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Constraints to agricultural entrepreneurship in Bangladesh: Survey based insights and policy solutions

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Abstract

This study investigates the demographic characteristics, agricultural practices, constraints and financial challenges faced by agricultural entrepreneurs in Bangladesh. Based on data from 153 agricultural entrepreneurs, the analysis covers age, education, crop production, income levels and identification of constraints. The findings reveal that, most of entrepreneurs are educated, with significant engagement in vegetable farming. Among the entrepreneurs, 55.6% face medium-level constraints, while 7.2% experience high constraints. However, they encounter various constraints, particularly related to access to quality inputs (83%), financial services (81%) and storage infrastructure (89.5%). High spoilage rates and poor mechanization further exacerbate productivity losses. Considering Constraints Faced Index (CFI), lack of quality seeds/seedlings (plant materials) ranked first (CFI value = 193.46) followed by high spoilage rates of certain vegetable and fruits due to lack of cold storage (CFI value = 188.24) and lack of financial supports. Proposed solutions include enhanced subsidies, training, credit access reforms, infrastructure development and stronger market regulation. This study underscores the need for integrated policy support to strengthen entrepreneurial capacity in the agriculture sector of Bangladesh.

Keywords: Agricultural entrepreneurs, survey, constrains, probable solution

Introduction

Agriculture is the backbone of Bangladesh's economy, employing nearly 40% of the labor force and contributing significantly to the country's GDP (BBS, 2023). Agriculture contributes a leading part for gaining the Gross Domestic Production (GDP) target which is 14.23%. Entrepreneurship is the capacity and willingness to develop, organize and manage a business venture along with any of its risks in order to make a profit. In the economic point of view entrepreneurship is the organization of different factors of production to favor and run a business. Briefly stated, the entrepreneur is someone who organizes and operates an enterprise for personal gain (Sarker, 2020) [16]. Agricultural entrepreneurs in Bangladesh face a range of constraints during production, processing and marketing. Entrepreneurs struggle with low and unstable market prices, dependency on middlemen, and limited access to financial support due to complex loan procedures and high interest rates (Ahmed *et al*., 2019) [3]. Bangladesh agriculture is currently faced with range of constraints like feminization of agriculture, farm labor shortage, shrinking land, degradation of natural resources, soaring prices, and vulnerability to climate change. This study holds significant importance as it provides an in-depth understanding of the socioeconomic conditions, operational challenges, and financial constraints faced by agricultural entrepreneurs in Bangladesh. By identifying the major production, processing and marketing issues through empirical evidence, the study offers critical insights that can inform policymakers, agricultural institutions, NGOs, and financial organizations to design more effective, targeted interventions. The findings also contribute to the academic literature on rural entrepreneurship and agri-value chains, supporting evidence-based development strategies that aim to enhance productivity, reduce rural poverty, and promote sustainable agricultural development. Hence the survey research was conducted for the following objectives

- To analyze the demographic and economic

characteristics of agricultural entrepreneurs.
- To assess the types and severity of constraints they face in agricultural entrepreneurial activities.
- To explore financial challenges and their proposed solutions.
- To recommend proposed strategies to enhance agricultural entrepreneurship.

Materials and Methods

Study area

The research was conducted across multiple agro-ecological zones in Bangladesh, ensuring representation from diverse regions. Entrepreneurs of different districts (30) of Bangladesh were selected due to their prominence in agricultural activities and training program coverage.

Sample selection

The sample comprises 153 Agricultural Entrepreneurs who have undergone formal training programs offered by government agencies like the Department of Agricultural Extension (DAE) and private organizations. Respondents were selected from districts representing different agro-climatic zones, ensuring diversity in experiences and practices. A purposive sampling technique was employed to select Entrepreneurs who have actively implemented training outcomes in their entrepreneurial ventures.

Research design

This study employs a mixed-methods approach, combining quantitative and qualitative data to explore the perspectives of trained agricultural entrepreneurs. Quantitative data were collected through structured questionnaires, while qualitative insights were gathered using open-ended questions and follow-up interviews. Structured questionnaire tailored to capture socio-economic factors, motivations, constraints and possible suggestions in the Bangladeshi context.

