



EAST WEST UNIVERSITY

DISSERTATION

ON

The Insurance law of Bangladesh on Agricultural a Critical Review

Course Title: Supervised Dissertation

Course Code: LAW 406

Semester: Fall 2023

Submitted By

Badhatray Roy Bristi

Student ID: 2019-1-66-029

Department of Law

Submitted To

Mohammed Shahjalal

Senior Lecturer

Department of Law

Date of Submission

Word Count: (excluding Footnote and Bibliography)

CONSENT FORM

The dissertation titled “**The Agricultural insurance- Legal Analysis In The Perspective Of Bangladesh**” prepared by Badhatray Roy Bristi, ID: 2019-1-66-029 submitted to Mohammed Shahjalal, Senior Lecturer, Department of Law to complete the requirements of Course LAW 406 (Supervise Dissertation) for LL.B (Hons) degree offered by the Department of Law, East West University is approved for submission.

.....

Signature of the Supervisor

Date:

ACKNOWLEDGEMENT

I appreciate the opportunity to conduct this study and thank Dr. Nabaat Tasnima Mahbub, East West University's Department of Law Chair, for enrolling me in this course. Many thanks to Dr. Md. Mehedi Hasan, former law department chair. Many thanks to Dr. Rumana Islam (University of Dhaka Law Department Professor) for describing my thesis process. I also appreciate my supervisor's aid with thesis subject selection and research.

Research allows me to study my issue more fully. I'm sure it will continue. I am also grateful to the esteemed East West University Department of Law faculty who guided me during my research. Also, thanks to my family.

Finally, I thank God for giving me the confidence to research.

DECLARATION

I, Badhatray Roy Bristi, declare and confirm that I wrote the undergraduate Law-406 (Supervised Dissertation) research paper for East West University's Department of Law. It has also not been considered for another academic or professional award. Each source of data or content that helped conclude this study is acknowledged. It's a primary goal because my undergraduate degrees are required for that study.

Badhatray Roy Bristi

Date:

Table of Contents

<u>Serial :</u>	<u>Contents</u>	<u>Page</u>
	LIST OF ABBREVIATION	1
	ABSTRACT	2
	Keyword	3
	Chapter 1 Introduction	
1.1	Introduction	4
1.2	Significance of the Research	4-5
1.3	Research Question	5
1.4	The Research Methodology	5
1.5	The Research Scope and Limitation	6
1.6	Literature Review	6-7
1.7	Conclusion	7

Chapter 02 Concept of Agricultural Insurance		
2.1	Introduction	8
2.2	Agriculture and Insurance	8
2.3	Process for Agriculture Insurance Policy	9-10
2.4	Conclusion	10
Chapter 03 Agriculture Insurance In Bangladesh		
3.1	Introduction	11
3.2	Analysis of relevant laws and policies in Bangladesh	11-13
3.3	Common risks that face in Bangladesh	13-15
3.4	Government support in Agricultural Insurance	15-17
3.5	Conclusion	17
Chapter 04 International Aspect		
4.1	Introduction	18
4.2	International Situation	18-20
4.3	India's Perspective regarding this issue	20-21

4.4	USA's Perspective regarding this issue	21
4.5	Conclusion	21
Chapter 05 Findings and Recommendation		
5.1	Introduction	22
5.2	Findings and Recommendation	22-25
5.3	Conclusion	26
Bibliography		27-31

LIST OF ABBREVIATIONS

IDRA- Insurance Development and Regulatory Authority

BADC- Bangladesh Agricultural Development Corporation

FAO- Food and Agriculture Organization of the United Nations

GDP- Gross Domestic Product

ILO- International Labour Organisation

BIA- Bangladesh Insurance Academy

BAAG- Bangladesh Academy of Agriculture

UNDP- United Nations Development Program

AFSC- Agriculture Financial Services

ABSTRACT

The thesis begins with an overview of "The Insurance Law," which discusses contracts and the legal principles that govern the insurance sector and insurer-policyholder relationships. This broad topic includes agriculture insurance, my topic. Agricultural insurance supports farmers and stabilises the sector. Coverage depends on farmers' insurance needs. Bangladesh has several agriculture insurance gaps. Every year, problems limit this sort of insurance in Bangladesh, and farmers don't know enough about it to lessen their losses. Bangladesh is an agricultural nation, thus agricultural insurance can boost the economy and other areas. However, farmers cannot find a legal or reliable way to recover farm losses. The legal value of agriculture insurance in Bangladesh is examined in this thesis.

Keywords: Agricultural, Farmer, Challenges, Insurance, Bangladesh, Legal

The Agricultural Insurance – Legal Analysis In The Perspective Of Bangladesh

Chapter 1

Introduction

1.1-Introduction

Insurance law regulates the insurance sector. It includes insurance contract formulation, insurer and policyholder obligations and rights, claim handling, and dispute settlement. Agriculture Insurance is important in Insurance Law. Agriculture insurance shields farmers from financial losses. Insurance legislation for agriculture Insurance policies specify coverage, claim procedures, and farmer and insurer rights and duties. FAO develops and monitors multi-hazard agriculture hazards and threats globally. BADC has developed agricultural sites in Bangladesh since 1961. Since Bangladesh is rural, its economy relies on agriculture. Thus, strengthening farm insurance procedures in Bangladesh can boost the agri-economy, which is now disorganised.

According to Bangladesh's rural economy, nearly half of all workers of Bangladesh and two-thirds in rural areas are directly employed by agriculture and about 87 percent of rural households rely on agriculture for at least part of their income. But are they securing their income procedure by entering agriculture insurance? The farmers can get best interest by knowing the processing of agriculture insurance.

1.2- Significance of the Research

Agriculture Insurance will generate a small but rising literature. "Perhaps the most important aspect of agriculture insurance is protecting farmers' investments, livelihoods, and families." Bangladeshi farmers lack financial protection. Since Bangladesh's economy relies on agriculture,

the Insurance Act 2010 has no component for safe farm insurance. However, the Act gives many development ideas and strong standards to keep contracts secure and legal for everyone.

Bangladesh is ignoring the issue, whereas most of the globe is planning and insuring its fields. This topic requires research to inform the public and government.

1.3- Research Question

Weather The Insurance Act 2010 ensure the Agriculture Insurance for the farmers?

1.4- Research Methodology

This thesis can be described as qualitative research. In conducting the research, sources like statutes, international conventions and some books are considered as primary sources. After this, for secondary resources, international and national journals, newspaper articles, websites and online journals are considered. This research paper looks at a range of challenges to find out a solution to the research question. The objective of this research paper is to explore and find how far the existing law ensures the agriculture insurance for the farmers and a nation also. In addition, the necessary materials related to this issue were collected and composed from websites, scholars blogs, journals and some articles.

1.5- The Research Scope and Limitations

In this research paper, I'm focusing on the legal analysis of the Insurance on Agriculture in the perspective of Bangladesh. Many restrictions were faced while doing the research. Because of my time limitations, I could not utilize many of my academic resources. There is a shortage of current information on this research area. If there are no time constraints and if other things are available for free on the internet, I will try to do more research and obtain more results. This study would be more informative and planned without these limitations.

