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# প্ৰাগজ্যোতিষ মহাবিদ্যালয়

## **PRAGJYOTISH COLLEGE**

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**2018-2023**

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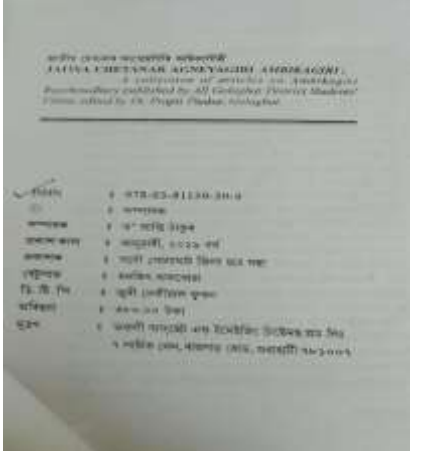
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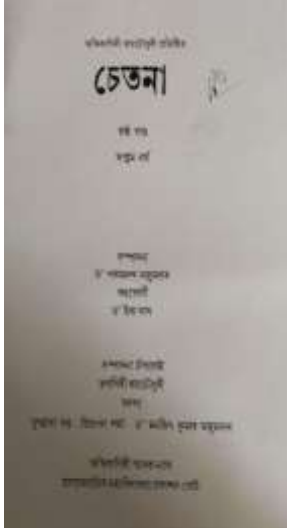



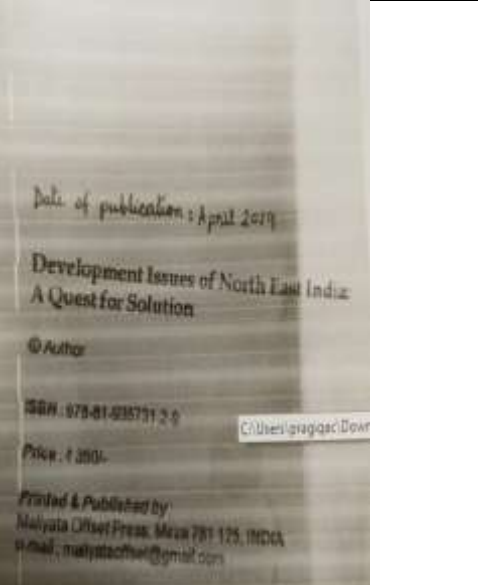
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	<p><b>Chemistry</b></p>			
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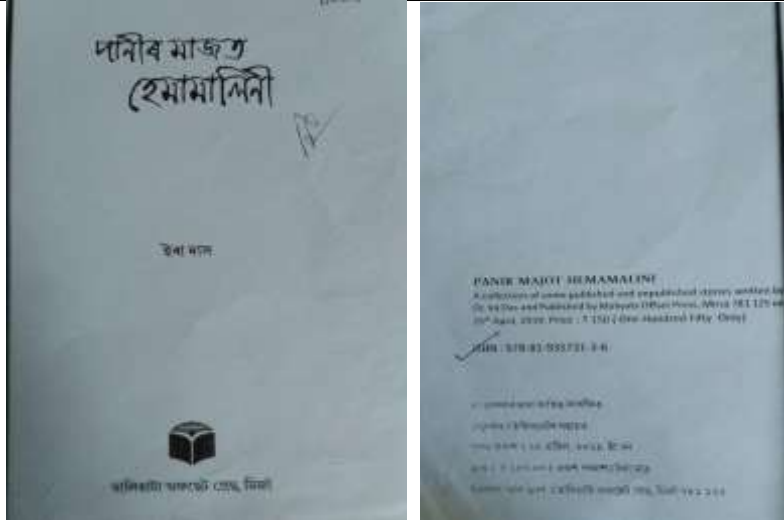
**Impact of 'FISHPED' for Changing Livelihood during Assam Agricultural Competitiveness Project (AACP) Intervention in RaHa Area of Nagal District, Assam, India**

Dr. Indira Kishor Dasgupta, Assistant Professor, Department of Economics, Rajabhat College, Guwahati, (ASSAM), e-mail: [ajdasg@rajabhat.ac.in](mailto:ajdasg@rajabhat.ac.in)

**1. Introduction**

The present investigation of Assam, Rural Subsidy Project and Agricultural Extension Project (ARLES), Rural Bank Extension, Assam Agricultural Competitiveness Project (AACP) with World Bank credit of US\$ 150 million, was taken up from February 2016 to January 2022. AACP got an additional financing of Rs 1100 crore from the World Bank. AACP along with the Additional Financing (AF) was started on 12 March 2016. AACP covered all areas under the intervention of Rural Bank, Agriculture, Fisheries, Animal Husbandry and Poultry of the Rural Subsidy Project, and the Assam Agricultural University. The objective of the project was to increase the productivity and income levels of targeted farmers and community groups. Key activities of the project were to increase the productivity of crops, fish and livestock products, implemented by an extension in the programme of targeted region. Project activities were implemented through the project, which primarily at small and marginal interventions, post fishing construction and the fisheries.

Assam State Cooperative Fish Marketing & Processing Societies Ltd. (ASCFMPS) is an apex level cooperative fish marketing organization under the Assam Cooperative Societies Act, 2017 under registration. It is a member of the National Fish Marketing Board (NFMB) and is a member of the Assam Fish Marketing Board (AFMB). The main objective of the fisheries intervention through the project was to increase the productivity of fish through various activities and to improve the income of the fish farmers. The project was implemented through the project, which primarily at small and marginal interventions, post fishing construction and the fisheries.



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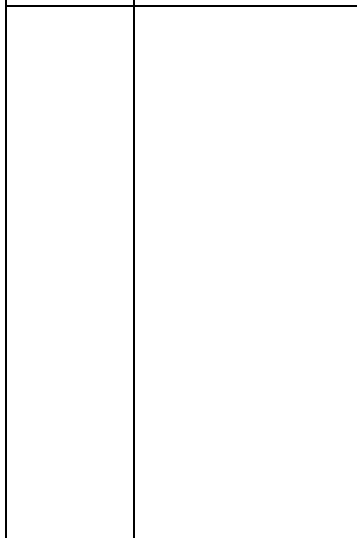
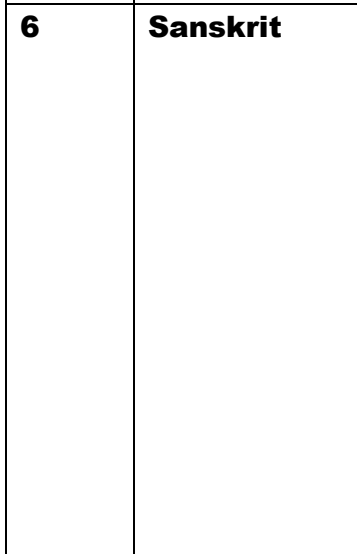
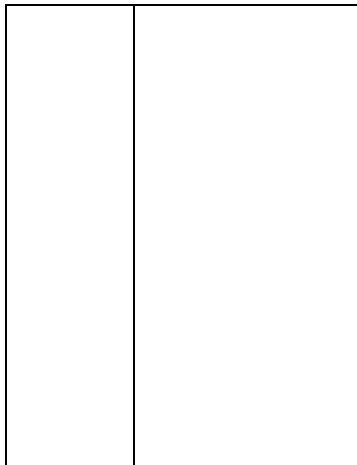
ইন্ডা মাজু

**PANIR MAJOT HEMAMONI**  
A collection of some published and unpublished stories written by  
Dr. Indira Dasgupta and published by Malyata Offset Press, Guwahati, Assam  
1st April, 2022. Price: ₹ 150 (One Hundred Fifty Only)

ISBN - 978-81-933731-3-6

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মাল্যতা অফসেট প্রেস  
মাল্যতা অফসেট প্রেস, গুৱাহাটী, অসম  
১৫ এপ্রিল, ২০২২। মূল্য: ₹ ১৫০  
ISBN - 978-81-933731-3-6

কল্যাণ চিত্রকলা সঙ্ঘ, গুৱাহাটী



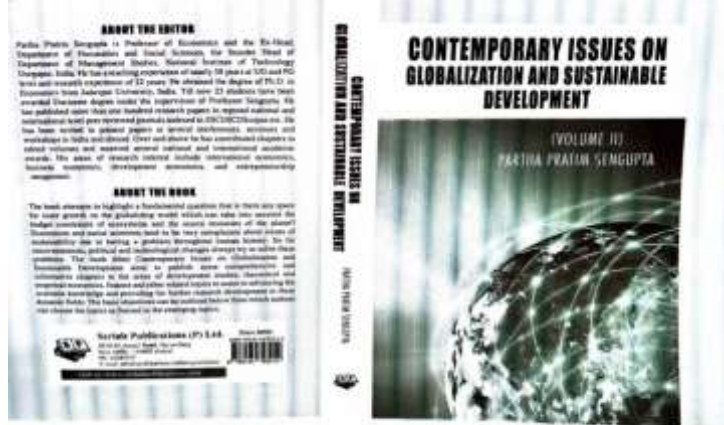


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**ECONOMICS**



ISBN - 978-81-947932-7-2

**ABOUT THE EDITOR**  
 Partha Pratim Sengupta is Professor of Economics and the Ex-Head, Department of Economics and Social Sciences, the Institute of Management Studies, National Institute of Technology, Durgam Chalo, K.R. He has an excellent experience of nearly 30 years at IIT and IISc and has a research experience of 12 years. He obtained the degree of Ph.D. in Economics from Jadavpur University, India. Till now 22 articles have been presented in various national and international conferences. He has published more than 100 research papers in reputed national and international level peer reviewed journals indexed in ISI/SCOPUS/ISI/ISI/ISI. He has been invited to submit papers at several international, national and regional level conferences. Over and above he has contributed chapters in several volumes and appeared several national and international academic journals. He also of research related articles in international economics, business economics, development economics, and entrepreneurship magazines.

**ABOUT THE BOOK**  
 The book attempts to highlight a fundamental question that is there any space for local growth in the globalizing world which can take into account the budget constraints of developing and the recent measures of the World Bank, International Monetary Fund and other international agencies to address the sustainability of the world's population through income policy. In the contemporary, political and technological changes aimed to address these problems. The book also Contemporary Issues on Globalization and Sustainable Development aims to publish some contemporary and relevant chapters in the areas of development studies, economic and regional economics, budget and other related issues in order to enhance the available knowledge and providing the further research development in these domains. The book also attempts to contribute to the research studies that change the impact of globalization in the emerging region.

**Editor:** Partha Pratim Sengupta  
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 Serials Publications Pvt Ltd.  
 ISBN: 978-81-947932-7-2

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Printed in India  
 SERIALS PUBLICATIONS PVT. LTD.  
 #80/2A, Park Street, South Road, Chennai-600 006.  
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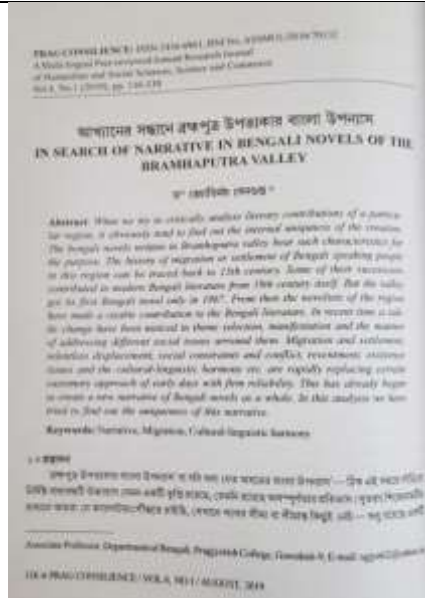
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**BENGALI**



BRAMBHAPETRA VALLEY (ব্রাম্ভপেত্রী উপত্যকা) - একটি গল্পের উপস্থাপনা  
 A Study on the Narrative in Bengali Novels of the Brambhapetra Valley  
 Journal of Management and Social Sciences, Volume 1, No. 1 (2020), pp. 1-10, 1-10

**BRAMBHAPETRA VALLEY (ব্রাম্ভপেত্রী উপত্যকা) - একটি গল্পের উপস্থাপনা**  
**IN SEARCH OF NARRATIVE IN BENGALI NOVELS OF THE BRAMBHAPETRA VALLEY**  
 by Partha Pratim Sengupta

**Abstract:** This book is an attempt to analyze the narrative contributions of a particular region in Bengali novels. It is an attempt to find out the internal structure of the region. The Bengali novels written in Brambhapetra valley have such characteristics for the purpose. The history of migration or settlement of Bengali speaking people in this region can be traced back to 17th century. Some of their migration, concentrated in modern Bengali literature from 19th century itself. But the books are in Bengali novel only in 19th. From then the narrative of the region has made a unique contribution to the Bengali literature. In recent times it has in change have been noticed in some television, mass media and the manner of addressing different social issues around them. Migration and settlement, industrial displacement, social constraints and conflict, renaissance, economic issues and the cultural-linguistic barriers etc. are rapidly replacing certain common approach of early days with new reliability. This has already begun to create a new narrative of Bengali novels on a whole. In this analysis we have tried to find out the uniqueness of this narrative.

