

Challenges faced by entrepreneurs in the agricultural sector of Bangladesh

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Abstract

Entrepreneurship undoubtedly and invariably plays a pivotal rule in the aspect of economic development of any country. This study aims to explore the challenges faced by entrepreneurs in the agricultural sector of Bangladesh. This paper contains both primary data collected from field study and secondary data collected from published research articles, case studies, and other materials as well.

Moreover, this study will certainly help us to scrutinize the findings indicating how societal attitude puts adverse effect on entrepreneurs' mind and how political instability jeopardizes the financial situation of the entrepreneurs. Besides, impacts of existing technological facilities, borrowing rate, grace period will certainly be brought forth. In addition, this study also develops a framework to explore how entrepreneurial assistance can be made at primary level, secondary level and tertiary level. Furthermore, developing strategies with proper rules and regulations along with entrepreneurial education and skills, proper technological support, and obviously financial assistance have been considered under policy making frame work to patronize entrepreneurship towards economic development.

Keywords: Entrepreneurship, Challenges, societal attitude, political instability, technologies, frame work, assistance, educations, skills

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I. Introduction

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. He/she pays current prices for the materials consumed in the business, for the use of land, for the personal service he/she employs, and for the capital he/she requires. He/she contributes his/her own initiatives, skills, and ingenuity in planning, organizing and administering the enterprise. He/she also bears the risk of loss and expects to gain in normal situation as well as in uncontrollable circumstances. Entrepreneurs are the keys to any economic development. If we look at developed economy, we will get the importance of entrepreneurship even in more details and without entrepreneurship, it is impossible to strengthen our local, regional and national economy. According to the statistics of 2016, Agriculture is one of the most important sectors in the economy of Bangladesh and contributes 16% of our national GDP. This sector creates job opportunities for approximately half of our total labor force. In fiscal year 2016, the total gross product was valued at 9922.80 BDT million. With rapid and impressive growth of the overall economy through a fast development in industry and commerce, this agricultural sector that once dominated GDP now claims a less significant position in the economy but still remain the life blood for the economy of Bangladesh. This sector, in particular, needs even more support to grab attention of potential educated entrepreneurs who may create more opportunities for the sector including agro business and others. Therefore I felt highly motivated to study “challenges of new entrepreneurs in agricultural sector of Bangladesh”. I hope this study will be informative and helpful enough to all actual and potential entrepreneurs to run agro businesses and researchers on that area to carry further study on the field with a view to adding value to our national and socio-economic development.

1.1 Objectives of the Study

- To Identify the challenges to start up new business in agricultural sector of Bangladesh
- To identify existing facilities and required facilities for entrepreneurs in agricultural sector
- To develop a framework to assist entrepreneurs in agricultural sector of Bangladesh

1.2 Scopes of the Study

This study has been conducted on the context of Bangladesh. This study will significantly make us understand the problems to develop entrepreneurship in agricultural sector of Bangladesh. This study has been done in order to understand the gap between the existing facilities and required facilities to develop entrepreneurship in agricultural sector. This study will also pave the way to reduce unemployed rate in the Bangladesh by developing entrepreneurship.

1.3 Limitation of the Study:

- Time is the major constrain to accomplish this study properly
- Some respondents remained reluctant to give proper information
- Some study pursued from web side has given contradictory information
- Different web sites searched for the necessary information cannot provide sufficient information

1.3 Research Methodology:

Research Design:

To conduct this study, several objectives including challenges to start up new business in agricultural sector, finding the existing facilities and required facilities for the entrepreneurs, and developing a frame work to assist entrepreneurs in agricultural sector have been fulfilled. To fulfill the first objective, several hypotheses have been developed to examine the impacts of several factors as challenges to start up new business in the field of agriculture of Bangladesh. Since societal recognition is a very important issue, how the attitude of the society affects the rate of entrepreneurs is a major issue to fulfill the first objective. Negative attitude of the society significantly affects the growth rate of the new business and turn into one of the major challenges to develop entrepreneurship.

To test this hypothesis, 55 respondents will be met to give their opinions on the interval scale weighted from 1 to 5 where 1 is weighted for very negative response and 5 is weighted for very positive response. Furthermore, Z test with 95 percent confidence level will be conducted for this hypothesis.

H₀: Our societal attitude towards entrepreneurship does not have negative impact on the rate of educated entrepreneurs.

H_a: Our societal attitude towards entrepreneurship has a negative impact on the rate of educated entrepreneurs.

Dependent variable: Rate of educated entrepreneurs

Independent variable: Societal attitude towards entrepreneurship

As the first objective of this study is to identify various challenges to start new business as an entrepreneur, political instability can be one of the major challenges to affect the entrepreneurs in a negative way. To test this hypothesis, a sample of 55 respondents have been obtained and asked to indicate their opinions on likert scale which has been given weight from 1 to 5 where strongly disagree will be given value 1 and strongly agree will be given value 5. For the testing of this hypothesis, Z test will be conducted with the 5 percent significance level.

