# Project report on

# Ins & out of Agro farming in Bangladesh: A chapter of prospects



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#### Letter of submission

Date:21-10-2020

To

Mrittika Shil

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Subject: Submission of Project report 03 on Ins & out of agro farming in Bangladesh: A chapter of prospects.

Dear Sir,

With due respect, I would submit my Project report 03 on Ins & out of agro farming in Bangladesh: A chapter of prospects. I have collected information as possible from the internet searching and interviewing with few professionals. I believe that this research report will enrich both my knowledge and experience and grab future opportunities. If you have further queries regarding this report, please let me know. Thank you.

Regards

alet

Sanjoy Pal

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#### **Declaration of Student**

I am Sanzoy Pal, ID: 172-45-153, 8th batch, Department of Innovation & Entrepreneurship, hereby declare that the presented project report 03 on Ins & out of agro farming in Bangladesh: A chapter of prospects is prepared by me after completing my one month research regarding this field.

My original work is submitted to Daffodil International University, and no part of this report has been submitted for any other courses, degree, or fellowship and the work has not been published in any journal or magazine.

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## **Letter of Acceptance**

This is to clarify that Sanjoy pal, ID: 172-45-153, program: BED, 8th batch, is a regular student of the Department of Innovation & Entrepreneurship, Faculty of Business & Entrepreneurship, Daffodil International University. He has completed his research on Ins & out of agro farming in Bangladesh: A chapter of prospects and he has prepared his project report three under my supervision. The data and findings presented in this report seem to be authentic. Thus, the research report has been accepted for his project three-course.

I wish him all success in life.

Mrittika Shil

Lecturer, Department of Innovation & Entrepreneurship

Faculty of Business & Entrepreneurship

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## Acknowledgment

First, all praise to go to the Almighty Allah, the most gracious, the most merciful, the most kind & generous to mankind and His action. This project report is on Ins & out of agro farming in Bangladesh: A chapter of prospects.

I would like to convey my sincere gratitude to my University supervisor, lecturer Mrittika Shil, Department of Innovation & Entrepreneurship, Faculty of Business & Entrepreneurship, Daffodil International University. Without her guidance & assistance, the report would not have been seen as the light of day.

Finally, my deep gratitude goes in favor of my university for getting a library, lab facilities & my teachers to enrich my knowledge, which helps me in different stages to complete this report.

#### **Executive Summary**

This project report has been prepared based on the observations of Agro Farming in Bangladesh. I choose this topic because I want to do business in the agro industry of Bangladesh. This report helps me to understand the opportunities, demand and challenges of the agro farming industry.

Bangladesh is an Agri dependable country and this Agri is the largest employment sector of Bangladesh. 80% of total population earn their livelihood by farming and 65% rural economy comes from this sector. It directly hit our macro economy as well as secure foods for our huge population. Rice, jute is our main agricultural product but apart from that we have our sub-sectors of agriculture like livestock, fish, vegetables, and forest and forsterites.

Agricultural history of Bangladesh is very old. It carries thousands of years of glorious history. It is mentioned in many ancient books, mythology and also mentioned by the famous travelers. Our agriculture has three ages of evolution. One is ancient age, where lots of agro products like rice, jute, are produced. These crops are our ancient crops. Then in middle age, crop production developed by the monitoring of Mughal empires. History says that it was the best time for agricultural prosperity. Then British colonial rules started, throughout this time we adopted many foreign crops for the result of international trading. For example, potato, guava, many fruits are enlisted to our crop production.

This report contains five chapters: in first chapter introduction is combined with overview, history of agriculture, objective, methodology and limitation of the study; the second chapter is about brief overview of crop production, production capacity and export import data; in chapter three opportunities, challenges and new farming approach; the fourth chapter is about the government plan and support and the last chapter, chapter five is findings, recommendations and conclusion.

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**Chapter: One** 

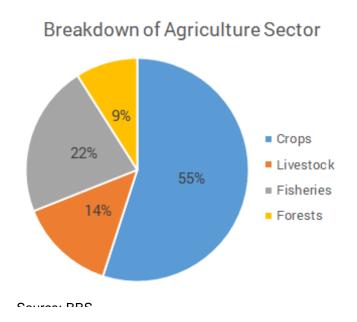
Introduction

## Introduction

#### 1.1 Overview:

From very ancient times, Bangali depends on agriculture as their main livelihood source because of our extremely fine silt land. It is the home for 700 hundred rivers like Padma, Brahmaputra, Meghna these are three major rivers. Because of this huge river system our land is naturally fertile. On the other hand in the monsoon season, floods coming down from upstream also helps fertilize the land.