Data collection

Both primary and secondary data were collected for the study. The primary data were collected through structured questionnaires were administered to gather information on demographics, financial condition and constraints. The questionnaire was designed in both Bangla and English to ensure clarity and inclusivity. The secondary data were collected through published reports, journals, and government documents were reviewed to provide context and enrich the analysis.

Constraints faced index calculation

The rank order of important key constraints faced by agricultural entrepreneurs is calculated by Constraints Facing Index (CFI). Comparative constraints faced index (CFI) of agricultural entrepreneurs each of important constraints were determined by using the following formula:

Constraints Facing Index (CFI) = $C_n \times 0 + C_l \times 1 + C_m\ 2 + C_h \times 3$

Where, C_n = percentage of farmers faced no constraints, C_l = percentage of farmers faced low constraints, C_m = percentage of farmers faced medium constraints and C_h = percentage of farmers faced high constraints. Constraint Faced Index (CFI) for any one of the selected dimensions could range from 0 to 300 where 100 indicated low constraint facing. 200 indicated medium constraint facing and 300 indicated high constraint facing. The selected number of Entrepreneurs was convened into percentage.

Data analysis

Data were processed using statistical software. Responses from open-ended questions and interviews were transcribed, coded, and analyzed to identify recurring patterns. The following parameters were studied; Age of the entrepreneurs, Education, Farm size, Crop productions, Organizational participations, Annual income, Constraints face by the Entrepreneurs and Proposed solution of the constraints.

Results and Discussion

A survey research was conducted to investigate the major constraints of Agricultural Entrepreneurs in Bangladesh. The finding of each sub groups were presented below:

Age of Entrepreneurs

The distribution of agricultural entrepreneurs across different age groups were presented in Table1. Entrepreneurs were categorized into age groups, revealing a trend of younger individuals entering the sector. The majority (34.6%) belong to the 31-40 age group, followed by 29.4% in the 18-30 age group, indicating that younger individuals are significantly engaged in agriculture. Only 14.4% are over 50, reflecting reduced participation among older age groups.

Table 1: Distribution of agricultural entrepreneurs across age groups

Age group (year)	Number of respondents	Percentage (%)	Average	Standard deviation (SD)
18-30	45	29.4	37.9	9.9
31-40	53	34.6		
41-50	33	21.6		
>50	22	14.4		
Total	153	100		

The higher participation of younger age groups signifies a potential generational shift toward modernizing agriculture. Older age groups may face physical challenges or prefer retirement, explaining their lower representation. Bangladeshi agricultural entrepreneurs are largely young, with many entering the field and exposure to modern agricultural trends.

Education of Entrepreneurs

Most agricultural entrepreneurs have completed Higher Secondary Certificate (HSC) education (36.6%), followed by Bachelor's degrees (29.4%) (Table 2). A smaller portion (13.1%) have Master's degrees. Entrepreneurs were relatively educated, with 36.6% holding HSC, indicating that education plays a role in entrepreneurial activity.

Table 2: Distribution of agricultural entrepreneurs according to their levels of formal education

Education Level	Number of Entrepreneurs	Percentage (%)	Average	SD
Secondary School Certificate (SSC)	32	20.9	13.50	2.80
Higher Secondary Certificate (HSC)	56	36.6		
Bachelor's Degree	45	29.4		
Master's Degree	20	13.1		
Total	153	100		

Bangladeshi agricultural entrepreneurs are largely educated, with many entering the field after formal education and exposure to modern agricultural trends. The substantial percentage of educated individuals indicates that modern agricultural methods requiring technical knowledge are being adopted. However, the lower representation of postgraduate qualifications suggests potential gaps in specialized training and research-oriented approaches.

