



ISSN 2278 – 0211 (Online)

Impact of Entrepreneurial Performance of Coir Yarn Spinners on their Entrepreneurial Objectives: An Assessment

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Abstract:

Entrepreneurs spinning coir yarn are small people; they have ventured into coir yarn spinning as an entrepreneurial activity with the sole objective of creating employment for themselves as a means of livelihood security. With a view to ascertain whether the coir yarn spinners have fulfilled their objective through their enterprise or not, an empirical analysis has been taken up among coir yarn spinners in one of the regions of the coir clusters in Tamil Nadu (2011-12). The study finds that entrepreneurship on coir yarn spinning has created employment besides providing business profit. It is more explicit in rural areas than in urban areas. However entrepreneurs who perform well in inputs procurement, machine capacity utilization and quality control have created employment to a greater extent than others. Similarly the entrepreneurs who perform well in plant and machinery maintenance, manpower management, cost control management and very effective in crisis management have high perception of the profit earning potential of the coir yarn spinning enterprise. Yet majority of the entrepreneurs are 'low performers' as far as performance of entrepreneurial managerial activities and also do have moderate perception of the profit earning potential of coir yarn spinning enterprises.

Keywords: Entrepreneurial Performance, Entrepreneurial Objectives, Coir Yarn spinning, Impact, Employment Creation, Profit Earning Potentials

1. Introduction

Entrepreneur's motives/intention behind his/ her enterprise which form basis for the 'very purpose' of the enterprise, can well reflect in the 'very objectives' of the enterprise. Infact, this is the reason that every entrepreneur strives hard by performing the entrepreneurial activities that are characterized by management functions in the fields of production/ operations, human resources, finance, cost and marketing etc., towards accomplishment of the objectives. In otherwords, it does mean that the impact/ outcome of the entrepreneurial performance can be ascertained by gauging the extent to which the objectives of the enterprise are achieved.

So far as entrepreneurship in the coir sector is concerned, the planners of our country have envisaged the promotion of entrepreneurial and trade developments on coir sector as a strategy for self employment creation and income augmentation among people. Special drives therefore, have been launched for the execution of schemes and programmes for the promotion of tiny/micro enterprises on coir based products in general and coir yarn in particular, among the persons of small means and unemployed, dwelling in both traditional and non-traditional coir producing areas/regions of the country. For instances, in Tamil Nadu there were 4706 coir yarn spinning enterprise in the year 2010- 11 and nearly 72,840 people were employed (*Industries and commerce, GOTn, 2013*).

The entrepreneurship on coir yarn therefore, should have created self employment /employment in the locality; it should have augmented the personal/family income of the entrepreneur; it should have necessarily contributed for increase in the assets and economic status of the entrepreneur. The enterprise should have a track record performance in its production and sales; it should have earned profit besides contributing to clear-off the debts if any, raised in connection with the establishment and working of the enterprise (the coir yarn production unit). In nut shell, the entrepreneurship on coir yarn spinning should have provided economic and livelihood security to the entrepreneur.

2. Study Background

2.1. Coir yarn Spinning Entrepreneurs and their Features

Entrepreneurs spinning coir yarn are small people; they have ventured into coir yarn spinning as an entrepreneurial activity primarily with the objective of creating employment for themselves as a means of livelihood security; they are tiny entrepreneurs with a capital

investments ranging from Rs. 4 to 8 lakhs; they depend on unskilled workers mostly hailing from the locality; they do purchase the raw materials in piece meal / small scale and carry out production; they are highly un-organized; they simply rely only on the suppliers, the workers and the buyers who are available locally.

Perforce during field visits through personal observation (2011-2012), it was noticed that a few of the coir yarn spinners were able to earn profit from their enterprise; a few were able to generate employment for themselves and also to others in the locality; a few were able to clear-off the debts raised in connection with the establishment/ functioning of the coir yarn spinning units, out of the earnings while a few have given up their spinning units and shifted to other occupation. These and such other features are quite against our expectations and pose serious threat to the efforts on the promotion of entrepreneurship on coir/ coir related employment avenues in the state.

