics covered, and the improvement in their businesses as a result of training. The planned interview schedule and

study's analysis are descriptive and analytical. Mean, standard deviation, and the one-way ANOVA significance test (F-test) are used to analyse data and establish variable relationships. Women business owners were given a five-point scale to rate the effectiveness of supporting institutions for training, their satisfaction, the adequacy of the topics covered, and the improvement in their businesses as a result. The study also used secondary data from journals, government publications, websites, and other sources.

**Table -1**  
**Sample Size of Women Entrepreneurs**

Nature of Business	Sample	Sample	Sample	Total Sample
	Trivendrum	Thrissur	Kannur	
Textiles, Tailoring and Garment Designing	39	43	23	105
Food Processing	31	34	20	85
Construction/Electrical & Metal Products	14	15	8	37
Furniture/Wood Product	6	7	3	16
Plastic/Rubber/Paper/Wax Products	12	14	7	33
IT Enabled Services	9	10	35	24
Printing/Photography	4	5	3	12
Beauty Care Services	10	11	6	27
Flour Milling	8	8	4	20
Miscellaneous	23	25	13	61
Total	156	172	92	420

### **Analysis and Discussions:**

As Per the MSME Annual Report 2022-23, 79.63% of proprietary MSMEs in India were held by men, compared to 20.37% controlled by women. As the

percentage distribution for female entrepreneurs is only 20 %, there should be more number of start-ups run by women in India. (Table-2)

**Table-2**  
**Percentage Distribution of enterprises owned by Male and Female Entrepreneurs**

Category	Male	Female	Total
Micro	79.56	20.44	100
Small	94.74	5.26	100
Medium	97.33	2.67	100
<b>Total</b>	<b>79.63</b>	<b>20.37</b>	<b>100</b>

Source: MSME Annual Report 2022-23

There are a total of estimated 1,23,90,523 Women owned proprietary MSMEs in the country, out of which Kerala has only 4,95,962 women start-ups distributing only 4 % of the total. Table-2 shows the percentage share of top ten states in MSMEs owned

by women in the country. More than 20% of women MSMEs are owned by West Bengal. And Kerala got only 9th position of the total estimated number of women MSMEs in the country. (Table-3)

**Table-3**  
**Percentage Share of States in MSMEs owned by women**

State	Percentage Share
West Bengal	23.42
Tamil Nadu	10.37
Telangana	7.85
Karnataka	7.56
Uttar Pradesh	6.96
Andhra Pradesh	6.76
Gujarat	6.67
Maharashtra	6.41
<b>Kerala</b>	<b>4.00</b>
Rajasthan	3.07

Source: MSME Annual Report 2022-2023

There has been considerable increase in the number of women entrepreneurial units registered

in Kerala. The number has increased from 901 in 1985 to 2664 in 1991.

**Table -4**  
**Registered entrepreneurial units led by women in Kerala, spanning the years 1985 to 1991**  
**(Pre-Globalisation Period)**

District	1984 -85	1985-86	1986-87	1987-88	1988-89	1989-90	1890-91
Thiruvananthapuram	103	113	116	138	165	223	285
Kollam	83	96	110	120	147	188	211
Alappuzha	77	89	100	115	140	186	246
Kottayam	80	88	103	139	158	198	240
Idukki	40	42	45	53	67	87	139
Ernakulam	110	130	152	167	215	287	392
Thrissur	137	159	171	193	233	266	308
Palaghat	43	49	51	60	78	106	149
Malapuram	50	50	65	76	91	97	123
Kozhikode	78	82	92	111	143	175	216
Kannur	75	78	81	100	100	133	164
Pathanamthitta	15	22	35	42	63	83	129
Wayanadu	5	7	10	13	14	20	27
Kasargod	5	8	12	13	19	29	35
Total	901	1013	1143	1340	1633	2078	2664

Source: Dept. of Economics and Statistics, Govt. of Kerala, Trivandrum

**Table -5**  
**Registered entrepreneurial units led by women in Kerala, spanning the years 1992 to 1998**  
**(Post-Globalisation Period)**

