

# ENTREPRENEURIAL BEHAVIOUR OF PLANT NURSERY OWNERS: A REVIEW IN THE CONTEXT OF ASSAM

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## Abstract

The nursery sector in Assam is emerging as a significant component of the state's horticultural economy, contributing to employment, greening initiatives, and rural entrepreneurship. However, the entrepreneurial behaviour of nursery owners varies widely depending on socio-economic traits, resource endowments, and market opportunities. This paper reviews existing literature on entrepreneurial behaviour, contextualises it within the plant nursery sector of Assam, and identifies gaps for further empirical research. The review highlights key behavioural dimensions such as innovativeness, risk-taking, proactiveness, achievement motivation, market orientation, and resource mobilisation, while situating them in the unique socio-economic and cultural milieu of Assam.

**Keywords:** entrepreneurial behaviour, plant nurseries, Assam, horticulture, micro-enterprises

## 1. Introduction

Entrepreneurship in agriculture and allied sectors is increasingly recognised as a driver of rural transformation in India. Plant nurseries, which supply fruit saplings, ornamentals, medicinal plants, and landscaping material, represent a niche yet growing enterprise sector. Assam, with its diverse agro-climatic conditions, has witnessed a steady rise in nursery enterprises. These enterprises not only meet local demand but also contribute to livelihoods, women's participation, and biodiversity conservation.

Despite this, nursery entrepreneurship is often informal, resource-constrained, and dependent on individual entrepreneurial behaviour. Hence, studying entrepreneurial behaviour in this context is essential for designing policy support and capacity building.

## 2. Objectives of the Study

The main objectives of this paper are:

- (i) To review the existing literatures on entrepreneurship and entrepreneurial behaviour.
- (ii) To analyse the key components of entrepreneurial behaviour of plant nursery owners in Assam.
- (iii) To identify the factors that limit entrepreneurial behaviour in nurseries of Assam.

## 3. Research Methodology

This paper is based on review of literatures on the subject of Entrepreneurship. It is mainly confined to the common components of Entrepreneurial behaviour that attributes to the plant nursery owners of Assam. Most of the review belongs to Journal, scholarly articles, Masters and Ph.D thesis.

## 4. Definitions of Entrepreneurship and Entrepreneurial Behaviour

Entrepreneurship has been widely studied across disciplines such as economics, sociology, psychology, and management, yet there remains no single universally accepted definition. This diversity of perspectives has enriched the field, as each conceptualization captures different dimensions of the entrepreneurial phenomenon. In the context of plant nursery enterprises in Assam, where entrepreneurship often emerges from necessity, resource constraints, and local opportunities, understanding entrepreneurship and entrepreneurial behaviour requires a multidimensional view. This section provides an overview of the major definitions of entrepreneurship and entrepreneurial behaviour, compares the perspectives of different scholars, and highlights their relevance for nursery enterprise owners in Assam.

### 4.1 Defining Entrepreneurship

Entrepreneurship has evolved significantly in meaning over time. Early economists primarily linked it with risk-bearing and uncertainty, while modern theorists emphasize innovation, opportunity recognition, and dynamic processes of value creation.

One of the earliest systematic treatments was provided by Knight (1921), who described entrepreneurship as the willingness to bear the uncertainty of business decisions. For Knight, risk-bearing differentiated entrepreneurs from mere managers or investors. This perspective remains highly relevant in the nursery sector of Assam, where climatic uncertainties, market volatility, and plant mortality represent significant risks borne by nursery owners.

Building upon this, Schumpeter (1934) offered a path-breaking definition, describing entrepreneurship as "carrying out new combinations," which include introducing new products, new production methods, exploring new markets, and reorganizing industries. Schumpeter viewed entrepreneurs as agents of "creative destruction," reshaping economies by displacing old structures with new ones. In the context of Assam, this view highlights how nursery owners innovate by introducing new plant varieties, adopting advanced propagation techniques, or targeting urban landscaping markets.

Later, Drucker (1985) emphasized the systematic and purposeful nature of entrepreneurship, describing it as "the practice of innovation." For Drucker, entrepreneurship was less about personal traits and more about exploiting changes as opportunities. This is particularly important for nursery owners in Assam, who must adapt to shifting demand for ornamental plants, rising urbanization, and growing interest in sustainable greening practices.

More recently, Kuratko (2016) defined entrepreneurship as "a dynamic process of vision, change, and creation" that requires energy, passion, and implementation of new ideas. This dynamic view reflects the ongoing transformations in Assam's nursery sector, where entrepreneurs continuously adapt to urban landscaping projects, government schemes promoting greenery, and consumer preferences for exotic plants.

A broader, inclusive definition was offered by Hisrich, Peters, and Shepherd (2017), who described entrepreneurship as "the process of creating something new with value by devoting time and effort, assuming financial, psychological, and social risks, and receiving the rewards of monetary and personal satisfaction." This multidimensional approach is highly applicable in Assam, where nursery entrepreneurship is not only an economic activity but also a socially valued occupation that contributes to environmental conservation and community well-being.

