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Determinants of Women's Entrepreneurial Performance in Kerala

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ABSTRACT

Women entrepreneurs have significant impact on the economic development in global as well as national context. Capacitating women with entrepreneurial qualities have remained key to social transformation especially in developing countries. The paper presents the results of a study conducted in Kerala during 2020-21 to analyse the determinants of women's entrepreneurial performance related to agricultural enterprises. Seventy women entrepreneurs involved in agricultural ventures randomly selected from the 14 districts of Kerala formed the study sample. Analysis of data collected based on a pretested structured interview schedule indicated mushroom and value addition enterprises as the most successful enterprises among women. It was estimated that these enterprises took three and six months respectively and production levels of 1872 kg and 1462 kg each in the order to reach break-even points. Mass media contact and stage of enterprise were the factors which were delineated as the factors that contributed significantly to the period taken to achieve the break-even point by the women led enterprises.

INTRODUCTION

Entrepreneurship is one of the most important inputs towards economic development of the country. An entrepreneur can be considered as a person who has creativity and is motivated to set up his own business or innovation and is always in the pursuit of great achievements. They are catalysts for social change and work for the common good. The term entrepreneurship implies a dynamic course of generating progressive asset (Shailesh et al., 2013). Entrepreneurship is a feasible approach for upward mobility, as a one per cent increase in entrepreneurial activities decreases the poverty rate by two per cent (Singh, 2014). As such, the quantity and competency of entrepreneurs affect the economic development of the country. The economic history of most of the developed countries confirms the dynamic role played by enterprises and the entrepreneurs.

Recent years have witnessed a surge of women entrepreneurs especially in agricultural sector of transforming economies such as India. This is reflected in the research findings that report a shift in attitude of farm women towards entrepreneurship (Singh & Singh, 2018). Also, there are extensive evidence to prove that the performance of women-owned micro and small enterprises played pivotal roles in development (Shakeel et al., 2020) and contributed to the well-being of societies by creating jobs, wealth, and innovations (Mozumdar et al., 2020). Floriculture, seed production, net house cultivation, vermi compost/organic products, apiary, value addition, mushroom production and dairy enterprises excelled in preferences for enterprise establishment (Nain et al., 2015). These suggest the great significance entrepreneurship development especially among women hold to transform the socio-economic scenario of rural India. However, the 6th Economic census released by Ministry of Statistics and Programme Implementation (MoSPI) highlighted that the women constituted 48.9 per cent in the population, but represent only 14 per cent of the total entrepreneurs in India. This indicates the need for concerted efforts to improve the women entrepreneurial ecosystem in the country to reap the emerging demographic dividend.

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In fact, entrepreneurship in agriculture could be defined as the formation of novel economic organization for the intention of growth under risk and uncertainty in agriculture (Dollinger, 2003). Less educated small farmers can also become an agri-entrepreneur, if they are clearly informed about the right type of technologies and knowledge about their use (Kharga et al., 2021). Among the many characteristics of entrepreneurship development, profit making ability of the enterprise plays a vital role in its sustainability and is dependent on the well-developed linkages among stakeholders (Singh et al., 2014). Therefore, an in-depth study was conducted among the selected agripreneurs of Kerala State to explore the net profit and its relationship with the socio-psychological, socio-personal and communication related determinants embedded with the enterprise and entrepreneurs.

METHODOLOGY

The study was conducted in Kerala during 2020-21 and ex-post-facto research design was followed in the present investigation. Purposive sampling technique were followed and five women entrepreneurs engaged in agriculture and allied sector were selected from each district of Kerala State and thus the total 70 women entrepreneurs were selected for the study. The required data were collected by personal interview through a well-structured and pre-tested interview schedule. The performance indicators like type of the product, entrepreneurial stage, were collected from the selected women entrepreneurs. Data of the enterprises viz., fixed cost, variable cost, price of the products were collected to assess the performance eon selected enterprises. Break even analysis based on the assumption of constant input price, technology and selling price, were used in the assessment. Break-even point was calculated using the algebraic formula given in the equation (1).

$$BEP = F / P\text{-}V \quad \ldots.(1)$$

BEP-Break-even point, F- Fixed cost of production, P-Price per unit of production, V-Variable cost per unit of product.

Multiple linear regression models are used to delineate the impact of independent variables on the dependent variable. In the present study it was used to identify the factors contributing to the time taken to reach break-even point based on the following equation (2).