3. Study Focus

Promotion of entrepreneurial development on coir yarn spinning as means of massive employment creating avenue among youth and women particularly in rural areas call for addressing a few fundamental/ critical issues such as: why a few of the entrepreneurs spinning coir yarn seem to be happy with their enterprise and others did not found so? Whether the entrepreneurs spinning coir yarn derived benefits (returns) from their enterprise in tune to their expectations or not? How did they perform the entrepreneurial managerial activities in the areas of production, marketing, finance, etc., of their enterprise? Did they realize entrepreneurship on coir yarn spinning as a dependable employment creating source? How do they perceive about profit earning potential of the coir yarn spinning enterprise? and the like. With a view to addressing these and such other related issues, an entrepreneurial analysis has been taken up among coir yarn spinners with the following objectives.

4. Objectives of the Study

- To assess the entrepreneurial managerial performance of coir yarn spinners (entrepreneurs spinning coir yarn through automated machines).
- To study the effect of entrepreneurial performance on employment creation and profit earning potentials of the coir yarn spinning enterprise, and
- To understand the perception of coir yarn spinners towards creation of employment and profit earning potentials of the coir yarn spinning enterprise.

5. Methodology

The study is an empirical analysis. Field survey method and personal interview technique are employed. Simple random sampling procedure is used to select the geographical area for the study while census method is used for selection of the respondents (coir yarn spinners) (see endnote). The fieldwork was carried out during the year 2011-12. Cumulative index scores on Personal, Personality, Economic, Social and Work experience including Entrepreneurial Competency for each respondent are estimated, while cumulative index scores on Entrepreneurial Performance for each respondent are estimated with the help of ratted scale technique. Analysis is done with the help of SPSS by using statistical tools such as percentages, means, Anova and Linear Multiple Regression models.

6. Major Inferences

6.1. Entrepreneurial Performance

Performance in entrepreneurial managerial activities such as Selection of the site for establishment of spinning unit, Capital mobilization and investment, Technology adoption, Machine maintenance, Machine capacity utilization, Manpower management, Input procurements, Production of coir yarn, Quality and Inventory control and standardization, Cost minimization, Sale and Marketing of coir yarn and Decision making in crisis situation are estimated with the help of ratted scale and index scores for each respondent are computed. For instances, the performance of the coir yarn spinners so far as selection of the geographical location and site for the establishment of the spinning unit was assessed by obtaining responses to a set of ten questions / statements in 5 point ratted scale and index scores of each respondent for each entrepreneurial managerial activity were estimated. Index scores of each entrepreneurial managerial activity ranging from 34 to 50 denote 'High performance' while the scores ranging from 19 to 35 denotes 'Moderate performance'. The scores upto 16 denotes 'Low performance'.

Sl. No	Entrepreneurial managerial activities	Number of respondents in Performance category (N=154)			Total
		Low	Moderate	High	
1.	Geographical location	16 (10.3)	98 (64.0)	40 (26.0)	154 (100)
2.	Capital and Investment	47 (31.0)	66 (43.0)	41 (26.6)	154 (100)
3.	Technology adoption	75 (48.7)	57 (37.0)	22 (14.3)	154 (100)
4.	Machine maintenance	69 (44.8)	45 (29.2)	40 (26.0)	154 (100)
5.	Manpower management	83 (54.0)	36 (23.3)	35 (22.7)	154 (100)

6.	Input procurements	67 (43.5)	48 (31.2)	39 (25.3)	154 (100)
7.	Machine Capacity	88 (57.1)	42 (27.3)	24 (15.6)	154 (100)
8.	Coir yarn production	67 (43.5)	74 (48.0)	13 (08.4)	154 (100)
9.	Quality control	88 (57.1)	41 (26.6)	25 (16.2)	154 (100)
10.	Inventory control	80 (52.0)	54 (35.1)	20 (13.0)	154 (100)
11.	Cost control	80 (52.0)	54 (34.1)	20 (13.0)	154 (100)
12.	Sale of Coir yarn	85 (55.2)	47 (30.5)	22 (14.3)	154 (100)
13.	Crisis management	34 (22.1)	120 (78.2)	--	154 (100)
	Total	879(44)	782(39)	341(17)	2002(100)