In the agricultural context, Alsos, Carter, and Ljunggren (2014) extended the concept of entrepreneurship to farming and rural enterprises, emphasizing the identification of new opportunities within traditional farming systems. This resonates with Assam's nurseries, which are often family-based and embedded in rural livelihoods, requiring entrepreneurs to balance tradition with innovation.

Collectively, these definitions reveal that entrepreneurship encompasses risk-bearing, innovation, opportunity-seeking, resource mobilization, and value creation. For Assam's nursery enterprises, entrepreneurship can be best understood as the process by which individuals and families organize resources, manage risks, and innovate in plant production and marketing to create sustainable livelihoods.

## 4.2 Defining Entrepreneurial Behaviour

While entrepreneurship is a broad phenomenon, entrepreneurial behaviour focuses on the specific actions, traits, and decision-making patterns that characterize entrepreneurs. Scholars have provided multiple definitions, often emphasizing psychological, behavioural, and contextual dimensions.

McClelland (1961) pioneered the psychological view by linking entrepreneurial behaviour with the "need for achievement." According to him, individuals with a strong achievement motivation engage in entrepreneurial behaviour through risk-taking, innovation, and persistence. In the Assamese nursery sector, this is evident in entrepreneurs who expand from small-scale seedling sales to large-scale supply chains, driven by a desire for recognition and growth.

Hornaday and Aboud (1971) offered one of the earliest behavioural definitions, identifying entrepreneurial behaviour as a combination of characteristics and actions, including self-confidence, innovativeness, problem-solving ability, and leadership. These behaviours are highly visible among nursery owners who mobilize local communities, manage workers, and solve practical challenges of plant propagation.

From a more structural standpoint, Carland, Hoy, Boulton, and Carland (1984) defined entrepreneurial behaviour as actions directed toward the establishment and growth of profit-oriented enterprises. This perspective places greater emphasis on business orientation, distinguishing entrepreneurs from self-employed individuals. Applied to Assam, it highlights the difference between subsistence-level nursery owners and those who actively expand into wholesale or landscaping markets.

Rauch and Frese (2007) expanded the behavioural framework by describing entrepreneurial behaviour as "a set of goal-directed behaviours" such as innovation, proactive decision-making, and perseverance, which ultimately impact business success. This aligns with Assam's nursery entrepreneurs who invest in networking, experiment with new plant varieties, and adopt marketing strategies despite uncertain returns.

In agricultural and rural development contexts, Singh and Jhamtani (2011) described entrepreneurial behaviour in farmers as the ability to take risks, adopt innovations, and effectively manage resources for better livelihood outcomes. Similarly, Mishra and Sharma (2017) emphasized that entrepreneurial behaviour is a composite of personality traits, knowledge, and skills enabling rural entrepreneurs to identify opportunities and manage enterprises effectively. These views directly apply to nursery owners in Assam, where entrepreneurial behaviour is shaped not only by individual traits but also by cultural, economic, and environmental factors.

Finally, Liguori and Pittz (2020) highlighted that entrepreneurial behaviour extends beyond venture creation, encompassing adaptability, resilience, and market orientation in changing environments. This resonates strongly with Assam's nursery entrepreneurs, who must adapt to climate variability, fluctuating demand, and competitive pressures.

In summary, entrepreneurial behaviour can be defined as a combination of psychological traits (e.g., achievement motivation, risk-taking), behavioural patterns (e.g., innovativeness, proactiveness), and contextual skills (e.g., resource management, adaptability). For nursery owners in Assam, entrepreneurial behaviour manifests in their ability to combine traditional plant propagation knowledge with modern marketing, manage risks from environmental uncertainties, and pursue opportunities in urban and rural markets.

## 5. Common Components of Entrepreneurial Behaviour of Plant Nursery Owners in Assam

The entrepreneurial behaviour of plant nursery owners in Assam can be understood through several interrelated components that collectively shape their enterprise performance and sustainability.

### 5.1 Innovativeness

Innovativeness is a critical trait, as nursery owners frequently adopt new plant varieties, advanced grafting techniques, and modern nursery practices such as the use of polybags and tissue culture saplings. Many also experiment with organic inputs, water-saving irrigation methods, or shading structures, and show a willingness to introduce exotic and ornamental species in response to changing market preferences.

### 5.2 Risk Orientation

Closely linked to innovation is risk orientation, since nursery owners often invest in high-value saplings without any certainty of future demand. They face multifaceted risks arising from climate variability, pest and disease attacks, and recurring floods in the Brahmaputra valley, along with market-related uncertainties such as price fluctuations, unsold inventory, and competition from neighbouring nurseries.

### 5.3 Decision-making ability

Another defining characteristic is decision-making ability, where entrepreneurs must constantly decide which species to cultivate depending on the season, resource availability, and prevailing market trends. They also take decisions regarding labour allocation, nursery layout, procurement of inputs, and establish strategic linkages with wholesalers, retailers, and government agencies.

### 5.4 Achievement motivation

These choices are guided by their achievement motivation, reflected in the aspiration to expand beyond subsistence-level nurseries into larger enterprises. Many entrepreneurs seek social recognition within their communities while simultaneously contributing to the broader horticultural development of Assam under initiatives like the National Horticulture Mission (NHM).

