Research Note

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Understanding and Overcoming Key Challenges of Agripreneurs in Southern Odisha: A Case Study

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HIGHLIGHTS

- Agripreneurs in Southern Odisha face numerous challenges, including a lack of technical knowledge, financial difficulties, and personal-social issues.
- Key recommendations to address these barriers include establishing comprehensive support systems for financial aid and expert guidance.
- The study used the RBQ method to identify and prioritise constraints, offering actionable insights to foster rural development and sustainable agriculture.

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ABSTRACT

The study, conducted during 2023 and 2024, investigates the constraints faced by agripreneurs in Southern Odisha and provides actionable suggestions to address these challenges. Data were collected from 120 agripreneurs across the Gajapati and Rayagada districts using personal interviews and random sampling. The collected data were analysed using the Rank-Based Quotient (RBQ) method to identify and prioritise key barriers. The findings revealed that knowledge and skills constraints ranked highest (66.07), highlighting inadequate technical expertise, lack of awareness, and insufficient training. Financial constraints followed (57.24), emphasising high risk, complex bank loan procedures, and substantial initial capital requirements. Personal and social challenges (53.37) and psychological limitations (49.78) were also identified but ranked lower. The study's recommendations, supported by word cloud analysis, stress the need for financial support, risk mitigation strategies, access to modern technologies, and expert advice. Suggested interventions include simplifying loan procedures, providing skill development programs, and fostering a supportive entrepreneurial ecosystem. The study addresses barriers to agripreneurship in Southern Odisha and may enhance agripreneurs' potential, promote sustainable agricultural development and rural economic growth, and provide valuable insights for policymakers and stakeholders by emphasizing skill development and technological integration.

INTRODUCTION

Agriculture in India is essential for millions of farmers, particularly in rural regions. Agripreneurship, which refers to entrepreneurial initiatives within agriculture, is vital to rural development. Agripreneurs use new strategies, improve production, and stimulate economic development by connecting traditional farming with contemporary agribusiness (Gupta et al., 2023). Agripreneurs drive technology innovations, enhance supply chain efficiency, and advocate for sustainable agricultural practices. They

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diversify agriculture via agri-processing, organic farming, and agri-tourism, therefore strengthening rural communities and invigorating local economies. However, their efforts are often hindered by challenges such as restricted market access, inadequate financial resources, insufficient technical expertise, intellectual property management, funding, and a lack of infrastructure assistance (Bihari et al., 2024). These constraints are particularly pronounced in regions like Southern Odisha, where agripreneurs face additional barriers due to socio-economic and geographical factors. Understanding these region-specific limitations is essential for developing targeted strategies to improve productivity, sustainability, and overall agripreneurial success.

Southern Odisha, characterised by its diverse agricultural practices and extensive rural population, presents unique challenges for agripreneurs. These challenges include restricted market access, limited financial resources, lack of technical knowledge, and inadequate infrastructure (Ferguson et al., 2024). The region is further impacted by climate change, which poses significant threats to agricultural yields and production, while fragmented land ownership hampers economies of scale (Suman et al., 2025). The limited availability of quality inputs such as seeds, fertilizers, and irrigation infrastructure exacerbate these difficulties (Mishra et al., 2024). Inefficient supply chain mechanisms and inadequate storage facilities contribute to post-harvest losses, thereby diminishing profitability. Social and cultural barriers, including marginalization and gender inequities, further compound these issues (Saha et al., 2025). Despite various policy initiatives supporting agripreneurs in Odisha, such as Mukhyamantri Krushi Udyog Yojana (MKUY), Odisha Startup Policy, and Odisha Agricultural Policy 2020, gaps in effective policy implementation remain, including insufficient awareness and accessibility, and bureaucratic hurdles. Addressing these gaps through targeted policy reforms and improved outreach can enhance agripreneurial growth and rural economic development in Southern Odisha.

Agripreneurs in India are advocating for better agricultural techniques and business initiatives. They emphasize the need for increased access to financing, including affordable credit and government-backed loans, as well as stronger market linkages. Skill development and training programs (Arunkumar et al., 2021), agri-tech advancements, and sustainable practices are also crucial (Kumari et al., 2024). Infrastructure upgrades, such as improved storage facilities, cold chains, and transportation networks, are essential. Additionally, agripreneurs call for supportive government policies and incentives, such as subsidies for inputs, tax advantages, and extension services, to create a more conducive environment for agricultural entrepreneurship in India. This research explores the restrictions encountered by agripreneurs in Southern Odisha using the Rank-Based Quotient (RBQ) approach (Saha et al., 2024). The region's agricultural potential is vast but underdeveloped owing to socio-economic and infrastructure challenges. Addressing these restraints is vital for unleashing the region's full potential and allowing agripreneurs to contribute more effectively to the local and national economy.