District	1991-92	1992- 93	1993-94	1994-95	1995-96	1996- 97	1997-98
Thiruvananthapuram	406	432	565	235	285	159	537
Kollam	263	369	456	445	493	486	563
Pathanamthitta	205	115	150	192	163	216	340
Alappuzha	319	178	280	332	335	479	359
Kottayam	305	168	490	532	254	260	680
Idukki	160	174	211	189	192	181	213
Ernakulam	521	3247	432	347	520	540	559
Thrissur	377	293	238	327	388	105	311
Palaghat	194	186	192	343	346	70	407
Malapuram	156	110	136	164	144	70	215
Kozhikode	254	153	238	212	241	318	45
Wayanadu	43	104	159	157	129	124	152
Kannur	199	104	101	83	146	132	142
Kasargod	42	36	94	61	75	98	143
Total	3444	3669	3742	3619	3711	3238	4666

Source: Economic Review-Various Issues, State planning Board, Govt. of Kerala, Trivandrum

As per Table 5, during 1991-92, about 3444 new women entrepreneurs and it has been increased to Small Scale Industrial units have been promoted by 4666 units registered in the year 1997-98.

**Table -6**  
**Registered entrepreneurial units led by women in Kerala, spanning the years 1999 to 2007**  
**(Post-Globalisation Period)**

District	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07*
Thiruvananthapuram	560	505	591	510	453	17	142	216	9
Kollam	520	548	540	567	365	327	240	183	202
Pathanamthitta	33	402	-	-	327	149	60	14	1
Alappuzha	596	475	547	526	397	162	161	281	176
Kottayam	280	135	146	482	314	144	119	148	32
Idukki	165	192	181	115	94	60	82	14	53
Ernakulam	538	85	-	650	443	116	129	154	84
Thrissur	425	335	335	589	253	209	186	144	137
Palaghat	456	488	467	280	108	19	73	81	69
Malapuram	252	235	17	153	101	38	22	43	16
Kozhikode	213	265	195	170	141	103	49	5	20
Wayanadu	135	162	122	93	46	-	7	3	5
Kannur	123	72	163	181	74	30	91	44	6
Kasargod	163	30	-	-	-	18	17	3	-
<b>Total</b>	<b>4459</b>	<b>3929</b>	<b>3304</b>	<b>4316</b>	<b>3116</b>	<b>1392</b>	<b>1378</b>	<b>1333</b>	<b>810*</b>

Source: Economic Review-Various Issues, State planning Board, Govt. of Kerala, Trivandrum

\* Up to October 2006 (SSI registration in DICs has been discontinued from 2/10/2006)

**Table-7**  
**Kerala Women Entrepreneurs who submitted Entrepreneurship Memorandum II**  
**for MSME registration (in numbers)**

District	Upto Sept. 2009	Upto Sept. 2010	Upto Sept. 2011	Upto Sept. 2012	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Thiruvananthapuram	71	198	148	290	309	364	381	376	558	298
Kollam	99	46	56	106	129	143	382	385	393	135
Pathanamthitta	28	92	113	195	129	202	314	297	334	160
Alappuzha	140	56	50	167	198	149	317	363	231	70
Kottayam	72	77	95	203	170	234	288	160	243	93
Idukki	50	101	17	32	98	70	50	63	72	40
Ernakulam	260	172	176	203	377	357	298	443	416	266
Thrissur	175	196	174	163	410	321	358	388	422	220
Palaghat	58	151	106	117	193	107	156	235	234	174
Malapuram	78	46	32	64	102	98	104	143	175	87
Kozhikode	27	132	79	94	217	135	169	155	203	87
Wayanadu	19	36	108	54	82	100	104	78	101	47
Kannur	47	66	189	89	101	193	141	190	246	94
Kasargod	41	33	318	43	114	133	60	78	107	34
<b>Total</b>	<b>1165</b>	<b>1402</b>	<b>1281</b>	<b>1820</b>	<b>2629</b>	<b>2606</b>	<b>3122</b>	<b>3354</b>	<b>3735</b>	<b>1805*</b>

Source: Economic Review-Various Issues, State planning Board, Govt. of Kerala.

\* Up to September 2015

Table 7 reveals that there has been an increase in the number of women entrepreneurial units who has filed Entrepreneurship Memorandum (EM) II

from 2629 in the year 2010-11 to 3735 in the year 2014-15.