**Keywords:** Narrative, Migration, Cultural-linguistic barriers

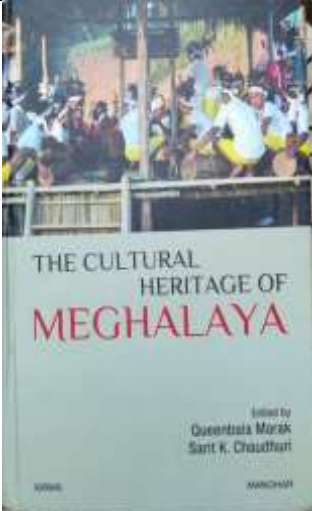


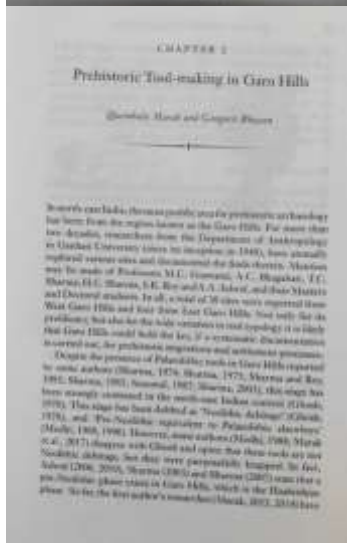
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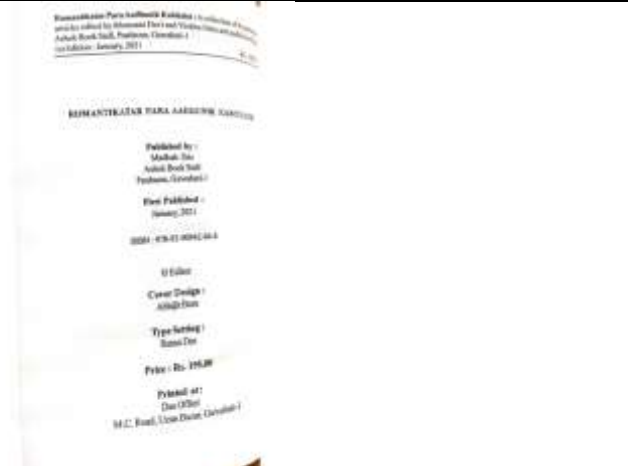
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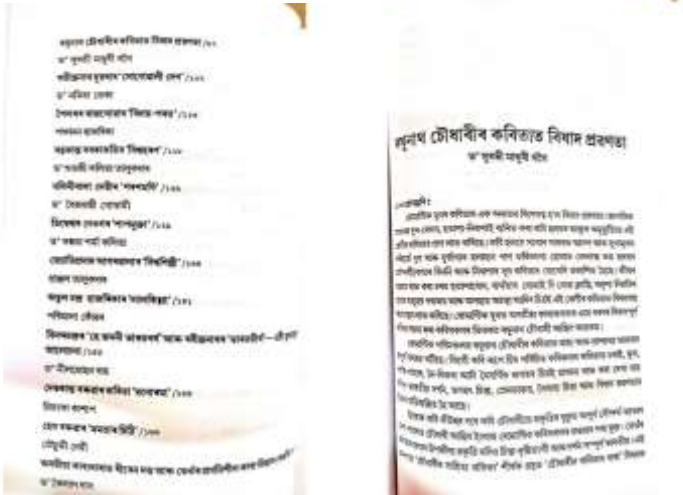

DR. PRADEEP KUMAR, WKA, MD / ASSISTANT, 2014



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1	Dr. Gangotri Bhuyan	   

<p><b>2</b></p>	<p>Dr Kalpana Talukdar</p>		
<p><b>3</b></p>	<p>Dr.Surabhi Madhuri Gogoi</p>		

		
<p><b>4</b></p>	<p>Dr. Surabhi Madhuri Gogoi</p>	
<p><b>5</b></p>	<p>Amit Kumar Pradhan</p>	<p><a href="https://onlinelibrary.wiley.com/doi/epdf/10.1002/9781119633174.ch13">https://onlinelibrary.wiley.com/doi/epdf/10.1002/9781119633174.ch13</a></p>
<p><b>6</b></p>	<p>Amit Kumar Pradhan</p>	<p><a href="https://link.springer.com/chapter/10.1007/978-981-15-2156-0_29">https://link.springer.com/chapter/10.1007/978-981-15-2156-0_29</a></p>
<p><b>7</b></p>	<p>Amit Kumar</p>	<p><a href="https://link.springer.com/chapter/10.1007/978-3-030-45669-">https://link.springer.com/chapter/10.1007/978-3-030-45669-</a></p>

Pradhan **6 1**

**8** Daijee Kalita



Belief Narratives in Folklore Studies: Narrating the Supernatural. A collection of research papers presented at the 20th Annual Conference of the Folklore Society of India, held at the Indian Institute of Cultural Studies, Ranchi, Jharkhand, India, from 15-17 October 2019. Edited by Daijee Kalita, Kanta Kanta Kanta, and Pabitra Kumar Barh. New Delhi: Ananta, 2020. Pp. 300. ISBN 978-81-954200-0-0.

**PREFACE**

The International Society for Folk Studies (ISFS), established in 1982 in Bombay, India, has a long history of promoting folk studies and its related disciplines. It has been instrumental in the development of folk studies in India and other parts of the world. The journal of ISFS, *Folklore Studies*, has been a significant platform for the dissemination of research in the field. The goal of the ISFS is to develop a global network of folk studies scholars and to promote the exchange of ideas among them. This volume is a tribute to the ISFS and its members.

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Traditions of Beliefs in the Supernatural Power of Humans among the Gonds of India. Pabitra Kumar Barh. 11-20

Belief Narratives and Practices. Daijee Kalita. 21-30

Beliefs and Oral Narratives Associated with the Christian Missions in Kerala. Pabitra Kumar Barh. 31-40

Checking Legends in Beliefs and Religions among the Nairs of Kerala. Pabitra Kumar Barh. 41-50

In the Name of...: A Study of Beliefs and Practices. Daijee Kalita. 51-60

Folk Narratives: Exemplifying the Supernatural Beliefs, Traditions, and Rituals. Pabitra Kumar Barh. 61-70

**ROLE OF GAPS IN TRANSMITTING MANKA, MOTHER AMONG THE COMMON PEOPLE OF ASSAM**

Daijee Kalita

**Introduction**

In the past, the transmission of folk beliefs and practices was done through oral tradition. This was done by the elders of the community. The role of Gaps in transmitting Manka, Mother among the common people of Assam is the focus of this study. The study aims to explore the role of Gaps in transmitting Manka, Mother among the common people of Assam. The study is based on field research conducted in Assam. The study is divided into two parts. The first part is a descriptive study of the role of Gaps in transmitting Manka, Mother among the common people of Assam. The second part is an analytical study of the role of Gaps in transmitting Manka, Mother among the common people of Assam.

**9** Dr. Krishna Das



**Card**

Dr. Krishna Das. New Delhi: Ananta, 2020. Pp. 100. ISBN 978-81-954200-1-7.

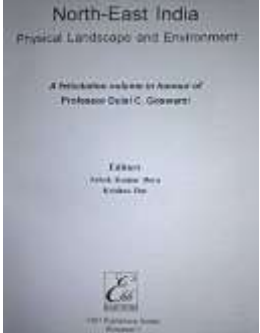
The book 'Card' by Dr. Krishna Das is a collection of research papers presented at the 20th Annual Conference of the Folklore Society of India, held at the Indian Institute of Cultural Studies, Ranchi, Jharkhand, India, from 15-17 October 2019. The book is divided into two parts. The first part is a descriptive study of the role of Gaps in transmitting Manka, Mother among the common people of Assam. The second part is an analytical study of the role of Gaps in transmitting Manka, Mother among the common people of Assam.

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**Card's Role in Society**

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**10** Dr. Krishna Das



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**ABOUT THE EDITOR**

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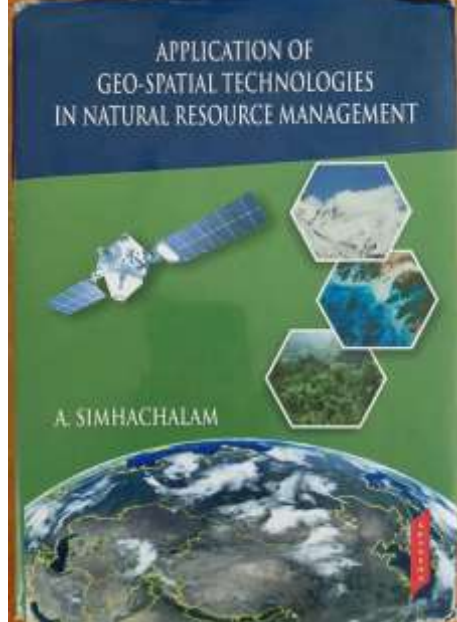
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**11** Pradip Chandra Kalita



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Fax: 91-11-27261193  
Email: akansha@akansha.com  
Web: www.akanshaonline.com

**Application of Geo-Spatial Technologies in Natural Resource Management**

Editor  
First Published 2021

**ISBN 978-81-8376-284-4**

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**PRINTED IN INDIA**

Published by Akansha Publishing House, New Delhi-110002 and printed in India.

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**Mapping and Change Analysis of Wetland using Geospatial Technology: A Case Study of Khamranga Wetland, Chandrapur, Kamrup M, Assam**

Jayanta Goswami, Pradip Chandra Kalita, A. Simhachalam

**ABSTRACT**

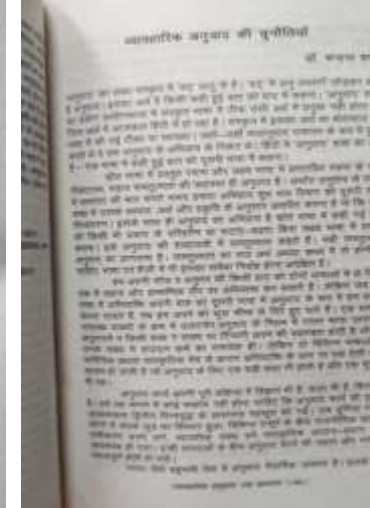
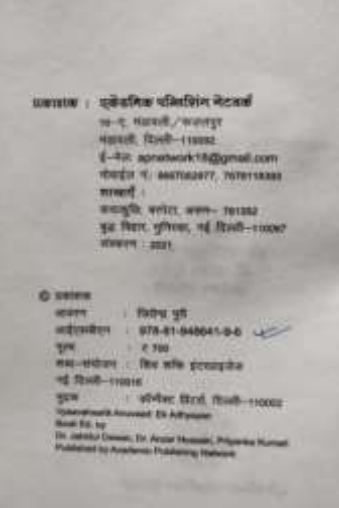
Wetlands are very important parts of natural environment. They are the habitat for various flora and fauna. Wetland helps to reduce the impact of flood water that on the present world, wetlands are being destroyed due to the increasing of population and anthropogenic activities of human. The freely available Landsat imagery has been widely used in extracting spatial and temporal information about wetlands (Kumar et al., 2010). From the literature, it has been found that wetland has decreased over the globe over the past few decades. Thus, this study has been carried out to know the present status and changes in the past 10 years of the Khamranga Wetland of Chandrapur, Kamrup M, Assam which is situated very near to the Garohat city in this north Assam. The GIS and RS has been used. Field verification shows that the destruction of wetland increasing population growth in the region. Having population, migration of people to wetland for fish culture is increasing people, natural species and the health status of the



**12** Dr. Priti Baishya



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**MOTHER GODDESS CULT IN EASTERN INDIA** Edited by Dr. Gargee Sharmah, published by Sri Aurobindo Centre, Pondicherry, India. ISBN: 978-81-93-0321-1-1. Price: Rs. 200.00.



**15** Dr. Gargee Sharmah



**ভাৰতৰ ইতিহাস** (History of India) by Dr. Gargee Sharmah. Published by Sri Aurobindo Centre, Pondicherry, India. ISBN: 978-81-93-0321-2-8. Price: Rs. 200.00.



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**বাজনৈতিক আৰু সামাজিক দৰ্শন** (Political & Social Philosophy) by Dipika Roy Medhi. Published by Sri Aurobindo Centre, Pondicherry, India. ISBN: 978-81-93-0321-3-5. Price: Rs. 200.00.





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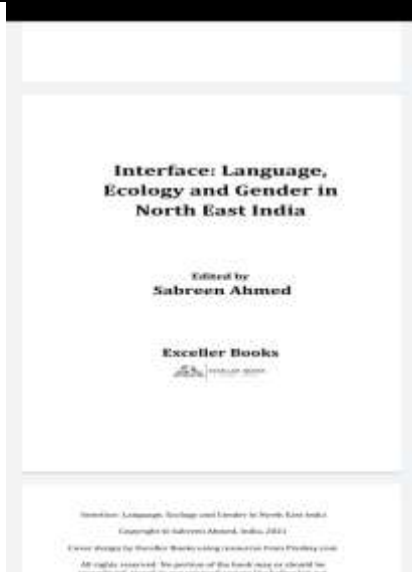
ISSN 0930-8989      ISSN 1867-4941 (electronic)  
 Springer Proceedings in Physics  
 ISBN 978-981-16-5140-3      ISBN 978-981-16-5141-0 (eBook)  
<https://doi.org/10.1007/978-981-16-5141-0>

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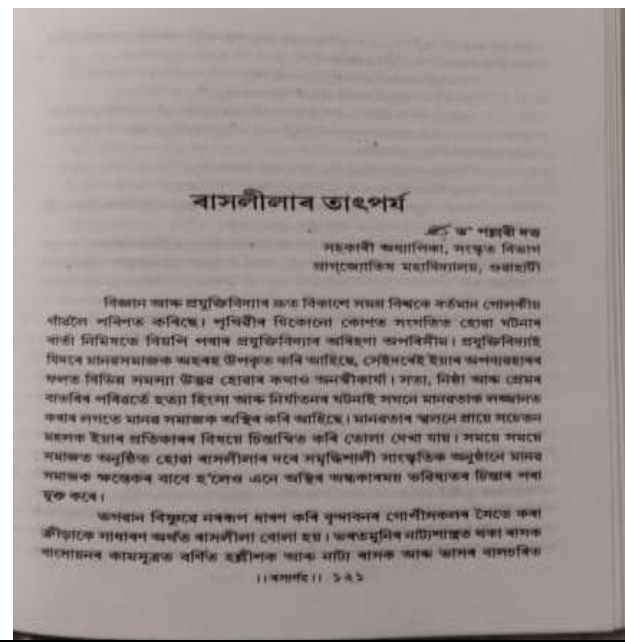
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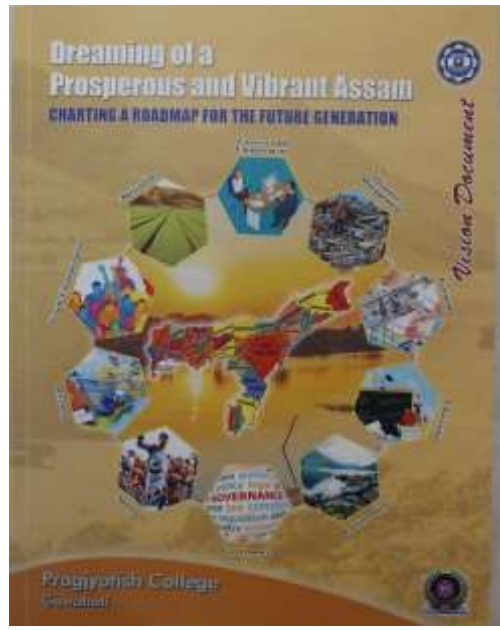
Rasarnava: A Journal published on the occasion of Rasarnava Competition held from 12<sup>th</sup> December to 18<sup>th</sup> December 2021 at Patkote, Saranwarje Ashoka organised by Patkote Ashoka Rajapal (Dr. Saranwarje Goshwami) and published by Mr. Ananta Dutta - Chief Executive, on behalf of Patkote Ashoka Rajapal (Dr. Saranwarje Goshwami). Printed at Ananta Publishers, 7/5, P. Road, Jorhat - 781001. Price: ₹ 150.00 only.

ISSN : 978-93-42815-05-8

**বসার্ণব**  
 পত্রিকাৰ আৰম্ভণি কৰাৰী নিঃ সন্দেহে প্ৰথম প্ৰতিবেদন  
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**20** Dr Manoj  
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**DREAMING OF A PROSPEROUS AND VIBRANT ASSAM**  
**CHARTING A ROADMAP FOR THE FUTURE GENERATION**  
A Vision Document compiled through the contributed inputs of a wide-section of Pragyanish College stakeholders

**Edited by:**  
Dr. Manoj Kumar Mahanta  
Dr. Manjit Kumar Mazumdar

**Published by:**  
Journal Quality Assurance Cell  
Pragyanish College, Guwahati - 781 009

**In Association with:**  
Pragyanish College Publication and  
General - 781 009

Articles published in this book reflect the views and opinions of the respective authors and have no connection whatsoever with that of the publishers.