1.6-Literature Review

The book named “ **BIRDS’ MODERN INSURANCE LAW**” authored by John Birds. The main theme is about the Insurance Law.

In this book first chapter titled “ The Nature and Definition of Insurance and Insurance Law”. In second chapter writer describes “The Insurance Regulation”, After this, in third chapter, the author explains “Insurable Interest”. In fourth chapter, the writer explains “Insurance of Third Parties’ Interests”. In fifth chapter, “Formation of the Insurance Contract” is described. “An offer to enter into an insurance contract may be made by a prospective insured or by an insurer.”¹

Here author gives a great idea on Insurance Law. This broad discussion on Insurance gives a proper knowledge how to make this type of contract and it is regulates as well. There are many types of Insurance, Agriculture Insurance is one of them. To make a proper type of contract between insurer and policyholder this book is helpful. To improve the system of Agri-economy, this basic knowledge on Insurance is useful. How the insurance industry today transacts vast amounts of business is also properly described in this book. There have lots of cases on Insurance Law also.

¹ BIRDS’ MODERN INSURANCE LAW, Tenth Edition, John Birds.

Here, the writer describes the whole proceedings of Insurance Law.

The second literature review, I am going to make is of the article named “ **INSURANCE PRINCIPLES AND PRACTICE**” created by M.N. Mishra and Dr .S.B. Mishra. In this book, the writers describe different types of Insurance. In fifth chapter of this book there is a part about Rural Insurance and Prospects of Agriculture Insurance in India. There have some charts which present the development system how working in India. Different types of challenges how can be solved in agriculture is also properly written in this book.

Actually, by realizing this book, we can be more aware of our own Agri-economy. Because, agriculture Insurance can make a great security on our agriculture dependent country. Our nearest country how maintaining there agriculture economy by the help of Agriculture Insurance this topic is the most important part of this book .

This article also recommends some ideas how can solve this problem. Here it is noticeable that, as an agriculture dependent country, we have to know all secure process to save our agriculture side of our country. By reading these types of book, we can improve our situation on agriculture. Insurance Law can be involved in this progress. Agri-economy can be more secured and improved by following rules and regulations as well. Some ideas on improving agriculture can be discovered by following these types of books also.

1.7- Conclusion

Numerous consequences, including a high percentage of people of our country continuing their livelihood on agriculture so that it should be secured by Agriculture Insurance. This may result in many challenges, farmers should be aware of this processing to protect their economy and their crops in legal way. Financial losses can be reduced by making agriculture Insurance. From at least 1920s, farmers are offered by agriculture insurance in many different countries in many different forms. Most of the farmers are not known with agriculture insurance which is their secure helper in fact. According to the context of Bangladesh, agriculture insurance can be a must needed insurance. So, the necessity of agriculture insurance should be well known by the farmers. Now in the next chapter I will be describing the concept of agriculture insurance according to insurance law.

Chapter 2

Concept of Agriculture Insurance

2.1- Introduction

Agriculture Insurance is a type of insurance that helps to protect farmers from financial losses caused by risks such as failure of crop, market fluctuations and natural disasters also. Farmers can get stability and support by this system. It is a great way to mitigate the risks and uncertainties in

agriculture. “When it comes to the business of agriculture, insurance is not just a means of protection against major events, loss and damage. Few industries are as heavily affected by unpredictable weather, fluctuations in supply and demand and day-to-day operational challenges. For this reason, agriculture insurance becomes a valuable risk management tool that allows farmers to plan for the future.”²

2.2-Agriculture and Insurance

Insurance means making sure and secure. So it can be said that it is nothing but making an arrangement for the payment of sum of money in the event of loss or injury to same body. Thus it can be said that the act or system of insuring is called insurance. According to some logic, it can be said that insurance appears concurrently with the appearance of human society. By facing need of insurance in human society, then insurance has been arrived actually.

So, in agricultural sight, insurance can discover a great effect on improving agricultural activity. This financial support can help the farmer to recover from the loss and continue their agricultural activities without facing extreme financial hardship. This type of insurance acts as a safety net for farmers, providing them with the necessary support when unforeseen events impact their crops.

2.3-Process for Agriculture Insurance Policy

Knowing the actual process is much important to get interest from this type of insurance. Firstly, a trained provider or agent can be involved usually for getting the knowledge of the process of the

² Importance of Agriculture, 2023, Reliant Insurance < <https://reliantinsurance.ca/blog/importance-of-agricultural-insurance/> >

insurance policy. They will guide and instruct through the application process, will also assess according to the needs and besides they will provide with a policy which will suit with requirements. The aforesaid provider or agent will know how can the farmers will get interests through agriculture insurance. There have some NGO's in Bangladesh, like BAAG. Here, traditional knowledge and innovations by the farmers are valued by BAAG. But it is not an insurance dependent NGO. But this type of famous NGO can make the publicity of agriculture insurance firstly, because there is no proper proclamation of agriculture insurance. After this, area based agriculture insurance will be arrived. The natural hazards differ from district to district. Weather indices have been prepared to decide the indemnity amount. Area based Agriculture insurance covers the risks of drought, flood etc. The agriculture insurance covers these, the value of protection desired for meeting the cost of cultivation and value of production etc. Farmers in the same region will receive the same rate of payment of claims in the area. So, from the above processing, the policy of this insurance will be different according to different places of the country. After these, regulations of IDRA is also involved here. The insurance products are sold with the help of NGO's and development agencies.

Prospects of Agriculture Insurance in Bangladesh

Agriculture is known as the oldest occupation and is the primary sector of the economy. The risks to be scaled up continuously to bring the much needed prosperity in rural economy. The risks are classified in agriculture under market risk, production risk, pest risk, investment and credit risk, institutional risk, technology risk and personal risk. Crop insurance and weather insurance are involved in Agriculture Insurance. There have six seasons in Bangladesh and then different types

of agricultural economy are gained through our farmers. So it is clear that our farmers are very interested in agriculture. They have selected agriculture for livelihood. So they will always interested to keep protection their livelihood by entering agriculture insurance process. By the support of government and non-governmental organizations will take this step to protect the agriculture -economy by the knowledge of insurance. Agriculture in Bangladesh is vital for people's livelihood, employment and contributing to GDP. Here, Agriculture Insurance can be a great secure protector of the economy where farmers will get their investment if they face any losses in their farm.

2.4-Conclusion

Setting up an agriculture insurance pool is still unclear for lacking of low experienced insurer, access to reinsurance on competitive terms, financial losses. Government should give a eye on this side to give support to the farmers and the agriculture. Besides non-governmental organization can promote crop insurance, strengthening marketing, education and awareness of the benefits of insurance. "Government policy can play an important role in agriculture insurance, as it helps to promote the availability of insurance products for farmers."³ "The contract contained a clause that the risk of loss due to robbery in transit was borne by the party providing the loan. In consideration for bearing this risk, the lender calculated interest on the loan at an exceptionally high rate."⁴ "Unfortunately, Bangladesh is highly exposed to extreme weather events . If agriculture at risk, it

³ Concept of agriculture Insurance, ILO < [⁴ A Study on Insurance: Its Development & Legal aspects in Bangladesh by Tanoy Kumer Saha & Tithi Rani Mondal](https://www.ilo.org/global/topics/employment-promotion/social-finance/impact-insurance/WCMS_877361/lang-en/index.htm#:~:text=Agriculture%20insurance%20is%20a%20relevant,production%20and%20income%20more%20effectively.></p></div><div data-bbox=)

can adversely impact livelihoods and cause food insecurity.”⁵ So agriculture insurance is an essential step to secure crops and farmers of Bangladesh.