H₀: Political instability does not discourage agro entrepreneurs

H_a: Political instability discourages agro entrepreneurs

Dependent variable: Agricultural development

Independent variable: Political instability

To enhance the rate of productivity, it is very important to know whether the existing technologies in the agro sector are sufficient or not. If existing technological facilities are not sufficient, the required technological facilities will be analyzed to explore entrepreneurship in the agricultural sector as well as to fulfill the second objective of this study. For this hypothesis, two firms will be visited and data including breeding rate, the rate of milk production, will be analyzed. For this hypothesis-test, z test with the 5 percent significance level will be accomplished.

H₀: Existing technologies are not insufficient to enhance the rate of agro-productivity

H_a: Existing technologies are insufficient to enhance agro-productivity

Dependent Variables: The rate of productivity

Independent variables: Existing technologies

To explore the growth of new business in the agricultural sector, fund management can be a challenging factor to be identified for our study. To identify whether borrowing rate encourages the growth of the new business in the agricultural sector or not, average of standard borrowing rate, according to the opinions of 55 respondents, have been calculated and existing average (sample mean \bar{X}) of borrowing rate of several banks for the agricultural sector have been analyzed. To test this hypothesis, z test with 5 percent significance level has been accomplished.

H0: The borrowing rate for the agricultural sector does not discourage the growth of the new business in agricultural sector

H1: The borrowing rate for the agricultural sector discourages the growth of the new business in the agricultural sector

Dependent Variables: Number of new business

Independent Variables: Interest rate factor

As grace period is a very important issue to manage fund duly, it is important to know whether grace period of the borrowed fund is sufficient or not. If grace period is not sufficient to develop new business in the agricultural sector, it will be another challenge to develop entrepreneurship in the agricultural sector because fund at initial level will play a vital role to establish new business. To test this hypothesis, 55 respondents have been obtained to calculate the average of expected grace period and average grace period given for agricultural sector by several banks has been analyzed. After analyzing the several banks' offers, sample mean (\bar{X}) will be calculated. For this hypothesis, z test with the 95 percent confidence level and 5 percent significance level will be accomplished.

H0: The grace period for the loan of agricultural sector is not insufficient to develop the new business

H1: The grace period for the loan of agricultural sector is insufficient to develop the new business

Dependent Variables: The growth of new business in the agricultural sector

Independent Variables: Grace period

Hypothesis of this research have been set to study this topic on several dimensions including economic, political, social and technological perspective. Some hypotheses have sub-factors with a view to studying in-depth as much as possible in a given time. To fulfill second objective of this study, 55 respondents have been met to take their opinions regarding existing facilities and required facilities. To develop a frame work to assist entrepreneurs, some journals have been studied out to gather decent knowledge over that topic. Information from books, journals, research work, and websites including Bangladesh Bank, Asian Development Bank, World Bank, Investopedia and newspapers has been considered as secondary data of this study and mentioned sources of those information use APA reference method in reference section of this study. For primary data, questionnaire has been prepared and targeted respondents have been requested to fill it. Data has been organized using MS Excel and SPSS software. This research has taken help of pie-charts, bar diagrams to interpret the information.

Framework for Hypothesis Testing

Table1: Hypotheses testing frame work

Statement	Scale/ Questions	Distribution Table	Confidence Level	Test Type	Sample Size
Our societal attitude towards entrepreneurship does not have negative impact on the rate of educated entrepreneurs.	Likert Scale	Z-test Distribution table	95 Percent	One tailed	55
Political instability does not discourage agro entrepreneurs	Likert Scale	Z-test Distribution table	95 Percent	One tailed	55
Existing technologies are not insufficient to enhance the rate of the productivity	Likert Scale	Z-test Distribution table	95 Percent	One tailed	55
Borrowing rate does not discourage entrepreneurs	open Ended	Z-test Distribution table	95 Percent	One tailed	12
Grace period is not insufficient for the entrepreneurs	Open Ended	Z-test Distribution table	95 Percent	One tailed	18

Table 2: Formula for hypotheses testing

	Sample Mean(\bar{X})	Sample Standard Deviation	Upper Limit	Lower Limit
Formula	$\Sigma xi/n$	$\sqrt{(x - \bar{X})^2/n-1}$	$\mu + Z(\text{standard deviation}/\sqrt{n})$	$\mu - Z(\text{standard deviation}/\sqrt{n})$

II. Review of the Literature

Md. Elias Hossain (2014) conducted a research on **Role of Agriculture in Economic Growth of Bangladesh**. The analysis suggests that there is a long run relationship between agriculture and economic growth as it is confirmed by both Trace statistics and Maximum Eigen-value test statistics. Results found from Granger causality test suggest that uni-directional causality running from agriculture to economic growth exists in Bangladesh. The VAR results confirm that changes in agricultural GDP respond more critically to economic growth, suggesting that boosting agricultural sector will effectively stimulate economic growth in Bangladesh.

Md. Hamid Miah et.al.,(2014) conducted a study on **Agricultural Sector Development Strategy**. They suggest to ensure an average of 4.5% real growth in agricultural sector over the 6th FYP period to develop a strong path for the agricultural sector, to raise farm productivity and real income of farm families in rural areas on a sustainable basis should be ensured, to attain self-sufficiency in food grain production along with crop diversification within cereal as well as toward horticultural crops, to expand application of technology and mechanized cultivation, to ensure sustained agricultural growth through more efficient and balanced utilization of land, water and other resources, to encourage research in adaptation to change and proper use of genetically modified technology in agriculture, and to promote non-crop agricultural activities related to forestry, livestock and fisheries.