Bangladesh is an Agri dependable country and this Agri is the largest employment sector of Bangladesh. 80% of total population earn their livelihood by farming and 65% rural economy comes from this sector. It directly hit our macro economy as well as secure foods for our huge population. Rice, jute is our main agricultural product but apart from that we have our sub-sectors



of agriculture like livestock, fish, vegetables, and forest and forestries. Ample water supply, fertile soil, laborintensive, geographical location are responsible factors for the fine Agrienvironment. In the global index, Bangladesh holds many positions: first in Hilsa Fish production, second position respectively fish & jute, third position respectively rice & vegetable and finally seventh in potato & mango. Apart from, as crop production index 146.4 and food

production index 145.3 & out of 5, 2 people are directly involved in agriculture ( Source DATABD.CO).

The land type of Bangladesh varies in different places. So all types of land are not suitable for all types of crops. That's why in Bangladesh different places are famous for different crops.

#### 1.2 History:

The history of Bangladeshi agriculture is very old. Many philosophers, travelers, and mythological scholars have written in their books about our glorious agricultural history. They all were amazed at the rich water supply system, planned fruits and vegetable gardens and the fertile silt soil. In the seventh century AD, the Chinese traveler Hiuen-Tsang mentioned his book about the abundant growth of fruits in pundravardhana and also noticed the intensive and regular cultivation of land. In mughal period, Agriculture in bangle expanded significantly. At that time rice, battle leaf, sugarcane, dairy products and cotton silk were the main agri products. These products are exported in the other part of India.

After starting the British rule, on one hand as production increased on the other hand products prices also increased because then the trade crossed the country border and reached the international and another reason was bangle was the first province under British culinary rule. British Govt made railway service that helped the agri sector tremendously. Jute was the golden fiber, the best quality of jute was produced in this territory. Holding this success in 1885 the first jute mill was established in Kolkata and in the next 50 years there were more 34 jute mills were established and that created 1 lakh ten thousand employment with earning foregn remittance. Another commercial crop was sugarcane, bangle sugar was so famous it was carried to the mumbai, malabar coast, surat and even in the passion galf, jeddah. Bangle was the main sugar capital in the export index. Bengal was introduced by many foregn crops that time like cashew, pineapple, potato ect.

In the year of 1885, the provincial agriculture department established. It took initiatives: establishing agri farm to agricultural improvement included the location Dhaka, Rangpur, Rajshahi, Shibpur and Bordhoman; appointed demonstrator to train up the fermar about advanced farming; providing training to farmers children about advanced farming method; publishing agri related journal and sharing the result with the farmers; supplying good seed to the farmers; introduction of advance agri tools.

But in the 19th century this agricultural system partially had broken down because of famine, recession, partition and the liberation war. But this situation started to recover after 1982 and continued to the present.

#### 1.3 Objective of the study:

The objective of this study is to find out the ins and Out of the agro farming in Bangladesh.

- To know the growth of Agro Farming industry in Bangladesh
- To find out the opportunities of this sector
- To know how much capable the industry is
- To find out the lacking of Agro industry in Bangladesh
- To know the Govt. policy and concern about this industry
- To know the future prospects

#### 1.4 Methodology:

To prepare the report I have collected the necessary information:

- Primary data
  - Conduct some interviews over phone calls with farmers and agro products producer
- Secondary data
  - Visit different Govt. websites
  - Different newspaper and journal

#### 1.5 limitation of the Study:

- Lack of time
- Due to pandemic situation I can't physically collect sufficient data, most of the them are from internet

• Many internet portal have access restriction

# **Chapter: Tow**

# Current situation of Agro Farming in Bangladesh

# Current situation of Agro Farming in Bangladesh

#### 2.1 Brief Overview

The total area of Bangladesh is around 14.3 million hectares. Among them 17.5 % is forest, 22.7% is river, houses, industry and the rest of 59.8 % is available for agriculture. Another thing is all types of land are not perfect for all crops; Bangladesh has different land quality such as high land, medium land and flat land. So different crops are produced in different land zone based on suitable criteria. This map shows that based on the land quality, crops are produced bamper in their suitable zone. In the Sylhet area there are high medium land and ample water, comparatively low

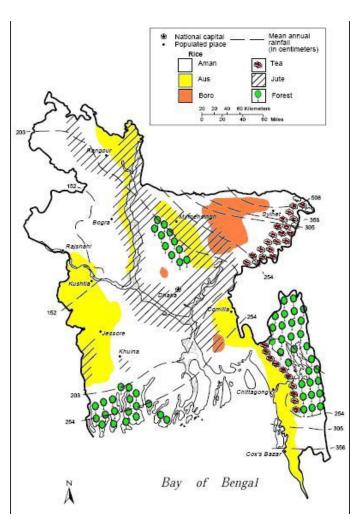
temperature. This environment is suitable for tea cultivation. That's why tea cluster established in this zone.