**First Published:** 1<sup>st</sup> September, 2021

**Price:** INR 800.00 (Rupees Eight hundred only).

**ISBN:** 978-81-922120-1-2


PRINTED IN INDIA

**Vision 2040 Assam Logo designed by:** Shri Babita Rajan

**Cover and Layout designed by:** Dipak Das

**Printed at:** Akshata Offset Printers, Kanakpuri, Guwahati- 781 010  
Mobile No.: 98623 13645, 82534 75945  
Email: akshataoffsetprinters@gmail.com, akshata108@gmail.com

**Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five year 2021-2022**

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International Conference on Business, Management, Social and Economic Advancements  
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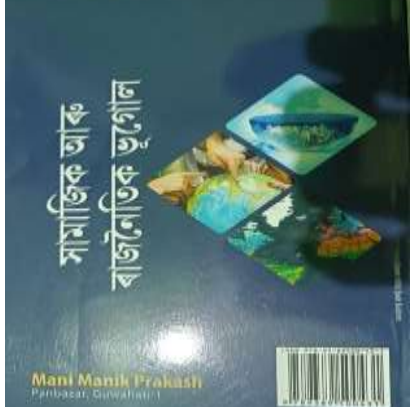
**Sustainable Development: Where Does the North East India Stand?**

Dr. Manik Prakash, Department of Economics, Government College, Guwahati, Assam, India

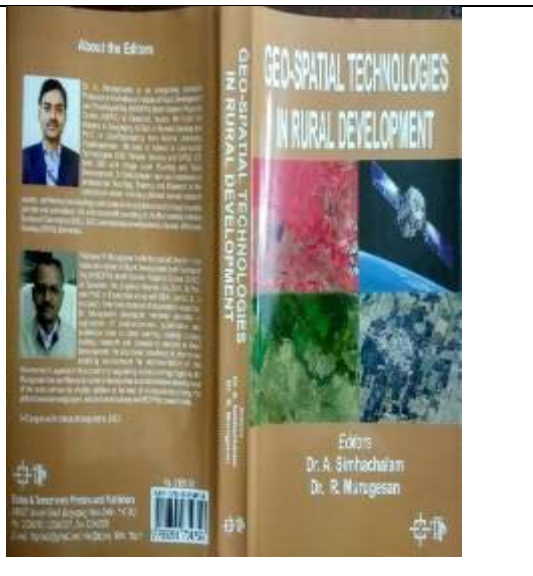
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**INTRODUCTION:** Generally, the article is a study on the SDGs in the context of the North East India. It discusses the challenges and opportunities for the region in achieving the SDGs. The article also discusses the role of the North East India in the context of the SDGs. The article also discusses the role of the North East India in the context of the SDGs. The article also discusses the role of the North East India in the context of the SDGs.

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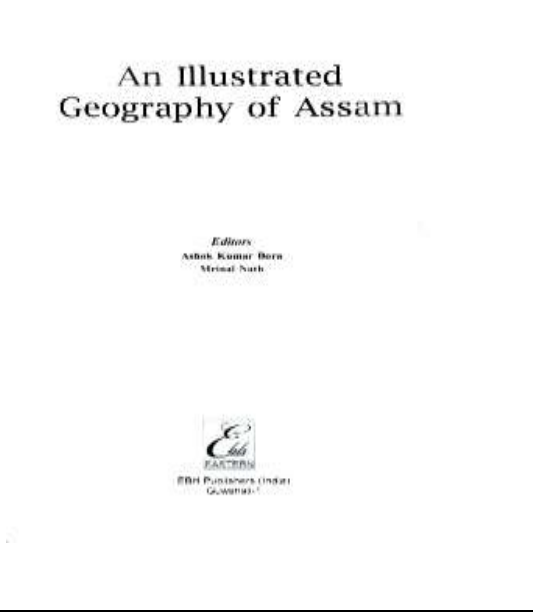
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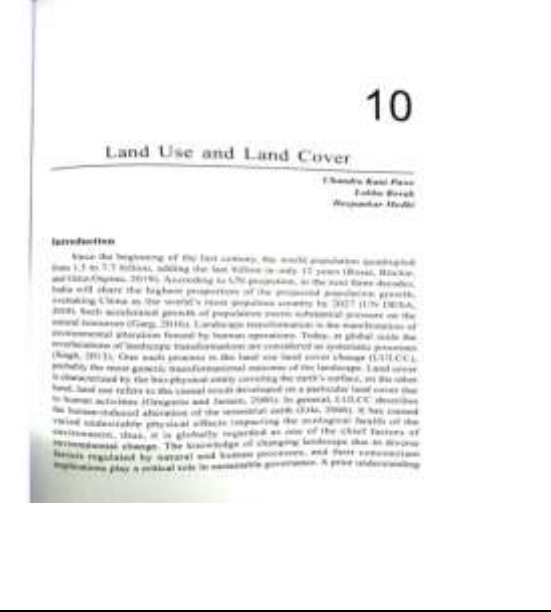
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6 An Illustrated Geography of Assam  
  
Land use and land cover of Assam,



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An Illustrated  
Geography of  
Assam

Topography and  
Physiography

An Illustrated  
Geography of Assam

Editors  
Ashok Kumar Bora  
Mouli Nath



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Topography and Physiography



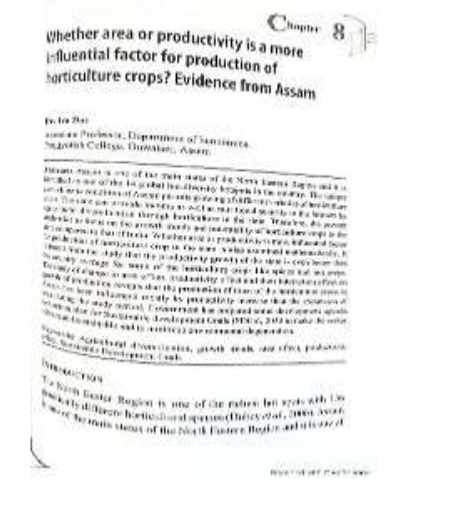
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Introduction

Geographically, Assam occupies a unique position with intricate physical, physiographic, biological, social, and cultural diversity. The Assam state is located in the north-east corner of India comprising excellent topographic and physiographic settings with hills, plateaus and river valleys (Ahasanulla, 1998). The river valleys spread over four-fifth of the total land area of Assam, which possess and hold immense natural wealth of the total land area (Dey & Akmal, 2017). The topographic appearance of Assam is different from that of any other state of India, and the intricate topographic, as well as physiographic diversity contributes an innumerable geo-environmental and socio-cultural problem for the state (Debnath, 1937). Topography and physiography do not only determine the physical geographical settings of a country but also these parameters also act as a basis to draw information on different geographical features available on the ground (Bhunia, 1987; Senil & Chakr, 2004; Senanayake et al., 2009). In this study, an attempt has been made to understand the physiographic setting of Assam based on secondary sources of secondary topographic framework of Assam by assessing the basic terrain profile based on a digital cartographic methodology. Especially focus the topography and its associated, the geo-scientific in general and geographical in particular, study following the digital cartographic methodology for studying the state.

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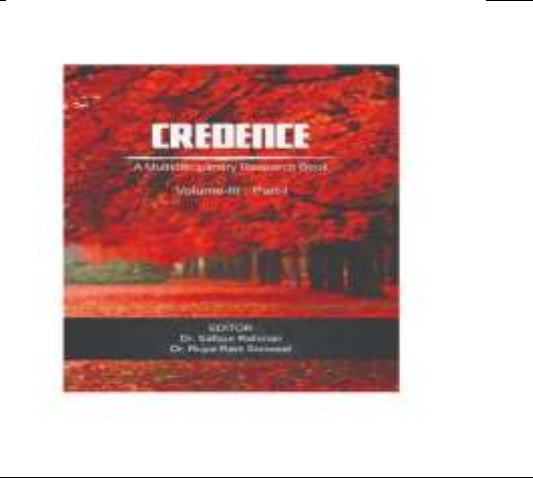
असम की तिवा जनजाति की भाषा और संस्कृति: एक अनुशीलन

— डॉ. विद्यानाथ और राजेश्वरी

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13 Credence Ecological Activism of Nature's Beckon with Special Reference to Assam: A Case Study of Its Interactions with the State and Society



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Ecological Activism of Nature's Beckon with Special Reference to Assam: A Case Study of Its Interactions with the State and Society

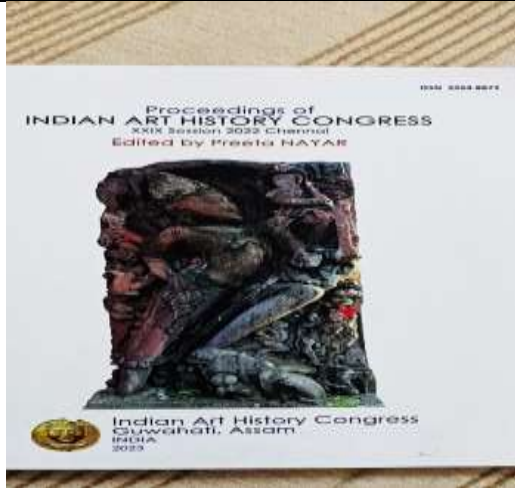
— Dr. Vidyanath and Rajeshwari

Abstract: In the developing countries ecological activities are increasing rapidly. Under the leadership of the state and society, in case of the developing countries the state and the provision of economic development are closely associated with the endeavor of 'nature-building'. However, due to the technological nature of the post-colonial development activities and the political process of the institutionalized state, the rural 'peripheries' within the political boundaries of the state, the state-sponsored projects of nature building has been facing various challenges. The state interventionism or pressure, the pressure with modernization, industrialization and urbanization has generated certain ecological problems. Academically these issues are being dealt with under the institutionalized 'Political Ecology'. Assam's Beckon, a non-governmental organization (NGO) established in 1982 has been doing some remedial jobs in forest in the field of forest and wildlife protection. In the last three decades, the issue of ecological conservation in Upper Assam was central to its agenda and policy framework. The concerned forest areas of the region constitute the most isolated, unpopulated and most neglected environment in India.

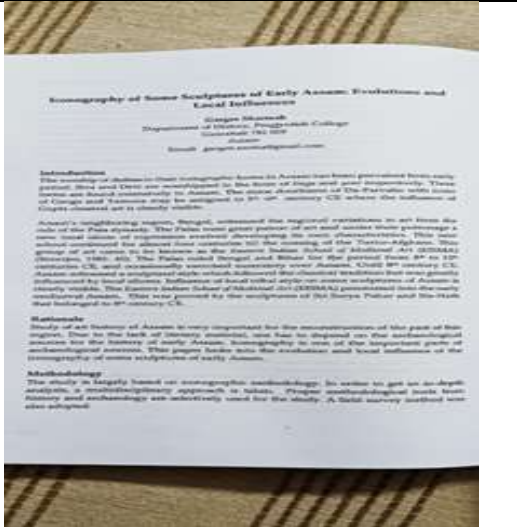
Key words: Ecological crisis, Developing countries, Nature's Beckon Assam, wildlife, Assam.

Introduction: In the late 1980s, for the first time in the environmental history of Assam, Nature's Beckon organized a state-wide ecological conservation building programme under the Bangladesh Bank 'Wildlife National Environmental Awareness Campaign'. The organization is Bangladesh Bank 'Wildlife National Environmental Awareness Campaign' has been actively involved in carrying out wildlife as well as their habitats in the small forest, natural forest and other forest areas of Assam. The organization is the first NGO and the only Assam-based organization of Political Ecology. Progress College, Tezpur, Assam.

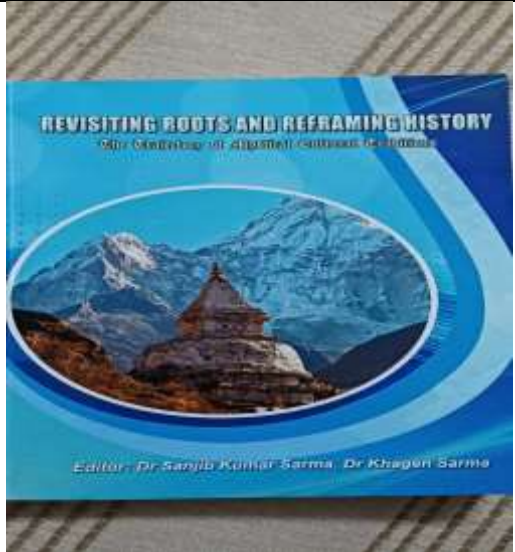
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Culture of Dasamahavidya in early Assam in historical perspective

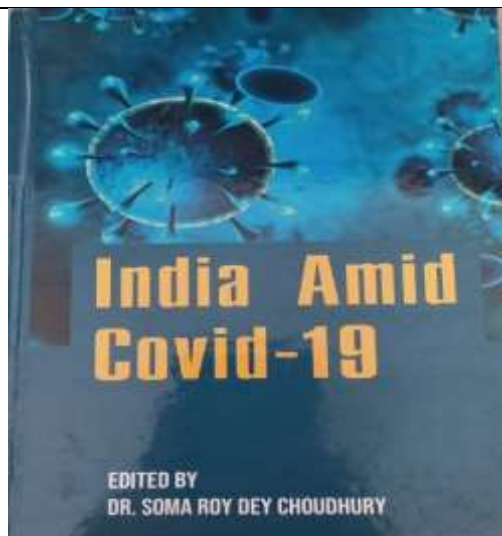


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18 Catalytic role of College Libraries of Assam in Academics during COVID-19 Pandemic



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**Catalytic role of College Libraries of Assam in academics during COVID-19 Pandemic**  
Udayraj Choudhury

**Abstract**

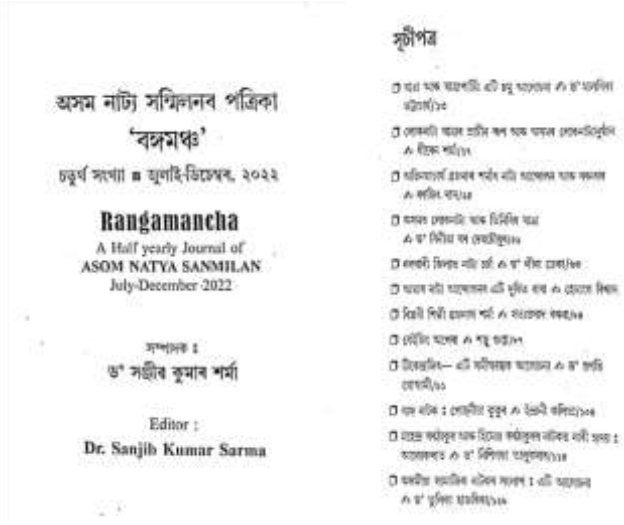

The whole world had stopped due to the attack of Corona Virus. It gives sudden and unexpected outbreak in the world. The complete academic system was stopped and later on with online mode. The services of academic libraries also changed during the pandemic and it offered some new online services to the user. This study will explore the new services extended by the college libraries of Assam, as well as the e-resources, applications, different tools used. Due to the effect of COVID-19 pandemic the librarian and information services play a catalytic role among the users to meet their needs. This paper also explore different website for free academic resources.