Praduman Kumar and Surabhi Mittal (2008) conducted a research on **Agricultural Growth Accounting and Total Factor Productivity in South Asia: A Review and Policy Implications**. They suggest that Productivity growth in agriculture is essential for the development of the sector. This paper has reviewed the developments in agricultural productivity related to the South Asian countries namely Bangladesh, India, Nepal, Pakistan, and Sri Lanka. They also recommend some Policies towards food security. Subsequently, South Asia have been outlined under the sub-heads (i) Arresting deceleration in total factor productivity, (ii) Enhancing yield of major commodities, (iii) Accent on empowering the small farmers, (iv) Environment protection, and (v) Strengthening of national agricultural research system.

David Kahan (2012) conducted a study on **Entrepreneurship in Farming**. The study suggests that entrepreneurial farmers need access to finance, land, labor, information and knowledge to be successful. This study has also found some problems to develop entrepreneurship in farming. 1) Smallholder farmers may be entrepreneurial in spirit but they often lack the security to take risks. 2) The declining share of agriculture in the public expenditure in the face of deceleration of the agricultural GDP growth remains a matter of major concern. However, allocation of public expenditure to agriculture needs to be enhanced, particularly for strengthening research and extension in all the subsectors of agriculture. With regard to cropping in the northern regions, strategies could be: (a) promoting Alternate Wetting and Drying (AWD) method of irrigation backed by appropriate irrigation pricing strategies, (b) covering the districts with buried pipe to reduce water conveyance loss, (c) exploring the possibility of Managed Aquifer Recharge and taking up programs to raise ground water level, and (d) providing incentives to grow high value crops and also crops that require less water. To identify entry points for action, three challenging domains are identified as: (1) Sustainable intensification of agricultural systems for food security with high resource use efficiency and environmental protection, (2) Poverty alleviation, economic and social rural development, and (3) Food systems for nutritional security and better health. Sustainable intensification of agricultural systems for food.

High competition, lack of infrastructural facility, syndication from middleman, lack of IT skill, legal formalities, negative social attitude etc. are some of the main problems of a rural agro entrepreneur (Patel and Chavda, 2013).

Entrepreneurs fail and do not feel motivated in agricultural sector due to lack of training facility, complex lending and repayment procedures, lack of marketing skill, inferior product quality etc (Tripathi and Agarwal, 2015).

Growth of Mall Culture, Poor Assistance, Power Failure, Lack of Technical know- how, Capacity Utilization and Infrastructure Sickness are some common challenges faced by rural entrepreneurs (Santhi and Kumar, 2011)

Nusrat Fatema Chowdhury (2017) conducted a study on **Entrepreneurship Development in Bangladesh: Pros and Cons**. The study shows the available opportunities for the entrepreneurs-availability of

the natural resources, Positive and independence attitude by nature, financial support, and technological support etc.

While there are many studies regarding to the relationship between agriculture and economic growth in Bangladesh, agricultural development strategy, different paths to develop the agricultural sector, but few studies in this research topic were found in case of Bangladesh. Therefore, country specific studies are needed to throw more light on the challenges faced by entrepreneurs in the agricultural sector. Most of the existing studies on Challenges faced by entrepreneurs to start up new business in the agricultural sector of Bangladesh are cross country studies. The difficulty with such studies is the homogeneity assumption across the countries, which is unrealistic due to variations in social, economic and institutional conditions. This study will provide on the issues what problems are to be faced by both illiterate and even graduate people to start up new business in the agricultural sector though there is a positive linkage between agriculture and economic growth. In the development strategies for agricultural sector of Bangladesh, there is no specific policy for entrepreneurs to get privilege in the agricultural sector to start up new business as well as to run the business smoothly in this sector. This study will try to provide what privileges should be given to the entrepreneurs in the agricultural sector.

III. Findings and Analysis

3.1: Identifying different challenges to start up new business in the agricultural sector of Bangladesh

To conduct this study, different hypotheses have been drawn to identify different challenges to start up new business in the agricultural sector of Bangladesh.

Table3: Profile of the opinions of the respondents

Particulars	Strongly Disagree (1)	Disagree (2)	Uncertain (3)	Agree (4)	Strongly Agree (5)	Sample Mean (\bar{X})	Standard Deviation
Our society's attitude towards entrepreneurship does not have negative impact on the rate of educated entrepreneurs.	32	12	6	4	1	1.72	1.044
Political instability does not discourage agro entrepreneurs	35	10	3	6	1	1.69	1.103
Existing technologies are not insufficient to enhance the rate of the productivity	15	30	5	5	0	2	0.86

	Number of respondents	Expected average (μ)	Sample Mean (\bar{X})	Standard Deviation
Borrowing rate does not discourage entrepreneurs	55	8%	8.66%	1.38
Grace period is not insufficient for the entrepreneurs	55	12 months	5.15 month	2.04

The first hypothesis is to analyze whether societal attitude towards entrepreneurship has negative impact or not. This hypothesis has been drawn as below:

H₀: Our societal attitude towards entrepreneurship does not have negative impact on the rate of educated entrepreneurs

H_a: Our societal attitude towards entrepreneurship has a negative impact on the rate of educated entrepreneurs

To test this hypothesis, Likert Scale, very essential for attitude testing, has been used where strongly disagree has been given the weight 1 and strongly agree has been given the weight 5 as well. On the basis of the weight, the hypothesis can be rewritten as below:

H₀: $\mu = 4$

H₁: $\mu < 4$

To test this hypothesis, agree with the statement given to the 55 respondents has been given the weight 4. Subsequently, the calculated sample mean (\bar{X}) is 1.72 with the standard deviation of 1.044 and the test has been conducted with the 5 percent significance level.