Rice is our staple food. All year round, three different times rice is cultivated with three varieties and the varieties are Aman, which need flat fertile land and cultivated almost all over the country;

this Aman rice meets our maximum demand of rice;. Aus is cultivated good at north bangle, some places of south east, and chittagong areas; then next is Boro which land criteria is low and in Bangladesh, Barishal Sundorbon zone is used for Boro cultivation.

Bangladesh is the finest jute producer country around the world. The map shows that almost all of Bangladesh's land is suitable for Jute cultivation. Apart from this there are many seasonal crops and vegetables are produced. There are also many minor crops which are produced over Bangladesh.

Most of the livestock & dairy products come from North Bengal region like Rangpur, Bogra & Dhaka . It meets the milk demand as well as meat. This livestock is also the main source of income of low income people. There is a proverb that "Fish and rice makes a Bangali". To meet the demand of fish, people cultivated fish and captured them from the ocean.



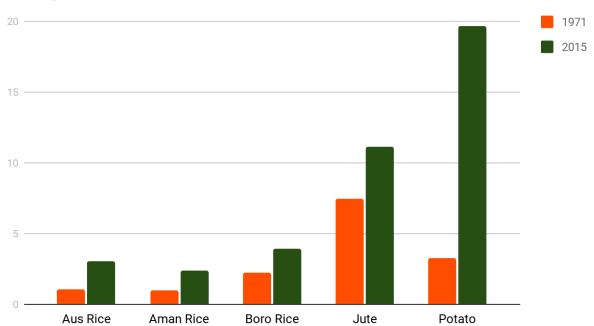
#### 2.2 Agro products production:

#### **Crop production:**

After the liberation war of Bangladesh, agriculture was broken down. Then it gradually overcame the crisis. In 1971 the average rice production was 1.45 % metric ton per hectare but in 2015 it

became 3.130% metric ton per hectare that means it increased by 1.68% metric ton per hectare though she lost its agricultural land. In the same way Jute and potato production increased respectively 3.68% metric ton per hectare and 16.37% metric ton per hectare. (Source Bangladesh Bureau of Statistics)

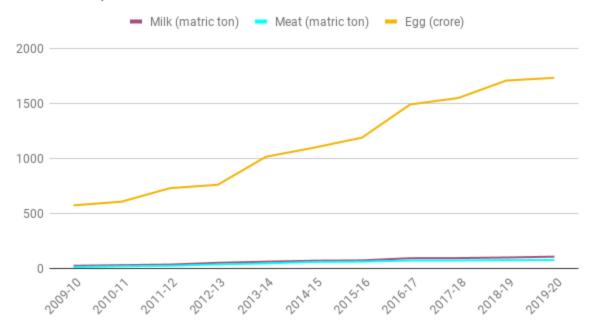




#### Livestock

Livestock is one of the major earning sources in Bangladesh. Out of the total population 20% people are directly and 50% are partially involved in the economy. In this 2019-20 fiscal year, Bangladesh has around 41224 lakh livestock population. Contribution of livestock in GDP is 1.47% and share in agriculture is 13.43%.

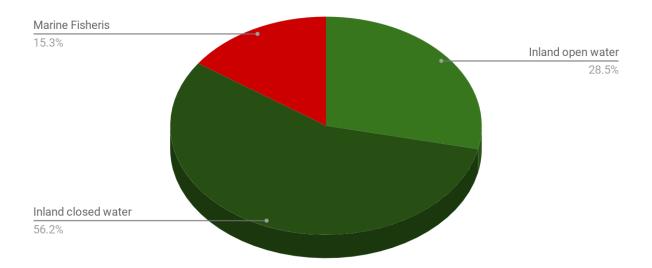
#### livestock production



#### **Fisheries**

Bangladesh ranked 2nd position in the world.the main sources of this fish are river, ocean, beel, hair and other water land. Jamalpur district is the highest inland fish supplier in bangladesh with 400053 metric ton yearly.