**Table -8**  
**Growth trend in Number of registered Women Entrepreneurs of Kerala**  
**from fiscal year 1992-93 to 2021-22**

Year	No. of units	Growth Rate	Year	No. of units	Growth Rate
1992 -93	11000	-	2007-08	41305	-
1993-94	14742	-33.01	2008-09	44116	6.81
1994-95	18361	24.54	2009-10	46621	5.68
1995-96	22072	20.21	2010-11	49688	6.54
1996-97	25310	14.67	2011-12	52294	5.28
1997-98	29976	18.44	2012-13	55416	5.97
1998-99	34435	14.87	2013-14	58774	6.06
1999-00	38364	11.40	2014-15	62509	6.35
2000-01	41668	8.61	2015-16	64314	2.89
2001-02	45985	10.36	2016-17	NA	-
2002-03	49101	6.78	2017-18	NA	-
2003-04	50493	2.83	2018-19	NA	-
2004-05	51871	2.73	2019-20	NA	-
2005-06	53204	2.57	2020-21	NA	-
2006-07*	41305	-22.36	2021-22	NA	-

*Source: Economic Review-Various Issues, State planning Board, Govt. of Kerala, Trivandrum*

*\*Revised after 2006 as per 4th all India MSME Census*

*NA-Not Available, as new Udyog Adhar provides only total MSME data, not gender-wise*

In Kerala, District Industries Centre discontinued the practice of filing EM Part II from September 18, 2015, and in its place, started online registration in Udyog Aadhar. Table 8 reveals that the number of registered Women SSI/MSME units in Kerala increased from 11000 in 1992-93 to 64314 in 2015-16.

### **Support Efficiency and Training Needs of women entrepreneurs**

Successful entrepreneurship requires skill development training. Training improves performance, which increases output in quantity and quality. Training promotes quality, corporate success, and workforce motivation. Training boosts confidence in entrepreneurs. Well-trained entrepreneurs can lead a competitive company.

**Table-9**  
**Perceptions of Female Entrepreneurs Regarding their Contentment with Specific Training Aspects Based on Business Nature, with Statistical Significance Analysis.**

Nature of Business	Statistics	Getting Proper motivation	Untapped Opportunity identification	Managerial capability inputs	Knowledge of incentives & subsidies	Help for Project report preparation	Awareness of supporting agencies	Registration and legal formalities	Various Skills improvement	Trainer's support and guidance	Unit visits and familiarisation
Textiles/Tailoring / Garment Designing	Mean SD	3.69* 1.23	3.89* 1.16	3.48* 1.47	3.07 1.17	3.05 0.67	2.79 1.05	2.54* 0.99	2.85 1.14	2.95 1.24	2.70* 0.94
Food Processing	Mean SD	3.80* 1.21	3.84* 1.14	3.52* 1.42	3.05 1.20	3.02 0.55	2.84 1.06	2.84 1.08	2.77 1.05	3.02 1.30	2.82 0.92
Construction/Electrical /Metal Products	Mean SD	2.65 1.35	3.40 1.39	3.25 1.33	3.15 1.42	2.85 0.37	2.55 1.23	2.50* 0.89	2.75 1.12	2.80 1.24	2.40* 0.82
Furniture/Wood Products	Mean SD	2.91 1.58	2.55 1.37	2.09* 1.30	2.55 1.21	3.00 0.77	2.09* 1.30	2.64 1.36	3.09 1.38	2.18* 1.17	1.91* 1.14
Plastic/Rubber/Paper/ Wax Products	Mean SD	3.68* 1.38	3.84* 1.07	3.58 1.46	3.16 1.07	2.89 0.32	2.58 0.96	2.47* 0.96	1.79* 0.63	2.74 1.33	2.32* 0.75
IT Enabled Services	Mean SD	3.50 1.38	2.75 1.48	2.58 1.38	3.25 1.14	2.75 1.06	2.75 0.75	3.00 1.60	2.25 1.48	1.83* 0.94	3.17 1.53
Printing/Photography	Mean SD	3.33 1.03	3.83 0.98	3.17 1.33	1.83* 0.75	2.00 1.10	3.00 1.26	2.00 1.26	3.33 1.37	3.33 1.37	2.00* 0.89
Beauty Care Services	Mean SD	3.11 1.57	3.11 1.37	3.17 1.38	2.89 1.13	2.78 1.52	2.94 0.80	2.78 0.88	3.11 1.08	2.39 1.24	2.50 1.15
Flour Milling	Mean SD	4.08* 0.51	3.67* 0.78	2.92 1.44	2.58 1.16	2.75 0.87	3.17 1.19	2.50 0.90	3.08 1.16	3.08 2.78	2.17* 0.94
Miscellaneous	Mean SD	3.65* 1.31	3.81* 1.05	3.32 1.54	3.23 1.20	3.00 0.68	2.71 0.90	2.58* 1.06	2.61* 0.92	3.00 1.26	2.58* 0.81
Total	Mean SD	3.53* 1.31	3.63* 1.22	3.28* 1.45	3.01 1.19	2.93 0.77	2.75* 1.04	2.62* 1.05	2.74* 1.13	2.82* 1.38	2.58* 0.98
F-value		2.173	2.879	1.616	1.290	1.531	1.005	0.786	2.659	1.541	2.253
Sig.		0.025	0.003	0.112	0.243	0.138	0.437	0.629	0.006	0.135	0.020