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X4 + b_5X_5 + b_6X_6 + b_7X_7 + ui \quad \ldots(2)$$

Where, Y = Time taken to achieve the Break-even point by the different enterprises (in months)

X1 = Age of the farmers (in years)

X2 = Education (0- illiterate, 1- Primary, 2- higher primary, 3- secondary, 4- Higher Secondary and 5- Graduation & Above)

X3 = Technical education (1- yes, 0- No)

X4 = Entrepreneurial stage (1- First generation entrepreneur, 2- Ex-employee, 3- Family entrepreneur, 4- First generation entrepreneur + Ex-employee, 5- First generation entrepreneur + Family entrepreneur)

X5 = Assets owned (1- Only Machinery and Equipment, 2- Equipment, machinery and own building, 3- Equipment, machinery, own building and land)

X6 = Mass media contact (1- Rare contact, 2- often, 3- regular)

X7 = Social media contact (1- Rare contact, 2- often, 3- regular)

RESULTS AND DISCUSSION

Personal attributes such as age, education, technical education, entrepreneurial stage, mass media contacts are known to play a crucial role in success of entrepreneurs and the results from the study. The composition of women entrepreneurs was dominated (48.57%) by middle aged entrepreneurs with mean age of 43 years. The findings corroborated the view of McElwee (2008) who reported that agricultural entrepreneurs are those who own the farm and are aged under 45 years. Another important variable studied was education, which encouraged and supported risk bearing capacity. There were no illiterates in the study and significant percent (71.44%) of respondents were having moderate education *viz.*, secondary, higher secondary and graduate level of education. However, with respect to technical education related to the entrepreneurs only 37.14 per cent of the respondents possessed any technical education. The results on formal and technical education could be well explained in the light of the high literacy rate in the State, especially for women. Type of entrepreneur was an attribute that indicated how the respondent was attracted to the venture, whether by personal choice or by situational choice and revealed elements of family support in the development of the enterprise. The results from the table indicated that 47.14 per cent of entrepreneurs belonged to the category of first-generation entrepreneurs. This suggested that most of the respondents entered the entrepreneurial activities based on their personal interest and passion rather than any situational or family compulsions. However, majority of the women entrepreneurs in the study were having poor mass media contacts. Most of the women entrepreneurs (81.43%) had rare contact with the mass media, which indicated non-utilization of easy and possible way of improving social networks and reaching out to prospective customers. Therefore, concerted efforts to improve their mass media contacts including social media needs to be attempted as a component of entrepreneurship development programmes especially through development agencies such as Kudumbasree Mission, District Industries Centers and Krishi Vigyan Kendras.

Entrepreneurial activities in which women were engaged had great significance in their performance. Accordingly, the study attempted to categorize the respondents based on enterprises

Table 1. Women owned enterprises in percent

	Central Zone	North Zone	South Zone	Total
Farming	20.00	15.00	28.00	21.43
Livestock management (Dairy/Poultry)	24.00	20.00	28.00	24.29
Agribusiness Services	4.00	15.00	8.00	8.57
Value Addition	76.00	70.00	68.00	71.43
Others (Fisheries/ mushroom/ nursery etc.)	16.00	10.00	8.00	11.43

handled *viz.*, farming, livestock management, agribusiness services, value addition and other allied sector activities as presented in Table 2. The results from the table showed that the majority of women entrepreneurs were engaged in value addition (71.43%) activities followed by livestock management (24.29%) of dairy, poultry etc. and farming (21.43%). Moreover, the results also indicated that trend almost followed similar pattern across the state irrespective of the zone.

The major value addition activities in which the women entrepreneurs were engaged included making of chips, pickles, papad, snacks, jam etc. These results pointed that women entrepreneurs preferred activities that could often be performed in and around the homestead without affecting their daily household chores and responsibilities. The results reiterated the substantial contribution of women in farming, livestock management, post-harvest, processing, value addition and allied activities as reported by many recent studies (Sidhu, 2007; Nain & Kumar, 2010; Sidhu, 2011; Gupta et al., 2013; Singh et al., 2016; Panda et al., 2016).

An attempt was also made to understand the number of entrepreneurial activities in which a women entrepreneur was involved and the results are presented in Table 2. The results revealed that most of the respondents (68.57%) were engaged in single activity enterprise, whereas 25.71 per cent and 5.71 per cent were involved in two and three activities respectively per enterprise at a time. The engagement with more than one activity in an enterprise could be viewed as a strategy to improve their risk bearing abilities. However, all these results were indicative of how women empowered themselves to cope with the changing times by setting up and sustaining enterprises.