Lower Limit: $\mu - Z$ (standard deviation/ \sqrt{n})
 = $4 - 1.65(1.044/\sqrt{55})$
 = $4 - 0.23$
 = 3.77

	<i>Societal Attitude</i>
Mean	1.727273
Known Variance	1.09
Observations	55
Hypothesized Mean Difference	4
Z	-16.1438
P(Z<=z) one-tail	0
z Critical one-tail	1.644854
P(Z<=z) two-tail	0
z Critical two-tail	1.959964

Result: As it is a left one tailed test and sample mean (\bar{X}) 1.72 belongs to the area of rejection below the lower limit 3.77. Besides z value < critical value; $-16.143 < -1.644854$. So, it can be concluded that H_0 (null hypothesis) is rejected that means H_a (alternative hypothesis) is accepted. So, it can be said that societal attitude has negative attitude towards entrepreneurship to be explored.

The second hypothesis has been drawn to make sense that whether political instability discourages the entrepreneurs or not. This hypothesis test has been made on “Likert Scale” asking the question “Political instability does not discourage the entrepreneurs” to the 55 respondents. Here, different weights for example 1 for strongly disagree and 5 for strongly agree have been given. The hypothesis is

- H0:** Political instability does not discourage agro entrepreneurs.
Ha: Political instability discourages agro entrepreneurs

Here, the weight 4 has been given for “agree” with our given statement to the respondents and this hypothesis can be rewritten as below

- H0:** $\mu = 4$
H1: $\mu < 4$

Here, the sample means (\bar{X}) is 1.69 with the standard deviation of 1.103. The test is two tailed test and has been conducted at 5 percent significance level

Lower Limit: $\mu - Z$ (standard deviation/ \sqrt{n})
 = $4 - 1.65(1.10/\sqrt{55})$
 = $4 - 0.24$
 = 3.76

z-Test: Two Sample for Means

	Political Instability
Mean	1.690909091
Known Variance	1.22
Observations	55
Hypothesized Mean Difference	4
z	-15.50360417
P(Z<=z) one-tail	0
z Critical one-tail	1.644853627
P(Z<=z) two-tail	0
z Critical two-tail	1.959963985

Result: As sample mean (\bar{X}) 1.69 belongs to the area of rejection below the lower limit 3.76. Besides z value < critical value; $-15.50360417 < -1.644854$. So, it can be concluded that H_0 (null hypothesis) is rejected that means H_a (alternative hypothesis) is accepted. So, it can be said that political instability discourages the entrepreneurs to develop entrepreneurship in the agricultural sector of Bangladesh.

Our third hypothesis has been made on the basis of technological advancement in the agricultural sector of Bangladesh. To test this hypothesis, a number of respondents have been obtained to have their attitude what they think about technological advancement for the agricultural sector. Moreover, to conduct this hypothesis “Existing technologies are not insufficient to enhance the rate of agro productivity”, likert Scale has been

thrown to the obtained respondents to pursue whether existing technologies are sufficient to enhance the rate of productivity or not. The hypothesis has been drawn as below:

H0: Existing technologies are not insufficient to enhance the rate of agro-productivity

Ha: Existing technologies are insufficient to enhance rate of agro-productivity

On Likert Scale, agree with the statement has been given weight 4 and on the basis of this weight, the hypothesis can be rewritten as below:

H0: $\mu = 4$

H1: $\mu < 4$

Here, the sample means (\bar{X}) is 2 with the standard deviation of .86. This test is one tailed test and has been measured at 5 percent significance level using Z table.

Lower Limit: $\mu - Z$ (standard deviation/ \sqrt{n})
 $= 4 - 1.65(.86/\sqrt{55})$
 $= 4 - .12$
 $= 3.88$

z-Test: Two Sample
for Means

	<i>Existing Technologies</i>
Mean	2
Known Variance	0.7396
Observations	55
Hypothesized Mean Difference	4
Z	-25.86949797
P(Z<=z) one-tail	0
z Critical one-tail	1.644853627
P(Z<=z) two-tail	0
z Critical two-tail	1.959963985

Result: As it is a left one tailed test and sample mean (\bar{X}) 2.00 belongs to the area of rejection below the lower limit 3.88. Besides z value < critical value; -25.86949797 < -1.644854. So, it can be concluded that H0 (null hypothesis) is rejected that means Ha (alternative hypothesis) is accepted. So, it can be said that existing technologies are insufficient to enhance the rate of agro productivity.

Furthermore, the expected average borrowing rate has been calculated at 8 percent with hypothesis, 55 respondents have been asked to obtain their expected average borrowing rate at which they feel that it will not be burden for them in case of starting new business in the agricultural sector and the standard deviation of 1.38. At this stage, the hypothesis can be rewritten as below

H0: The borrowing rate for the agricultural sector does not discourage the growth of the new business in agricultural sector.