**Keywords:** - Library Services, COVID-19 Pandemic, Assam College Librarian, On line Library Services

**Introduction**

The COVID-19 disease caused by the infection of SARS-CoV-2, was first reported in Wuhan, China in December 31, 2019<sup>1</sup>. Modern globally connected world made the virus quickly spread across the multiple countries. In India the first case was reported on 31, January 2020, the virus spread very fast in India and within two month it spread every part of the

Year : 2022-2023

Department	Name of the author	Supporting document/link
Assamese	Dr Indrani Kalita	 <p>সূচীপত্র</p> <ul style="list-style-type: none"> <li>১) বহু বছৰ আগলৈ এটি মূৰু অচলৈ এ হ'ল অচলৈ (১২)</li> <li>২) গোস্বামী আৰু হৰিশ শৰ্মা আৰু আন কেমে-ৱেবলৈ এ বিবেচনা (১৫)</li> <li>৩) অসমত প্ৰথমবাৰৰ বাবে পৰিচালিত আৰু আন আৰু এ পৰিচালনা (১৮)</li> <li>৪) অসমত প্ৰথমবাৰৰ বাবে চিত্ৰিত আৰু এ হ'ল চিত্ৰিত আৰু চিত্ৰিত (২০)</li> <li>৫) গগনচীৰ বিলাস নাট্য চলি এ হ'ল বিলাস (২২)</li> <li>৬) অসমত প্ৰথমবাৰৰ বাবে চিত্ৰিত আৰু এ হ'ল চিত্ৰিত আৰু চিত্ৰিত (২৪)</li> <li>৭) অসমত প্ৰথমবাৰৰ বাবে চিত্ৰিত আৰু এ হ'ল চিত্ৰিত আৰু চিত্ৰিত (২৬)</li> <li>৮) অসমত প্ৰথমবাৰৰ বাবে চিত্ৰিত আৰু এ হ'ল চিত্ৰিত আৰু চিত্ৰিত (২৮)</li> <li>৯) অসমত প্ৰথমবাৰৰ বাবে চিত্ৰিত আৰু এ হ'ল চিত্ৰিত আৰু চিত্ৰিত (৩০)</li> <li>১০) অসমত প্ৰথমবাৰৰ বাবে চিত্ৰিত আৰু এ হ'ল চিত্ৰিত আৰু চিত্ৰিত (৩২)</li> <li>১১) অসমত প্ৰথমবাৰৰ বাবে চিত্ৰিত আৰু এ হ'ল চিত্ৰিত আৰু চিত্ৰিত (৩৪)</li> <li>১২) অসমত প্ৰথমবাৰৰ বাবে চিত্ৰিত আৰু এ হ'ল চিত্ৰিত আৰু চিত্ৰিত (৩৬)</li> <li>১৩) অসমত প্ৰথমবাৰৰ বাবে চিত্ৰিত আৰু এ হ'ল চিত্ৰিত আৰু চিত্ৰিত (৩৮)</li> <li>১৪) অসমত প্ৰথমবাৰৰ বাবে চিত্ৰিত আৰু এ হ'ল চিত্ৰিত আৰু চিত্ৰিত (৪০)</li> <li>১৫) অসমত প্ৰথমবাৰৰ বাবে চিত্ৰিত আৰু এ হ'ল চিত্ৰিত আৰু চিত্ৰিত (৪২)</li> <li>১৬) অসমত প্ৰথমবাৰৰ বাবে চিত্ৰিত আৰু এ হ'ল চিত্ৰিত আৰু চিত্ৰিত (৪৪)</li> <li>১৭) অসমত প্ৰথমবাৰৰ বাবে চিত্ৰিত আৰু এ হ'ল চিত্ৰিত আৰু চিত্ৰিত (৪৬)</li> <li>১৮) অসমত প্ৰথমবাৰৰ বাবে চিত্ৰিত আৰু এ হ'ল চিত্ৰিত আৰু চিত্ৰিত (৪৮)</li> <li>১৯) অসমত প্ৰথমবাৰৰ বাবে চিত্ৰিত আৰু এ হ'ল চিত্ৰিত আৰু চিত্ৰিত (৫০)</li> <li>২০) অসমত প্ৰথমবাৰৰ বাবে চিত্ৰিত আৰু এ হ'ল চিত্ৰিত আৰু চিত্ৰিত (৫২)</li> </ul>
	Dr Karabi Kherkatary Boro	 <p><b>PARISHEELAN</b> A Multidisciplinary Perspective On Higher Education and Development</p> <p>Editor: Dr. Snigdha Kataky Dr. Lakhimi Nath</p> <p><b>PARISHEELAN</b> : A Multidisciplinary Perspective On Higher Education and Development – A collection of selected Research Article edited by Dr. Snigdha Kataky &amp; Dr. Lakhimi Nath, published by Principal, Dimoria College, Khetri Kamrup(M) in association with B.R. Book Stall, Panbazar, Guwahati, Kamrup (M), Assam, India.</p> <p><b>First publication</b> : March, 2023</p> <p><b>Published by</b> : Principal, Dimoria College, Khetri, Kamrup (M) in Association with B.R. Book Stall, Panbazar, Ghy-61</p> <p><b>ISBN</b> : 978-93-93929-20-4</p> <p><b>Edited by</b> : Dr. Snigdha Kataky Dr. Lakhimi Nath</p> <p><b>Committee of Editorial Board</b> : Chairman – Dr. Himan Kumar Datta, Principal Advisor – Mr. Manohjyoti Barakaty, Co-ordinator, IQAC Dr. Apurba K. Hazarbaruah, Co-ordinator, NAAC</p> <p><b>Cover Design</b> : Janki Yugantar Boro</p> <p><b>Price</b> : 500/-</p> <p><b>Printed at</b> : Angik Press Ambari, Guwahati-1</p> <p>The views, ideas, findings and opinions expressed in the research articles are those of the authors and do not necessarily reflect the view &amp; ideas of the publishers or the editorial board. All rights are reserved by IQAC, Dimoria College. No part of this publication can be reproduced, stored in a retrieval system or transmitted in any form or by any means without written permission from the publishers.</p>



		<p>স্বাভাবিক ভাষা প্রক্রিয়াকৰণত অসমীয়া ভাষাত পদ টেগিঙৰ অৱস্থা</p> <p>১৯ ড° কৰবী খেৰকটাৰী বড়ো 371</p> <p>ভাৱহীন-চুটিৰ লোকগীতৰ বিষয়বস্তু : এটি অধ্যয়ন</p> <p>২০ ড° দিৱা কটকী 346</p> <p>অপূৰ্ণ শৰ্মাৰ চুটি গল্প "শেষ গৌৰৱ"</p> <p>২১ ড° সংজ্ঞা বৰুৱা 318</p> <p>চন্দনা গোস্বামীৰ পাটকাইৰ ইলাবে মোৰ দেশ : এক বিশ্লেষণাত্মক আলোচনা</p> <p>২২ বিনীতা বৰুৱা 376</p> <p>বান গৈগৈ কবিতাত অকৃতি আৰু মানুহৰ সম্পৰ্ক : এক অধ্যয়ন</p> <p>২৩ ড° গীতমনি হুটীমুৰীয়া 381</p> <p>মেয়েৰে ধৰা ১ টিৰ উপন্যাসত লোকবিশ্বাস</p> <p>২৪ সত্ৰুৰ তুষল ঘোণী 393</p> <p>অৰুণা পট্টনীয়া কলিতাৰ 'পাছ চোৱালৰ স্বাধিকতা' — এক সমালোচনাত্মক বিশ্লেষণ</p> <p>২৫ বীণা ভাণ্ডাৰী 401</p> <p>ব্যক্তকথা একে দুজন গল্পবন্ধ</p> <p>২৬ শেখাৰী গোস্বামী 419</p> <p>বঙ্গ শৰ্মাৰ "অনুব" আৰু "মানুহ" নাটক : এটি আলোচনা</p> <p>২৭ বিনীতা বৰুৱা 429</p> <p>কৃত্ৰিম বুদ্ধিমত্তাৰ লগত অসমীয়া ভাষাৰ স্থিতি-সন্মতনা আৰু প্ৰত্যাহ্বান</p> <p>২৮ বিকাশ চেতিয়া 435</p>
Dr Tutumoni Das		<div style="display: flex; justify-content: space-around;"> <div> </div> <div> <p>Anchor Publishers Distribution A Book on Assessment and Evaluation edited by Dr. Bineta Barua and Parulashree Parashar Publication, Guwahati, Assam, India. © Bineta Barua (2024) ISBN : 978-81-9533-103-9</p> <p><b>অসমীয়া গীতি-সাহিত্য সমীক্ষা</b></p> <p>লেখকগণ : বিনীতা বৰুৱা শিল্পকলা গুৱাহাটী : ৭৮১০০১</p> <p>২০২৪</p> <p>প্ৰথম প্ৰকাশ আইচিএন ৯৭৮০-৮১-৯৫৩৩-১০৩-৯ ISBN 978-81-9533-103-9 anchor_publishers@yahoo.com © anchorpubs.in</p> <p>Printed at : Pancham Publications Pvt. Ltd. Pancham, Guwahati - 1, Assam, India.</p> </div> <div> <p><b>স্বাভাবিক ভাষা প্রক্রিয়াকৰণত অসমীয়া ভাষাত পদ টেগিঙৰ প্ৰত্যাহ্বান</b></p> <p>ড° কৰবী খেৰকটাৰী বড়ো মহাবীৰ অধ্যাপক, অসমীয়া বিভাগ প্ৰাগজ্যোতিৰ মহাবিদ্যালয়</p> <p>সঙ্কলিত শৰ</p> <p>স্বাভাবিক ভাষা প্ৰক্রিয়াকৰণত অসমীয়া ভাষাত পদ টেগিঙৰ প্ৰত্যাহ্বান। স্বাভাবিক ভাষাৰ প্ৰক্রিয়াকৰণ কামত ব্যাকট্ৰিক পদ টেগিঙৰ এক অতি আবশ্যকীয় উপাদান। ভাষা বিশেষে পদ টেগিঙত বহুতো সমস্যা বা প্ৰত্যাহ্বান আছে। লক্ষ্যভেদে অতি চমুকী আৰু বৈচিত্ৰপূৰ্ণ ভাষা হিচাপে অসমীয়া ভাষাৰ ক্ষেত্ৰত ই অধিক জটিল। আলোচনা প্ৰস্তুতকৰণ অতি সংক্ষেপে অসমীয়া ভাষাৰ পদৰ পৰিচয় আৰু পদসমূহৰ টেগিঙে সম্পৰ্কে আলোচনা কৰাৰ লগতে ইয়াৰ সাভাৰ সমস্যা তথা প্ৰত্যাহ্বান সম্পৰ্কে আলোচনা কৰা হ'ব।</p> <p>বীণা শৰ্মা : কণ্ঠচিত্ৰকৰণত ভাষাবিজ্ঞান, স্বাভাবিক ভাষা প্ৰক্রিয়াকৰণ, পদ টেগিঙৰ পৰিচয়</p> <p>বৰ্তমান সময়ত কণ্ঠচিত্ৰকৰণ মানুহৰ সৈমিন্দীৰ অঁকৰ এক এৰাব নোৱাৰা সামগ্ৰীত পৰিণত হৈছে। চিকিৎসা বিজ্ঞান, জ্যোতিৰ্বিজ্ঞান, কন্যা বিজ্ঞান, পদার্থ বিজ্ঞান, শ্ৰাবী বিজ্ঞান, পৰিসংখ্যা বিজ্ঞান, জু-বিজ্ঞান, মহাবিজ্ঞান আদি বিজ্ঞানৰ বিভিন্ন ক্ষেত্ৰৰ লগতে ভাষা-বিজ্ঞান, সাহিত্য, ব্যৱসায়-বাণিজ্যৰ লগতে</p> </div> </div>



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Botany

Dr Amit Kumar Pradhan

**International Journal of Science Studies**  
 Volume 10, Issue 1, 2023  
 ISSN: 2278-3845  
 Website: www.ijss.in

**Exploring the regulatory potential of new water transportation for addressing climate change in crop plants**  
 Dr. Anil Kumar Pradhan  
 Department of Botany, Indian Institute of Technology (IIT) Kharagpur, India

**Exploring the regulatory potential of new water transportation for addressing climate change in crop plants**  
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**Exploring the regulatory potential of new water transportation for addressing climate change in crop plants**  
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	Dr Himadri Saikia	 <p><b>International Journal for Multidisciplinary Research (IJMR)</b>    ISSN: 2582-9742 • Website: <a href="http://www.ijmr.in">www.ijmr.in</a> • Email: <a href="mailto:ijmr@ijmr.in">ijmr@ijmr.in</a></p> <p><b>Ethnomedicinal Survey and a Quantitative Analysis of Bioactive Plants Used by Sonowal Kachari Community of Assam</b>    Himadri Saikia<sup>1</sup>, Nahanta Maity<sup>1</sup>, Mahuya Sengupta<sup>2*</sup></p> <p><sup>1,2</sup>Department of Biotechnology, Assam University, Silchar, Assam, India- 788011    *Corresponding author: <a href="mailto:senguptamahuya20@gmail.com">senguptamahuya20@gmail.com</a></p> <p><b>Abstract</b></p> <p><b>Background:</b> In recent times, cases of infectious and non-infectious diseases are increasing to an exponential manner. The treatment to these diseases face drawbacks of specificity and high costs. Due to this, many patients seek alternative or complementary methods of treatment. Ethnomedicine is the first and foremost choice in this regard. However, due to cultural belief no proper documentation with scientific validation is available. The present study intended to evaluate the possibility of the ethnomedicinal plants of historical Kachari community of Assam, quantitatively and qualitatively along with a few bioactive studies of essential oils and antioxidant activities in a mouse systemic model.</p> <p><b>Methods:</b> The study was based on extensive ethnomedicinal field survey for 2 year period from 2018-2019, then was analyzed and most potent plant was short listed using decarboxylation index (DCI), phytochemical screening and 2,2-diphenylpicrylhydrazyl (DPPH) assay. An effective dose was determined by calculating IC<sub>50</sub> with 1,1-D, dimethylsulfoxide 2,2',2'-trifluoroethanol: hexane: sodium acetate (MTT) assay in mouse splenic macrophages. Bioactivity was studied as Aggalyucaninase (LPS) mediated macrophage macrophages for oxidative stress and antioxidant parameters.</p> <p><b>Results:</b> From the preliminary quantitative and qualitative screening it was found that <i>Streptopus tuberosus</i> exhibited highest DCI as a potent antioxidant activity. Based on IC<sub>50</sub> qualitative concentration 500 µg/ml activity value a working dose of 0.75 µg/ml was determined. The qualitative stress and antioxidant parameters show high free radical scavenging activity of ODM.</p> <p><b>Conclusion:</b> Systemic pharmacological trials in present study validate the active bioactive potential of the ethnomedicinal plant as per scientific standards.</p> <p><b>Keywords:</b> Ethnomedicine; Oxidative stress; Antioxidant; Sonowal Kachari.</p>
Commarce	Uddipta Nayan Medhi	 <p>The image shows two journal covers. On the left is the cover of 'South India Journal of Social Sciences', Volume 1, Issue 1, published by the A.P. Academy of Social Sciences. On the right is the cover of the 'Journal of the Asiatic Society of Bombay', featuring a classical building illustration and the text 'REVUE DE L'ASIE' and 'ASIAN SOCIETY OF BOMBAY'.</p>



## Emerging Trends in Commerce

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## The Role of AI in Accounting and Finance: A Study on Current Trends and Future Implications

Anshu Agarwal,  
IIT Bombay, Mumbai, India

**ABSTRACT**

Artificial Intelligence (AI) is revolutionizing the accounting and finance industry. This paper explores the current trends and future implications of AI in these fields. It discusses the various applications of AI, such as automation of repetitive tasks, data analysis, and risk management. The paper also highlights the challenges associated with AI, such as data privacy and security, and provides recommendations for organizations to overcome these challenges. The study concludes that AI has the potential to transform the accounting and finance industry, leading to increased efficiency, accuracy, and cost savings.