Chapter 3

Agriculture Insurance in Bangladesh

3.1- Introduction

Bangladesh is an agricultural country and so, major part of economy is gained by it. From the very first, Bangladesh is showing activity on improving agriculture sight as the weather and soil is suitable for cultivating. There are about 800 rivers in Bangladesh so that it is called riverine country. For this reason, cultivation is easy for the farmers. But when natural disasters destroy the hard working land then the farmers suffered a lot because the crop is destroyed. Insurance on

⁵ The state of crop insurance in Bangladesh, The financial express < <https://thefinancialexpress.com.bd/views/the-state-of-crop-insurance-in-bangladesh-1567174854> >

Agriculture can be the safe guard of the farmers. There have some different types of insurance are available in Bangladesh. “Life Insurance, General Insurance, Reinsurance, Micro-insurance, Takaful or Islami insurance”⁶ are mostly known in Bangladesh. But agriculture insurance is not common to the cultivators indeed. “One of the major sectors of Bangladesh is agriculture. In the FY 2017-18, the contribution of agriculture in our national GDP was 13.75% (Bangladesh Bureau of Statistics), 45% of the population are directly dependent on agriculture.”⁷

In the Insurance Act 2010 has provided safe secure legal way with insurance policy which definitely can be connected for agriculture insurance. Therefore I am going to highlight the most important sections relevant as well as some other statues which are enacted and active regarding this issue.

3.2- Analysis of relevant laws and policies in Bangladesh

The Insurance Act 2010

The Insurance Act 2010 has relevant sections that how the companies and general people do insurance in legal way. To regulate and oversee the insurance industry, Insurance Act is mandatory. It will also help to promote confidence in the insurance sector and will encourage the growth of the industry.

With the other sections, I think section 8, section 21, section 44 and section 45 and section 58 are most important to protect an insurer. When an insurer will make agriculture insurance by following these aforesaid sections, then he will realize the secure and legal procedure which he is making,

⁶ Types of Insurance, Bangladesh Bank. – Index , Financial system overview < <https://www.bb.org.bd/en/index.php/financialactivity/insurance#:~:text=General%20Insurance%2C,Takaful%20or%20Islami%20insurance.> >

⁷ Agriculture scenario of Bangladesh, Green Delta Insurance < <https://green-delta.com/agriculture-insurance/> >

and how he is protected actually. Then it will create a well functioning insurance market that will benefit both insurers and policyholders. Additionally, by following these sections of The Insurance Act 2010, agricultural sector will follow this way to protect the economy through making agriculture insurance. These aforesaid sections are describing here-

Firstly, Section 8 ensures that, registration certificate is mandatory to make insurance. It is an evidence that one is registered for going into the contract. There will be noted about applicant's detail.

Secondly, Section 21 provides that, the essential requirements for capital and share holdings. In agricultural sight, capital and share holding processing will be helpful to protect the contract.

After this, Section 44 gives that, the facility of restrictions on grant of loan. The farmers will give more attention to protect the crops by knowing this section.

Then, Section 45 provides the liability of directors and others for loss, here the protector companies will take liabilities of the loss. In Agricultural way, farmers will use this section's facility.

And, Section 58 gives the restriction on payment by way of commission or otherwise for procuring business.

The Act has made for the establishment of an authority for the supervision of the business of insurance industry. From this Act, the basics of insurance policy has explained. Here in Bangladesh, IDRA is controlling the development of insurance of the country. "Inspection, inquiry and investigation of insurance institutions, developing new policies, controlling the fund and investment, maintenance of solvency margin and determining the proposed premium rate, giving advantage to insurer, settlement of dispute and providing the procedure for preparing actual

reports.”⁸ “IDRA has been established to make the insurance industry as the premier financial service provider in the country by structuring on an efficient corporate environment, by securing fetal aspiration of society and by strong deep into all section for high economic growth.”⁹ “ When loss has taken place, the insured becomes entitled to enforce the policy and the insurers become liable to pay the amount of the loss in accordance with its terms.”¹⁰

There are some Banks in Bangladesh which are helping agriculture and the farmers.

Bangladesh’s Agriculture insurance situation is very low

“Crop Insurance is not currently offered but two donor-supported initiatives are under implementation. On the supply side, there is a lack of knowledge and experience of the potential of agriculture services by the insurance companies.”¹¹

Various factors can be attributed for the low agriculture insurance situation in Bangladesh, such as limited awareness, and some other challenges in this effective insurance program. So, it is a complex issue where should give effort from various stakeholders. “In Bangladesh, the current per capita expenditure on insurance is USD 8 per person while in India it is USD 71 per person. So,

⁸ Insurance Act 2010, IDRA, Devex < <https://www.devex.com/organizations/insurance-development-and-regulatory-authority-idra-125925#:~:text=Inspection%2C%20inquiry%20and%20investigation%20of,procedure%20for%20preparing%20actuarial%20reports> >

⁹ IDRA Work, Regulators of the Financial System – Bangladesh Bank, Financialactivity > regulator < <https://www.bb.org.bd/en/index.php/financialactivity/regulator#:~:text=Insurance%20Authority&text=IDRA%20has%20been%20established%20to,segments%20for%20high%20economic%20growth.> >

¹⁰ Making of claim, A Study On Insurance: Its Development & Legal Aspects in Bangladesh

¹¹ Agriculture Situation in Bangladesh, financial protection forum < <https://www.financialprotectionforum.org/publication/bangladesh-agriculture-insurance-situation-analysis> >

there is considerable scope to develop the insurance market in Bangladesh.”¹² So, Bangladesh should gain more progress in economy in digital way.