Source: Primary Data

\*significantly vary from average (3.00) as per one-sample t-test with test value 3.00

In Kerala, a multitude of institutions provide training programmes specifically tailored for female entrepreneurs. In Kerala, there exist several noteworthy government-level institutes that offer

training opportunities to women entrepreneurs. These include District Industries Centres (DICs), Rural Self Employment Training Institutes (R-SETIs), Micro, Small and Medium Enterprises

Development Institute (MSME-DI), and Khadi and Village Industries. It is widely acknowledged that a significant proportion of the selected female entrepreneurs have successfully undergone specialised Entrepreneurship Development training tailored for women, without incurring any

associated costs. The researchers employed a five-point Likert scale consisting of the response options Highly Satisfied, Satisfied, Moderate, Less Satisfied, and Unsatisfied to assess participants' levels of satisfaction about the different components of the training programme.

**Table-10**  
**Assessment of Women Entrepreneurs' Mean Opinion Scores Regarding Satisfaction with Selected Training Aspects, with Significance Testing**

Nature of Business	Mean	SD	F-value	Sig.
Textiles/T Gar ailing ment Designing	3.19	0.57	<b>3.351</b>	<b>0.001</b>
Food Processing	3.22	0.53		
Construction Electrical/Metal Products	2.94	0.42		
Furniture/Wood Products	2.50	0.58		
Plastic/Rubber/ Paper/wax Products	3.07	0.45		
IT Enabled Services	2.86	0.34		
Printing /Photography	2.74	0.18		
Beauty Care Services	2.92	0.41		
Flour Milling	3.00	0.45		
Miscellaneous	3.15	0.50		
Total	<b>3.07</b>	<b>0.52</b>		

Source: Primary Data

Table 9 displays the average opinion scores of women entrepreneurs. The findings indicate that a significant majority of women entrepreneurs express satisfaction with various factors, including Getting Proper Motivation, Untapped Opportunity Identification, Managerial Capability Inputs, Knowledge of Incentives & Subsidies, and Help for Project Report Preparation. This conclusion is drawn based on the total mean scores, which are significantly higher than or equal to the average value of 3.00, as determined through a one sample t-test. Nevertheless, female entrepreneurs exhibit lower levels of satisfaction in areas such as

awareness of supportive institutions, registration and compliance with legal requirements, opportunities for skill enhancement, assistance and direction from trainers, and opportunities for site visits and familiarisation.

The one-way ANOVA (F-test) shows that female business owners across ten types of firms differ significantly in their satisfaction with specific training components. Get enough motivation, find untapped chances, build a variety of abilities, attend training units, and get familiar with them. The p-value is  $< 0.050$ , indicating significant differences. With a significance threshold of 0.05,

the Scheffe test shows that female entrepreneurs' opinion scores are homogeneous and can be classified into one subset. This shows no statistically significant difference in opinion evaluation variability.