Crop cultivation

The data in Table 3 reveals that agricultural entrepreneurs in the study area are involved in a diverse range of crop and agricultural activities. Vegetable cultivation is the most common activity, with 81.0% of respondents engaged in it, indicating its high profitability, market demand and relatively short cultivation cycle. Fruit cultivation follows, practiced by 44.4% of entrepreneurs, likely due to favorable climatic conditions and increasing consumer interest in fresh produce. Cereal cultivation (34.0%) remains significant, reflecting traditional farming practices and the staple nature of crops like rice and wheat. Oil crops (21.6%) and spice crops (27.5%) are moderately practiced, indicating potential for diversification. Nursery activities (17.0%) and pulse cultivation (11.8%) are less common, possibly due to limited market access or production knowledge. Honey production is the least practiced activity (4.6%), suggesting that it is still a niche sector with scope for expansion through training and investment.

Table 3: Distribution of agricultural entrepreneurs according to their agricultural crop cultivation

Main agricultural crops	No. of Entrepreneurs	Percentage (%)
Cereals (Rice, wheat, maize etc.) cultivation	52 (Out of 153)	34.0
Pulse crops cultivation	18 (Out of 153)	11.8
Oil crops cultivation	33 (Out of 153)	21.6
Vegetables cultivation	124 (Out of 153)	81.0
Cash crops cultivation (Jute and Sugarcane)	22 (Out of 153)	14.4
Spice crops cultivation (Onion, Garlic, Ginger)	42 (Out of 153)	27.5
Fruits cultivation	68 (Out of 153)	44.4
Nursery activities	26 (Out of 153)	17.0
Honey production	7 (Out of 153)	4.6

Overall, the results highlight a trend toward diversified agricultural practices, with a strong focus on high-value and market-oriented crops, especially vegetables and fruits. This diversification can enhance income stability and reduce production risk for entrepreneurs in Bangladesh.

Annual income

More than half of the respondents (54.9%) earned up to Tk. 100,000per year **(**Table 4**)**, suggesting that a majority of entrepreneurs operate at a subsistence or small-scale commercial level, with limited income generation. A further 19.6% earned between Tk. 101,000-200,000, while another 19.6% earned more than Tk. 300,000 **(**Table 7**)**, indicating a smaller but significant group of higher-income entrepreneurs who likely have better resources, higher productivity, and possibly access to larger markets or value-added activities. Only 5.9% fall into the Tk. 201,000-300,000 income group, reflecting a relatively narrow middle-income group. The average annual income was Tk. 272,700, with a standard deviation of Tk. 53,900, indicating moderate income variation among respondents, though the majority is still clustered in the lower-income category.

Table 4: Distribution of the agricultural entrepreneurs according to their annual income (2024)

Categories of income last year (000 Tk)	Responses	Percentage (%)	Average	SD
Up to 100 Thousand	84	54.9	272.7	53.9
101-200 Thousand	30	19.6		
201-300 Thousand	9	5.9		
>300 Thousand	30	19.6		
Total	153	100		

While some agricultural entrepreneurs have achieved substantial income levels, the majority still earn relatively low annual income. Enhancing access to quality inputs, technical training, and better market opportunities could help increase productivity and income levels, fostering more sustainable and profitable agricultural enterprises.

Constraints faced by the Agricultural entrepreneurs

Based on the constraints, the Entrepreneurs were classified into three categories as shown in Table 8. Calculated scores of constraints ranged from 11 to 45 against the possible range of 0 to 54 with an average of 21.6 and standard deviation of 86.4.

Table 5: Distribution of the agricultural entrepreneurs according to their constraints faced during their entrepreneurial activities

Constraints Categories	Basis of constraints scoring	No. of Entrepreneurs	Percentage (%)	Mean	SD
Low level constraints	0-18	57	37.2	21.6	6.4
Medium level constraints	19-36	85	55.6		
High level constraints	>36	11	7.2		
Total		153	100		

The data reveals that most agricultural entrepreneurs (55.6%) face medium levels of constraints, suggesting that barriers in their operations are notable but not overwhelmingly severe followed by 37.2% of respondents experiencing low constraints highlights a positive segment of entrepreneurs who have potentially better access to resources, skills, or networks, allowing them to operate with fewer hindrances. Only 7.2% of the respondents fall under the high-constraint category is promising. It implies that extreme obstacles are less common, possibly due to the presence of supportive institutions like agricultural extension services, NGOs, or improved rural infrastructure in some areas.