**KEYWORDS:** Artificial Intelligence, Accounting, Finance, Automation, Data Analysis, Risk Management.

**REFERENCES:**

- Smith, J. (2020). The Impact of AI on the Accounting Industry. *Journal of Accounting and Finance*, 15(2), 1-10.
- Johnson, A. (2021). The Future of Finance: The Role of AI. *Financial Analysts Journal*, 77(3), 4-12.
- Chen, L. (2022). AI in Accounting: A Review of Current Trends and Future Implications. *International Journal of Accounting and Finance*, 18(1), 1-15.



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### Impact of COVID-19 on Indigenous People: An Analysis

Ujjwala Agrawal, Manoj Kulkarni, Shivudu Das

**ABSTRACT**

The COVID-19 pandemic has had a significant impact on indigenous communities worldwide. This paper analyzes the impact of COVID-19 on indigenous people, focusing on their health, social, and economic well-being. It discusses the challenges faced by indigenous communities, such as limited access to healthcare, education, and employment opportunities. The paper also highlights the resilience of indigenous communities and their traditional knowledge and practices. The study concludes that COVID-19 has exacerbated the existing inequalities and challenges faced by indigenous people, and it calls for urgent action to address these issues.

**KEYWORDS:** COVID-19, Indigenous People, Health, Social, Economic, Resilience.

Gaurav Das

## Impact Factor : 7.832

**IJFANS**  
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### The Prospect of Tea Garden Youth in Sustainable Development in Assam

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**ABSTRACT**

In the world's economy, tea is a major source of revenue for a particular field. Tea plantation is a major and profitable sector in Assam. Sustainable development is a goal for the tea sector. The paper examines the current situation, challenges, and opportunities of tea garden youth in Assam. It discusses the role of tea garden youth in sustainable development and the need for government and industry support. The paper also highlights the various initiatives and programs implemented to support tea garden youth. The study concludes that tea garden youth have a significant role to play in the sustainable development of Assam, and it calls for concerted efforts to support and empower them.

**KEYWORDS:** Tea Garden, Youth, Sustainable Development, Assam.

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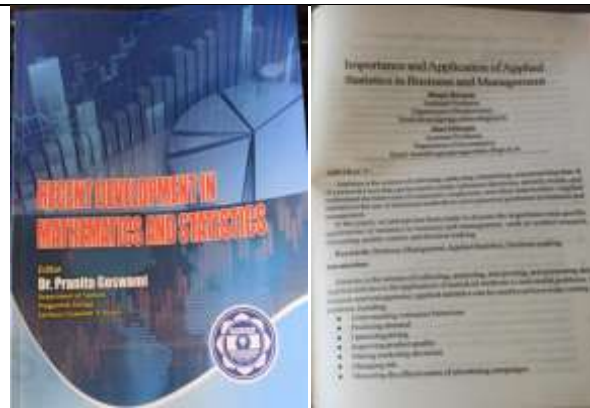
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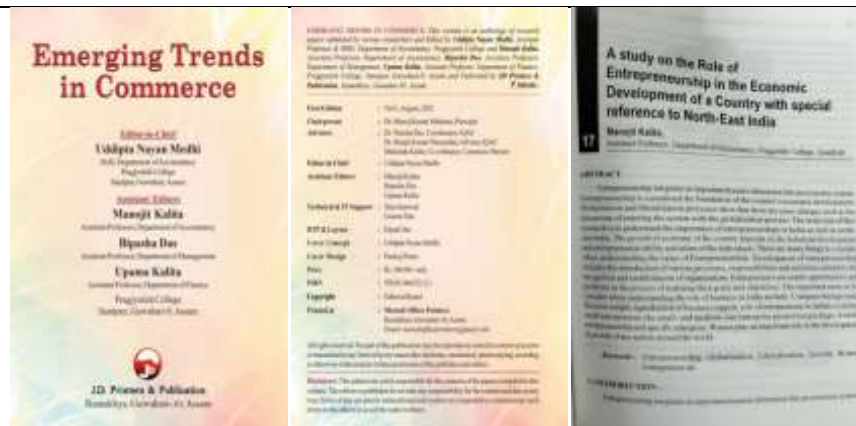
		<p align="center"><b>"Unveiling the Significance of Sustainability in Tourism: Environmental Conservation, Socioeconomic Development, and Destination Resilience"</b></p> <p align="center"><b>Khanindra Das</b> Research scholar Jayanegara Group khanindra@jgpn.ac.id</p> <p align="center"><b>Upama Kalita</b> Research Scholar Jayanegara University upama@jgpn.ac.id</p> <p align="center"><b>Wahid Ward</b> Chief Executive Wahid Ward Group wahid@wwg.com</p> <p align="center"><b>Al Akbari</b> Director of Hospitality Administration Profession University of Sultan Hassanudin, South Sulawesi</p> <p><b>Abstract</b></p> <p>Sustainable tourism has emerged as a critical concept in the contemporary global context, with increasing recognition of its importance to the local and tourist industry. This article aims to explore the multifaceted nature of sustainable tourism, its challenges, and its potential to address the needs of the future. The authors discuss the significance of sustainable tourism in promoting economic growth, environmental conservation, and social equity. They also explore the role of stakeholders in creating a sustainable tourism ecosystem and the importance of policy and regulation in ensuring its success. The article concludes by highlighting the need for a holistic approach to sustainable tourism, one that considers the needs of all stakeholders and the long-term well-being of the destination.</p> <p align="center"><small>Key Words: Sustainability, Tourism, Environment, Local Communities, Protected Development.</small></p>
	<p>Upama Kalita</p>	 <p>The image displays three book covers from Union Book Publications. The first cover on the left is for 'BUSINESS ORGANISATION and MANAGEMENT' by Khanindra Das, Upama Kalita, and Gaurav Das. The middle cover is for 'ENTREPRENEURSHIP' by Khanindra Das and Upama Kalita. The third cover on the right is for 'Fundamentals of INVESTMENT' by Khanindra Das, Santosh Kumar Sarma, and Upama Kalita. All covers feature the Union Book Publications logo and a barcode.</p>

		
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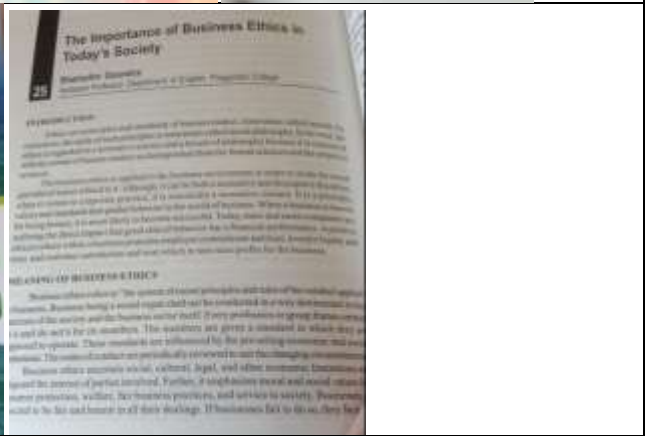






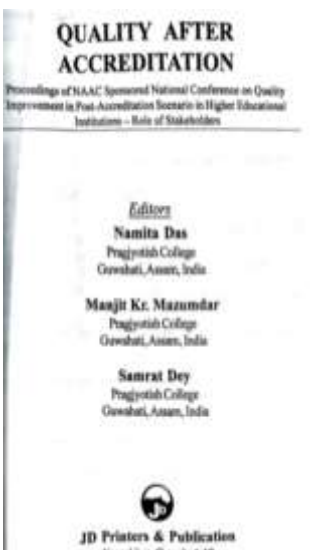
Kabita Medhi



Shyamolim Gauratra



Chemistry	Dr. Saitanya Kumar Bharadwaj		<p><b>Chapter 13</b> <b>Topological Index of Naturally Occurring Zeolite Material [4, 6]</b></p> <p>Saitanya K. Bharadwaj and Santanu Acharjee</p> <p><b>Abstract</b> A topological index is a numeric quantity which characterizes the whole structure of a chemical graph. Here, we compare Randić index and the generalized Randić index, Zagreb index, arithmetic Zagreb index, harmonic index, hyper Zagreb index, atom bond connectivity index, geometric-arithmetic index, Laplacian index of molecule, Hosoya [4, 5] and Euler characteristic [6, 7] index of <math>G</math>. We also calculate the fourth moment of the atom-bond connectivity index and the 10th moment of the geometric-arithmetic index of zeolite structure [4, 5], where <math>n = 2, 3, 4</math>.</p> <p><b>Keywords</b> Topological index · Chemical graph · Zeolite</p> <p><b>13.1 Introduction</b></p> <p>Zeolites are crystalline aluminosilicates with pores having the general formula <math>M_x(\text{Al})_x(\text{Si})_y\text{O}_4 \cdot n\text{H}_2\text{O}</math>, where <math>M</math> is any metal, <math>x</math> is aluminum and <math>y</math> is silicon. Zeolites <math>\text{Y}</math>, <math>\text{A}</math>, <math>\text{D}</math>, and <math>\text{Z}</math> zeolites are synthesized by sharing oxygen atoms giving three-dimensional tetrahedral network by periodic cavities from naturally occur three-dimensional crystal structure built from the aluminum silicates network and silicon with silicon or aluminum-oxygen bonds in tetrahedra, pentamers, and hexamers. The sharing of the individual silicon and aluminum tetrahedra distributed throughout with 3-6 SiO<sub>4</sub> tetrahedra and could which are occupied by alkali cations and water molecules. Depending on the SiO<sub>4</sub> tetra, different types of zeolites are formed and their structure may be 2D, 3D, 4D.</p> <p>Zeolite can be synthesized as well as obtained naturally. Zeolite formations may occur under various conditions such as hydrothermal alteration of basalt, metamorphism.</p> <p><b>S. K. Bharadwaj</b> Department of Chemistry, Pimpri Chinchwad Education Trust, Pimpri, Chinchwad, Maharashtra 411004, India e-mail: sarkar@pimpri.chet.ac.in</p> <p><b>S. Acharjee</b> Department of Mathematics, Chhatrapati Shivaji Maharaj Vastu Sangrahalaya, Mumbai, Maharashtra, India e-mail: sancharjee@math.mumbai.ac.in</p> <p>© The Author(s) under exclusive license to Springer Nature Singapore Pte Ltd. 2023 This book is a U.S. Government work and, as such, is in the public domain in the United States of America.</p>
English	Laltanzul Khawbung		 <p><b>QUALITY AFTER ACCREDITATION</b> Proceedings of 3rd National Conference on Quality Assurance in Higher Education Co-located with 1st National Conference on Quality Assurance in Higher Education Co-located with 1st National Conference on Quality Assurance in Higher Education</p> <p><b>EDITED BY</b> Namita Das Pimpri Chinchwad Education Trust, Pimpri, Chinchwad, Maharashtra, India</p> <p><b>MANOJ K. MISHRA</b> Pimpri Chinchwad Education Trust, Pimpri, Chinchwad, Maharashtra, India</p> <p><b>SUMIT DAS</b> Pimpri Chinchwad Education Trust, Pimpri, Chinchwad, Maharashtra, India</p> <p><b>3rd Printers &amp; Publishers</b> Creative Education Pvt. Ltd.</p> <ul style="list-style-type: none"> <li>• CORE MATERIAL ASSESSMENT AND QUALITY ASSURANCE IN HIGHER EDUCATION = Namita Das, Manoj K. Mishra, Sumit Das</li> <li>• THE IMPACT OF THE ROLE OF STAKEHOLDERS IN HIGHER EDUCATION IN HIGHER EDUCATIONAL INSTITUTIONS: A QUALITY REVIEW WITH REFERENCE TO SIAMARTIN SECTION = Laltanzul Khawbung</li> <li>• PERFORMANCE AND ACCREDITATION STATUS OF HIGHER EDUCATIONAL INSTITUTIONS IN INDIA = Rajat Das &amp; Pritam Rajan</li> <li>• ROLE OF ENGINEER DEGREE IN QUALITY IMPROVEMENT IN HIGHER EDUCATIONAL INSTITUTIONS = Ashu Mishra &amp; Sandeep Kumar</li> <li>• IMPACT OF STUDENT ENRICHMENT RELATIONSHIP AND OPPORTUNITIES FOR STUDENT LEADERSHIP = Anshu K. Mishra &amp; Rajat Das</li> <li>• ROLE OF ENGINEER DEGREE IN THE QUALITY OF HIGHER EDUCATIONAL INSTITUTIONS = C. Parameswari, S. Ramesh Kumar, &amp; S. Siva Rajan</li> </ul>

	<p>Monali Ghosh</p>		<p>CONCOCTION: A Collection of Interdisciplinary Perspectives on Food and Literature provides a comprehensive account of food, nutrition and the related literary studies in the representation of culture, identity, ethnicity, gender, sexuality, religion and education. The book is an outcome of the Dept. of English, Teajga College, Teajga and IQAC, Teajga College, Assam. It is a result of the research and writing of food and literature by the staff members of the Department of English, Teajga College, Assam.</p> <p>First Edition: December, 2022</p> <p>© All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the copyright owner.</p> <p>ISBN: 978-81-960222-6-6</p> <p>Price: ₹ 200 (INR 200)</p> <p>Published by: Jit Prakashan, Jyoti Road, Teajga, 781010, Assam</p> <p>Contact: 9856111111</p> <p>Printed at: Graphic Space Printing Services, Harnamanpur, Guwahati, 781005.</p> <p>Jit Prakashan, Teajga, Assam</p> <p>Food and nutrition is a discipline that has been developed over the years. It is a multidisciplinary field that involves the study of food, nutrition and the related literary studies. The book is a result of the research and writing of food and literature by the staff members of the Department of English, Teajga College, Assam. It is a result of the research and writing of food and literature by the staff members of the Department of English, Teajga College, Assam.</p>	
<p>Economics</p>	<p>DR. NAMITA DAS</p>		<p><b>QUALITY AFTER ACCREDITATION</b>    Proceedings of NAAC Sponsored National Conference on Quality Improvement in Post-Accreditation Scenario in Higher Educational Institutions - Role of Stakeholders</p> <p>First Published in 2023</p> <p>Published by JD Printers &amp; Publication</p> <p>Editors: Namita Das, Manjit K. Mazumdar &amp; Samrat Dey</p> <p>Price: 300/- (Three hundred only)</p> <p>Cover Design &amp; Layout: Dipak Das</p> <p>ISBN : 978-81-960222-6-6</p> <p>© The Editor(s) (if applicable) and The Author(s), 2023</p> <p>Printed at : Meenai Offset Printers, Kamakhya, Guwahati-78</p> <p>This work is subject to copyright. No part of this work may be reproduced, stored in a retrieval system or transmitted in any form or by any means, without the prior knowledge of the copyright owner and the publisher.</p> <p>Neither the publisher nor the authors or the editors give any warranty expressed or implied, with respect to the material contained herein or for any errors or omissions that may have been made.</p>	



### DOES NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL (NAAC) GRADING MATTER WHILE ENROLLING IN A COLLEGE?

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#### ABSTRACT

Students have been at the centre of the education policy-making process. This necessitates students' active participation and the understanding of their rights as well as awareness of policy guidelines. Based on a primary survey of 228 students in Katrap (Metropolitan) and Katrap districts of Assam, India, this paper explores students' awareness about National Assessment and Accreditation Council (NAAC). The data revealed that most undergraduate students are ill-informed of NAAC's assessment criteria. Criteria 2 of NAAC's assessment focuses on the Teaching-Learning Process. The students need to gain a full understanding of the process in order to identify areas in which they can improve personally contribute to the growth of their academic institutions. A systematic of case awareness program about NAAC's assessment criteria should be conducted with the students each year by the educational institutions. This will serve as a reminder to the students and to the teaching and

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- [4] Hsu, J. (2002) Quality Assurance in Higher Education: Reflections in the National University of Bangladesh. International University on Quality Assurance in Education in Bangladesh, IQAE of Bangladesh.
- [5] Hapanayagwi O., Chanda T., Dewu C. (2012) Education: Interrelationships between learning and learning outcomes and child development education in Zimbabwe. Save the Children.
- [6] Kanyomo G.Y. (2005) Zimbabwe's public education reforms: Successes and challenges. *International Journal*, 6(1), 65-74.
- [7] Postlethwaite T. N., Kallagas T. (2005) An assessment of educational achievement. [www.iaac.org/download9\\_05web.pdf](http://www.iaac.org/download9_05web.pdf).
- [8] Tillett, H., Ludkowski, M., Allagar, M. (2013) Peer assessment quality: Criteria for quality assessment (peer) assessment for learning-A review of the studies. *Studies in Educational Evaluation*, 37(1), 23-33.
- [9] Okandi, J. W., Morris, D., & Davis, N. S. (2010) Formative assessment in higher education. *Assessment, Critique and Evaluation*, 47(6), 1210-1225.
- [10] Coakley, J. (2000). *Kasta Yennara (You are not an idiot)*. Zanzibar: Zanzibar Publishing Co.
- [11] Ruzak-Szyrowska, J. & Bilal-Kováč, M. (2014). Employability of graduates in E-learning environments. *Production Engineering*, 12: 259-268.