3.3- Common risks that face in Bangladesh

Firstly, have to realize the common risk or challenges in doing agriculture in the land of Bangladesh. “Crop agriculture is constrained in Bangladesh every year by challenges, such as loss of arable land, population growth, climate change, imbalanced use of fertilizers, inefficient water use, pests and diseases, unfair produce price, and insufficient research investment.”¹³ “The government and various other stakeholders have long been calling for introducing in Bangladesh in order to mitigate risk of farmers in the event of losses resulting from floods, cyclone, droughts, unseasonal and excessive rains, and other weather-related events.”¹⁴ “Bangladesh is a low-income and highly vulnerable country that ranks among the top five countries most vulnerable to climate change. The profitability of agriculture is already low because of high risks and low returns,

¹² Potential Agriculture market Bangladesh, The Daily Star-Roundtables < <https://www.thedailystar.net/roundtables/news/unleashing-the-potential-agriculture-microinsurance-market-bangladesh-prospects-and-challenges-3013401> >

¹³ Crop agriculture of Bangladesh: Challenges and Opportunities < [https://www.researchgate.net/publication/250212260_Crop_Agriculture_of_Bangladesh_Challenges_and_Opportunities#:~:text=Crop%20agriculture%20is%20constrained%20in,investment%20\(Mondal%2C%202010\)%20.](https://www.researchgate.net/publication/250212260_Crop_Agriculture_of_Bangladesh_Challenges_and_Opportunities#:~:text=Crop%20agriculture%20is%20constrained%20in,investment%20(Mondal%2C%202010)%20.) >

¹⁴ Crop Insurance still elusive, The Daily Star < <https://www.thedailystar.net/business/economy/news/crop-insurance-still-elusive-3153351> >

making the risk of crop failure even higher. Given these realities, it should come as no surprise that the promoters of crop insurance in Bangladesh face several challenges.”¹⁵

Bangladesh is a country of different seasons. So, weather is one of the most challenges to protect agriculture in the land of Bangladesh. Most of the farmers are uneducated, that is a reason of this actually. The insurance company can call meeting with our farmers for publishing it accordingly. The farmers of Bangladesh face several challenges in accessing Agriculture Insurance. Here some main challenges are included: a) Limited Awareness, b) Affordability c) complex application process d) lack of trust, e) Insufficient coverage options.

These following difficulties are making suffering to the farmers in Bangladesh. So, now a days farmers are losing their interest to cultivate land. They do not know the secure policy which can solve their problem, it is Insurance. Insurance can access credit and loans and can make easier for farmers to secure financing operations. “ By providing financial protection against losses caused by unforeseen events, such as droughts and crop failures, agriculture insurance helps smallholder farmers recover from setbacks and continue their farming activities.”¹⁶ “Crop insurance is recommended as a useful instrument for the farmers to manage the diverse crop-related risk while covering the pertinent losses.”¹⁷ “In recent years, natural disasters, particularly climate-related

¹⁵ Key challenges to crop insurance in Bangladesh, linkedin < <https://www.linkedin.com/pulse/prospects-crop-insurance-bangladesh-reality-check-sajedul-islam> >

¹⁶ Insurance can help the farmers, Role of agriculture insurance < <https://timesofindia.indiatimes.com/blogs/voices/216303/#:~:text=By%20providing%20financial%20protection%20against,and%20continue%20their%20farming%20activities.> >

¹⁷ Factors Influencing the Adoption of Crop Insurance in Bangladesh, researchgate.net < https://www.researchgate.net/publication/366167947_Factors_Influencing_the_Adoption_of_Crop_Insurance_in_Bangladesh_A_Survey_Analysis#:~:text=Crop%20insurance%20is%20recommended%20as,risk%20management%20strategy%20in%20Bangladesh. >

disasters have increased both in terms of frequency and magnitude. As a consequence of climate disasters, agricultural dependent livelihood of Bangladesh is facing its substantial impacts.”¹⁸

So, there are many challenges in safe agriculture in Bangladesh. Here Agriculture Insurance is essential indeed, which can protect farmers and agriculture both. There is no available Agriculture Insurance Company in Bangladesh, so that the farmers have no knowledge about Insurance. The following companies will work on taking note according to the name of the farmers and will make insurance in legal way. Farmers of Bangladesh will work according to the rules of Insurance law by making awareness on it with the help of government. “While services account for a similar percentage of employment, they are an amalgam of many heterogeneous types of activities and no single activity is responsible for much employment except perhaps transport services. Thus, agriculture still remains the largest sector.”¹⁹ From the very first of Bangladesh, Agriculture is the most famous work choice of the people of Bangladesh. But now digital era has come and other develop countries are improving their agricultural economy by Agriculture Insurance. In tis way, Bangladesh is not reached yet. There are some problematic issues to do not go this way yet. Government should take eye on this matter as soon as possible to protect the main source of economy of Bangladesh.

3.4- Government support in Agriculture Insurance

¹⁸ Crop Insurance and risk management, Common risk in Bangladesh < https://www.researchgate.net/publication/299716323_Crop_Insurance_as_Risk_Management_Strategy_in_Bangladesh >

¹⁹ Current situation of agriculture in Bangladesh, The Daily Star < <https://www.thedailystar.net/supplements/celebrating-50-years-bangladesh/news/agriculture-bangladesh-the-last-and-the-next-fifty-years-2066689> >

The Government of Bangladesh has provided some government facilities in agricultural sight of the country. But these are not enough now actually. There are some banks in Bangladesh which are providing “Krishi Bima” to the farmers. “The agricultural Credit Department has been entrusted with the responsibilities of formulating agricultural credit policy for the country and its implementation.”²⁰ There are available of objectives of National Agriculture Policy in the system of Bangladesh. The rule and regulations are followed by the nation accordingly. “BAIDP improving vertical infrastructure and horizontal infrastructure.”²¹ It is a developing program which is organized by the government of Bangladesh. Agriculture sector plays an important role in overall economic development of Bangladesh. Achieving the target of self-sufficiency in food is one of avowed goals of the present Government. “Includes expansion of small irrigation facilities, reduction of water logging, production of improved quality and high yielding varieties of seeds and their preservation and distribution.”²² “Government considering the loss of crop (approximately 1 lakh ton) due to heat shock, the government has allocated Tk 420 million for the affected farmers. The ministry of agriculture should identify the ‘actual’ farmers who lost the crops and take steps to disburse the fund properly.”²³ “In order to continue agriculture-friendly initiatives, the government has spent Tk9000 crore annually to subsidize the sector.”²⁴

So, there are some valuable steps which are taken by the Government of Bangladesh. Bangladesh Government has no available rules and companies which are supporting the system of Agriculture

²⁰ Agricultural Credit Department, Bangladesh Bank < <https://www.bb.org.bd/en/index.php/about/deptdtl/3> >

²¹ USAID, Bangladesh Agricultural Infrastructure Development Program(BAIDP) < <https://www.usaid.gov/infrastructure/results/bangladesh-agricultural-development> >

²² Chapter 7, Bangladesh Economic Review 2017

²³ Budget FY22 & Support for agriculture, CSEMEs < <https://thefinancialexpress.com.bd/views/views/budget-fy22-support-for-agriculture-csmes-1620662153> >

²⁴ Timely government action helps agriculture sector to thrive, Dhaka Tribune < <https://www.dhakatribune.com/bangladesh/150100/timely-government-action-helps-agriculture-sector> >

Insurance. Even, there is no specific rule to maintain Agriculture Insurance in Insurance Act,2010. The Insurance Act 2010 is followed by the insurer and the companies of the nation. As the farmers are the heart of the agriculture, farmers protection should mandatory for Bangladesh. Bangladesh will show more hope and achievement through enter into Agriculture Insurance. Then farmers will gain the courage also that Insurance will protect them from the economic losses.