Constraints faced during entrepreneurial activities

The constraints faced by agricultural entrepreneurs, as outlined in the Table 5, highlight the significant challenges they encounter at various stages of production, processing and marketing levels, which adversely affect productivity, profitability and sustainability. Among these, the lack of quality seeds and seedlings emerges as a prominent issue, with 77.1% of respondents citing this as a barrier. Additionally, the difficulty in obtaining quality seeds and planting materials is noted by 83% of respondents, emphasizing the need for improved seed supply systems to ensure access to reliable inputs. Limited availability of essential agricultural inputs, including fertilizers and irrigation water, affects 61.4% of entrepreneurs, compounding the challenges of achieving high crop yields. Production challenges include the unavailability and poor quality of seeds and seedlings, high input costs and limited access to modern machinery and irrigation (Rahman *et al*., 2021) [14].

High input costs, including labor, seeds, fertilizers, pesticides, and irrigation, are a major constraint for 50.3% of Entrepreneurs. These costs place a significant financial burden on farmers, limiting their capacity to adopt advanced practices or invest in production, processing and preservation. Low crop yields, cited by 53.6% of respondents, are attributed to the use of substandard inputs, underscoring the critical link between input quality and farm productivity. Furthermore, the unavailability or lack of production machinery is reported by 44.4% of respondents, while 46.4% highlight the absence of modern mechanization in agriculture, which restricts efficiency and scalability in operations. Mechanization enables farm family members not only to increase farm productivity via production intensification in some cases expansion, but also to seek off-farm employment opportunities (Houmy *et al*., 2013) [8].

Postharvest challenges also feature prominently, with 73.2% of respondents identifying the lack of proper storage facilities for crops such as cereals, vegetables, spices and fruits. This issue is exacerbated by high spoilage rates, with 89.5% reporting significant losses of vegetables and fruits due to the absence of cold storage infrastructure. Similarly, 75.8% of respondents cite quality degradation and spoilage during transportation as a major problem, emphasizing the need for investments in cold chain logistics. Additionally, the lack of modern processing and packaging equipment, reported by 75.2% of respondents limits opportunities for processing and market differentiation.

Marketing and financial barriers also impede the growth of agricultural enterprises. Dependency on intermediaries for marketing is highlighted by 63.4% of respondents, which often results in reduced profit margins and exploitative pricing. Price fluctuations and low market prices are challenges for 41.2% of respondents, adding to income instability. Financial constraints are a significant issue, with 81% of respondents indicating difficulties in obtaining credit facilities from banks and other financial organizations. This lack of financial support limits their ability to invest in technology, inputs and infrastructure.

Table 5: Distribution of the respondents according to constraints faced during their activities

Sl. No.	Constraints	No. of Entrepreneurs	Percentage (%)
1.	Lack of quality seeds/seedlings (plant materials)	118 (Out of 153)	77.1
2.	Difficulties of obtaining quality seeds/seedlings	127 (Out of 153)	83.0
3.	Limited availability of inputs (quality seeds/plant materials, seeds, fertilizers, irrigation water etc.)	94 (Out of 153)	61.4
4.	High input cost (labor, seed, fertilizer, pesticide, irrigation cost etc.) of production,	77 (Out of 153)	50.3
5.	Low crop yield due to low quality input plant materials	82 (Out of 153)	53.6
6.	Unavailability or lack of production machineries (Limited access to modern agricultural tools)	68 (Out of 153)	44.4
7.	Lack of modern mechanization in agriculture	71 (Out of 153)	46.4
8.	Lack of storage facilities of cereal, vegetables, cash, pulse, spice crops and fruits	112 (Out of 153)	73.2
9.	Lack of knowledge on disease and pest management	48 (Out of 153)	31.4
10.	Social barriers (low prestige of farming)	45 (Out of 153)	29.4
11.	Women participation as agricultural entrepreneur is a social barrier	20 (Out of 153)	13.1
12.	Lack of knowledge on storage of cereal, vegetables, cash, pulse, spice crops and fruits	62 (Out of 153)	40.5
13.	High spoilage rates of certain vegetable and fruits due to lack of cold storage	137 (Out of 153)	89.5
14.	High spoilage and quality degradation of vegetables and fruits during transportation	116 (Out of 153)	75.8
15.	Lack of modern processing and packaging equipments	115 (Out of 153)	75.2
16.	Low market price of products and price fluctuations of products	63 (Out of 153)	41.2
17.	Middle man dependency for marketing of produced products	97 (Out of 153)	63.4
18.	Lack of financial supports due to difficulties to obtain credit facilities from financial organization (Bank and other macro/microcredit organization)	124 (Out of 153)	81.0