Entrepreneurship and Employment Generation in Assam: A collection of research articles on the role of entrepreneurship in employment generation in the State of Assam, edited by Dr. Susmita Priyadarshini, Parthapratim Choudhury, Dr. Khagen Das on behalf of Assam College Teachers' Association (ACTA) and published by Assam College Teachers' Association in association with Centre Books, Newmarket, Guwahati-78.

ISBN: 978-81-92984-16-1.

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Published by: Dr. Susmita Priyadarshini, Assistant Secretary, Assam College Teachers' Association, 80/1A, Thana, Jorhat, Guwahati-781004, Assam and Centre Books, Newmarket, Guwahati-781007.

Year of Publication: December, 2013.  
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Cover Design: Manjiri Ghosh.  
Type Setting: Jitendra Kumar, Thana Road, Jorhat 1.  
Printed at: Sri Ganga Press, Sakardighat, Jorhat.  
Guwahati, Assam-781005, Phone: 91-94351 12887.

J. Entrepreneurship and Employment Generation in Assam

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### Growth and Growth Drivers of Entrepreneurship Development in Assam: Linking with Economic Growth and Employment

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Assistant Professor  
Dept. of Economics, Praggyani College

**Abstract**  
The economic growth process of a country is not only influenced by entrepreneurial activities at various levels. Entrepreneurship is also known as an efficient and profitable investment for employment generation and poverty alleviation of the state of any country. There is enough scope for all round economic development through entrepreneurship development in Assam. Therefore, the present study tries to analyze the growth of entrepreneurship development in the state in comparison with the growth of all India. The research article also tries to investigate the factors of growth of entrepreneurship development in Assam. It is found that the growth of entrepreneurship development in Assam is not only influenced by economic growth but also by social and human development. The study also finds that the growth of entrepreneurship development in Assam is not only influenced by economic growth but also by social and human development. The study also finds that the growth of entrepreneurship development in Assam is not only influenced by economic growth but also by social and human development. The study also finds that the growth of entrepreneurship development in Assam is not only influenced by economic growth but also by social and human development.

From <https://jeet.pearsoned.com/doi/full/10.1016/j.jeet.2019.04.001>  
 March 01, 2019 Available Online 01/02/2019

14. Prave Information Bureau of India (3 February 2012), taken to promote entrepreneurship in India. Ministry Government of India, Ministry of Development of New Regions, Delhi.

15. Rithipattan, N., Kulkarni, W., Vaidhyanathan, C. Chennakrishna, S. (2011), Success of entrepreneurial in Young Adults in Thailand, Proceedings of the Intern Conference on Engineering, Project, and Project Management, Singapore: 219-226.

16. Schalte, T. W. (1981), Investment in entrepreneurship. Scandinavian Journal of Economics, 82(4): 548-549.

17. Schumpeter, J. A. (1934), The Theory of Firm Development: An Inquiry into Profits, Capital, Credit, and the Business Cycle. Harvard University Press.

18. Shukla, S; Bharti, P & Dwivedi, A. K. (2022), On Entrepreneurship. Advertiser (ICEM) India Report 201 Entrepreneurship. Advertiser (ICEM) India Report 201 Entrepreneurship. Advertiser (ICEM) India Report 201 Entrepreneurship. Advertiser (ICEM) India Report 201 Entrepreneurship.

19. Soesono, C.J. and Mwangi, D (2008), Entrepreneurship economic development: A study among the Making in Africa. Man in India, 48(4):529-546.

20. Zaki, M. R. English, N. Choudhury, S & Rajak, S. (2013), The of necessity and opportunity driven entrepreneurship in growth. International Research Journal of Applied and IS Sciences, Science Explorer Publications, 7 (2): 100-108.

Dr Bidyut Bikash Baishya

**QUALITY AFTER ACCREDITATION**  
 Proceedings of NAAC Sponsored National Conference on Quality Improvement in Post-Accreditation Scenario in Higher Educational Institutions – Role of Stakeholders

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**JD Printers & Publication**  
 Kamakhya, Goswati, Assam

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First Published in 2023

Published by JD Printers & Publication

Editors : Namita Das, Manjit Kr. Mazumdar & Samrat Dey

Price : 300/- (Three hundred only)

Cover Design & Layout : Dipak Das

ISBN : 978-81-960222-6-6

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Printed at : Metal Offset Printers, Kamakhya, Goswati, Assam

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**DOES NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL (NAAC) GRADING MATTER WHILE ENROLLING IN A COLLEGE?**

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**ABSTRACT**

Students have been at the centre of the education policy-making process. This necessitates students' active participation and the understanding of their rights as well as awareness of policy guidelines. Based on a primary survey of 226 students in Kanpur (Metropolitan) and Kanpur districts of Uttar Pradesh, India, this paper explores students' awareness about National Assessment and Accreditation Council (NAAC). The data revealed that most undergraduate students are ill-informed of NAAC's assessment criteria. Criteria 2 of NAAC's assessment focuses on the Teaching-Learning Process. The students tend to gain a full understanding of the process in order to identify areas in which they can improve personally contribute to the growth of their academic institutions. A rehearsal of an awareness program about NAAC's assessment criteria should be conducted with the students each year by the educational institutions. This will serve as a reminder to the students and to the teaching and

**भारतीय अर्थव्यवस्था की प्रवृत्तियाँ एवं चुनौतियाँ (1991-2021)**

डॉ. जयंत अग्रवाल  
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[4] Hug, Z. (2000) Quality Assurance in Higher Education: Reflections in Higher Education in Bangladesh. International Seminar on Quality Assurance in Higher Education in Bangladesh, UCC of Bangladesh with The Commonwealth of Learning, Canada.

[5] Hapatyengwi O., Chataka T., Drowa C. (2019) Education: Interrelationships between learning and learning outcomes and child development in Zimbabwe. Save the Children

[6] Kanyonga G.Y. (2005) Zimbabwe's public sector reforms: Successes and challenges. *International Journal*, 6(1), 65-74.

[7] Postlethwaite T. N., Kallaghan T. (2006). An assessment of educational achievement. [www.isced.org/showdoc.do?docid=9\\_00000002](http://www.isced.org/showdoc.do?docid=9_00000002)

[8] Tillens, H., Laatschack, M., Kluge, M. (2019). Assessment quality: Criteria for quality assessment (peer) assessment for learning: A review of the studies. *Studies in Educational Evaluation*, 77(1), 1-10.

[9] Gikandi, J. W., Morrow, D., & Davis, N. B. (2019). Formative assessment in higher education. *Assessment in Higher Education*, 24(4), 515-530.

[10] Chakrabarti, J. (2000). *Karta/Parinama/Transformation in Indian Education: A Study of the Evolution of the Indian Education System*. New Delhi: Vikas.

[11] Ruzak-Szyroka, J. & Hlasková, M. (2018). Digital Production Education in E-learning. *Proceedings of the 12th International Conference on e-Learning*, 12, 219-228.



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© Editor 2021  
First Published: 2021  
ISBN: 978-61-900991-5-3

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		<p><b>विस्थापन: स्थानीय विकास परिधि का एक ज्वलंत मुद्दा एवं जाटिल आर्थिक समस्या</b> (असम राज्य के संदर्भ में एक विश्लेषणात्मक अध्ययन) — डॉ. विद्युत विकास बीरम</p> <p><b>सारांश</b></p> <p>विस्थापन के परिधि में विस्थापन का मुद्दा एक अलग समस्ये का हिस्सा है जहां विस्थापन के अर्थशास्त्रीय प्रभाव को समझना ही अर्थशास्त्रियों का मुख्य कार्य है। असम राज्य में एक गरीब राज्य का रूप है। जहाँ जहाँ एक विस्थापन प्रक्रिया चल रही है जहाँ जहाँ एक ही जगह है जो विकास और विकास की जड़ों को हिला देती है।</p> <p>युवाओं का असम राज्य की अर्थशास्त्रीय समस्या को हल करने में एक प्रमुख भूमिका है। यह असम के एक गरीब राज्य को एक विकसित राज्य में बदलने में मदद करेगा। असम राज्य में विस्थापन का प्रभाविक प्रभाव है। यह असम के विकास को प्रभावित करेगा। असम राज्य में विस्थापन का प्रभाविक प्रभाव है। यह असम के विकास को प्रभावित करेगा।</p> <p><b>संस्थापक</b></p> <p>असम राज्य में एक गरीब राज्य का रूप है। असम राज्य में एक गरीब राज्य का रूप है। असम राज्य में एक गरीब राज्य का रूप है। असम राज्य में एक गरीब राज्य का रूप है।</p>	<p><b>Chapter 4</b> <b>Problems of Tomato and Potato Growers: A study on Paneri, Barbhag and Sontali areas of Assam</b> — Dr. Bidyut Bikash Baisya<sup>1</sup>, Parbana Mahto<sup>2</sup>, Nilakshi Kalita<sup>3</sup> &amp; Wahida Parbin<sup>4</sup></p> <p><b>Abstract</b></p> <p>India relies heavily on agriculture to sustain its economy. It is one of the major sources of employment for rural residents. In order for a region to grow economically, rural markets play a crucial role. In agricultural marketing, it is relatively underexplored. Due to this, it is important to highlight the problems surrounding agricultural marketing in Assam. Using primary field data, we explored the problem of agricultural marketing in Barbhag, Paneri and Sontali, respectively, of Nalbari, Udalguri and Kamrup districts. To accomplish this, we used descriptive statistics and t-test. Each of the three areas was sampled by 10 farmers each that is 30. Averaging out the income of farmers in Barbhag, household expenditure, and agricultural expenditure, we found that farmers in Barbhag earn around Rs. 1333 a month on average. In Paneri, the average monthly household expenditure of the farmers is Rs. 900, the average monthly income is Rs. 12,700, and the</p> <ol style="list-style-type: none"> <li>1. Assistant Professor, Department of Economics, Pragati College, Guwahati.</li> <li>2. M.A., M.Phil. Economics, Department of Economics, Panjab College, Guwahati.</li> <li>3. M.A., M.Phil. Economics, Department of Economics, Pragati College, Guwahati.</li> <li>4. M.A., M.Phil. Economics, Department of Economics, Pragati College, Guwahati.</li> </ol>	
Masum Ahmed		<p><b>QUALITY AFTER ACCREDITATION</b> Proceedings of NAAC Sponsored National Conference on Quality Improvement in Post-Accreditation Scenario in Higher Educational Institutions - Role of Stakeholders</p> <p><b>Editors</b> <b>Namita Das</b> Pragati College Guwahati, Assam, India <b>Manjit Kr. Mazumdar</b> Pragati College Guwahati, Assam, India <b>Samrat Dey</b> Pragati College Guwahati, Assam, India</p> <p><b>JD Printers &amp; Publication</b> Kamakhya, Guwahati, IB</p>	<p><b>QUALITY AFTER ACCREDITATION</b> Proceedings of NAAC Sponsored National Conference on Quality Improvement in Post-Accreditation Scenario in Higher Educational Institutions - Role of Stakeholders</p> <p>First Published in 2023 Published by JD Printers &amp; Publication Editors: Namita Das, Manjit Kr. Mazumdar &amp; Samrat Dey Price: 300/- (Three hundred only) Cover Design &amp; Layout: Dipak Das ISBN: 978-81-960222-6-6 © The Editor(s) (if applicable) and The Author(s), 2023 Printed at: Metal Offset Printers, Kamakhya, Guwahati</p> <p>This work is subject to copyright. No part of this work may be reproduced, stored in a retrieval system or transmitted in any form or by any means, without the prior knowledge of the copyright owner and the publisher.</p> <p>Neither the publisher nor the authors or the editors give any warranty expressed or implied, with respect to the material contained herein or for any errors or omissions that may have been made.</p> <ul style="list-style-type: none"> <li>◆ DOES NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL (NAAC) GRADING MATTER WHILE ENROLLING IN A COLLEGE? — 1 by Masum Ahmed, Bidyut Bikash Baisya, Iru Das &amp; Namita Das</li> <li>◆ RE-VISITING THE ROLE OF STAKEHOLDERS IN POST-ACCREDITATION SCENARIO IN HIGHER EDUCATIONAL INSTITUTION: A BRIEF REVIEW WITH REFERENCE TO HUMANITIES SECTION — 11 by Lathnasel Khawbung</li> <li>◆ PERFORMANCE AND ACCREDITATION STATUS OF HIGHER EDUCATION INSTITUTIONS IN WEST BENGAL — 17 by Sujal Ray &amp; Prizam Rajak</li> <li>◆ ROLE OF STAKEHOLDERS IN QUALITY IMPROVEMENT IN HIGHER EDUCATIONAL INSTITUTIONS — 23 by Anil Abhis &amp; Nishi Palojja</li> <li>◆ IMPACT OF NEP 2020 ON HIGHER EDUCATION AND OPPORTUNITIES FOR STAKEHOLDERS — 31 by Anil Abhis &amp; Rajan Upadhyay</li> <li>◆ ROLE OF STAKEHOLDERS IN THE PROCESS OF CONTINUOUS IMPROVEMENT IN HIGHER EDUCATIONAL INSTITUTIONS — 37 by C. Parameswar, S. Nathansala &amp; S. Isha Banerjee</li> </ul>	



## DOES NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL (NAAC) GRADING MATTER WHILE ENROLLING IN A COLLEGE?

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### ABSTRACT

Students have been at the centre of the education policy-making process. This necessitates students' active participation and the understanding of their rights as well as awareness of policy guidelines. Based on a primary survey of 226 students in Kamrup (Metropolitan) and Kamrup districts of Assam, India, this paper explores students' awareness about National Assessment and Accreditation Council (NAAC). The data revealed that most undergraduate students are ill-informed of NAAC's assessment criteria. Criteria 2 of NAAC's assessment focus on the Teaching-Learning Process. The students need to gain a full understanding of the process in order to identify areas in which they can improve personally contribute to the growth of their academic institutions. A refinement of any awareness program about NAAC's assessment criteria should be conducted with the students each year by the educational institutions. This will serve as a reminder to the students and to the teaching and

QUALITY AFTER ACCREDITATION

[4] Hui, Z. (2002) Quality Assessment and Accreditation: Reflections in Higher Education. Paper presented at the International Seminar on Quality Assessment in Education in Bangladesh, UCC, Dhaka, Bangladesh with The Cotacoreworld of Learning, Cambridge.