F-test results below 0.05 show that women entrepreneurs across organisations have differing satisfaction levels with various training-related factors. The average score of 3.07 shows that female entrepreneurs are somewhat satisfied with the training curriculum.

According to the analysis, many female entrepreneurs who have received training are satisfied. The training's effectiveness in teaching motivation, identifying unexplored prospects, managerial competencies, awareness of incentives and subsidies, and project report preparation

contributes to this satisfaction. According to Table 11, a one-sample t-test shows that the mean scores are statistically comparable to or slightly greater than 2.00. This implies that marketing and HR management were adequately covered. However, other female entrepreneurs say that production management, financial management, and external agency connections were neglected, as shown by the considerably low mean scores compared to the average value of 2.00, as assessed by a one-sample t-test.

The one-way analysis of variance (ANOVA) showed statistically significant differences in training coverage for Production Management, Financial Management, Marketing Management, and External Agency Contacts within and between groups. These differences were significant at 5%.

**Table- 11**  
**Perception of Female Entrepreneurs Regarding Adequacy in Training Coverage across**  
**Different Business Types, with Statistical Significance Testing**

Nature of Business	Coverage of Selected Aspects in Training									
	Production Management		Financial Management		Marketing Management		Human Resource management		External Agency Contacts	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Textiles/Tailoring / Garment Designing	1.26 <sub>1*</sub>	0.63	1.54 <sub>12*</sub>	0.72	1.64*	0.75	2.08	0.84	1.34*	0.60
Food Processing	1.93 <sub>12</sub>	0.95	2.02 <sub>12</sub>	0.85	2.05	0.96	1.84	0.89	1.27*	0.54
Construction/ Electrical/ Metal Products	2.35 <sub>12</sub>	0.99	1.95 <sub>12</sub>	0.69	2.00	0.56	2.20	0.77	1.65	0.75
FurnitureNood Products	1.73 <sub>12</sub>	0.65	1.27 <sub>1*</sub>	0.47	2.36	0.81	2.45	0.69	1.55	0.93
Plastic/ Rubber/Paper/ Wax Products	2.00 <sub>12</sub>	0.58	1.79 <sub>12</sub>	0.79	2.26	0.73	2.00	0.82	1.37*	0.68
IT Enabled Services	2.50 <sub>2</sub>	1.00	2.25 <sub>12</sub>	0.75	2.00	0.95	2.00	0.85	1.08*	0.29
Printing/Photography	2.33 <sub>12</sub>	1.03	2.67 <sub>2</sub>	1.21	2.33	0.82	2.00	0.89	1.67	0.82
Services Care Beauty	2.06 <sub>12</sub>	0.94	2.00 <sub>12</sub>	0.84	2.00	0.77	2.17	0.86	1.39	0.70
Flour Milling	2.17 <sub>12</sub>	0.58	1.75 <sub>12</sub>	0.75	1.74	0.85	2.08	0.79	2.08	1.38
Miscellaneous	1.87 <sub>12</sub>	0.62	1.94 <sub>12</sub>	0.63	1.93	0.73	2.00	0.82	1.68*	0.87
Total	1.84*	0.86	1.84*	0.79		0.82	2.05	0.83	1.45*	0.75
F-value	3.440		2.132		0.745		0.745		2.411	
Sig.	0.001		0.028		0.668		0.668		0.013	

Source: Primary Data \*significantly vary from average (2.00) as per one-sample t-test with test value 2.00  
 1=lower subset, 2=higher subset, 12=includable in both subsets as per Scheffe Test

Table 12 indicates that there are substantial differences in opinion regarding the coverage of particular topics in training among female

entrepreneurs operating various types of enterprises, with the significance level of the F-test being less than 0.05.

**Table-12**  
**Perception of Female Entrepreneurs Regarding the Extent of Coverage in**  
**Training across Various Aspects, with Significance Testing**

Nature of Business	Mean	SD	F-value	Sig.
Textiles/T Gar ailoring ment Designing	1.65	0.44	<b>2.966</b>	<b>0.002</b>
Food Processing	1.88	0.54		
Construction Electrical/Metal Products	2.10	0.46		
Furniture/Wood Products	1.92	0.30		
Plastic/Rubber/ Paper/wax Products	1.93	0.41		
IT Enabled Services	2.09	0.35		
Printing /Photography	2.25	0.45		
Beauty Care Services	2.01	0.45		
Flour Milling	2.01	0.52		
Miscellaneous	1.90	0.56		
Total	1.88	0.49		

*Source: Primary Data*

The total mean score is only 1.88, indicating that

only a few areas of the course were adequately covered.