### 5.5 Leadership

Leadership emerges as another vital component of entrepreneurial behaviour. Nursery owners not only direct workers in day-to-day tasks such as potting, grafting, and watering but also play the role of community leaders by offering demonstrations, training sessions, and peer-to-peer guidance. Many take active initiatives in farmers' associations, cooperatives, or self-help groups (SHGs), thereby strengthening the collective horticultural ecosystem.

### 5.6 Knowledge and technical competence

Equally important is knowledge and technical competence, where nursery entrepreneurs must be proficient in various plant propagation methods such as cutting, layering, and grafting, as well as in the management of pests, diseases, and fertilizers. Formal and informal training programs offered by institutions like Krishi Vigyan Kendras (KVKs), Agricultural Technology Management Agencies (ATMA), and ICAR institutes significantly enhance their technical capabilities.

## 5.7 Market orientation

Market Orientation also plays a decisive role in entrepreneurial success, as nursery owners are required to assess the demand for diverse categories of saplings, ranging from fruit-bearing and ornamental to medicinal plants. Sustaining good relationships with customers, government buyers, and landscapers is essential, and younger entrepreneurs increasingly leverage social media platforms to expand their market reach.

## 5.8 Planning and goal setting

The market-oriented approach is further complemented by planning and goal setting, as successful nursery owners strategically design production cycles in tune with seasonal species while planning for long-term investments in high-value crops. Financial planning, including access to credit, reinvestment, and efficient working capital management, enables them to pursue both short-term and long-term goals such as diversification into landscaping or floriculture.

## 5.9 Management Competence

Management competence is indispensable for ensuring efficient use of land, labour, capital, and water resources. Many nursery owners engage in systematic record-keeping of sales, inputs, and expenditures while balancing multiple activities that range from production to marketing and delivery.

## 5.10 Adaptability and resilience

Lastly, adaptability and resilience are defining behavioural traits, particularly in the context of Assam's vulnerability to natural calamities. Nursery owners often reorganize their operations in response to floods, droughts, pest outbreaks, and even market shocks such as those caused by COVID-19 disruptions and input shortages. Their ability to adjust production strategies in line with changing customer preferences, such as the growing demand for ornamental or medicinal plants, highlights the resilience embedded in their entrepreneurial approach.

In summary, the entrepreneurial behaviour of nursery owners in Assam encompasses a blend of psychological characteristics (risk-taking, achievement motivation), managerial skills (planning, decision-making, leadership), technical expertise (propagation methods, pest management), and market-oriented practices (customer focus, adaptability). Together, these components enable nursery entrepreneurs to navigate the challenges of Assam's dynamic agro-climatic conditions and evolving socio-economic environment, ensuring both sustainability and growth of their enterprises.

## 6. Constraints That Limit Entrepreneurial Behaviour in Plant Nurseries of Assam

In Assam, many nursery owners demonstrate entrepreneurial agency, persistent constraints limit the translation of orientation into firm performance. The constraints that limit entrepreneurial behaviour in the state can be explained as follows.

### 6.1 Quality of Planting Material and Technical Support

A recurring problem is inconsistent availability of disease-free, true-to-type planting material. Small operators often lack access to certified mother blocks or laboratories for quality testing, increasing reputational risk and discouraging large contracts. State guidance and handbooks provide techniques, but dissemination and adoption are uneven across districts.

## 6.2 Financial and Working-Capital Constraints

Nurseries require substantial working capital to maintain inventories and to fund labour-intensive propagation cycles. Seasonal demand spikes (festivals, planting seasons) require advance stocking; inability to finance these cycles forces many owners to shrink operations, avoid bulk orders, or rely on suboptimal propagation timing.

## 6.3 Infrastructure, Logistics and Market Access

Poor transport, limited cold storage or sheltered structures, and high logistic costs for fragile plants impede access to distant urban markets. Cluster development programs can mitigate these challenges, but program coverage in Assam is patchy.

## 6.4 Information Asymmetry and Weak Value Chains

Buyers face asymmetry in verifying genetic identity and quality, while small nurseries struggle to access aggregated market intelligence. This asymmetry depresses prices for high-quality stock and disincentivises investment in superior practices.

## 6.5 Policy and Regulatory Frictions

Although national policies provide for nursery accreditation and cluster schemes, actual uptake requires administrative capacity at the state and district levels. Where institutional capacity is weak, benefits do not reach micro-enterprises, hampering entrepreneurial momentum.

## 7. Conclusion

From the above discussion we may conclude that, the entrepreneurial behaviour of nursery owners in Assam encompasses a blend of psychological characteristics (risk-taking, achievement motivation), managerial skills (planning, decision-making, leadership), technical expertise (propagation methods, pest management), and market-oriented practices (customer focus, adaptability). Together, these components enable nursery entrepreneurs to navigate the challenges of Assam's dynamic agro-climatic conditions and evolving socio-economic environment, ensuring both sustainability and growth of their enterprises.

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