Regulation of IDRA

IDRA regulates the Insurance Development in Bangladesh. This regulator can take serious step to develop Bangladesh's safe protection in agriculture. "Government of Bangladesh has enacted the Insurance Act 2010 to develop and regulate the insurance business. IDRA has established for the purpose of supervising the insurance business and safeguarding the interest of policy holder."²⁵ "Inspection, inquiry, and investigation of insurance institutions, developing new policies and other maintenances."²⁶ IDRA can improve the agricultural situation in Bangladesh because, the regulation process is maintained by them.

3.5-Conclusion

²⁵ INSURANCE DEVELOPMENT AND REGULATORY AUTHORITY, Climate < <https://www.devex.com/organizations/insurance-development-and-regulatory-authority-idra-125925#:~:text=Government%20of%20Bangladesh%20has%20enacted,the%20interest%20of%20policy%20holder.>

>
²⁶ IDRA, activities of IDRA < <https://www.devex.com/organizations/insurance-development-and-regulatory-authority-idra-125925#:~:text=Inspection%20of%20inquiry%20and%20investigation%20of,procedure%20for%20preparing%20actuarial%20reports> >

According to Bangladesh, Agriculture Insurance is a newly introduced improver for economy. “Government can play an important role in the introduction of new agricultural insurance programs by supporting (i) farmer awareness and education programs and (ii) capacity building and workshops and technical training programs for key agricultural insurance staff. The company field staff will also need to receive suitable training in operating systems and procedures.”²⁷ Agriculture Insurance how can be a safe guard of the farmers, the government will introduce to the insurance companies and farmers. “ Crop Insurance is a contract of indemnity by which, for a specified premium, one party promises to compensate another for the financial loss incurred by the destruction of agricultural products from the forces of nature, such as rain, hail, frost, or insect infestation.”²⁸ Farmers of Bangladesh are not well introduced with agriculture insurance yet. The Insurance Act, 2010 should be applied in Agriculture in Bangladesh for growing agriculture economy with proper protection of farmers investment. “Agriculture is a source of employment for nearly 50% of adult population in Bangladesh contributing to 13 % of GDP in 2019. The country is highly exposed to climate change risks: cyclones, floods, droughts and saltwater inundation due to tidal surges.”²⁹ So, here in Bangladesh, the importance of agriculture insurance can not be described in words. There have a little sum of number of insurance company who are working on Agriculture Insurance which are not enough for Bangladesh actually.

²⁷ Agriculture Insurance in Bangladesh – World Bank Document < <https://openknowledge.worldbank.org/server/api/core/bitstreams/18bcb201-963f-501e-8b05-670a99281572/content> >

²⁸ A Study on Insurance: Its Development & Legal Aspects in Bangladesh by Tanoy Kumer Saha & Tithi Rani Mondal

²⁹ Bangladesh, Crop insurance, Index Insurance Forum < <https://www.indexinsuranceforum.org/region/bangladesh> >

Chapter 4

International Aspect

4.1- Introduction

Agriculture Insurance is internationally known as safe secure solution for different problems of the farmers. Agriculture is oldest income source of many countries of the world. So, it is the backbone of many countries from the very first. Here, Insurance has been involved to protect from different types of losses of the farmers. Internationally, many organizations and companies are working on this topic and also showing many improvement results. From the World Bank Report,

there are provided the agriculture data and development of insurance. Here it is cleared that, many developing countries have grown up their economic position by improving their agriculture.

Now I will give how international agriculture insurance deals to keep secure the agriculture economy through Insurance and developing day by day, as well as our neighbor country India and USA as western developed country, deal with this matter.

4.2- International Situation

“Many billions of dollars are spent each year on premium subsidies and other forms of financial support for agriculture insurance. A World Bank study estimated that in 2007, the total global cost to governments was \$20 billion. However, that figure seems low today given that just three countries – China, India and the US, are together spending about \$17.7 billion each year.”³⁰ During the year 2004 the committee for the Insurance for Agriculture Risks of CEA has elaborated a questionnaire with the aim of establishing the Average annual amount of losses.”³¹ “A high number of insurers in countries which are developing, are undercapitalized. Consequently, their capacity to presume risks is limited.”³²

Different country has different weather, so their cultivation process and crops are different also. Farmers are known by the weather of their own weather. Many insurance companies are working worldwide to make improve report or loss report of the countries. Farmers are enjoying the

³⁰ World Bank Document, International labor organization, < https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_613707.pdf >

³¹ Agriculture Insurance Schemes, European Union < https://agriculture.ec.europa.eu/system/files/2020-04/ext-study-insurance-full-report_2006_en_0.pdf >

³² Unctad, Agriculture Insurance in Developing Countries, < https://unctad.org/system/files/official-document/unctadsddins1Rev.1_en.pdf >

facilities of the Agriculture Insurance internationally. Asian countries agriculture profession is very old, their soil is also friendly with the crops. Here rice is staple food crop for the Asian. So, paddy is cultivated more here. Other crops are also cultivated good here. But the farmers are not well educated on agriculture insurance here. But now a days agriculture insurance companies are also growing in Asia also. “Agriculture insurance program have grown considerably over the past 25 years and now are an integral part of many domestic support programs.”³³ “Agriculture Financial Services (AFSC) provides crop insurance for annual and perennial crops as well as honey and bee overwintering.”³⁴

So, there are lots of agriculture insurance companies in the world, which are working on this matter. Cultivation of crops are depended on the weather mainly, that’s why different nation are well developed in different cultivation. Now the digital era is going, Agriculture Insurance policy is a part of this digital era. The insurers are identifying the land which needs protection, and can count down the farmers name and land organization through online. So, Agriculture Insurance is quite easier to the companies now. Internationally, the insurance companies are introduced through online. For this type of opportunity, international companies are now working easily.

“In 2018, ISF Advisors carried out an in-depth analysis of the rate of access to agriculture-insurance coverage for the combined population of smallholders in developing markets. According to the estimates, only 19 percent of the target population of 268 million smallholders currently has

³³ Agriculture insurance and the World Trade Organization, International Food Policy Research Institute < <https://www.ifpri.org/publication/agricultural-insurance-and-world-trade-organization>>

³⁴ Crop Insurance, Agriculture Financial Services 2023, < [25](https://afsc.ca/crop-insurance/#:~:text=Agriculture%20Financial%20Services%20(AFSC)%20provides,unique%20needs%20of%20each%20operation.></p></div><div data-bbox=)

access to agriculture insurance coverage.”³⁵ “In India and Kenya alike, governments have provided support for the data collection to design the insurance products, as well as premium co-financing to lower the cost to farmers and incentivize insurance companies to extend coverage.”³⁶

From the above broad discussion, it is cleared that, Agriculture Insurance is well established internationally. Developing countries are mainly introducing how they are protecting their agricultural sight to the world. The countries are applying many rule and regulations in legal way for their safe cultivation through Insurance and besides, they are showing their improvement reports internationally. International Organizations are also supporting this legal way.

4.3- India’s perspective regarding this issue

India is now well developed in agriculture and well designed with the process of insurance. There are enough agriculture insurance companies to manage the agriculture secure in legal way. I am explaining some steps which are taken by the Indian government according to insurance law in agriculture.