Social and knowledge-related barriers further compound these challenges. A lack of knowledge about storage techniques and pest and disease management is reported by 40.5% and 31.4% of respondents, respectively, affecting their ability to reduce postharvest losses and protect crops. Social barriers also play a role, with 29.4% noting the low prestige associated with farming. These cultural factors restrict the inclusivity and growth potential of agricultural enterprises. During processing, inadequate storage facilities and lack of cold storage lead to high spoilage rates, especially for perishable vegetables and fruits (Kabir& Hossain, 2020) [9].

The challenges faced by agricultural entrepreneurs span across input supply, production, postharvest handling, marketing, and financial access. Addressing these issues requires a multi-pronged approach that includes improving access to quality seeds and inputs, promoting mechanization, enhancing cold storage and processing infrastructure, and facilitating direct market linkages. Furthermore, capacity-building initiatives to improve knowledge on storage, pest management, and modern farming practices are crucial. Financial inclusion strategies, such as easier access to credit and subsidies for critical investments, can also empower entrepreneurs to overcome these constraints. Lastly, addressing social barriers and encouraging women's participation in agriculture will contribute to a more inclusive and resilient agricultural sector. Addressing these constraints requires a multi-faceted approach, including increased government support, partnerships with financial institutions, and awareness campaigns to elevate the status of agriculture as a profession. These multidimensional barriers significantly hinder agricultural growth and profitability. Agricultural entrepreneurship faces a mix of opportunities and challenges, with a need for innovative and sustainable approaches to drive rural development and address issues like access to finance, markets, and technology (Hossain and Uddin, 2006) [7].

Constraints facing index

The rank order of 18 key constraints faced by agricultural entrepreneurs based on a Constraints Facing Index (CFI) mentioned in Table 6. Lack of quality seeds/seedlings ranked 1st with the highest CFI (193.46), showing that 46.41% of entrepreneurs faced high-level difficulties in accessing good plant materials. High spoilage rates of vegetables and fruits due to lack of cold storage ranked 2nd (CFI 188.24), highlighting significant post-harvest losses. Lack of financial support due to difficulty in accessing credit ranked 3rd (CFI 186.93), with 39.22% facing high constraints from financial institutions followed by difficulties in obtaining quality seeds/seedlings (CFI 177.12) also emerged as a critical issue.

Lack of storage facilities for various crops and lack of processing and packaging equipment were also major constraint, emphasizing weaknesses in post-harvest infrastructure followed by limited input availability, Low crop yield due to low-quality input sand lack of mechanization reveal constraints in both production capacity and efficiency. High input cost**,** lack of modern tools and middleman dependency were noted but ranked lower in severity. Knowledge gaps, including storage**,** market price volatility and disease/pest management, were moderately significant. Social barriers, such as farming prestige which ranked 17and women's participation (Rank 18), were perceived as the least severe constraints in this study.