**Table-13**  
**Significance Testing of Mean Opinion Scores among Women Entrepreneurs on**  
**Business Improvement Aspects Resulting from Training**

Nature of Business	Mean	SD	F-value	Sig.
Textiles/T Gar ailoring ment Designing	3.09	0.43	<b>5.440</b>	<b>0.000</b>
Food Processing	2.68	0.77		
Construction Electrical/Metal Products	2.99	0.38		
Furniture/Wood Products	3.30	0.44		
Plastic/Rubber/ Paper/wax Products	3.20	0.35		
IT Enabled Services	2.96	0.36		
Printing /Photography	3.26	0.23		
Beauty Care Services	3.20	0.25		
Flour Milling	3.36	0.30		
Miscellaneous	3.30	0.33		
Total	3.07	0.51		

Source: Primary Data

Table 13 shows that there are substantial differences in attitude on business improvement owing to training among women entrepreneurs in various types of enterprises. Due to training, the businesses of women entrepreneurs saw a moderate improvement, as indicated by the 3.07 overall mean score.

### Major Findings

The consistent growth in the number of women entrepreneurs can be attributed to the various initiatives and programmes implemented by the government. Currently, there has been a substantial rise in the registration of enterprises owned by women in the state of Kerala. The population count in 1993 was recorded as 11,000 individuals, which shown a notable increase to 64,314 individuals by the year 2016. The annual growth rate is cause for concern. Based on the IV All India MSME Census,

Kerala is positioned as the ninth-ranked state in terms of the aggregate count of registered women-owned business units. The extent to which specific supporting institutions fulfilled the expectations of female entrepreneurs ranged from limited to moderate. When examining the supporting institutions, female entrepreneurs express a high level of agreement with factors such as the absence of a clearly outlined framework, the inadequate effectiveness of the motivating function, and the absence of cohesion among governing bodies. The female entrepreneurs who have undergone training express satisfaction with various factors related to their training, including receiving adequate motivation, identifying unexplored opportunities, acquiring managerial skills, being informed about incentives and subsidies, and receiving assistance in preparing project reports. However, they report lower levels of satisfaction in terms of their awareness of supporting agencies, completing

registration and legal procedures, receiving support and guidance from trainers, and participating in unit visits and familiarisation trips. Nevertheless, the covering of marketing management and human resource management was deemed to be adequately comprehensive. A significant proportion of female entrepreneurs have reported notable enhancements in several aspects of their firms, including staff management, financial management and cash flow, business expansion, innovative problem-solving, business profitability, and customer happiness. Nevertheless, there has been a somewhat slower advancement among female entrepreneurs in terms of their ability to generate financial statements. The acquisition of fixed assets by female entrepreneurs has been facilitated by institutional support. The assistance provided by various entities has led to enhancements in both profitability and the utilisation of information and communication technology (ICT). The improvement of exporting and diversification among female entrepreneurs has been limited.

### **Conclusion**

While the potential for women's micro entrepreneurship initiatives is great, it is essential to emphasise the need of effective microbusiness planning, implementation, and appropriate strategies for long-term success. A significant number of these firms heavily depend on interest-free subsidies and various forms of financial support offered by the government and other promotional organisations or schemes. These measures serve as a means of mitigating shocks and enabling the enterprises to sustain their operations. Furthermore, it is not recommended for women residing in rural areas to embark on entrepreneurial endeavours simply with the intention of alleviating poverty, as this approach does not guarantee a definitive solution. The motivation for pursuing entrepreneurship should not be solely driven by the