*Table 1: Performance in entrepreneurial managerial activities of the coir yarn spinners
Figures in brackets are percentages to the row total*

As shown in Table 01, on an average 44 per cent of the coir yarn spinners are 'low performers' while only 17 per cent of them exhibit 'high performance' in their entrepreneurial managerial activities. The performance of coir yarn spinners also vary in each of the entrepreneurial managerial activities. For instances, only 10 per cent of the coir yarn spinners have low performance in the selection of geographical location and site for the establishment of the spinning unit, whereas 57 per cent of them found to be low performers in quality control and management. These indicate existence of not only differences in the entrepreneurial performance among coir yarn spinners but also variations in the performance in each entrepreneurial managerial activities. Thus the above inferences serve a backdrop/ base for further enquiry on the determinants of entrepreneurial performance of the coir yarn spinners.

6.2. Impact on Employment Creation

It is observed during survey that the entrepreneurs of tiny/ micro level coir yarn spinning through automated machines have taken up coir yarn spinning with the prime objective/ motive of creating self employment for themselves. Infact, coir yarn spinning is carried out by the entrepreneurs with the help of their family members besides employing workers on piece rate/daily wage. The man hours of the entrepreneurs and their family members are much higher than that the hours employed through paid-workers. The need to spent more time in the spinning unit by the entrepreneur and his/her family members has become so essential due to uncertainty in the electric power supply, increased cost of labour and the like. It is noticed that many of the spinning units were found to have carried out the production functions during odd hours (during night time) with the help of the family members of the entrepreneurs.

S. No	Employment creation level (Index scores)	Number of respondents	
		F	%
1.	Low (upto 7)	--	--
2.	Moderate (8 -14)	113	75.3
3.	High (15 - 20)	37	24.7
	Total	150	100

*Table 2: Extent of employment creation through coir yarn spinning enterprise
The mean score is 12.31 out of 20*

As such the entrepreneurship on coir yarn spinning in fact, has come to stay as 'way of life' of the entrepreneur. In light of the above, the actual realization of the objective of employment creation through coir yarn spinning was assessed by obtaining responses to a set of five statements in four point ratted scale and index scores of the respondents are estimated. High scores (ranging from 15 to 20) denote high level of employment creation while, low scores (up to 7) denote low level of employment creation through coir yarn spinning.

The descriptive statistics as shown in Table 02 depicts that the mean index scores of the respondents are 12.31 out of 20. The skewness in distribution of data indicates that majority of the respondents are found with scores below the mean scores. This implies that the entrepreneurship on coir yarn spinning did not create expected level of employment. Problems in supply/availability of electric power, low capacity utilization due to increased down-time, absence of stable price/assured market for the coir yarn and increased labour cost are reported as the major reasons for low level of employment creation through coir yarn spinning units in the locality.

6.3. Effect of Entrepreneurial Performance on Employment Creation - LMR model

To know the effect of entrepreneurial performance on the entrepreneurial output viz., employment creation, the entrepreneurial performance variables such as performance in geographical location and site for the establishment of spinning unit, capital mobilization and investment performance, performance in adoption of production technology, performance in plant and machinery maintenance management, performance in manpower management, performance in production, performance in input procurement, performance in machine capacity utilization, performance in quality control management, performance in inventory control management, performance in cost control management, performance in sale of coir yarn and performance in crisis management are fitted in LMR model.