“The Government and the Agriculture Insurance Company of India Limited (AIC) have passed through the learning curve in all areas of crop insurance. The insurance charges and claims in respect of crops insured in any stage is shared between the central Crop Insurance Fund and Crop Insurance Fund set up by the State Government concerned in the ratio of 2:1.”³⁷ There’s number of farmers covered under crop insurance has been increasing. Crop insurance is a part of

³⁵ Food and Agriculture Organization, Protecting livelihoods <https://www.fao.org/3/cb2690en/cb2690en.pdf>

³⁶ Agriculture Insurance, Brookings < <https://www.brookings.edu/articles/agricultural-insurance-the-antidote-to-many-economic-illnesses/> >

³⁷ Insurance principles and practice by M.N. MISHRA and Dr. S.B. MISHRA

Agriculture Insurance. It has included the risk of weather, yield and so on. According to Indian report, here index based insurance is gaining rapidly interest in India. “To make the Crop Insurance Schemes more farmer friendly, a restructured Central Sector Scheme in the name of ‘ National Crop Insurance Program was introduced from Rabi 2013-14.”³⁸ “India’s crop insurance program is the world’s largest with 25 million farmers insured. However, issues in design, particularly related to delays in claims settlement, have led to 95 million farmer households not being covered, despite significant government subsidy.”³⁹

Therefore, India has about proper design and plans on agriculture insurance, and their developing process in insurance is improving. They showing their improvement report internationally and earning more money through making this legal contract of agriculture insurance.

4.4- USA’s Perspective regarding this issue

USA is the most develop country in the world. USA’s government and non-governmental insurers offer various programs to support farmers. As a most develop country, USA is not only depending on agriculture, but also have many other income sources. They have proper laws to maintain the insurance policy to the farmers. There are lots of examples on how USA maintain the agriculture insurance strictly and how much friendly with the farmers.

³⁸ Crop Insurance In India- Lok Sabha Secretariat Intranet < https://loksabhadocs.nic.in/Refinput/New_Reference_Notes/English/CROP%20INSURANCE%20IN%20INDIA.pdf >

³⁹ Improving Farmers’ Access to Agricultural Insurance in India, World Bank e Library < <https://elibrary.worldbank.org/doi/abs/10.1596/1813-9450-5987> >

“The United States adopts a government-initiated and commercial insurance company-operated mode. Besides, here it is a rule that, no tax for crop insurance from federal government or local government also.”⁴⁰ The program of USA is used as a model for other countries of the world because of high participation by farmers indeed. They achieved a record participation rate also. So, they are providing many facilities on agriculture insurance and have a stable economy.

4.5- Conclusion:

“In many countries, there are no insurance providers that are able or willing to drive innovative market development.”⁴¹ Actually, agriculture insurance is called a risk management insurance, By researching international report of agricultural insurance, it is found that developing countries are making insurance now a days more for secure agriculture economy. And develop countries are well designed with agriculture insure from the very first. Besides, the international reports are showing the improvement report. Next chapter will be my last chapter. In this chapter, I will discuss what is my findings and will give recommendations for them also with the conclusion remark

Chapter 5

Findings and Recommendation

⁴⁰ Agriculture Treaty Reinsurance, AXA XL <
<http://www.pbc.gov.cn/english/130736/2882924/2015090811223531574.pdf> >

⁴¹ How agriculture insurance can improve food security, Access to Insurance Initiative <
https://a2ii.org/sites/default/files/2019-07/how_agricultural_insurance_can_improve_food_security_and_why_regulation_matters.pdf >

5.1- Introduction

Farmers are the heart of Agriculture. Many developing countries are depending on agriculture till now. So, a secure insurance policy for the farmers should be mandatory. When the decisions are taken about the farmers, it should be made on the basis of best interest principle. The necessity behind the concept is that farmers require special protection because by going lots of difficulties like weather problem, financial problem and others, farmers produce foods and other daily necessities for nation's daily life. As a safe legal solution, Agriculture Insurance can be a support for the farmers as well as agriculture dependent countries. From the historic report, insurance has some legal strict rules and regulations which are applying in agriculture. Through this process, farmers are getting security and hope for more cultivation. On this policy, the farmer (insured) pays a sum and in percentage to an insurance company (insurer) to guarantee against loss.

5.2- Findings and Recommendations

The responsibilities of producing the major part of food are going on the farmers besides they play a significant role in GDP of a nation. But the they are not getting proper security to protect their cultivation and crops. Agriculture insurance is a legal contract for several difficulties of the farmers. "Insurance operates most effectively when the pool of people exposed to a certain kind of risk do not all suffer a loss at the same time."⁴² So, agriculture insurance is an essential contract

⁴² Background on: Crop Insurance, Commercial < <https://www.iii.org/article/background-on-crop-insurance> >

for the farmers, specially for the developing countries. However, the followings are some potential outcomes that might be drawn from a thesis on the Agriculture Insurance in Bangladesh.

Legal Steps

We found from the analysis that farmers of Bangladesh face various challenges by doing their profession for livelihood. There have only Insurance Act, 2010 for maintain the insurance of the country, but no other law recognized here properly. This Act can not cover the whole procedures and maintenance of the agriculture insurance. Agriculture insurance needs a new step which should be taken by the government of Bangladesh. Because, from Independence time, agriculture is taking the major part of economy of the country. So, farmers of Bangladesh need secure system of their valuable profession which is the main source of our GDP. To make agriculture insurance publicity, government may take these following steps –

1. Make any policies or law for the farmers who are suffering from financial losses for cultivate land. This law will ensure the agriculture insurance will be applied all farmers of the country.

2. There are no proper data or statistics how the farmers loss financial stage each year and which is the major reason for their losses. So, make a correct database of them.
3. Sadly, farmers are facing lots of challenges for cultivating but they are not well known with agriculture insurance indeed. Government should advertise this legal contract by the help of the rules of insurance, then farmers will make this legal contract for their own interest and will improve national agriculture economic situation.
4. Should find out the appropriate reasons of sufferings and losing in agricultural sectors in Bangladesh and create rules how the young generations can be interested to improve agriculture insurance also.

Insurance Company Support

“Farmers need to carry liability insurance to pay for mishaps involving third parties. A standard commercial general liability policy and commercial property plan may be all needed.”⁴³ It is cleared that, if make perfect situation of agriculture insurance, there need enough insurance companies. The workers of the companies will make agriculture more interesting to the people and they feel free to take any type of help from those workers. Available government and non-governmental companies can introduce agriculture insurance to general people of the country. Insurance Act will apply rule on this matter that there will be enough insurance companies which will count down the farmers and their necessities in their land. The companies will show the chart where will be noted about how much farmers enter into this insurance in a year. There have some

⁴³ Some Key Benefits for Farmers to Carry Farm Insurance, Leland smith < <https://lelandsmith.com/blog/what-are-the-benefits-of-farm-insurance-to-farmers/#:~:text=Farmers%20need%20to%20carry%20liability,a%20commercial%20general%20liability%20policy> >

few agriculture insurance companies in Bangladesh but these are not enough at all and these are also unregulated, management process is very low and also lack of regulatory framework. So Bangladesh needs Agriculture Insurance Support to improve this sector. Besides Government will give attention on these company's improvement. The Companies will maintain the available land for cultivation and will make interests in this work in proper way.