H1: The borrowing rate for the agricultural sector discourages the growth of the new business in the agricultural sector.

Ho: $\mu = 8$

H1: $\mu > 8$

It is basically a right one tailed test. By analyzing different borrowing rates of several banks, it has been found that the average borrowing rate (sample mean \bar{X}) of different banks is 8.66 for the agricultural sector. Using Z test table with 5 percent significant level, both lower limit and upper limit for the null hypothesis can be calculated.

Upper Limit: $\mu + Z$ (standard deviation/ \sqrt{n})
 $8 + 1.65(1.38/\sqrt{12})$
 8.66

z-Test: Two Sample for Means

	Borrowing Rate
Mean	8.654545455
Known Variance	1.904
Observations	55
Hypothesized Mean Difference	8
z	-1.856684693
P(Z<=z) one-tail	0.031678013
z Critical one-tail	1.644853627
P(Z<=z) two-tail	0.063356027
z Critical two-tail	1.959963985

Result: As sample mean (\bar{X}) 8.66 remains within the upper limit. Besides z value < critical value ; $-1.85 < 1.644854$. it can be concluded that H_0 (null hypothesis) is not rejected that means H_a (alternative hypothesis) is rejected. So, it can be said that borrowing rate is not a burden for the entrepreneurs to start up new business in agricultural sector.

The fifth hypothesis of this study is to identify whether the grace period for agro loans offered by different financial organizations is sufficient or not. To test this hypothesis, 55 respondents are obtained and interviewed to know their expected average grace period to start up new business with the credits available for agricultural sector. Here, the calculated expected average grace period (μ), on the basis of the given opinions of respondents, is 12 months where the standard deviation of this one-tailed test is 7.31. This hypothesis is

H0: The grace period for the loan of agricultural sector is not insufficient to develop the new business

H1: The grace period for the loan of agricultural sector is insufficient to develop the new business

For this hypothesis, grace period offered by different financial organizations has been analyzed.

Table 4: Amount of loans, Tenure and Grace period for different Categories

Type	Maximum Amount (BDT)	Tenure	Grace period
Solar home system	1,75,000	4 years	-
Solar irrigation pumping System	35,00,000	10 years	6 Months
Solar PV assembly plan	60,00,000	5 years	6 months
Bio gas plan/ Existing cattle/ Poultry farm	50,000	4 years	3 Months
Cow rearing	4,50,000	4 years	3 Months
Organic Manure from Slurry	200,000	4 years	3 Months
Mid range bio gas plan	25,00,000	5 years	6 Months
Biological ETP	40,00,000	5 years	6 Months
Combination of biological ETP	2,00,00,000	5 years	6 Months
Substitution of energy efficient	35,00,000	5 years	6 Months
KlinVermi Compost	2,90,000	4 years	3 Months
Hydro power	50,00,000	5 years	6 Months
PET bottle recycling plan	5,00,00,000	5 years	6 Months
Solar battery recycling plan	10,000,000	5 years	6 Months
LED Bulb manufacturing plan	50,000,000	5 years	6 Months
Setting up hybrid hoffman	50,000,000	5 years	6 Months
Technology in Brick Manufacturing	50,000,000	5 years	6 Months
Zigzag/ BSBK	50,000,000	5 years	9 Months

Source: Bangladesh Authorities

From the given table, the average grace period (sample mean \bar{X}) that is 5.16 months has been calculated and the hypothesis can be rewritten as below:

H0: $\mu = 12$

H1: $\mu < 12$

This is basically a left one tailed test. The upper limit as well as the lower limit can be calculated using the Z table at 5 percent significant level and 95 percent confidence level as well.

Lower Limit: $\mu - Z (\text{standard deviation}/\sqrt{n})$
 $= 12 - 1.65(7.31/\sqrt{18})$
 $= 12 - 2.84$
 $= 9.162$

z-Test: Two Sample for Means

	Grace Period
Mean	5.145455
Known Variance	2.04
Observations	55
Hypothesized Mean Difference	12
Z	-40.7837
	0

P(Z<=z) one-tail

z Critical one-tail 1.644854

P(Z<=z) two-tail 0

z Critical two-tail 1.959964

Result: As sample mean (\bar{X}) **5.16** belongs to the area of rejection of lower limit **9.162**. Besides z value < critical value; $-40.7837 < -1.644854$. So, it can be concluded that **H0** (null hypothesis) is rejected that means **Ha** (alternative hypothesis) is accepted. So, it can be said that the grace period for the loan in the agricultural sector is insufficient to start business in the agricultural sector.

However, NusratFatemaChowdhry (2017) in her study on **Entrepreneurship Development in Bangladesh: Pros and Corns**, identifies the availability of natural resources as opportunity, positive and independence attitude by nature, financial support and technological support as opportunities but our study has found that societal attitude does have negative impact, financial assistance is not as much as expected specially grace period, Technological support are not sufficient. So, this study inversely support the study of NusratFatema Chowdhury on Entrepreneurship development in Bangladesh: pros and corns.

3.2: To identify existing facilities and required facilities for entrepreneurs in agricultural sector

To conduct this study, the second objective of this study is to identify facilities available to the agricultural sector of Bangladesh and facilities available for the entrepreneurs to start up new business in the agricultural sector.