#### Points scored



# Chapter: Three Future Prospects of Agro Farming in

Bangladesh

# Future Prospects of Agro Farming in Bangladesh

#### 3.1 Opportunities:

In the year 1972 the total crop production was one crore ten lakh metric tons but in 2020 it became four crore fifty three lakh metric tons. Though it is a huge production development for the agricultural sector, our population increased before then.

A report published by the Department of livestock named "livestock economy at a glance 2020" says that the demand of milk is 154.94 lakh metric tons but production is 106.80 metric tons. On the other hand the egg demand is 1765.92 crore number and production is 1736.43 crore number. So here is the opportunity to make more production to fulfill the demand.

Bangladesh basically exports rice, vegetables, mangos, frozen fish, and flowers to different countries all over the world. There are also many minor agro products we have that we can export. Recently Bangladesh is working on growing foreign fruits and vegetables and they grow fantastically. It is an opportunity to export them also.

One of the biggest challenges of Bangladesh agro industry is post harvest waste. Due to proper and sufficient warehousing management, every season around 30000 crore tk lost occurs. Bangladesh is one of the best mango producers, there is a huge demand for it outside of the world. Processed food can be another opportunity for Bangladesh.

For export, gulf countries are the prime destination. Apart from that European countries, Australia, USA are also potential export destinations.

#### 3.2 Challenges:

Despite of having a potential future, agro farming in Bangladesh is facing some challenges.

- Climate change: due to climate change, it directly impacts the agro sector. Day by day it
  became difficult to cultivate crops in land, the water level went lower, drought is the
  common problem in every season, and unexpected floods are also the result of climate
  change.
- Availability of agricultural land: due to increasing population and industrialization, agricultural lands are shrinking dramatically and industrial waste thrown directly to the lang and river. As a result crops are not grown on that land and fish and other water lives are demolished.
- High input cost: to produce agro product, costs are very high rather than output price.
- Improper distribution of seeds fertilizer

#### 3.3 New Farming Approach:

Agriculture sector of Bangladesh is rural based. Due to the increase of population and shrinking of agro land it is losing its production capacity. That's why agro farming is not bound in rural areas, it started in urban areas too to increase the production capacity and meet the demand. Biofloc, vertical farming, and hydrophobic modern farming methods are adopted in bangladesh. Many agropreneur are working on it, passing through its testing period. Commercial production has not started yet but I hope that this result will impact the entire agro farming in Bangladesh.

**Chapter: Four** 

**Government Plan & Support** 

## Government Plan & Support

The Bangladesh government has developed different new plans for boosting up the agro farming industry. They started many smart farming projects over the country. Providing training, workshop to interested young agropreneur to take the agro sector to the next level.

Government accumulated many stimulus packages and gave subsidies to the farmers. To encourage the farmers using new technologies, the government. Declared that if a farmer buys any agro machineries or imports then 60% cost will bear the government. A farmer has to pay only 40% of the cost. This decision brings corrage into the farmers to cultivate and invest more than before.

Governments doing marketing on behalf of the farmers because farmers are not educated, they don't feel the need of marketing. For this, many agreements are signed between government and foreign countries about agro industry. Recently european countries have shown interest in importing jute from Bangladesh.

Government also emphasizes urban agriculture. For that biofloc fish farming, producing vegetables by hydroponic and aquaponic method. Even the govt has waved 10 % tax exemption on doing rooftop farming whereas it was 5%.

# **Chapter: Five**

Findings, Recommendations & Conclusion

## Findings, Recommendations & Conclusion

#### 5.1Findings:

- Agro Farming of Bangladesh has a glorious history and prospectus future
- Government policy and support are not sufficient
- Huge opportunity in this sector
- Agro innovation is not present

#### 5.2 Recommendations

- Government should encourage young people to involve themselves into the agriculture sector.
- New agro friendly policy should be implied
- Emphasis on agro process sector so that more export can happened
- Proper distribution of seeds and fertilizer among the farmers
- Adopting new technology in agro sector
- Provide training to Farmers about smart farming

#### **5.3 Conclusion:**

Though Bangladesh is a small country with a large number of populations, we have come a long way in agriculture. We positioned globally in many agro sectors. We are now exporting agro products after meeting the local demand. Because of this success, young educated people are engaging in agriculture and it's a good sign of more prospects of agro farming in Bangladesh.

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