The model shows that the R^2 value is 98.7 so it is acceptable. The results show that the variables such as performance in man power management, performance in input procurement, performance in capacity utilization of machineries and performance in quality control of finished goods have positive significant effect for the creation of employment to a greater extent through coir yarn spinning than other variables. Whereas the variables such as performance in geographical location and site for the establishment of spinning unit has negative significant effect (rural=1; semi urban=2; urban=3). It means that coir yarn spinning units established in rural areas could create more employment than that in semi urban/ urban area. Similarly the variable viz., performance in adoption of production technology has negative significant effect. This indicates that coir yarn spinning units with less level of adoption of automated technology could able to create more employment than those with high level of automated technology. Thus the above findings drawn from the LMR model are on our expected line. However, the variables viz., performance in crisis management has negative significant effect. It implies that high performance in crisis management is beneficial particularly for cost minimization/ profit maximization, whereas it hampers the employment creation potential of coir yarn spinning enterprises. For instances, decision to stop production during the periods of dull demand for coir yarn/ or increase in production cost due to increase in machine downtime/ idle time/ breakdown time, infact the benefit to entrepreneurs, but not beneficial to paid workers who seek daily wage through employment.

Regression

Variables Entered/Removed(b)			
Model	Variables Entered	Variables Removed	Method
1	Crisis management, Establishment of spinning unit, Plant and machinery maintenance , Sale of coir yarn , Capital mobilization and investment, Machine capacity utilization, Coir yarn production, Manpower management, Cost control, Adoption of production technology, Input procurement, Quality control (a)	.	Enter
a Tolerance = .000 limits reached.			
b Dependent Variable: Employment Creation			

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.994(a)	.988	.987	.3411
a Predictors: (Constant), Crisis management, Establishment of spinning unit, Plant and machinery maintenance , Sale of coir yarn , Capital mobilization and investment, Machine capacity utilization, Coir yarn production, Manpower management, Cost control, Adoption of production technology, Input procurement, Quality control				

ANOVA(b)

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	1291.955	12	107.663	925.402	.000(a)
	Residual	15.939	137	.116		
	Total	1307.893	149			
a Predictors: (Constant), Crisis management, Establishment of spinning unit, Plant and machinery maintenance , Sale of coir yarn , Capital mobilization and investment, Machine capacity utilization, Coir yarn production, Manpower management, Cost control, Adoption of production technology, Input procurement, Quality control						
b Dependent Variable: Employment Creation						

Coefficients(a)						
Variables		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	8.522	.384		22.173	.000
	Geographical location of the spinning unit	-7.329E-02	.018	-.101	-4.139	.000
	Capital mobilisation	4.227E-03	.024	.009	.179	.858
	Adoption of production technology	-.188	.060	-.318	-3.158	.002
	Plant and machinery maintenance	-3.228E-02	.022	-.087	-1.466	.145
	Manpower management	.220	.020	.807	11.126	.000
	Input procurement	.205	.036	.632	5.724	.000
	Machine capacity utilisation	.146	.029	.453	5.102	.000
	Coir yarn production	-4.152E-02	.021	-.114	-1.943	.054
	Quality control	.340	.047	1.010	7.262	.000
	Cost control	-1.307E-02	.030	-.041	-.431	.667
	Sale of coir yarn	-1.761E-02	.026	-.048	-.671	.503
	Crisis management	-.166	.038	-.352	-4.366	.000

a Dependent Variable: Employment Creation

Table 3: Effect of entrepreneurial performance on the employment creation – Results of LMR model

Excluded Variables(b)						
		Beta In	T	Sig.	Partial Correlation	Collinearity Statistics
Model						Tolerance
1	Inventory control	.(a)000

a Predictors in the Model: (Constant), Crisis management, Establishment of spinning unit, Plant and machinery maintenance , Sale of coir yarn , Capital mobilization and investment, Machine capacity utilization, Coir yarn production, Manpower management, Cost control, Adoption of production technology, Input procurement, Quality control

b Dependent Variable: Employment Creation

6.4. Perception towards Profit Earnings Potential of Coir yarn Spinning Entrepreneurship

The effectiveness of performance of entrepreneurial activities of the entrepreneur in fact, can be witnessed from business net result i.e., whether the entrepreneur has earned profit though not in short run, but necessarily in the long run or not? In these context, a set of six statements relating to profit earning potential of the coir yarn spinning unit were administered to know about perception of coir yarn spinners. The responses were obtained in four point ratted scale and index scores of the respondents were estimated. Scores ranging from 17 to 24 denote high perception while scores upto 8 denotes low perception towards the profit earning potential of the coir yarn spinning enterprise (Table 04).