Break-even point of enterprises practiced by women

Respondents in the study have taken up various entrepreneurial activities *viz.*, fisheries, Dairy, egg production, bakery items, chicken (broiler), nursery, mushroom and value addition. The estimates on fixed costs, variable costs, price per unit, break-even points of each enterprise and time taken to achieve reach the break-even point is presented in Table 3. Among the enterprises practiced, fixed cost was highest for bakery units (Rs. 3,46,429), followed by fisheries (Rs. 2,36,667), and dairy (Rs. 2,28,077). Break-even point column in the table indicated the quantity of each product needed to be produced to reach the profit zone. Among the different enterprises mushroom venture which reached the profit zone by producing 1462 kg of mushroom had the least lag time. Time required to achieve the said production level was six months with the average production of 234 kg/month. It was followed by value addition enterprises, they had to produce 1872 kg of value-added products to attain break-even point and enter the profit zone. Time taken by the value addition enterprises for reaching the break-even point was three months with average monthly production of 574 kgs. Fisheries and dairy sectors have attained the break-even point with production of 7,889 kg and 17,883 kg respectively and had taken the time of more than 3 years to attain the break-even point and earning the profit. Results have concluded that mushroom production, value addition sector and nursery are the best enterprises which fetched the profits at the earliest compared to other enterprises. The results of the Table 4 also proved that entrepreneurs have made the right choice by selecting value addition and allied enterprises (Table 3) as the most commonly practised entrepreneurial venture.

Table 2. Number of activities engaged by selected entrepreneur

	Central zone (%)	North zone (%)	South zone (%)	Total (%)
One	68.00	15.00	68.00	68.57
Two	24.00	30.00	24.00	25.71
Three	8.00	0.00	8.00	5.71
Grand Total	100.00	100.00	100.00	100.00

Factors affecting the time taken to achieve the break-even (BE) point

The results indicated that the time taken to achieve the break-even point mainly depended on factors *viz.*, input cost, technology used, and scale of production. Apart from these factors there were also other personal factors like age, education, technical education, entrepreneurial type, social media contacts and mass media contacts that influenced BE point. An attempt was also made to delineate the factors that influenced the time to reach breakeven point in women led enterprises through regression and the results are presented in Table 5. Results showed that entrepreneurial type (6.92) and mass media contact (2.44) of the entrepreneurs were significantly contributing in reducing the time taken to achieve the break-even point. Significance of the entrepreneurial type, confirmed that as the entrepreneur with family entrepreneurship and previous experience were more successful because of their in-depth knowledge and experience back up. On the other hand, significance of mass media contact confirmed its role in developing the successful entrepreneurship reiterating the results that the entrepreneurs with more mass media contact had better performance. However, the R^2 value of 0.25 confirmed that there were many more possible variables that contributed to the period to the break-even point

Table 3. Cost of investment and break even points of different women enterprises

S.No.	Enterprises	Fixed cost (Rs.)	Price/unit (Rs.)	Variable cost/unit (Rs.)	Break-even point (quantity) (kg)	Production/ month	Time (Months)
1	Bakery	346429	262	219.60	8170	328	25
2	Egg production	163000	6	4.68	123485	4100	30
3	Fisheries	236667	210	180	7889	118	67
4	Dairy	228077	68	55.25	17883	494	36
5	Mushroom	116750	390	310.13	1462	234	6
6	Chicken (Broiler)	96250	148	113.00	2750	150	18
7	Value Addition	142264	350	274.00	1872	574	3
8	Nursery	170833	100	72.00	6101	500	12

Table 4. Factors influencing the time taken to reach break-even point

S.No.	Particulars	Co-efficient	Std. error	t
1	Constant	-71.16	1.28	0.40
2	Age	0.50	15.49	-0.37
3	Education	-5.76	21.47	1.15
4	Technical education	24.75	3.71	1.87
5	Entrepreneurial stage	6.92***	14.29	-0.06
6	Facilities	-0.84	1.44	1.70
7	Mass media contact	2.44*	16.91	-0.18
8	Social Media contact	-3.11	1.51	0.41
	R^2	25		

which need to be explored through future studies. Kobba et al., (2021) found four determinants of entrepreneurial success in farm entrepreneurs viz.; family size, land size, turnover and annual income whereas in the non-farm sectors five determinants of entrepreneurial success were long term involvement, initiative, number of employees, entrepreneurial experience and annual income.

CONCLUSION

The results of the study could conclusively prove the potential of **e**ntrepreneurship as one of the most important interventions towards inclusive development. It contributed towards reduction of socio-economic imbalances related to gender. It could also be inferred from the results that despite the educational advantage of women in the state, promotion of technical education among women could be effective in harnessing the entrepreneurial advantages. Also, special purpose programmes targeting women entrepreneurs could attract more young women into entrepreneurship. It was also observed that mushroom and value addition were the enterprises which were highly successful among women. The BE analysis showed that these enterprises entered profit zone at three and six months respectively vindicating the popularity. The study also concluded that entrepreneurial stage and mass media contact played the crucial role in determining the performance of the enterprises. This implied that women entrepreneurs should be given more access to technical guidance and networking opportunities with the help of agribusiness incubators and business accelerators dedicated for the purpose. Also, entrepreneurship development and capacity development programmes for women need to have components on mass media contacts which contribute to accelerate the achievement of break-even point.

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