Significant Challenges for Agriculture Insurance

“Challenges facing agricultural insurance development include; moral and adverse selection, post-disaster relief, absence of infrastructure support, intensive data collection; demand constraints caused low incomes for the vast majority of the population etc.”⁴⁴ “Farmers today are confronted with a variety of challenges like- The depletion of valuable resources necessary to sustain modern farms, Farmland degradation and undervaluing its capacity and others.”⁴⁵ “In 2023, the agriculture industry faced challenges threatening global stability and food security.”⁴⁶ “Agriculture is the core of Bangladeshi economy, playing an essential role in reducing poverty and achieving food security in the past.”⁴⁷ “The impact of climate change is a great concern for Bangladesh, where lives and

⁴⁴ Challenges and prospects of agricultural insurance market, Research gate < <https://lelandsmith.com/blog/what-are-the-benefits-of-farm-insurance-to-farmers/#:~:text=Farmers%20need%20to%20carry%20liability,a%20commercial%20general%20liability%20policy> . >

⁴⁵ Matt Lail, ‘ Top Challenges for Modern Agriculture’ (2 August, 2023) < <https://vlsci.com/blog/top-challenges-for-modern-agriculture-in-2023/> >

⁴⁶ The Top 6 Concerns of the Agricultural Industry in 2023- Produce Pay < <https://producepay.com/blog/the-top-6-concerns-of-the-agricultural-industry-in-2023/#:~:text=In%202023%2C%20the%20agricultural%20industry,capital%2C%20and%20alarming%20food%20wa> ste. >

⁴⁷ Light Castle Analytics Wing, ‘Agricultural Productivity in Bangladesh and Green Revolution’ < <https://www.lightcastlebd.com/insights/2021/08/agricultural-productivity-in-bangladesh-and-green-revolution-where-are-we-heading-3/> > accessed 19 August 2021

livelihoods depend mainly on agriculture.”⁴⁸ Weather is a great challenge for the cultivation, it makes sufferings to the farmers. Now a days, agricultural land is decreasing in Bangladesh, many industries are taking place here which are destroying those land. It is making hard agriculture situation here in Bangladesh. New generation of this country is not much interested about doing agriculture because of lacking of facilities in agriculture. Low income is another reason for losing interest. There has no enough proper legal rules and rights also. “Experts believe that there is no evidence that significant reforms have been taken to protect the interest of the agricultural sector and farmers.”⁴⁹ Making agriculture insurance can be a proper and right step to get good evidence on agriculture. “According to the International Labor Organization (ILO), the employment in the service and agricultural sectors both reached 27.3 million in 2019.”⁵⁰ Agriculture insurance can be make interest in agriculture which insures a good security .

But all of these sufferings can be reduced by the help of agriculture insurance. Government should take proper rules and regulations on making friend of the farmers. Insurance can reduce their sufferings, they have to know. Then they will get interest on doing more agricultural work without thinking of their losses at all. The rules of Insurance law will be applied accordingly here. Governmental support on agriculture insurance can be the best reducer of farmer’s suffering and also sufferings of the agriculture economy.

⁴⁸ Minhazur Rahman, ‘Impact of climate change on agricultural’ < <https://thefinancialexpress.com.bd/views/views/impact-of-climate-change-on-agricultural-1518619832> > accessed 15 February 2018

⁴⁹ Dr Matiur Rahman, ‘Why Young Generation Losing Interest in Agriculture- Daily Sun’ (Dhaka, 17 October 2021) < <https://www.daily-sun.com/printversion/details/582901/Why-Young-Generation-Losing-Interest-in-Agriculture> >

⁵⁰ Farhad Ifaz, ‘How to make agriculture attractive for Bangladesh youth’ (White Board Magazine, 16 June 2021) < <https://whiteboardmagazine.com/2347/how-to-make-agriculture-attractive-for-bangladeshi-youth/#:~:text=Fewer%20young%20people%20are%20pursuing,2010%20to%2011.5%25%20in%202020.> >

Overall, the result of a thesis on agriculture insurance may emphasize the importance of the support of insurance on improving the farmers position, the value of support systems and the necessity of legislative and regulatory changes to defend the farmers and agriculture economy of Bangladesh.

5.3- Conclusion

In concluding this discussion I would like to submit that solution is that the government may make law on Agriculture Insurance, increase insurance companies. Increase public awareness, give support on agriculture according to law with proper rules and regulations and make secure contract for the farmers to protect them from financial losses. It is clear that, the Insurance Act of Bangladesh is not covering the whole process of agriculture insurance. So, the government should give more attention on this matter to update the agricultural position of Bangladesh.

The additional research is needed on the issue of lacking of support by the government in the matter of agriculture insurance. Enough insurance company can support the farmers by providing many scientific knowledge to the farmers. Farmers can take financial support from the insurance companies. Besides they will submit the report of the insurance taking farmers numbers and their improvement of their financial losses. Even they will submit the profit chart also. Limitation of financial support, weather disasters, lacking of agricultural knowledge and education are making

the suffering to the farmers actually. In case of crop loss the farmers need to intimate the insurance company without delay. In the first stage, government should make this legal contract policy by making proper Act and should be applied immediately for save agriculture economy from the losses. This awareness of a wider influence will motivate individuals to play a bigger part in reducing the sufferings of the farmers of Bangladesh.

Bibliography

Legislation/Statutes

1. Insurance Act 2010
2. Insurance law
3. United Nations Conference on Trade and Development (UNCTAD)
4. Insurance Development and Regulatory Authority of Bangladesh (IDRA)

Cases

1. Hooley Hill Rubber & Chemical Co Ltd and Royal Insurance Co Ltd' Arbitration, Re
2. Everett v Des borough (1829)

3. Agnew-Surpass Stores v Cumber- Yonge Investments (1975)
4. Arterial Caravans v Yorkshire Insurance Co (1973)
5. Bond Air Services v Hill (1955)
6. Farmers Insurance Group of Companies v. Workers' Company Appeals Bd.