S. No	Perception category (index scores)	Number of respondents	
		F	%
1.	Low (upto 8)	37	24.7
2.	Moderate (9 -16)	66	44.0
3.	High (17 - 24)	47	31.3
Total		150	100

Table 4: Perception towards profit earning potential of coir yarn spinning enterprise
The mean score is 13.61 out of 24

The descriptive statistics show that mean index scores of the respondents are 13.61 out of 24. The skewness indicates that the scores of majority of the respondents found to lay around the mean scores. This implies that majority of the respondents did not perceive the profit earning potentials of coir yarn spinning enterprise either at low level or at high level. They have moderate perception.

6.5. Effect of Entrepreneurial Performance on the Perception of Profit earning potentials of Coir Yarn Spinning Enterprise

To ascertain the effect of entrepreneurial performance on the entrepreneurial output viz., earning business profit, the entrepreneurial performance variables such as performance in selection of geographical area and site for location of establishment of spinning unit, capital mobilization and investment performance, performance in adoption of production technology, performance in plant and machinery maintenance management, performance in manpower management, performance in production process, performance in inputs procurement, performance in machine capacity utilization, performance in quality control management, performance in inventory control management, performance in cost control management, performance in sale of coir yarn and performance in decision making in times of crisis situation were fitted in LMR Model.

Regression

Variables Entered/Removed(b)			
Model	Variables Entered	Variables Removed	Method
1	Crisis management, Establishment of spinning unit, Plant and machinery maintenance , Sale of coir yarn , Capital mobilization and investment, Machine capacity utilization, Coir yarn production, Manpower management, Cost control, Adoption of production technology, Input procurement, Quality control (a)	.	Enter
a Tolerance = .000 limits reached.			
b Dependent Variable: Profit earning potential			

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.997(a)	.994	.993	.4568
a Predictors: (Constant), Crisis management, Establishment of spinning unit, Plant and machinery maintenance , Sale of coir yarn , Capital mobilization and investment, Machine capacity utilization, Coir yarn production, Manpower management, Cost control, Adoption of production technology, Input procurement, Quality control				

ANOVA(b)

Model	Sum of Squares	Df	Mean Square	F	Sig.	
1	Regression	4394.981	12	366.248	1754.850	.000(a)
	Residual	28.593	137	.209		
	Total	4423.573	149			
a Predictors: (Constant), Crisis management, Establishment of spinning unit, Plant and machinery maintenance , Sale of coir yarn , Capital mobilization and investment, Machine capacity utilization, Coir yarn production, Manpower management, Cost control, Adoption of production technology, Input procurement, Quality control						
b Dependent Variable: Profit earning potential						

The results of LMR show that the variables such as the performance in plant and machinery maintenance management, performance in manpower management, performance in coir yarn production, performance in cost control management and performance in decision making in crisis situation have positively effected significantly to have high perception of the profit earnings potential of the coir yarn spinning enterprise to a greater extent than other variables. However, among the variables that have significant positive effect, the variable viz., performance in crisis management has positive significant effect to have high perception of the profit earning potential of the coir yarn spinning enterprise to a greater extent than any other variables i.e., the β value is 0.320 which is the highest. Moreover, the variable viz., performance in geographical location and site for the establishment of the coir yarn spinning enterprise has significant negative effect (ie., rural=1, semi urban=2, urban=3). This indicates that establishment of coir yarn spinning enterprise in rural areas enable to have high perception of the profit earning potential of coir yarn spinning enterprises.

