



গড়গাঁও মহাবিদ্যালয়
GARGAON COLLEGE



Linkages/Collaborations

Gargaon College

2019-20

List of Collaborations, 2019-20

Sl.No	Parent Institution	Collaborating Institutions	Nature of Work	Year of Activity
1	Gargaon College	Women's College, Tinsukia, Assam	Research Paper	2020
2	Gargaon College	Women's College, Tinsukia, Assam	Research Paper	2020

Collaboration between Gargaon College & Women's College, Tinsukia, Assam

Outline of the Activity

Collaborative Research

Surajit Saikia

Department of Economics, Gargaon College

&

Bhagyalakhi Gogoi

Department of Economics, Women's College Tinsukia, Assam

Title of the Paper: Use of Modified Entropy Index and Logit

Transformation Model to Access Non-Crop Enterprise

Diversification in the Flood Affected Areas of Assam, India

Title of the Journal: International Journal of Innovative

Technology and Exploring Engineering

Photograph of the Activity

OPEN ACCESS International Journal of Recent Technology and Engineering (IJRTE)
ISSN: 2277-3878 (Online), Volume-8 Issue-6, March 2020

Use of Modified Entropy Index and Logit Transformation Model to Access Non-Crop Enterprise Diversification in the Flood Affected Areas of Assam, India

B. Gogoi, S. Saikia

Abstract: Changing climatic condition like increasing density of rainfall, more siltation in the river beds etc., stimulates devastating flood in Assam. Year after year the changing nature of flood in Assam extemporize more risk in agriculture. In such circumstances, risk mitigation and livelihood security in the flood prone agricultural sector of Assam becomes one of the key agendas for development of the small and marginal farmers. Different studies have brought this issue of climate change and risk in agriculture and opined that crop diversification is one of the prolific strategies to mitigate risk and ensure livelihood in agriculture. However, very few studies have mentioned about non-crop enterprise diversification and risk mitigation in the agricultural sector of Assam. Therefore, an attempt has been made to examine the impact of non-crop enterprise diversification in risk mitigation in the flood prone areas of Assam by using Modified Entropy Index and Logit Transformation Model. The findings of the study show that the farmers in the flood prone areas under study diversified more non-crop enterprises than in the flood free areas. Therefore, small and marginal farmers of the flood prone areas of the study can takenon-crop sector to be an effective measure to combat flood like situations.

Key words: Non-Crop Enterprise Diversification, Risk Mitigation, flood, prolific strategy.

I. INTRODUCTION

Frequent and destructive nature of flood causes huge loses to the farm families of Assam and extemporize more risk in agriculture. Therefore, risk mitigation and livelihood security in the flood prone agricultural sector of Assam becomes one of the key agendas for the small and marginal farmers. Different research studies found that improper policy measures and institutional failures in agriculture make the sector more challenging for development.

II. OBJECTIVES OF THE STUDY

A. To examine the extent of non-crop enterprise diversification through Modified Entropy Index.
B. To identify the determinants of non-crop enterprise diversification through Logit Transformation Model.

III. METHODOLOGY

This paper is completely based on primary data. The locations for field investigation were limited only to the

Manuscript received on February 10, 2020.
Revised Manuscript received on February 20, 2020.
Manuscript published on March 30, 2020.
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Retrieval Number: F38390386202020@BEIESP
DOI:10.35940/ijrte.F3839.0319020
Journal Website: www.ijrte.org

Published By:
Blue Eyes Intelligence Engineering & Sciences Publication

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Collaboration between Gargaon College & Women's College, Tinsukia, Assam

Outline of the Activity

Collaborative Research

Surajit Saikia

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Department of Economics, Women's College Tinsukia, Assam

Title of the Paper: A Panel Data Analysis Model to Assess the Impact of Institutional Factors on Crop Diversification of Assam, India

Title of the Journal: International Journal of Innovative Technology and Exploring Engineering