Existing Facilities

Scope to develop entrepreneurship in rural area:

The rural areas of Bangladesh have the abilities to explore the huge potentials to develop entrepreneurship. Our rural area needs lots of entrepreneurs to flourish the GDP growth using potential operational areas. Interested entrepreneurs can start different agro based businesses including honey bee, food preservation, mushroom cultivation, juice; farming business like poultry farming, cattle rearing, fishing; firming like nursery, horticulture, tree plantation, bamboo cultivation in the remote parts of the country to minimize infrastructural costs as well as labor costs with fertile lands.

Financial Support

Entrepreneurs of Bangladesh get direct and indirect favorable support from the financial sector by the way of entrepreneurship development policy. Bangladesh Bank is the most leading contributor of the financial sector through financial assistance, interest free loan, micro credit facilities, collecting foreign aid, subsidy Equity and Entrepreneurship fund and other ways for young entrepreneurs.

Table5: Interest rates offered by different state owned banks

Name of the banks	Rate of Interest (%)
Agrani	9
Basic	10
BDBL	10
Janata	4-10
Rupali	4-10
Sonali	4-10

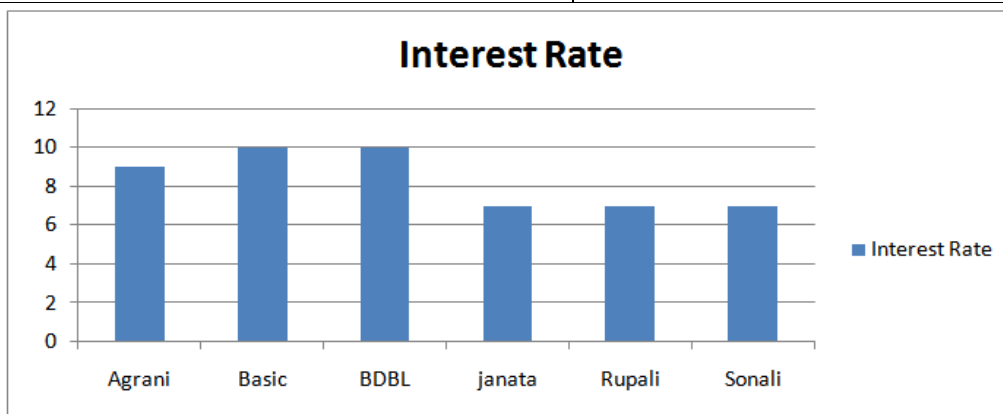


Figure 1: Average interest rates of state owned commercial banks in agricultural sector of Bangladesh

This chart shows the average interest rates of state owned bank including Agrani Bank Limited, Basic Bank Limited, BDBL, Janata Bank Limited, Rupali Bank Limited, Sonali Bank Limited in the agricultural sector of Bangladesh. Here Agrani Bank provides at the average rate of 9 percent on the other hand Basic Bank and BDBL provide credit at the average of 10 percent and Janata bank, Rupali bank, Sonali bank provide 7 percent as well.

Table6: Interest rates offered by different private banks

Name of the banks	Rate of interest (%)
Al- Arafah	10
IFIC	8.5
IBBL	7
Jamuna	10
DBBL	8.5
ICB	10

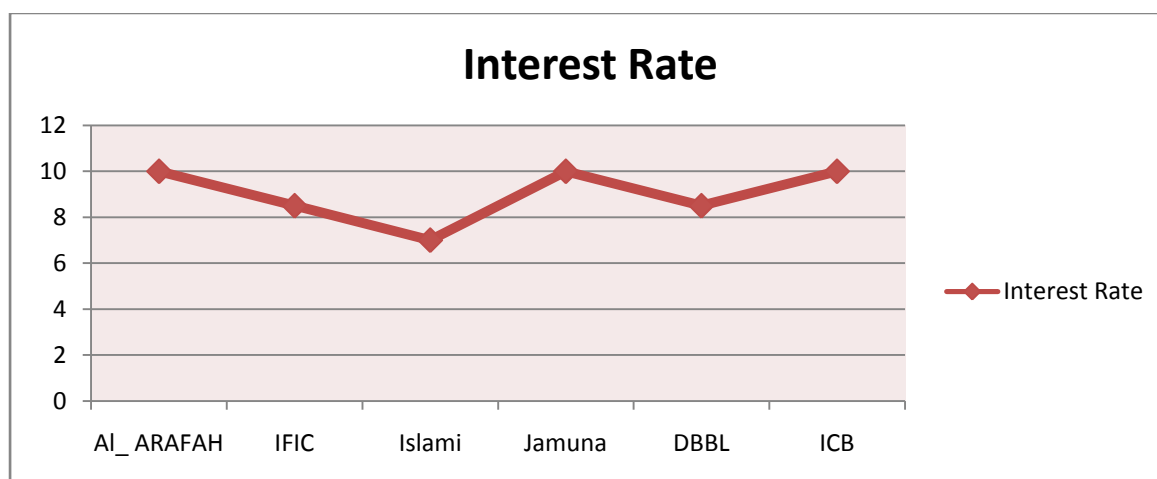


Figure 2: Average interest rates of private commercial banks in agricultural sector

Educational Facilities

In general education, students get introduced to entrepreneurship in the secondary level and remain there on to develop preliminary background for startup initiative in the business field. The academic curriculum introduces the students with the prominent business entrepreneurs in Bangladesh. Recently, The University Grant Commission (UGC) of Bangladesh has approved the Bachelor of Entrepreneurship Development (BED) program focusing on the opportunities to gather knowledge and skills which will help them flex their minds into becoming a successful entrepreneur. BED program is mainly focused on to guide students as a mentor so that they can move through process of starting a venture in order to become an entrepreneur. Besides the program is suitable to those who dream to become a successful entrepreneur.