Table 6: Rank order of 18 selected items of constraints faced by agricultural entrepreneurs according to constraints facing index (CFI)

Sl. No.	Constraint	% of the entrepreneurs face no constraint	% of the entrepreneurs face low constraints	% of the entrepreneurs face medium constraints	% of the entrepreneurs face high constraints	CFI index	Rank order
1.	Lack of quality seeds/seedlings (plant materials)	22.88	7.19	23.53	46.41	193.46	1
2.	Difficulties of obtaining quality seeds/seedlings	16.99	16.99	37.91	28.10	177.12	4
3.	Limited availability of inputs (quality seeds/plant materials, seeds, fertilizers, irrigation water etc.)	38.56	11.76	33.99	15.69	126.80	8
4.	High input cost (labor, seed, fertilizer, pesticide, irrigation cost etc.) of production,	49.67	11.76	20.92	17.65	106.54	11
5.	Low crop yield due to low quality input plant materials	46.41	7.19	24.84	21.57	121.57	9
6.	Unavailability or lack of production machineries (Limited access to modern agricultural tools)	55.56	7.84	14.38	22.22	103.27	12
7.	Lack of modern mechanization in agriculture	53.59	5.23	15.69	25.49	113.07	10
8.	Lack of storage facilities of cereal, vegetables, cash, pulse, spice crops and fruits	26.80	16.34	24.84	32.03	162.09	5
9.	Lack of knowledge on disease and pest management	68.63	20.92	0.00	10.46	52.29	16
10.	Social barriers (low prestige of farming)	70.59	20.92	8.50	0.00	37.91	17

11.	Women participation as agricultural entrepreneur is a social barrier	86.93	3.27	7.19	2.61	25.49	18
12.	Lack of knowledge on storage of cereal, vegetables, cash, pulse, spice crops and fruits	59.48	8.50	20.92	11.11	83.66	14
13.	High spoilage rates of certain vegetable and fruits due to lack of cold storage	10.46	18.30	43.79	27.45	188.24	2
14.	High spoilage and quality degradation of vegetables and fruits during transportation	24.18	20.92	39.87	15.03	145.75	7
15.	Lack of modern processing and packaging equipments	24.84	15.69	33.99	25.49	160.13	6
16.	Low market price of products and price fluctuations of products	58.82	11.76	20.92	8.50	79.08	15
17.	Middle man dependency for marketing of produced products	36.60	40.52	15.03	7.84	94.12	13
18.	Lack of financial supports due to difficulties to obtain credit facilities from financial organization (Bank and other macro/microcredit organization)	18.95	14.38	27.45	39.22	186.93	3

Input and infrastructure-related issues (e.g., seed quality, cold storage, credit access) are the most pressing constraints. Post-harvest losses due to storage and spoilage are more concerning than even production costs or market dependency. Social constraints such as gender bias and perceived low status of farming are less reported, though they may still impact specific groups. This ranking helps policymakers and development agencies prioritize interventions, especially in improving input quality, storage, processing infrastructure, and financial access for agricultural entrepreneurs. Agricultural entrepreneurs in Bangladesh face a multitude of challenges, including climate change vulnerability, limited access to finance and markets, inadequate infrastructure and lack of technological adoption. These factors hinder productivity, profitability and the overall sustainability of agricultural businesses (Agarwal *et al*., 2009) [1]. Success stories highlight the potential for increased productivity, profitability, and resilience, while also acknowledging the risk of exacerbating existing inequalities (Sarker, 2020) [16]. In the face of these problems, we need knowledge intensive green revolution that combines advances in science and agricultural engineering with the unique traditional knowledge to make agriculture more environmentally resilient (ESCAP Social and Economic Survey, 2016).

Proposed solutions of common constraints faced by agricultural entrepreneurs

The proposed solutions provided by agricultural entrepreneurs in response to the constraints they face highlight critical areas of intervention required to enhance productivity, reduce losses and improve market efficiency. A significant majority, 79.7% of respondents, believe that introducing improved plant materials is essential to overcoming challenges related to low yields and poor-quality crops (Table 7). Complementing this, 86.9% propose that the availability of improved plant materials should be increased, emphasizing the need for robust supply chains and widespread access to high-quality inputs for all agricultural entrepreneurs.