Photograph/video link of the Activity

OPEN ACCESS International Journal of Innovative Technology and Exploring Engineering (IJITEE)
ISSN: 2278-3075 (Online), Volume-9 Issue-6, April 2020

A Panel Data Analysis Model to Assess the Impact of Institutional Factors on Crop Diversification of Assam, India

B. Gogoi, S. Saikia

Abstract: The process of crop diversification is generally used in agriculture to mitigate both production and price risk. Crop diversification is a process through which farmers diversify his farm activities from one crop to different value added crops so that he minimizes the existing risk in his farm operation. Most of the studies in literature in context to crop diversification have identified different factors that influence crop diversification in their study area. However, very few studies have attempted to examine the impact of institutional factors on crop diversification at macro level by using district level panel data in Assam. Therefore, this study makes an attempt to examine the impact of institutional factors on crop diversification through panel analysis. To fulfill the objective of this paper secondary data have been collected from different issues of Statistical Hand Book of Assam, assamstate.com, RBI, etc. The overall results of this paper show that institutional factors like farm size have positive impact on crop diversification except institutional credit. Institutional credit has negative impact on crop diversification. This paper will definitely help to bring some policy changes in the macro level to optimize crop diversification in the region.

Keywords: Institutional factors, crop diversification, climate change, risk mitigation

I. INTRODUCTION

A sustained economic growth, rising per capita income and growing urbanization are ostensibly causing a shift in the consumption patterns in favor of high-value food commodities like fruits, vegetables, dairy, poultry, meat and fish products from staple food such as rice, wheat and coarse cereals. The demand for and supply of these commodities have grown much faster than those of food grains [1, 2]. And this change is not confined to the higher income group of the Indian society only but is visible in the lower income or 'below poverty line' segment also. Such a shift in consumption patterns in favor of high-value food commodities even among the poorest strata of the India society depicts an on-going process of transformation that is leading towards a 'silent revolution' of agricultural diversification. This revolution or process of transformation is also reflected in the rising exports of high-value agricultural products [3].

Diversification of Agriculture is a process that has several dimensions. It can be viewed, narrowly, as a larger mix of activities within agriculture involving crop substitution. Diversification can also involve a shift of resources from one crop to a larger mix of crops keeping in view the varying nature of risks and expected returns from each crop/livestock activity, and adjusting in such a way that it leads to optimum portfolio of income [4].

Uncertainties and risk are two important parts in the discussions of agricultural economics. Therefore, risk and uncertainties play vital role in any kind of decision making process in agriculture. Every day farmers face with a significant amount of uncertainty. As a result agricultural producers are forced to make decisions based on imperfect information. Born out of this uncertainty is the possibility of injury or loss. Risk and uncertainty are ubiquitous and varied within agriculture and agricultural supply chains. This stems from a range of factors including the vagaries of weather, the unpredictable nature of biological processes, the pronounced seasonality of production and market cycles, the geographical separation of production and end users, and the unique and uncertain political economy of food and agriculture sectors, both domestic and international [5].

Different researchers have found that crop diversification is one of the prominent strategies of risk mitigation in agriculture. The broad rationale for crop diversification emanates from the opportunities it offers to reduce production and price risks, increasing yields, natural resource sustainability, maintaining ecological balance, increasing flexibility and sustain productivity and growth. It also creates opportunities for more employment and higher incomes through more efficient use of resources and exploitation of comparative advantage [6, 7, 8, 9, and 10].

Frequent change in the climatic condition like increasing density of rainfall, more siltation in the river beds etc., stimulates devastating flood in Assam. Year after year the changing nature of flood in Assam extemporize more risk in agriculture.

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Revised Manuscript Received on April 30, 2020.
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Retrieval Number: F3539049620/2020@BEIESP
DOI: 10.25940/ijitee.F3539.0496.20
Journal Website: www.ijitee.org

Published By: Blue Eyes Intelligence Engineering & Sciences Publication

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