[5] Hapsaryergwi O., Chatsika T., Dering C. (2018) Education: Interrelationships between assessment and learning outcomes and child development education in Zimbabwe. *Save the Children Journal*, 6(1), 65-74.

[6] Kapreyo G Y. (2005) Zimbabwe's performance reforms: Successes and challenges. *International Journal*, 6(1), 65-74.

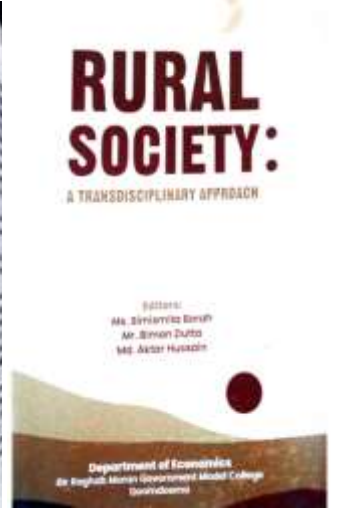
[7] Postlethwaite T. N., Kellaghan T. (2006) The assessments of educational achievement in the 1990s. [www.iaee.org/download/?\\_file=wp06](http://www.iaee.org/download/?_file=wp06)

[8] Tiller, H., Lorenz, M., & Sauer, M. (2015) Assessment quality: Criteria for quality assessment of (peer) assessment for learning-A review of studies. *Studies in Educational Evaluation*, 37(2), 101-114.

[9] Okano, J. W., Moore, D., & Davis, N. E. (2010) Formative assessment in higher education: A review. *Computers & Education*, 57(4), 200-208.

[10] Gresham, J. (2000). *Konferencja i Wydział Politechniki Częstochowa* (Wydział Inżynierii Logistycznej i Inżynierii Produkcji) (Edycje Inżynierii i Logistyki Wydział Inżynierii Politechniki Częstochowa, 17-18-19).

[11] Rask-Szymczak, J. & Białkowski, M. (2004). *Produkcja Edukacji w Inżynierii Produkcji* (Inżynieria Produkcji, 12-239-248).



**Rural Society: A Transdisciplinary Approach** is a research-based book published by Department of Economics, Bir Jagdish Mohan Government Model College, Guwahati, Assam, India. The book is available for purchase at [www.kapsons.com](http://www.kapsons.com).

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Dr. Pranjali Prasad Bhattacharya, Bir Jagdish Mohan Government Model College, Guwahati, Assam.

**Published By:** Department of Economics, Bir Jagdish Mohan Government Model College, Guwahati, Assam.

**Year of Publication:** July, 2022

**ISBN:** 978-91-5627-443-1

**Price:** ₹ 275/-

**Printed at:** Kapsons Printing House, Chandernagore, Guwahati-781001

**Disclaimer:** The facts, opinions expressed here are entirely of the authors and editorial board of the book is not responsible. Unintentional errors to be advised (concerned authority).

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**Digital Transactions in India, Passover with Hidden Costs: A Review of Literature**

Masum Ahmed  
 PhD Research Scholar, Department of Economics, Gauhati University, Assam

Aruneka Mahanta  
 PhD Research Scholar, Department of Geography, Gauhati University, Assam

**Abstract**

One of the most profitable functions of money is to serve as a medium of exchange. With change in the physical format of money in the digital form, it is essential to study the volume of transactions. Transactions are necessary for trade in financial markets and for the growth of the nation. This paper studies the digital transactions in India on various dimensions. It also discusses the government's role in promoting digital transactions. The paper also discusses the government's role in promoting digital transactions. The paper also discusses the government's role in promoting digital transactions.

**Keywords:** Digital Transactions, COVID-19, Ease of Doing Business, Digital Payments, Digital Transactions.

**Introduction**

Transactions in an economy are the key to growth. The promotion of the digital form of money and then the promotion of digital transactions followed by the digital payment system (cryptocurrency) are the changes that has potential to increase the transactions in the economy. The government's initiative to make the digital transactions has led to the birth of many financial technology companies (Fintech) which is expected

**Chapter 18**  
**What an Untapped Opportunity! Pisciculture in Assam: A Study of South Kamrup and Gohpur.**

Ashok Pradhan<sup>1</sup>, Palashjyoti Das<sup>2</sup> & Masum Ahmed<sup>3</sup>

**Abstract:**

Pisciculture is one of the most underexplored sectors of Assam's rural economy, despite Assam's abundance of fresh water bodies. People use fish as a source of protein as well as a source of livelihood. During the last decade, Assam experienced more than 2077 mm of rainfall each year, and the state has more than 216 ichthyofauna species due to the presence of the many rivers and flood plains. In spite of this, the state's domestic consumption cannot be met by domestic production, and therefore the state is dependent on imports of fish from Andhra Pradesh. In this context, using primary data, this paper explores the problems and prospects of fishing industry in South Kamrup and Gohpur Assam, India. Data were analysed using descriptive statistics, and the data also indicate that the average monthly income of the fish farmers is Rs. 45,000 (SD: 10060.64). Only 3.22 percent of respondents have benefited from government policies relating to pisciculture. This demonstrates the relevance of the present paper.

**Key Words:** Pisciculture, Fish, Assam, Problems of Fish industry.

**18.1. Introduction:**

The term "pisciculture" refers to the practice of growing and

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Kritika Das

**Chapter 17**  
**A Study on Pradhan Mantri Fasal Bima Yojana (PMFBY) in Kamrup District of Assam**

Ms. Kritika Das<sup>1</sup>, Subham Thakur<sup>2</sup> & Jahanara Khatun<sup>3</sup>

**Abstract**

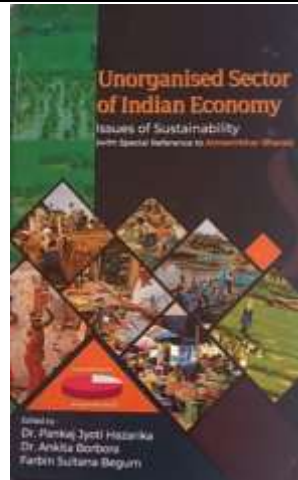
Since independence India has witnessed various peaks and troughs in the agricultural sector. Though the first five-year plan emphasized thoroughly on the growth of agriculture, the second plan totally neglected it. The experience of the first plan compelled the Government to promote the agricultural sector as it is the backbone of the Indian Economy. However, in recent years, indebtedness, crop failures, non-cooperative prices and poor returns have led to agrarian grief in many parts of the country. To tackle these problems, the government has come up with various mechanisms viz. insurance, direct transfers and loan waivers. In February 2016, the government launched the crop insurance scheme, Pradhan Mantri Fasal Bima Yojana (PMFBY) to safeguard the interest of the farmers.

The study is conducted to study the performance of Pradhan Mantri Fasal Bima Yojana (PMFBY) in Assam over the years. It also analyses the socio-economic profile of the farmers and their perception towards the scheme in Kamrup district of Assam. The study is based on both primary and secondary data and appropriate statistical tools have been used to analyse the data. Initially it was observed that there was a decline in the percentage of farmers but after 2019 there was a sharp increase in the percentage of farmers taking up the scheme.

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Geography

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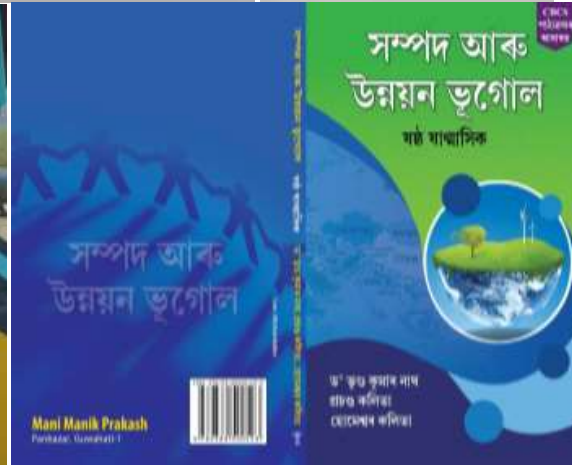
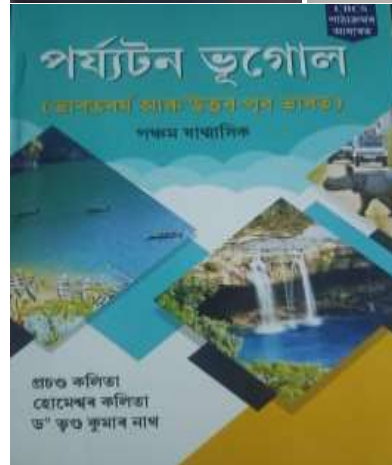
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**Community Participation and Progress of Tourism Development: A Case Study of Pabitora Wildlife Sanctuary of Assam, India**  
Dr. Bhrigu Kumar Nath  
Assistant Professor, Department of Geography, Pragati College, Assam

Being well in the unorganised industry because this sector is operating in a variety of ways. Among the role of tourism in economic development is viewed as one of the significant interventions. Tourism industry has already proved its capabilities as an alternative economic sector in growth and development sectors. The factors assessed here, include social, including education and cultural background of different sections. After this study to see the possibilities of the industry in the local and the management development on the other. The Pabitora Wildlife Sanctuary located in Margaita District of Assam has a very rich biodiversity which is working as natural tourism resource. On one side and on the other hand the culturally rich villages in the periphery of the sanctuary are providing the natural resource base for facilitating the tourism industry in the area. There are attempt has been made to refer the role of community participation in tourism in highlighting the economic sector to boost the livelihood of the people in the area.

**Keywords:** Pabitora, tourism, community, multiple, livelihood, education

**Introduction:** Tourism is often said as the "sunshine industry". Because of its least detrimental effect to nature and society on one side, and economic, property associated with it on the other, tourism has gained reputation over the years worldwide. However, there are some other positive forms of tourism practices like creation of jobs, increase in foreign exchange, generating opportunities for different medicinal industries and other services. The development of technical know-how by train and







## Topography and Physiography

Articles by  
Abdul Kameer Khan

### Introduction

Geographically, Assam occupies a unique position with its unique geological, physiographic, biological, social, and cultural diversity. The Assam state is located in the north-east corner of India comprising exclusive topographic and physiographic settings with hills, plateaus and river valleys (Anantaramaiah, 1996). The river valleys spread over four-fifths of the total land area of Assam while plateaus and hills comprise around one-fifth of the total land area (Khan & Ahmed, 2007). The topographic appearance of Assam is different from that of most other states of India, and the variable topographic, as well as physiographic conditions make Assam an interesting place for researchers in understanding the diverse activities on inseparable geo-environmental and socio-cultural aspects of this region of the country (Mazumdar, 1937). Topography and physiography are the key parameters to know about the physical geographic settings of a landscape and these parameters also act as a basis to draw information on different geographic features available on the ground (Blanc, 1967; Saal & Cohen, 2004; Librowski et al., 2009). In this study, an attempt has been made to understand the physiographic setting of Assam based on secondary sources of scientific literature. Simultaneously, the study also tries to draw a basic understanding of the topographic framework of Assam by assessing the basic terrain preparation based on a digital cartographic methodology. Especially from the beginning of the 21<sup>st</sup> century, the geo-scientists in general and geographers in particular, started following the digital cartographic methodology for studying the present

## GEO-SPATIAL TECHNOLOGIES IN RURAL DEVELOPMENT

Editors

Dr. A. Sinhaichalan  
Dr. R. Maraganan

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ISBN: 9788281734758



Today & Tomorrow's Printers and Publishers  
44367, Ansari Road, Daryaganj, New Delhi - 110 002  
Ph: 23243621, 23241021; Fax 23242621  
E-mail: [todaytomorrow@gmail.com](mailto:todaytomorrow@gmail.com) [tdp@tdp.in](mailto:tdp@tdp.in)  
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Printed and Published by  
Today and Tomorrow's Printers and Publishers  
44367, Ansari Road, Daryaganj, New Delhi - 110 002 (India)  
Ph: 23242621, 23241021; Fax 23242621.

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**Abstract**

The abstract provides a brief overview of the research paper, highlighting the objectives, methodology, and key findings. It serves as a concise summary for readers to quickly assess the relevance and contribution of the study.

**Keywords:**



Keywords are terms used to describe the main topics and concepts covered in the paper, facilitating searchability and indexing for researchers and practitioners.



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<b>Department of Geography</b> <b>GARDHATI UNIVERSITY</b> <b>Guwahati (Assam, India)</b>	
4	<b>Evaluating Effectiveness of Some Remote Sensing Indices for Extracting Natural Resource Information Using LANDSAT Data: A Case Study of Dhemaj District, Assam</b> <i>Krishna Das and Ashok Kumar Bora</i>
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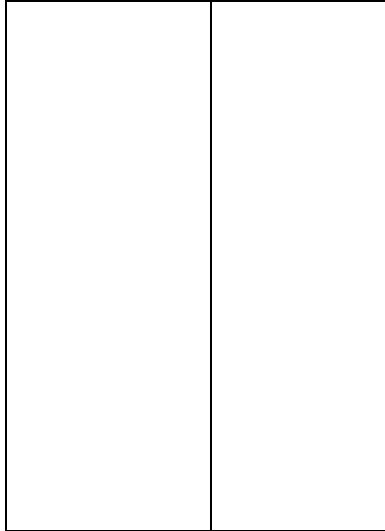
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Pankhi Senapati





Monalisha Chakrabarty





History

Dr. Gargee  
Sharmah

DOI: 10.54560/2021

Proceedings of  
**INDIAN ART HISTORY CONGRESS**  
XXIX Session 2022 (Chennai)  
Edited by Preeto NAYAR



 Indian Art History Congress  
Guwahati, Assam  
INDIA  
2023

**Iconography of Some Sculptures of Early Assam: Evolutions and Local Influences**

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**Introduction**  
The iconological studies in their iconographic terms in Assam has been provided from early period. Shiva and Devi are worshipped in the form of huge and giant sculptures. These forms are found extensively in Assam. The above discussion of the Patala with some of Garga and Sarmah may be assigned to 5<sup>th</sup>-4<sup>th</sup> century CE, where the influence of Gupta character is clearly visible.