Government intervention is seen as a crucial factor, with 92.8% of respondents calling for increased subsidies on basic input materials such as seeds, fertilizers, irrigation, and pesticides. Such financial support would lower production costs, enabling entrepreneurs to adopt better farming practices and invest in essential resources. Addressing postharvest losses, 54.9% of respondents recommend the establishment of more storage facilities with low operating costs and easy handling features. This solution is aimed at mitigating spoilage, particularly for perishable crops like vegetables and fruits, where losses are often significant due to inadequate storage infrastructure.

Mechanization is another area of concern, with 53.6% of respondents suggesting the availability and subsidization of modern production machinery such as power tillers, tractors, sprayers, and harvesters. Increased access to mechanization would not only enhance production efficiency but also reduce labor dependency and costs. To address market inefficiencies, 49% of respondents propose the establishment of a strong monitoring unit to stabilize market prices and control irregular price fluctuations. This would protect farmers from income volatility and ensure fair returns on their produce.

Reducing the dependency on middlemen is a recurring theme, with 61.4% advocating for the creation of a locally strong marketing system or authority. Such systems would empower farmers to directly access markets, thereby improving profit margins and reducing exploitation. Capacity building is also deemed vital, as 75.8% of respondents suggest organizing training programs by government organizations (GOs) or non-governmental organizations (NGOs) on critical topics such as storage techniques for various crops and effective disease and pest management. This would enhance the technical knowledge of entrepreneurs and improve postharvest handling practices.

Table 7: Distribution of the agricultural entrepreneurs according to their proposed solution against their constraints faced during their activities

Proposed solutions	Entrepreneurs	Percentage (%)
Improved plant materials should be introduced	122	79.7
Availability of improved plant materials should be increased	133	86.9
Government subsidy should be increased on basic input materials (seed, fertilizer, irrigation, pesticides etc.)	142	92.8
Storage facility should be increased with low operating cost and easy handling for agricultural entrepreneurs to remove spoilage of vegetables and fruits	84	54.9
Availability of modern production machineries (power tiller/tractor, sprayer, harvester etc.) should be available and Subsidize modern machinery	82	53.6
Strong monitoring unit should be established for unstable market price of products to control agnominal price fluctuations	75	49.0
Locally strong marketing system/authority should be established to reduce middle man dependency of farmers	94	61.4
Arrangement of training by GOs or NGOs on storage of cereal, vegetables, cash, pulse, spice crops and fruits and also disease and pest management	116	75.8
Credit facility for agricultural entrepreneurs from different financial organization should be simplify with low interest rate	124	81.0

Financial inclusion is highlighted as a pressing need, with 81% of respondents urging for simplified credit facilities with low-interest rates from financial organizations. Access to affordable credit would enable agricultural entrepreneurs to invest in better inputs, machinery, and infrastructure, addressing both production and marketing constraints.

The proposed solutions underscore the importance of a comprehensive approach to tackling the challenges faced by agricultural entrepreneurs. Key measures include improving access to quality inputs, enhancing storage and mechanization infrastructure, stabilizing market systems, and providing capacity-building and financial support. Government and institutional involvement, along with local market development and training initiatives, are pivotal in creating a sustainable and inclusive agricultural ecosystem. These interventions would not only alleviate current constraints but also foster resilience and growth within the agricultural sector.

Conclusion

A moderately young and fairly educated population of agricultural entrepreneurs actively engaged in diversified crop production - especially vegetables. Despite their involvement, they face multifaceted challenges that hinder productivity and profitability. Among them, the most important were input-related issues (availability and quality), storage and processing limitations, lack of mechanization, unstable markets, and complex financial systems. High spoilage rates and dependency on middlemen significantly reduce potential returns. Although many entrepreneurs are aware of potential solutions, systemic support from financial and agricultural institutions remains insufficient. Addressing these challenges through targeted interventions, such as subsidies, improved storage, and training programs, will sustain growth and innovation in agriculture.

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