METHODOLOGY

The research design used for the study was the Ex post-facto design. The study focused on the Gajapati and Rayagada districts in southern Odisha (Figure 1), selected for their large number of cashew processing units and agri-enterprises. A total of 120 Agripreneurs, with 60 from each district, were chosen from various agricultural sectors for the study by using the random sampling technique. The data collection tool was developed keeping in view the objectives and variables of the research. Personal interviews were used to collect data. Major constraints taken for the study were identified through initial discussion with experts and respondents, as well as from the literature review. Three statements under 4 barrier groups were considered, and respondents were asked to rank these constraints: rank 1 being the most severe, rank 2 being the moderately severe, and rank 3 being the least severe. Qualitative data were gathered through interactive discussion with key informants, and literature, journals and data available on the internet were the key resources for secondary data. The rank-based quotient (RBQ) method was used to analyse the collected data (Sabaratnam & Venilla, 1996).

The RBQ-Rank Based Quotient is a method used to prioritize alternatives based on their relative rankings. The study involved three statements under four barrier domains, with respondents ranking them based on perceived severity. The highest RBQ value was chosen as the most severe constraint, and the cumulative rank for each barrier was determined by obtaining the mean RBQ value. The study aimed to identify major constraints and determine the most effective approach to address them. The suggestions were framed by asking open-ended statements to the respondents, and several suggestions were received from the extension personnel. The qualitative data was analysed using the word-cloud generator tool in R software.

RESULTS

The study identified four primary categories of constraints faced by agripreneurs in Table 1. financial constraints, knowledge and skills, personal and social challenges, and psychological constraints. The most significant barrier was the substantial risk involved in establishing agro-based enterprises, with a Rank Based Quotient (RBQ) of 64.44, followed by extensive bank loan procedures (61.11) and high initial capital investment (46.17), which ranked financial constraints as the second most critical challenge with an overall RBQ of 57.24. In terms of knowledge and skills, inadequate technical knowledge regarding agro-based enterprises emerged as the most pressing issue, boasting an RBQ of 70.42, followed by a lack of awareness of key agro-based enterprises (67.67) and an absence of specific training programs (60.11), making this category the highest-ranked constraint with an overall RBQ of 66.07. Personal and social challenges included difficulties in balancing personal and professional lives (55.28), acquiring the expected number of consumers (51.94), and securing family support (52.89), resulting in an overall RBQ of 53.37, which placed it third. Finally, psychological constraints, comprising a lack of decisiveness (50.78), a lack of confidence (49.72), and a negative mindset (48.83), had the lowest overall RBQ score of 49.78, positioning them as the fourth-ranking category.

The overall results indicated that knowledge and skills constraints were the most significant, with the highest RBQ score of 66.07. This highlighted issues such as inadequate technical

Table 1. Constraints faced by Agripreneurs in Southern Odisha

Major Barrier	Constraints	RBQ	Individual Constraint Rank	Mean Overall RBQ Value	Overall Rank
B1 (Financial Constraints)	Huge risk involved in the establishment of the agro-based enterprise.	64.44	III	57.24	II
	The bank loan application process is lengthy and complex	61.11	IV		
	High initial capital investment is required.	46.17	XII		
B2 (Knowledge and Skills Constraints)	Inadequate technical knowledge regarding agro-based enterprise.	70.42	I	66.07	I
	Lack of awareness regarding various key agro-based enterprises.	67.67	II		
	Not received any specific training regarding agro-based enterprise.	60.11	V		
B3 (Personal and Social Constraints)	Problems faced in managing personal life and professional life.	55.28	VI	53.37	III
	Difficult to get the expected number of consumers.	51.94	VIII		
	Lack of support from family.	52.89	VII		
B4 (Psychological Constraints)	Lack of decisiveness to start an agro-based enterprise.	50.78	IX	49.78	IV
	Lack of confidence to succeed in agro-based enterprise.	49.72	X		
	Lack of positive mindset regarding agro-based enterprise.	48.83	XI		

Figure 1. Word Cloud of suggestions perceived by Agripreneurs in South Odisha

knowledge and a lack of awareness about agro-based enterprises. Financial constraints ranked second, with an RBQ score of 57.24, emphasizing challenges like high risks and complicated bank loan procedures. Personal and social constraints came in third, scoring 53.37, which pointed to difficulties in managing a balance between personal and professional life and acquiring consumers. Psychological constraints ranked fourth, with the lowest RBQ score of 49.78. This suggested that while issues related to decisiveness and confidence existed, their impact was less significant than the other constraints.