Training and Development:

National Youth Development Center (NYDC) as a part of government offers several training programs – specially on a agricultural sector at free of cost even with a proper accommodation with free food supplies for three months. Those programs undoubtedly encourages young enthusiastic, unemployed people to explore their latent talents as well as to involve themselves into productive areas. Besides providing training, NYDC provides loan at minimum interest rate to develop entrepreneurship.

Required Facilities

Reducing complexity when applying for loan

Applying procedures for loans are very complex. Most of the time, several financial institutions including banking and non-banking organizations are reluctant to patronize venture capital for newly started business.

Equity and Entrepreneurships Fund (EEF) from commercial banks

Commercial banks are mainly interested in debt financing rather than equity financing. If commercial banks come forward to pave the way for offering equity financing with reduced complexity, the rate of entrepreneurs will certainly be appreciated to explore the growth of GDP.

Motivational training for young entrepreneurs:

Motivational training for the young entrepreneurs should be emphasized with the focus on with start-up techniques, savings and motivational aspect of business entity. Moreover, the way to acquire resources, logistics support, and financial support needed for an enterprise as well as setup from various supportive organizations should be emphasized.

Logistic Support with proper infrastructure

Logistic support plays an important role in agricultural sector, specially, for perishable goods. If proper logistic support is not be ensured, newly started business with perishable goods as a result may fall into trouble to ensure proper profit margin necessary for the existence of the business as well as the growth of the business.

Technological Support:

Bangladesh being a digital country focuses on implementation of the information and technology in every sphere of the country. So, information and technology as a result can explore the new way by reducing labor cost and increasing productivity. Proper technological support can ensure the scientific management of cultivation and cattle rearing.

Societal positive attitude

Society hardly encourages entrepreneurship rather they prefer job to develop entrepreneurship. Subsequently, developing entrepreneurship is very difficult task especially for university graduates who usually remain under tremendous amount of pressure to manage jobs at any cost. To develop entrepreneurship, societal negative attitude towards entrepreneurship should be turned into positive belief that people with tenacity and enthusiasm can explore new dimension in the different business sectors to develop their own careers as well as to create new jobs for others.

3.3: Developing a framework to assist Entrepreneurs in agricultural sector of Bangladesh

The third objective of this study is to develop a framework to assist entrepreneurs. Here

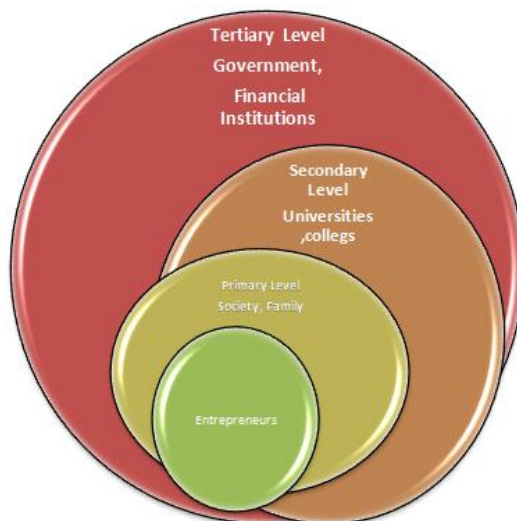


Figure 3: Frame work to assist entrepreneurs for start-up business.

a frame work with different levels including primary level, secondary level, and tertiary level has been designed. In every level, different factors play important roles to develop a structure in which entrepreneurs can be supported duly.

Primary Level

Support with a view to assisting entrepreneurs should be begun at family. In the event that family markedly can provide initial assistance with financial support, motivation and inspiration. The positive attitude of the society, on the other side, towards entrepreneurship is very important issue to be considered. Societal attitude towards entrepreneurship affects more inversely the graduate people than non-graduate people. It is hardly surprising that people as the social being usually hunger for recognition as a result youngenthusiastic people, especially after completion of graduation and post-graduation degree, become very tenacious for getting jobs rather than developing entrepreneurship. In this circumstance, societal negative attitude- not to get a job takes people into trouble. At this stage, If society recognizes not only job holders but also entrepreneurs, the young, ardent, painstaking people will be appreciated to explore their latent talents in diverse ways by developing entrepreneurship.

