# PROFILE OF ORNAMENTAL NURSERY OWNERS, THEIR CONSTRAINTS AND SUGGESTIONS

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#### **ABSTRACT**

An ornamental nursery is a place where ornamental plants and their promoting commodities are being produced. The ornamental nursery owners are entrepreneurs who are engaged in operating and maintaining their enterprises. The present study was conducted in four talukas of the Navsari district of South Gujarat namely Khergam, Chikhli, Gandevi and Vansda during the year 2022-23. Among each selected talukas 25 respondents were randomly selected. Thus, a total of 100 ornamental nursery owners were drawn for the study. The study was conducted to study the profile of ornamental nursery owners and to find out the constraints faced by ornamental nursery owners and seek their suggestions to overcome the constraints. The present study revealed that the majority of ornamental nursery owners were in middle age, had medium and small family sizes, high school level of education, marginal land holding, medium farming experience, above ₹ 2,00,000 annual income, only ornamental nursery as a main occupation, not a member of any organisation, medium mass media exposure, medium level of material possession, medium level of extension contact. The study further revealed that education, social participation and mass media exposure together influenced nearly half of the entrepreneurial behaviour (dependent variable). Moreover, the study reveals that major constraints faced by ornamental nursery owners were a lack of awareness regarding nursery production technology/Govt. initiatives, lack of timely technical advice regarding plant protection and nursery management, and scarcity of labours. The major suggestions given by ornamental nursery owners to overcome their constraints were extension contact should be strengthened, increase dissemination of information regarding Govt. initiatives/ training programmes/plant protection, provide improved practices of mechanization.

Keywords: ornamental nursery, entrepreneurs, profile, constraints, suggestions

#### INTRODUCTION

An ornamental nursery is a place where ornamental plants are propagated and grown to a desired age. They include retail nurseries which sell to the general public, wholesale nurseries which sell only to businesses such as other nurseries and to commercial gardeners, and private nurseries which supply the needs of institutions or private estates (Anonymous, 2023<sub>a</sub>). There has been increasing demand for horticultural crops particularly fruit and ornamental ones in both urban and rural areas of India. With this, the demand for good quality planting materials has gone up and hence the nursery business has developed rapidly in recent years in our country (Anonymous, 2023<sub>b</sub>). A nursery provides an opportunity to become an entrepreneur.

An entrepreneur is an individual who always looks for becoming the first man in initiating a new venture; he does not belives in windfall profit or windfall loss while initiating the venture. Deep down in his mind, profit is there. Respecting the social responsibilities, highest motivation and enormous courage, he starts an enterprise that may provide jobs to many jobless hands (Dangi *et al.*, 2014; Kumar et al., 2021; Patel et al., 2015).

Being an entrepreneur is often viewed as an aversive career choice where one is faced with everyday life and work situations that are fraught with increased uncertainty, impediments, failures, and frustrations associated with the process of new firm creation (Campbell, 1992). Entrepreneurs face many problems in operating their enterprises. The present study focused on these issues with the following objective.

## **OBJECTIVES**

- (1) To study the profile of ornamental nursery owners
- (2) To find out the constraints faced by the ornamental nursery owners and seek their suggestions to overcome the constraints

### **METHODOLOGY**

The present study was conducted using an *ex-post-facto* research design during the year 2022-23 in the Navsari district of South Gujarat. South Gujarat has seven districts namely Surat, Navsari, Valsad, The Dangs, Tapi, Bharuch and Narmada among them only Navsari district was purposively selected based on the greater number of nurseries in this

area. The Navsari district has six *talukas* namely Navsari, Chikhli, Gandevi, Vansda, Khergam and Jalalpore among them Khergam, Chikhli, Gandevi and Vansda *talukas* were purposively selected due to a greater number of nurseries in these *talukas*. Among each selected *talukas* 25 respondents were randomly selected. Thus, a total of 100 sample size was obtained for the present study.



Fig. 1: Operational structure of selection of respondents

An interview schedule was developed as per the objectives of the study. The data were collected through the personal interview method. For the present study variable age, family size, education, landholding, farming experience, annual income, occupation, social participation, mass media exposure, material possession, extension contact, risk orientation, achievement orientation, scientific orientation, management orientation, innovativeness and decision-

making ability were considered in the profile of ornamental nursery owners. The frequency obtained for each category applicable to the variables of the respondents was summed up and converted into a percentage. Further, for constraints and suggestions, open-ended questions were used. The responses were counted in frequency and converted into a percentage. Lastly, the same constraints and suggestions were ranked.