Books

1. BIRDS' MODERN INSURANCE LAW (Tenth Edition, e book published in 25 April, 2022) <<https://www.sweetandmaxwell.co.uk/Product/Academic-Law/Birds-Modern-Insurance-Law/Paperback-and-eBook-ProView/43018919> >
2. INSURANCE PRINCIPLE AND PRACTICE by M.N. MISHRA & Dr. S.B. MISHRA (ISBN: 81-219-1021-8, S. CHAND & COMPANY LTD.) accessed on 2014-2015
3. A Study on Insurance: Its Development & Legal Aspects in Bangladesh by Tanoy Kumer Saha & Tithi Rani Mondal accessed on March,2014
4. Innovative agriculture insurance products and schemes by Kang M.G.,2007 <https://books.google.com.bd/books?id=JYfN-y6TUHUC&pg=PA1&lpg=PA1&dq=Agriculture+Insurance&source=bl&ots=M6CmxddiNx&sig=ACfU3U12ZWCBA10FNPYTAZoPtQ6TJusN2A&hl=en&sa=X&ved=2ahUKEwiNtv22qP2CAxVUe_UHHTTVCBk4MhDoAXoECAIQAw >

Journal Article

1. Agriculture Insurance, International Labor Organization, 1996, <https://www.ilo.org/global/topics/employment-promotion/social-finance/impact-insurance/WCMS_877361/lang--en/index.htm >
2. Quayyum, Shah Nur, Clarke, Danial Jonathan, Bangladesh: Agriculture Insurance situation analysis, 27 December 2018, Prevention Web <<https://www.preventionweb.net/publication/bangladesh-agriculture-insurance-situation-analysis> >

3. Agriculture Insurance, April 2017, Asian Development Bank < <https://www.adb.org/publications/agriculture-insurance> >
4. Joseph W. Glauber, Agriculture insurance and World Trade Organization, International Food Policy Research Institute < <https://www.ifpri.org/publication/agricultural-insurance-and-world-trade-organization> >
5. Agriculture Insurance, IGI, Industrial and General Insurance Plc < <https://www.iginigeria.com/products/non-life-products/agricultural-insurance/> >
6. DA Ankrah, 2021, Agriculture insurance access and acceptability, Agriculture & Food Security < <https://agricultureandfoodsecurity.biomedcentral.com/articles/10.1186/s40066-021-00292-y> >
7. Panos Varangis, Agriculture Finance & Agriculture Insurance, World Bank < <https://www.worldbank.org/en/topic/financialsector/brief/agriculture-finance> >
8. Gracelin Baskaran and Barry Maher, May 26, 2021, Agriculture Insurance. Brookings< <https://www.brookings.edu/articles/agricultural-insurance-the-antidote-to-many-economic-illnesses/> >
9. The state of crop insurance in Bangladesh, 2019, The Financial Express < <https://thefinancialexpress.com.bd/views/the-state-of-crop-insurance-in-bangladesh-1567174854> >
10. Crop and Livestock Insurance, United States Department of Agriculture< <https://www.usda.gov/topics/farming/crop-and-livestock-insurance> >
11. A Closer Look at China's Agriculture Insurance Pilot, August 2020, GFDRR < <https://www.usda.gov/topics/farming/crop-and-livestock-insurance> >
12. Amarnath, 2020, "Project Completion report-2020" Relief web < <https://reliefweb.int/report/bangladesh/project-completion-report-2020-index-based-agriculture-insurance-haor-area-report> >
13. Oliver Mahul, 1 Feb 2013, Government Support to Agriculture Insurance, World Bank e Library< <https://reliefweb.int/report/bangladesh/project-completion-report-2020-index-based-agriculture-insurance-haor-area-report> >
14. Crop Insurance: Update on Opportunities to Reduce Program Costs, 2023, Government Accountability Office < <https://www.gao.gov/products/gao-24-106086> >

15. Crop Insurance, National Association of Insurance Commissioners < <https://content.naic.org/cipr-topics/crop-insurance> >
16. Innovative index-based agriculture insurance: Where hope meets possibility, 18 November 2020, Prevention Web < <https://www.preventionweb.net/news/innovative-index-based-agriculture-insurance-where-hope-meets-possibility> >
17. V.H. Smith, 2012, Agriculture insurance in developed countries JSTOR < <https://www.jstor.org/stable/23273811>

Newspaper Article

1. Agriculture Insurance still elusive, (October 27, 2022, The Daily Star) < <https://www.thedailystar.net/business/economy/news/crop-insurance-still-elusive-3153351> >
2. “How livestock insurance can lead to sustainable agricultural development”, Dr Md Saidur Rahman & Md Sayemul Islam, (19 June, 2023, The Business Standard) < <https://www.tbsnews.net/thoughts/how-livestock-insurance-can-lead-sustainable-agricultural-development-652598> >
3. Crop Insurance Latest News, The Economic Times < <https://economictimes.indiatimes.com/topic/crop-insurance> >
4. Agriculture in Bangladesh: The last and the next fifty years, (M. Asaduzzaman, 26 March, 2021, The Daily Star) < <https://www.thedailystar.net/supplements/celebrating-50-years-bangladesh/news/agriculture-bangladesh-the-last-and-the-next-fifty-years-2066689> >
5. Increase in farm insurance enrolments for two years in row, (October, 11, 2023, Hindustan Times) < <https://www.hindustantimes.com/india-news/increase-in-farm-insurance-enrolments-for-two-years-in-row-101696962862205.html> >

Websites

1. Insurance Development and Regulatory Authority (IDRA), Devex < <https://www.devex.com/organizations/insurance-development-and-regulatory-authority-idra-125925> >
2. Risk Management and Crop Insurance Education Program, University of Maine Extension < <https://extension.umaine.edu/agriculture/crop-insurance/> >
3. IFC, Green Delta Crop Insurance for Farmers, International Finance Corporation < <https://pressroom.ifc.org/all/pages/PressDetail.aspx?ID=24484> >
4. Impact of digital agriculture on smallholder farmers, United Nations in Bangladesh < <https://bangladesh.un.org/en/223522-impact-digital-agriculture-smallholder-farmers-bangladesh> >
5. Increasing Access to Finance for Farmers Organization, Global Agriculture and Food Security Program < <https://www.gafspfund.org/projects/increasing-access-finance-farmers-organizations-bangladesh> >
6. BRAC Institute of Government and Development, < <https://bigd.bracu.ac.bd/study/leveraging-digital-technology-to-make-crop-insurance-more-accessible-to-women-the-effects-of-flexible-payment-schedules-on-womens-uptake-and-bargaining-power/> >
7. International Water Management Institute < <https://www.iwmi.cgiar.org/success-stories/how-hi-tech-insurance-is-helping-farmers-survive-floods/> >

Blogs

1. Arup Kumer Chatterjee, “Crop insurance is a valuable climate adaptation tool for disaster prone countries like Bangladesh” (2018) < <https://blogs.adb.org/blog/crop-insurance-lessons-my-field-trip-rajshahi> > accessed on 23 August, 2018.
2. M. Mehrab Bakhtiar, Md. Aminul Karim, Raisa Shamma, and Julie Ghostlaw, “Agricultural Microinsurance: Opportunities And Challenges”, Event Blog < <https://bangladesh.ifpri.info/2023/02/event-blog-agricultural-microinsurance-opportunities-and-challenges/> > accessed on 27 February, 2023.

3. Matt Lail, “ Top Challenges for Modern Agriculture in 2023” (2023) <
<https://vlsci.com/blog/top-challenges-for-modern-agriculture-in-2023/> >

Thesis

1. Li Zhang, “ Three essays on agricultural risk and insurance” (Iowa State University, 2008)
< <https://core.ac.uk/download/pdf/38911855.pdf> >
2. Xiaoxue Du, “Essays on the Economics of Crop and Livestock Insurance”(2017)
University of California.
<
https://escholarship.org/content/qt94j5f8fw/qt94j5f8fw_noSplash_924affd7b980df8ebda364524908681e.pdf?t=otc2bx >