Coefficients(a)						
Variables		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	-.940	.515		-1.827	.070
	Geographical location of the spinning unit	-.122	.024	-.092	-5.139	.000
	Capital mobilization	3.545E-02	.032	.040	1.123	.263
	Adoption of production technology	9.348E-02	.080	.086	1.172	.243
	Plant and machinery maintenance	.125	.029	.183	4.234	.000
	Manpower management	.114	.027	.227	4.293	.000
	Input procurement	-1.988E-02	.048	-.033	-.415	.679
	Machine capacity utilization	9.833E-02	.038	.166	2.562	.011
	Coir yarn production	.110	.029	.165	3.850	.000
	Quality control	-.233	.063	-.376	-3.709	.000
	Cost control	.182	.041	.308	4.488	.000
	Sale of coir yarn	1.213E-02	.035	.018	.345	.730
	Crisis management	.277	.051	.320	5.444	.000

a Dependent Variable: Profit earning potential

Table 5: Effect of Entrepreneurial performance on the Profit earning potential of the coir yarn enterprise – Results of LMR model

Excluded Variables (b)						
		Beta In	T	Sig.	Partial Correlation	Collinearity Statistics
Model						Tolerance
1	Inventory control	.(a)000

a Predictors in the Model: (Constant), Decision making, Establishment of spinning unit, Plant and machinery maintenance, Sale of coir yarn, Capital mobilization and investment, Machine capacity utilization, Coir yarn production, Manpower management, Cost control, Adoption of production technology, Input procurement, Quality control

b Dependent Variable: Profit earning potential

7. Conclusion

An analysis of the impact of entrepreneurial performance of coir yarn spinners on their entrepreneurial objective shows that majority of the coir yarn spinners have ventured into coir yarn spinning as a tiny/ micro enterprise with the avowed objective of creating employment to them, besides earning business profit. However entrepreneurs who perform well in inputs procurement, machine capacity utilization and quality control have created employment to a greater extent than others. Similarly the entrepreneurs who perform well in plant and machinery maintenance, manpower management, cost control management and very effective in crisis management have high perception of the profit earning potential of the coir yarn spinning enterprise. The entrepreneurs who have established their coir yarn spinning units in rural areas have generated employment to a greater extent than others, besides having high perception of the profit earning potential of the coir yarn spinning enterprise. Yet majority of the entrepreneurs are 'low performers' so far as performance of entrepreneurial managerial activities and also do have moderate perception of the profit earning potential of coir yarn spinning enterprises.

The study thus concludes that entrepreneurship on coir yarn spinning through automated machines has created employment besides providing business profit. It is more explicit in rural areas than in urban areas. Entrepreneurship on coir yarn spinning hence, may be regarded as one of the important avenues for creating massive employment in rural areas.

In light of the above, the study suggests that special drives are to be taken to provide incubation training to spinners on entrepreneurial management activities particularly on machine maintenance management, machine capacity utilization and line balancing, measures on cost control and quality control in coir yarn spinning. Schemes for modernization of production technology by replaced the obsolete technology etc., are to be carried out. Projects for creating 'Production - Consumption Chain (PCC) on coir may be executed through 'Convergent Models (CM)' involving Public – Private Partnership (PPP).

8. End Note

8.1. Sampling procedure for selection of the geographical area and the respondents

So far as the selection of the geographical area for the study is concerned, the study considered that the Coir Board (GOI), Kochi has notified a few geographical regions in Tamil Nadu where coir and coir based entrepreneurial activities are prominently found. Accordingly the Coir Board has identified six coir clusters comprising the geographical regions of Salem, Singampunari, Periyakulam, Pattukottai, Cuddalore, and Vellore. Each coir cluster covers a geographical area of more than one district. Peiyakulam Coir Cluster which covers the geographical area of Theni and Dindigul districts was selected on 'simple random sampling bases as the geographical area to launch the study. All the coir yarn spinning entrepreneurs operating in the study geographical area were considered as the respondents i.e., 154 entrepreneurs spinning coir yarn through automated spinning machines / devices in Periyakulam Coir Cluster comprising 48 and 106 in Theni and Dindigul districts respectively (*DIC, 2010*).

9. References

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