#### RESULTS AND DISCUSSION

#### Profile of ornamental nursery owners

Table 1: Distribution of the ornamental nursery owners based on their profile

(n=100)

Sr. No.	Variables	Categories	f(%)
1	Age	Young (up to 35 years)	63 (63.00 %)
		Middle (between 36 to 50 years)	23 (23.00 %)
		Old (above 50 years)	14 (14.00 %)
2	Family size	Small (1 to 4 members)	46 (46.00 %)
		Medium (5 to 7 members)	46 (46.00 %)
		Large (8 and above members)	8 (08.00 %)
3	Education	College and above	25 (25.00 %)
		High school	35 (35.00 %)
		Middle school	30 (30.00 %)
		Primary school	10 (10.00 %)
		Functionally literate (can only read and write)	00 (00.00 %)
		Illiterate	00 (00.00 %)

4	Landholding		f(%)		
		Big landholding (above 10.00 ha.)	2 (02.00 %)		
		Medium landholding (04.01 ha. To 10.00 ha.)	4 (04.00 %)		
		<b>Semi-medium landholding</b> (02.01 ha. To 04.00 ha.)	5 (05.00 %)		
		Small landholding (01.01 ha. To 02.00 ha.)	14 (14.00 %)		
		Marginal landholding (00.01 ha. To 01.00 ha.)	67 (67.00 %)		
		Landless	8 (08.00 %)		
5	Farming experience	Low (below 5 years)	33 (33.00 %)		
		Medium (5 to 10 years)	44 (44.00 %)		
		High (more than 10 years)	23 (23.00 %)		
6	Annual income	Above ₹ 2,00,000	55 (55.00 %)		
		Between ₹ 1,50,001 to ₹ 2,00,000	27 (27.00 %)		
		Between ₹ 1,00,001 to ₹ 1,50,000	16 (16.00 %)		
		Between ₹ 50,001 to ₹ 1,00,000	2 (02.00 %)		
		Up to ₹ 50,000	0 (00.00 %)		
7	Occupation	Ornamental nursery + service in Govt.	0 (00.00 %)		
		Ornamental nursery + other business enterprises	3 (03.00 %)		
		Ornamental nursery + service in private	5 (05.00 %)		
		Ornamental nursery + farming	20 (20.00 %)		
		Ornamental nursery only	72 (72.00 %)		
8	Social participation	Not a member of any organization	82 (82.00 %)		
		Member of one organization	14 (14.00 %)		
		Member of more than one organization	4 (04.00 %)		
		Officeholders	0 (00.00 %)		
9	Mass media exposure Mean = 15.88 SD = 03.79	Low (up to 12 score)	22 (22.00 %)		
		Medium (between 12 to 20 score)	60 (60.00 %)		
		High (above 20 score)	18 (18.00 %)		
10	Material possession	Low (up to 11 score)	13 (13.00 %)		
	Mean = $20.02$ SD = $09.02$	Medium (between 11 to 29 score)	83 (83.00 %)		
		High (above 29 score)	04 (04.00 %)		
11	<b>Extension contact</b>	Low (up to 11 score)	26 (26.00 %)		
	Mean = 13.81 SD = 02.67	Medium (between 11 to 17 score)	74 (74.00 %)		
		High (above 17 score)	0 (00.00 %)		

The data from Table 1 indicates that the majority (63.00 %) of the respondents were young, followed by 23.00 and 14.00 per cent were in middle and old age, respectively. Young individuals may exhibit greater flexibility in embracing new experiences, while older individuals may have hesitation in trying unfamiliar things.

An equal per cent of the respondents (46.00 %) had a small and a medium family size, followed by 08.00 per cent had a large family size. This could be due to the modernization of families as they prefer isolated living rather than traditional joint family life.

It is apparent that 35.00 per cent of the respondents had a high school level of education, followed by 30.00 per cent had a middle school, 25.00 had a college and above and 10.00 per cent had a primary school level of education. While none of them were illiterate and functionally literate. Formally educated possess the necessary academic background which equips them to the necessary skills, knowledge and networks to handle the complexities of launching and maintaining new ventures. Also, education might have developed positive view towards entrepreneurship.

Further, it is apparent that the majority (67.00 %) of the respondents had a marginal landholding, followed by 14.00 per cent had a small landholding, 08.00 per cent were landless, 05.00 had a semi-medium landholding, 04.00 had a medium landholding and 02.00 per cent had a big landholding. This result aligns with the current situation where the majority of landholdings in India are small and marginal. This could be due to the fragmentation of landholdings from a growing population.

Moreover, 44.00 per cent of the respondents had a medium farming experience, followed by 33.00 and 23.00 per cent had a low and a high farming experience, respectively. The majority (63.00 %) of young respondents in the study could be the reason for this outcome.