many incentives and perks provided for the establishment of small businesses. Women micro enterprises serve as a potential solution to ameliorate the prevailing circumstances, particularly in light of Kerala's elevated unemployment rate relative to other states in India. This issue is more pronounced among educated women residing in rural regions. In order for these firms to achieve success, it is imperative to integrate meticulous region selection, efficient execution, and proficient marketing tactics, while also securing support from governmental and non-governmental organisations. The prudent cultivation of existing firms, ensuring their sustained growth and development, holds greater significance compared to the mere pursuit of establishing new enterprises just for the sake of augmenting statistical indicators. The findings of the study suggest that female entrepreneurs exhibit deficiencies in many managerial competencies that are crucial for the achievement of organisational success. Hence, it is crucial that training programmes prioritise the development of managerial competencies to effectively operate entrepreneurial entities, enhance managerial skills with a sense of professionalism, and foster motivation for achieving desired outcomes. The acquisition of technical skills can provide female entrepreneurs with a platform to effectively showcase their goods and services, while simultaneously facilitating their understanding of the range, variety, and quality of competing items. Adequate support should be offered in identifying possible projects and untapped opportunities that connect with the entrepreneurial needs of women. Enhanced assistance in the form of handholding support and improved coordination among different departments is necessary to expedite and enhance the efficiency of service provision for marketing agencies catering to women. This includes obtaining licences, approvals, and fulfilling legal obligations.



## Recommendations

For Future of Women Start-ups development in Kerala:

While the increasing growth and enrolment of women units is undoubtedly a beneficial development, it is crucial for the supporting institutions to closely monitor the training components and ensure their adequacy. With the emergence of several shopping malls, hypermarkets, and digital stores offering exclusive promotions and a wide range of branded products, it is imperative for microenterprises operated by rural women in Kerala to focus on implementing effective strategies for brand development and product diversification. Value-added items offered by rural micro women companies provide unique characteristics that are likely to appeal to contemporary consumers. Instead of providing training solely based on the namesake of women rural entrepreneurs, it is recommended to offer professional training instead. It is recommended that promotional agencies organise regular entrepreneurship orientation programmes in order to enhance their comprehension of the essential principles of company planning and implementation. A collaborative effort between industry, government, and academia will be established in order to cultivate innovative concepts and facilitate the transformation of women-led enterprises into thriving businesses. Efforts should be made to eliminate the obstacles and bureaucratic procedures associated with institutional supports. When discussing the intersection of women-led start-ups and local economic development, the focus lies on rural women enterprises, which play a crucial role in the advancement of rural development within a state such as Kerala. Prospective female individuals have the opportunity to select from a variety of domains in which they can demonstrate exceptional performance. One of the crafts

currently being considered for geographical indication (GI) registration is the Straw picture craft. The exploration of pine craft and screw pines handicraft represents an additional area worthy of investigation. The traditional artisan expertise of 'Thazhappaya', which has been transmitted through centuries, holds enduring appeal transcending national borders. The product has also been granted a Geographical Indication (GI) designation. The state of Kerala has experienced a significant growth in its seafood industry. In order to facilitate the production of marine bio-active compounds from waste materials, women have the capacity to create processing facilities, engage in value-adding activities, and even establish effluent treatment plants. During the fiscal year 2020-21, the state of Kerala achieved a noteworthy export of seafood, amounting to a total of 157,698 million metric tonnes. This successful export venture earned the state over 5,000 crores. Through culinary science and technology advances, women can start their own businesses to meet the growing need for safe and high-quality seafood.

Cashew processing and value-added goods are important to the state. Variety items with new flavours are sought. Women can start business units by focusing on value-added items like cashew kernels in different flavours, cashew powders for kitchen and babies, cashew soup-squash-jam, etc. Drum-roasted kernels are also popular. Cashew nuts from Kerala farmers and traditional processing are still in high demand. Recently graduated computer software developers can help women launch software development units. Kerala women have good opportunities in ethnic food preparation and catering. Coir product manufacture in backwaters is another opportunity. Local women's competence could assist start coir product units and attract larger markets. Local self-government institutions and business groups will promote waste-to-energy projects. Following the global shift towards eco-friendly products, women

in Kerala might start their own units in the above categories.

### Scope for further research

The scope of this study is limited to just examining micro firms that are registered and managed by women in the state of Kerala. The investigation ought to encompass both registered and unregistered MSME entities inside the state. Given that male entrepreneurs are excluded from the current study, it would be beneficial to do a comparison analysis that includes both male and female entrepreneurs. This study exclusively focused on the assessment of training needs, leaving out the examination of managerial competencies and associated challenges. Future studies could investigate include these aspects for a more comprehensive analysis.