Secondary Level:

At the secondary level, Universities, colleges can play an emerge role to make students motivated and competent to implement their ideas, innovations, talents to build a perfect career as well as to ensure proper allocation and utilization of the resources. Subsequently,at this stage, there is a need of some entrepreneurial forums to stand beside the new entrepreneurs. Moreover, some universities are working for entrepreneurial integration for their student like social business center of a Daffodil International University, UIU entrepreneurship forum, NSU Business Club, AIUB business club. The Bangladesh Youth Leadership Center (BYLC), United Nations Youth and Students Association of Bangladesh (UNYSAB) and Forum of entrepreneurship and business (FEB) are also working for strengthening the students in the business field. These forums induce mainly the inspiration among the entrepreneurs. Though different universities, colleges, institutions are working to stimulate entrepreneurs in various sectors, it is scanty in relative to necessity. At this stage, different Colleges, Universities should come forward with different programs including inaugurating the new department of entrepreneurship, arranging different competitions to explore different ideas those can pave the way for new entrepreneurs to workwith new ideas in new dimensions. Besides, these entrepreneurial forums should be established at every university in a larger scale that they can, collectively, arrange various work-shops and training programs inviting successful entrepreneurs from both national and international boundaries.

Tertiary level

At this stage, government and financial institutions are the key factors to patronize the entrepreneurs in a proper way. Government can develop a policy so that all entrepreneurs can work together under same regulations. To develop policy, government can consider following strategies.

Developing proper rules and regulations

For the systemic approach, government should provide proper rules and regulations to patronize entrepreneurship in the agricultural sector. Moreover, rules and regulations can include particular areas of the agricultural sectors for example- fisheries, live stocks, dairy as well as total procedures to start up business in those particular areas. Besides, Policymakers should emphasize on the most conducive and supportive environment for the entrepreneurs to thrive. Furthermore, government should have specific policy objectives considering which policy objectives are the most appropriate to develop existing level of entrepreneurship.



Figure 4: Policy making framework

Besides, vocational training should be emphasized largely that students can duly enhance their technical skills along with managerial skills. Moreover, empirical training program to some extent more preferable and applicable to the market that can support the entrepreneurs to create competitive advantages in both nationally and internationally.

To develop the proper entrepreneurial environment and to patronize the entrepreneur truly, adequate technological support must be ensured in the field of entrepreneur otherwise productivity of the entrepreneurs as well as economic development will not reach up to the mark. Rather, entrepreneurs' faith will not be the exception.

Some motivational activities including incentives, tax rebate, extended grace period, tax free import and export facilities can charge up the mind of the entrepreneurs and fuel the activities of the entrepreneurs in a positive way. Besides, some motivational training program can make them realize how important they are for the society and for the economy as well! And there is no doubt they are tremendously contributing to the economy not only by making themselves self-dependent but also by creating job for others.

Policy objectives and recommendations

Financial Support

Entrepreneurs of Bangladesh can get direct and indirect favorable support from the financial sector by the way of entrepreneurship development policy. Bangladesh Bank as a part of government can play the role of the most leading contributor of the financial sector through financial assistance, interest free loan, micro credit facilities, collecting foreign aid, subsidy and various ways for young entrepreneurs. A number of organizations including Board of Investment, Bangladesh Development Bank Limited (BDBL), Bank of Small Industries and Commerce (BASIC), Investment Corporation of Bangladesh (ICB), Government, Commercial Banks,

RajshahiKrishiUnnoyon Bank, Bangladesh Krishi Bank, Controller of Export and Import, Bangladesh Standard and

Table 6: Policy objectives and recommendations

Policy objectives	Recommendation
Finding the specific challenges	<ul style="list-style-type: none"> ➤ Finding the specific challenges for entrepreneurship is very important ➤ Pursuing the available opportunities and creating the future opportunities
Set defined goals and objectives	<ul style="list-style-type: none"> ➤ Develop strategies for obtaining goals and objectives ➤ Take actions on priority basis
Maintaining relevancy of strategies with the other related policies	<ul style="list-style-type: none"> ➤ Merge entrepreneurial strategies with other developing strategies ➤ Ensuring control over all strategies
Organize the overall framework	<ul style="list-style-type: none"> ➤ Design institutional framework ➤ Maintaining effective cooperation with other department ➤ Engaging and ensuring private sectors' contributions ➤ Ensuring proper communication
Measuring the results and ensuring policy learning	<ul style="list-style-type: none"> ➤ Defining the appropriate performance indicators ➤ Ensuring controlling and monitoring the impact

Testing Institute (BSTI), Bangladesh Council of Scientific and Industrial Research (BICSIR), Industrial promotion and Development Company of Bangladesh (IPDCB), Export Promotion Bureau (EPB), and Trading Corporation of Bangladesh (TCB) etc can be special in providing the financial assistance for the entrepreneurs. On the other hand, the Private, Commercial Banks, Private Insurance Company, Grameen Bank, Industrial Development leasing Company of Bangladesh Ltd. (IDLC), United Leasing Company (ULC), can contribute to develop entrepreneurship in diverse ways.

IV. Conclusion

As a growing south Asian country, Bangladesh must have to focus on exploring entrepreneurship not only for the growth of her economy but also to create employment for the millions of people. To explore entrepreneurship, government had better consider productive sector. As a matter of fact, agricultural sector is one of the most productive sectors of Bangladesh. To explore entrepreneurship in this sector, government must have to patronize specially young, enthusiastic and educated people that they can ensure proper utilization of the resources as well as proper technological advancement.

To sum up, to motivate people in the agricultural sector, different challenges need to be under consideration and required facilities have to be provided with a proper policy frame work that a perfect competition can exist in this sector.

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