The study also concludes that more than half (55.00 %) of respondents had above ₹ 2,00,000 annual income, followed by 27.00 per cent had between ₹ 1,50,001 to ₹ 2,00,000 annual income, 16.00 per cent had between ₹ 1,00,001 to ₹ 1,50,000 annual income and 02.00 per cent had between ₹ 50,001 to ₹ 1,00,000 annual income. at the same time, none of them had up to ₹ 50,000 annual income. The results emphasize that the ornamental nursery enterprise is profitable leading to increased earnings for respondents.

It was inferred that the majority (72.00 %) of respondents had only ornamental nursery as an occupation, followed by 20.00, 05.00 and 03.00 per cent had ornamental nursery + farming, ornamental nursery + service in private

and ornamental nursery + other business enterprises as occupation, respectively. In contrast, none of them had ornamental nursery + service in govt. this result shows the inclination of respondents towards their own business rather than seeking employment in other occupations.

The study points out that the majority (82.00 %) of respondents were not a member of any organization, followed by 14.00 and 04.00 per cent were a member of one organization and member of more than one organization, respectively. While none of them were officeholders. This could be due to the tendency of young age individuals to be less engaged in social activities in comparison to more aged individuals.

The majority (60.00 %) of respondents had a medium level of mass media exposure, followed by 22.00 and 18.00 had a low and a high level of mass media exposure, respectively. There was a preference of young individuals towards a few media sources (TV, internet, mobile phones) rather than diverse sources.

The study states that the majority (83.00 %) of the respondents had a medium level of material possession, followed by 13.00 and 04.00 per cent had a low and a high level of material possession, respectively. Most of the owners were able to maintain their ornamental nursery enterprises with medium material possession as this area is naturally suitable for nursery production due to prolonged monsoon, availability of water throughout the year, availability of nursery soil and a part from peak summer period shade net is sufficient for nursery germinations.

Also, the majority (74.00 %) of respondents had a medium level of extension contact and 26.00 per cent had a low level of extension contact. While none of them had a high level of extension contact. In the study area, most respondents indicated Gramsevak as their extension contact. In contrast, other options had less contact with the respondents. This result showcases the setback of the extension system to reach the respondents.

Table 2: Stepwise multiple regression analysis of independent variables and entrepreneurial behaviour (n=100)

Sr. No.	Independent variable	Partial regression coefficient (b)	Standard error	Multiple Correlation Coefficient 'R'	Adjusted R <sup>2</sup>	
	(Constant)	17.954	4.126			
1	Education (X <sub>3</sub> )	3.97**	0.897	0.710	0.488	
2	Social participation (X <sub>8</sub> )	3.809**	1.628	0.710		
3	Mass media exposure (X <sub>9</sub> )	0.978**	0.244			
**Significant at 1 Percentage level of probability						

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As a result of stepwise regression analysis, the following model was obtained:

$$Y = 17.954 + (3.97)X_2 + (3.809)X_9 + (0.978)X_9$$

Where,

Y = Entrepreneurial behaviour

A = The intercept *i.e.*, 17.954

 $b_i$  = Regression coefficient, i = 1,2,3....,n

 $X_2 = Education$ 

 $X_{g}$  = Social participation

 $X_0 = Mass media contact$ 

Table 2 revealed that out of eleven independent variables, three variables namely education  $(X_3)$ , social participation  $(X_8)$  and mass media contact $(X_9)$  were accounting influences on the entrepreneurial behaviour of ornamental nursery owners. These three independent variables together accounted for 48.80 per cent variation as

indicated by the adjusted R<sup>2</sup> value. The partial regression coefficients (b) indicate that one unit change in education social participation and mass media exposure corresponded to the significant increase in entrepreneurial behaviour 3.97, 3.809 and 0.978 units, respectively. The residual value represents the unexplained variance or error in the model.

## Constraints faced by the ornamental nursery owners and their suggestions to overcome the constraints

# (A) Constraints faced by ornamental nursery owners

Table 3: Distribution of ornamental nursery owners according to constraints experienced by them

(n=100)

Sr. No.	Constraints	f	%	Rank
1	Lack of awareness regarding nursery production technology/ Govt. initiatives	82	82.00	I
2	Lack of timely technical advice regarding plant protection and nursery management	69	69.00	II
3	Scarcity of labours	43	43.00	III
4	Shortage of nursery soil	29	29.00	IV
5	High cost of labour/inputs	24	24.00	V
6	Scarcity of irrigation water in the nursery during peak summer periods	23	23.00	VI
7	No initiatives by Govt. authorities to register/ document scattered nurseries	16	16.00	VII
8	Lack of market infrastructure	13	13.00	VIII
9	Non-availability of credit on time	12	12.00	IX
10	Poor transportation facility	11	11.00	X
11	Competition from the other nursery enterprises	10	10.00	XI
12	Uneven profit earnings by the nursery owners	6	06.00	XII
13	Water logging during heavy rainfall period	6	06.00	XII
f = Frec	f = Frequency, % = Percentage			