The suggestions received from agripreneurs highlighted several insights, as seen in the word cloud in Figure 1. Support was the most commonly cited, indicating a widespread need for extensive assistance in several aspects of agro-based business. Financial support emerged as a crucial recommendation, highlighting the need for accessible financial resources to alleviate the considerable risks and huge initial expenditures associated with agro-based firms. Risk mitigation was another critical domain, with recommendations highlighting the formulation of strategies and regulations to alleviate the financial uncertainties and operational risks encountered by agripreneurs. The banking sector was highlighted, indicating the need for enhanced lending processes and more advantageous financing choices customised for agro-based enterprises. The significance of loan accessibility was emphasised, underscoring the need for efficient and facilitative lending procedures. Technology was often recommended, showing the significance of technical breakthroughs and innovations in improving the productivity and sustainability of agricultural enterprises. Expert Advice emerged as a prevalent recommendation, emphasising the need for expert assistance and consultation to assist agripreneurs in navigating the intricacies of the sector and making educated choices.

DISCUSSION

The most significant hurdles were related to knowledge and skills, which emerged as the highest-ranking limitation. This indicated that many agripreneurs lacked the essential technical competence and understanding of major agro-based enterprises, which were crucial for effectively starting and maintaining their operations. Similar results were elucidated by Johari et al., (2024). The scarcity of specialized training further exacerbated this difficulty, pointing to a clear need for tailored educational programs and capacity-building activities to equip prospective agripreneurs with the essential skills and knowledge needed to thrive in the industry. The results were in line with the findings of Agrawal & Jaggi (2024). The substantial risk associated with launching agro-based firms, combined with the complicated and time-consuming bank lending processes, emerged as a key barrier for many agripreneurs. Similar results were reported by Jaiswal et al., (2022).

Personal and social hurdles rated third, indicating that while these concerns were essential, they might not have been as daunting as knowledge and financial constraints. Nettle et al., (2018) mentioned that the challenges of managing personal and professional life, alongside issues related to customer acquisition and lack of family support, highlighted the importance of fostering a healthy social and professional environment for agripreneurs. Mentorship programs, community networks, and access to consumer markets could have significantly alleviated these obstacles. Psychological

restrictions, though ranked fourth, remained crucial issues that required attention. Factors such as indecisiveness, lack of confidence, and a negative mindset could have inhibited Agripreneurs from taking the necessary steps to establish and grow their enterprises. Similar suggestions were found in the study conducted by Janker et al., (2021). This emphasized that psychological support, including mentoring and confidence-building programs, might have promoted a more resilient and optimistic entrepreneurial mentality.

The emphasis on support reflected the need for a comprehensive strategy encompassing financial, technical, and advisory components. Swamy (2016) in his study mentioned that the call for financial assistance underscored the fundamental constraints faced by agro-based enterprises, as early capital needs and high risks necessitated accessible financial instruments tailored to the unique challenges of the industry. Financial institutions were viewed as pivotal in providing specialised credit products and minimising procedural barriers. Risk mitigation techniques, such as insurance products, risk-sharing mechanisms, and supportive policies, were considered essential for safeguarding agripreneurs from financial losses. The focus on banks and loans emphasized a demand for entrepreneur-friendly financial services, advocating for simplified loan processes. Arunkumar et al., (2023) mentioned clear cut indication for tailored plans, polices and strategies for farmers' financial inclusion in their study. These findings partially aligned with the results of Landini & Noussia (2024). The role of technology was emphasised in enhancing efficiency and innovation in agro-processing, marketing, and distribution. Kademani et al., (2024) highlighted in their study the significance of mentoring and professional consulting to assist agripreneurs in navigating challenges and improving business outcomes. Strengthening social networks, mentorship initiatives, and psychological support can foster resilience, while promoting technology adoption and digital tools will improve efficiency and market access. A comprehensive, policy-driven approach is crucial to cultivating a sustainable and thriving agripreneurial ecosystem.

CONCLUSION

The study revealed that agripreneurs in Southern Odisha face numerous challenges, including knowledge and skills, financial, personal, social, and psychological constraints. The most critical barriers are inadequate technical expertise, lack of awareness, and insufficient training. To address these, targeted educational programs and capacity-building initiatives are needed. Financial constraints include high risks, complex loan procedures, and substantial initial capital investments. Personal and social constraints, such as balancing professional and personal life and limited family support, can be addressed through community networks and mentorship programs. Psychological constraints, such as lack of confidence and decisiveness, require interventions like confidence-building and motivational programs. The study recommends comprehensive support systems, financial aid, risk mitigation strategies, access to modern technologies, and expert guidance. Tailored interventions, such as accessible credit schemes and advanced agri-tech integration, can foster a more enabling environment. Future studies should explore crop-specific agripreneurship, digital innovations and climate-resilient strategies to develop targeted and sustainable solutions.

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