Assam's neighboring region, Bengal, witnessed the regional variations in art form, the subject the Pala dynasty. The Pala were great patron of art and under their patronage a new local school of sculpture evolved, developing its own characteristics. This new school continued for almost four centuries till the coming of the Turko-Afghans. This group of art came to be known as the Eastern Indian School of Medieval Art (EISMA) (Dasgupta, 1961: 40). The Pala ruled Bengal and Bihar for the period from 8<sup>th</sup> to 12<sup>th</sup> centuries CE, and occasionally extended successfully over Assam. Until 8<sup>th</sup> century CE, Assam witnessed a sculptural style which followed the classical tradition but was greatly influenced by local forms. Influence of local tribal style on some sculptures of Assam is clearly visible. The Eastern Indian School of Medieval Art (EISMA) penetrated into the early medieval Assam. This was proved by the sculptures of Sri Surya Pahar and Na-Nali that belonged to 8<sup>th</sup> century CE.

**Rationale**  
Study of art history of Assam is very important for the reconstruction of the past of this region. Due to the lack of literary material, one has to depend on the archaeological sources for the history of early Assam. Iconography is one of the important parts of archaeological sources. This paper looks into the evolution and local influence of the iconography of some sculptures of early Assam.

**Methodology**  
The study is largely based on iconographic methodology. In order to get an in-depth analysis, a multidisciplinary approach is taken. Proper methodological tools from history and archaeology are selectively used for the study. A field survey method was also adopted.

# ART AND ARCHITECTURE OF EASTERN INDIA



Edited by  
**PAROMITA DAS**

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Editor - Paromita Das

© Edition

ISBN : 978-93-91352-14-3

Price : 3000/-

First Edition: 2023

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Published by:  
**PATNAK PUBLISHER AND DISTRIBUTORS**  
E-6/33a & 34, Ground Floor, Sangam Vihar  
New Delhi-110030  
E-mail: [patnakppd@gmail.com](mailto:patnakppd@gmail.com)

Typographic Design by: G. R. Sharma

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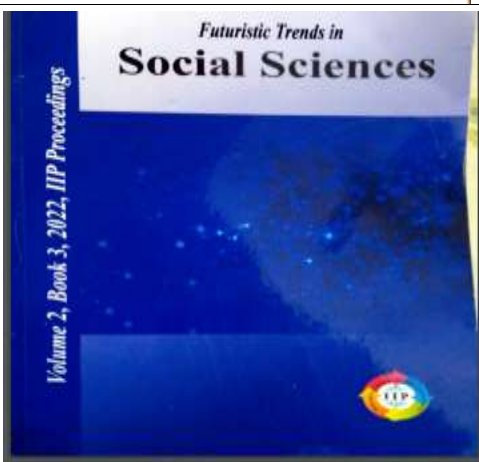
**Idea behind the Image: War Goddesses in Early Assam and Bengal**

*Gargya Sharma*

Iconography deals with the idea behind the image. Iconography is helpful not only in the purpose of identifying images, but also for that of dating the works of art. The study of iconography is blended with the study of religion, because the word icon (Greek often means a devotional image, a figure representing a deity or a saint, in painting, mosaic, sculpture sometimes etc., which is specially meant for worship or which is in some way or other associated with ritual). So the proper understanding of iconography enables one to be quite conversant with one of the most important aspects of the religious life of different men of mankind. This paper focuses on the iconography of the war goddesses of Assam and Bengal up to 13<sup>th</sup> century CE. R.C. Majumdar states that up to the seventh century CE Indian art displayed an all-Indian character. Regional variations took in political and cultural life grew and found expression in eighth century CE. In Bengal, under the Pala rule new local forms of expression evolved, developing its own characteristics which is generally known as *Later Indian School of Medieval Art* (EITM). The Pala rule occasionally extended authority over Assam and Pala School of Bengal also influenced art of Assam.

In popular Indian perceptions of divinity, the dominant image is of a male god, accompanied by his consort, who is his *betwixt-sex Sakti*. However, war goddesses Mahishasurardini is portrayed independently and her iconography is very popular in both Assam and Bengal. Sarvasvi image of Devilrai proves that war goddess was popular in Bengal from the seventh century CE. Most of the Mahishasurardini image of Assam and Bengal are made in eleventh century CE. In both the regions two female Mahishasurardini, known as Katyayani, is popular. Sekta Upa Purana written in Bengal also gave prominence to the

Philosophy  
Dr Parmita Chowdhury



*100* of the Book: Futuristic Trends in Social Sciences  
*1000* of the Book: Volume 2, Book 3, 2022, IIP Proceedings

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ISBN: 978-93-90432-09-1

**Publisher, Printed at & Distributed by:**  
Indraprastha Developers Pvt. Ltd.,  
Pedagogues Campus,  
Devaly SH Housing Road,  
8, M Road Chittaranjanpura, Korumda,  
T.C. : 01-2041118608  
E-mail: info@iponline.org

**IMPRINT: IIP Korumda International Publishers**

		<p style="text-align: center;">Journal: Indian Journal of Education ISSN: 014-0104(2011)01 IJPE, Volume 2, Issue 1, Part 2, June 2011 RAMAKRISHNA'S CONCEPT OF BHAKTI</p> <p style="text-align: center;"><b>RAMAKRISHNA'S CONCEPT OF BHAKTI</b></p> <p><b>ABSTRACT</b></p> <p>Ramakrishna who is considered as the Godfather of modern India, is an ancient path and social reformer of 19<sup>th</sup> century. He is also recognized as an embodiment of Vedanta or Vedantism. His objective is to awaken the spirituality of man for which he tries to remove the egoistic and materialistic veil of people's spirituality. This study particularly deals with his conception of Bhakti. In this paper I will try to focus on certain aspects like why Ramakrishna has put forwarded so much of importance on Bhakti for the era of materialism or Kaliyuga? Moreover, the nature of Bhakti as it is understood by Ramakrishna is tried to be put forth as well as for practicing Bhakti in these any pre-requisite condition upheld by Ramakrishna is also a matter of inquiry in this paper.</p> <p><b>Keywords:</b> Bhakti, Bhakti, Kaliyuga, Mind, Priest, Rama, Karma</p>
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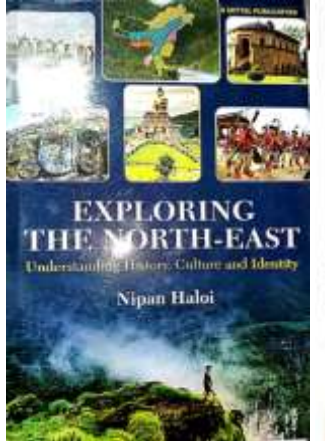
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Political Science

Sun Gogoi



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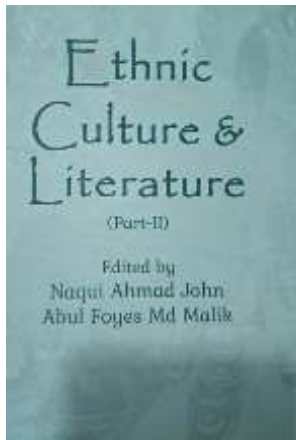
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**Ethnic Culture and Literature (Part-II)**  
 Edited by : Naqul Ahmad John, Abul Foyes Md Malik

ISBN : 978-93-95291-44-6, 2022.  
 Price : ₹200/-

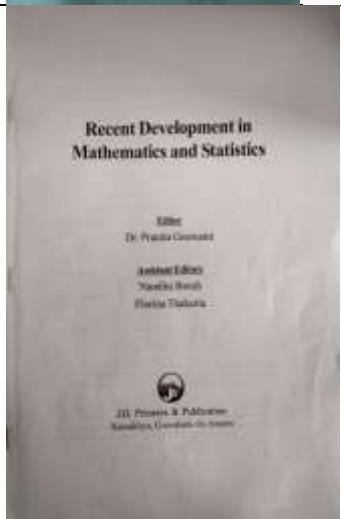
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**Publisher**  
 Sarvabhusha Prakashan  
 J-49, Street No. 38, Rajapuri (Main Road)  
 Uttam Nagar, New Delhi-110059  
 E-mail : sbpublication@gmail.com  
 Website : www.sarvabhusha.in  
 Contact : 011-3501-3521, +91-8178695666

**Printer** : R.K. Offset Process, Delhi

Statistics

Dr Pranita Goswami



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**Recent Development in Mathematics and Statistics**  
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First Edition : August, 2022  
 ISBN : 978-93-95291-44-6  
 Copyright : All Rights Reserved  
 Editor : Dr. Pranita Goswami  
 Author Editor : Pranita Goswami  
 Praksha Prakashan

**Cover Design & Layout**  
 Praksha Prakashan

Price : ₹. 200.00/-

Printed at  
 Sarvabhusha Prakashan  
 J-49, Street No. 38, Rajapuri (Main Road)  
 Uttam Nagar, New Delhi-110059

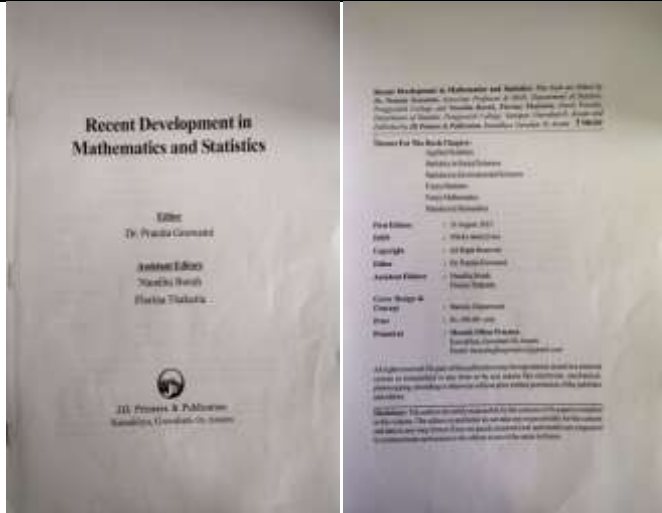
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Zoology

Seema Kaur



Diptimati K. Borah

**DIVERSITY OF ODONATA SPECIES ALONG THE WATERSHED OF KOPALI RIVER AT HANAMAPUR, WEST KARBENGLONG**

Author: Diptimati K. Borah  
Co-author: Seema Kaur

Author's Address: Department of Zoology, Gauhati University, Gauhati, Assam, India.

**ABSTRACT**

Odonata are diverse and colorful insects with diverse ecological and economic importance. The present study aims to understand the species diversity of Odonata along the watershed of Kopali River in West Karbi Anglong. The study area is divided into 10 sections along the river. A total of 15 species belonging to 7 families were recorded. The highest number of specimens belonged to the family Libellulidae (11 species). The species diversity was calculated using Simpson index and Shannon index.

**KEYWORDS:** Diptimati K. Borah, Seema Kaur

**INTRODUCTION**

Odonata are diverse and colorful insects with diverse ecological and economic importance. The present study aims to understand the species diversity of Odonata along the watershed of Kopali River in West Karbi Anglong. The study area is divided into 10 sections along the river. A total of 15 species belonging to 7 families were recorded. The highest number of specimens belonged to the family Libellulidae (11 species). The species diversity was calculated using Simpson index and Shannon index.

<p>Langtuk Terang</p>	<p><b>Recent Advances in Biological Science : Biodiversity and Human Welfare</b></p> <p>Proceedings of the National Seminar on "Recent Advances in Biological Science, Biodiversity and Human Welfare" November 20th-21st, 2022</p> <p>Department of Zoology, Baring College, Terengganu, Assam Hosted by Assam Science Technology and Environment Council (ASTEC), Science Technology and Climate Change Department, Govt. of Assam</p> <p>Editors <b>Dr. Chittaranjan Baruah Dr. Rabintra Hazarika</b></p>	<p><b>RECENT ADVANCES IN BIOLOGICAL SCIENCES - BIODIVERSITY &amp; HUMAN WELFARE</b> - A collection of research articles on Biological Sciences in the Proceedings of National Seminar on "Recent Advances in Biological Science, Biodiversity &amp; Human Welfare" November 20-21, 2022 organized by Department of Zoology, Baring College, Terengganu, Assam in collaboration with Zoological Society of Assam (ZSA) and ICAC, Baring College, Terengganu, Assam. Edited by Dr. Chittaranjan Baruah &amp; Dr. Rabintra Hazarika and published by Global Bio Publishers, an imprint of Assam Bookland Private Ltd. (Pvt. Ltd.) at 47/20/21, Assam Road, Dibrugarh, New Delhi-110001. Contact No: 88611 48865, 9876575232. E-mail: <a href="mailto:astec@astec.in">astec@astec.in</a>, <a href="mailto:astec@astec.org">astec@astec.org</a></p> <p><b>Global Bio Publishers</b> an imprint of Assam Bookland Private Ltd. 47/20/21, Assam Road, Dibrugarh, New Delhi-110001 Contact No: 88611 48865, 9876575232 E-mail: <a href="mailto:astec@astec.in">astec@astec.in</a>, <a href="mailto:astec@astec.org">astec@astec.org</a></p> <p><b>Baring College Publishing House</b> Baring College, Terengganu, Assam</p> <p>First Impression - 2022</p> <p>ISBN - 978-91-962361-4-0</p> <p>Printed at : The Offset, Assam, India</p> <p>Price: ₹ 495/-</p>	<p>Recent Advances in Biological Science: Biodiversity and Human Welfare, pp. 46-52 DOI: 10.1007/978-91-962361-4-0</p> <p><b>Chapter 5 :</b></p> <p><b>WEB STABILITY - A POSSIBLE FUNCTION OF STABILIMENTUM IN Agropyronichne webs (ARAREAE : ARAGIDAE)</b></p> <p>Sangeeta Das*, Jatin Kulkarni Rishabh Mishra<sup>1</sup>, Langkai Sanyal<sup>2</sup> Rishabh Shrivastava<sup>3</sup></p> <p><sup>1</sup>Department of Zoology, Progressive College, Assam, India <sup>2</sup>Department of Zoology, Guwahati University, Assam, India <sup>3</sup>Department of Zoology, Baring College, Terengganu, Assam, India <sup>*</sup>Corresponding author's e-mail: <a href="mailto:sangeeta@astec.in">sangeeta@astec.in</a> <a href="mailto:astec@astec.in">astec@astec.in</a></p> <p><b>ABSTRACT</b></p> <p>Agropyronichne, Thewissen (1997), is commonly known as the spider of spider (due to the shape of its abdomen and distinctive radial stabilimentum present on its web). For an arachnid spider, the silk web acts as a trapping device which allows food catching (movement of additional silk in form of web discontinuities) in the process of feeding. While the prey enters to investigate the actual structure of the stabilimentum in the spider web, the web stability hypothesis was proved for dragon flies. It stabilimentum function to provide web stability there. It should be proved in all species with web. It should not only deal with web but build (stabilimentum) have different discontinuities or discontinuities web has been still existed in web. We found the stabilimentum is just a circular thread in dragon flies. Stabilimentum often present some other structure as long as spider (spider web) had similar or an additional and thin silk, but this structure difference could be proved conclusively. Multiple experiments conducted through this the function of radial thread was found to be the direct position of the spider stabilimentum is a thin web layer system of radial threads (the stabilimentum) (Kulkarni et al., 2016). These radial threads on the ground treatment on spider web system were not conclusively. Therefore, these radial threads were found to be stability of the web. This is more supported by increasing silk in Arachnid discontinuities after the web is fully constructed by spider with radial stabilimentum.</p> <p><b>Keywords:</b> Arachnid, stability, spider, stabilimentum.</p>
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