The data from Table 3 reveals the constraints faced by ornamental nursery owners were lack of awareness regarding nursery production technology/ Govt. initiatives (82.00 %) got ranked I, Followed by lack of timely technical advice regarding plant protection and nursery management (69.00 %) got ranked II, scarcity of labours (43.00 %) got ranked IV, high cost of labour/inputs (24.00 %) got ranked V, scarcity of irrigation water in the nursery during peak summer periods

(23.00 %) got ranked VI, no initiatives by Govt. authorities to register/ document scattered nurseries (16.00 %) got ranked VII, lack of market infrastructure (13.00 %) got ranked VIII, Non-availability of credit on time (12.00 %) got ranked IX, poor transportation facility (11.00 %) got ranked X, competition from the other nursery enterprises (10.00 %) got ranked XI, uneven profit earnings by the nursery owners (06.00 %) and water logging during heavy rainfall period (06.00 %) got ranked XII collectively.

# 3.2 Suggestions given by ornamental nursery owners to overcome the constraints

Table 4: Distribution of ornamental nursery owners according to their suggestions to overcome constraints

(n=100)

Sr. No.	Suggestions	f	%	Rank
1	Extension contact should strengthen	68	68.00	I
2	Increase dissemination of information regarding Govt. initiatives/ training programmes/ plant protection	61	61.00	II
3	Provide improved practices of mechanization	35	35.00	III
4	Increase awareness of alternative potting mixtures	23	23.00	IV
5	Subsidies should be provided to reduce the cost of production	21	21.00	V
6	Increase awareness about various groundwater recharge /water harvesting techniques	14	14.00	VI
7	Regulation of the ornamental nursery through proper registration and monitoring mechanism	13	13.00	VII
8	Development of rural roads	11	11.00	VIII
9	Develop proper marketing channels and information outlets	10	10.00	IX
10	Provision of proper credit facilities	09	09.00	X
11	Authorities should pay attention that the flow of profit is not only towards specified group	08	08.00	XI
	of nursery owners			
12	Increase awareness about drainage techniques	08	08.00	XI
$f = F_1$	f = Frequency, % = Percentage			

The data from Table 4 reveals the suggestions given bay ornamental nursery owners to overcome the constraints were extension contact should strengthen (68.00 %) got ranked I, increase dissemination of information regarding Govt. initiatives/training programmes/plant protection (61.00 %) got ranked II, provide improved practices of mechanization (35.00 %) got ranked III, increase awareness of alternative potting mixtures (23.00 %) got ranked IV, provide subsidies to reduce the cost of production (21.00 %) got ranked V, increase awareness about various groundwater recharge/water harvesting techniques (14.00 %) got ranked VI, regulation of the ornamental nursery through proper registration and monitoring mechanism (13.00 %) got ranked VII, development of rural roads (11.00 %) got ranked VIII, develop proper marketing channels and information outlets (10.00 %) got ranked IX, provision of proper credit facilities (09.00 %) got ranked X, authorities should pay attention that the flow of profit is not only towards specified group of nursery owners (08.00 %) and increase awareness about drainage techniques (08.00 %) ranked XI collectively.

## **CONCLUSION**

Ornamental nursery enterprises are blooming ventures. In current times business like ornamental nursery is a requirement for sustainable development. The present

study concludes that educated young age people are taking ornamental enterprise as an occupation. Ornamental nursery as an only occupation were able to provide good earnings even to the small and marginal farmers with medium to low levels of material possession. People with varied experiences are adopting ornamental nursery enterprise. Ornamental nursery owners are not maintaining much social participation, but maintaining extension contact and utilizing mass media for getting information regarding enterprise. Further, the study also highlights that independent variables education, social participation and mass media contact collectively have a major influence on entrepreneurial behaviour. Therefore, collective efforts in education through increased social participation and various mass media exposure can notably increase individuals' entrepreneurial behaviour.

Awareness regarding constraints and implementation of suitable suggestions given by ornamental nursery owners are important for the smooth functioning of nursery enterprises. The present study indicates that ornamental nursery owners of the Navsari district are operating their enterprises while facing various constraints. These constraints require attention and efforts from government authorities and NGOs to resolve. There is also scope for organizing nursery owners in a self-help manner.

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# **CONFLICT OF INTEREST**

All authors declare that they have no conflict of interest

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