### Limitations of the study

This study has only focused on the registered enterprises operated by rural women in the state of Kerala. This study exclusively focused on micro enterprises within the categorization of MSME, which encompasses micro, small, and medium enterprises.

### References

Ahmed, H. (2002). Financing Microenterprises: An Analytical Study of Islamic Microfinance Institutions. *Islamic Economic Studies*, 9(2), 27-64

Cyriac, S. (2008). The Micro credit and Rural Micro enterprise scenario in Kerala: A study on Kudumbashree - A Case Study of rural Thiruvananthapuram, *Centre for Civil Society (CCS) -Working Paper No.203*, Thiruvananthapuram, Kerala.

Deng, W.; Liang, Q., Li, J., Wang, W. (2020). Science mapping: A bibliometric analysis of female entrepreneurship studies. *Gender Management International Journal*, 36, 61–86

Deshpande, A., & Sharma, S. (2013). Entrepreneurship or

Survival? Caste and Gender of Small Business in India. *Economic & Political Weekly*, 48(28), 38-49

Dhanya.M.B & Sivakumar.P.(2010), "Women Empowerment and Micro finance: case study from Kerala", University of Kerala, Munich Personal RePEC Archive (MPRA).

Directorate of Industries and Commerce. (n.d.). <https://industry.kerala.gov.in/>

Goyal, M., & Parkash, J. (2011). Women Entrepreneurship in India: Problems and Prospects. *International Journal of Multidisciplinary Research*, 1(5), 195-207

Lavanya, T. (2010). Women Empowerment Through Entrepreneurship. New Century Publications, New Delhi.

Nabavi, S. Abdol Hussein. (2009). Poverty and Micro Enterprise Development, *European Journal of Social Sciences*, 9(1). 120-128

Nune, S. (2022, October 8). Why Women Entrepreneurs Are Missing From India's Unicorn Growth Story. Entrepreneur. <https://entm.ag/7VirK>

Paramashivaiah, P., & Suresh, B. (2014). Women Entrepreneurs: Problems and Prospects: A Study of Tumkur District, Karnataka. *International Journal of Management and Social Science Research Review*, 1(3), 1-6.

Santos, G.; Marques, C.S.; Ferreira, J.J. (2018). A look back over the past 40 years of female entrepreneurship: Mapping knowledge networks. *Scientometrics*, 115, 953–987.

Shah, H. (2013). Creating an enabling environment for women's entrepreneurship in India. <https://hdl.handle.net/20.500.12870/582>

Shihabudheen, N. (2012). Role of Micro Enterprises in Women Empowerment: Evidence from a Field Study of „Kudumbashree“ Units in Ernakulam District in Kerala. *IOSR Journal Of Humanities And Social Science*, 3(6). 6-12

Stock, P.; Burton, R.J.F. (2011). Defining terms for integrated (multi-inter-trans-disciplinary) sustainability research. *Sustainability*, 3, 1090–1113.

Sushma, Bavle and Palker, Apoorva. (2015). Women Entrepreneurship towards Women Empowerment in India: Plan Initiatives. *Southern Economist*, 54(3), 16

Uncategorised. (2023, October 13). <https://industry.kerala.gov.in/index.php/government-orders->

previous-years/2-uncategorised

Vasanthakumari. (2012). Economic Empowerment of Women through Micro enterprises in India with special reference to Promotional agencies, *Zenith International Journal of Multi-Disciplinary Research*, 2(1).194-210.

Vatharkar, P. (2011). A Study of Constraints and Motivating Factors for Indian Women Entrepreneurs in Small Scale Industries. The 2012 International Conference on Business and Management.

World Bank. (2020). Labor Force, Female (% of Total Labor Force). <https://data.worldbank.org/>

Yasmeen, V. S., & Gangaiah, B. (2014). Women Empowerment Through Micro- Enterprises – A Study Of Y.S.R District, A.P. *IOSR Journal Of Humanities And Social Science*, 19 (2). 39-48