



গড়গাঁও মহাবিদ্যালয়
GARGAON COLLEGE



Linkages/Collaborations

Gargaon College

2023-24



List of Collaborations, 2023-24

Sl.No	Parent Institution	Collaborating Institutions	Nature of Work	Year of Activity
1	Gargaon College	Jorhat Kendriya Mahavidyalaya	Book Chapter	2024
2	Gargaon College	Krish Vigyan Kendra, Sivasagar	Training Programme	2023
3	Gargaon College	Tezpur University	Research Paper	2023
4	Gargaon College	Tezpur University	Research Paper	2023
5	Gargaon College	Tezpur University	Research Paper	2023
6	Gargaon College	Raha College ,Nagaon	Book Chapter	2023
7	Gargaon College	Arunodaya University, and USTM	Book	2023
8	Gargaon College	Gauhati University	Book Chapter	2023
9	Gargaon College	Dibrugarh University	Book Chapter	2023
10	Gargaon College	Arunodaya University, Arunachal Pradesh & BPP college, Dhubri	Book	2023
11	Gargaon College	Dibrugarh University	Faculty Exchange Programme	2023
12	Gargaon College	Dibrugarh University	Faculty Exchange Programme	2023



List of Collaborations, 2023-24

Sl.No	Parent Institution	Collaborating Institutions	Nature of Work	Year of Activity
13	Gargaon College	Dibrugarh University	Faculty Exchange Programme	2023
14	Gargaon College	Dibrugarh University	Faculty Exchange Programme	2023
15	Gargaon College	Cotton University	Book	2023
16	Gargaon College	Smithsonian Marine Station, USA & Dana Farber Cancer Institute, USA	International Workshop	2023
17	Gargaon College	Jadavpur University & University of Calcutta	Research Paper	2023
18	Gargaon College	Sibsagar Girl's College	Faculty Exchange Programme	2023
19	Gargaon College	Dibrugarh University	Research Paper	2023
20	Gargaon College	Dibrugarh University	Research Paper	2023
21	Gargaon College	Dibrugarh University	Research Paper	2023

List of Collaborations, 2023-24



Sl.No	Parent Institution	Collaborating Institutions	Nature of Work	Year of Activity
22	Gargaon College	Sikkim University	Research Paper	2024
23	Gargaon College	Dibrugarh University	Faculty Exchange	2024
24	Gargaon College	Dibrugarh University	Faculty Exchange	2024
25	Gargaon College	Dibrugarh University	Faculty Exchange	2024
26	Gargaon College	Dibrugarh University	Faculty Exchange	2024
27	Gargaon College	Dibrugarh University	Faculty Exchange Program	2023
28	Gargaon College	Swahed Peoli Phukan College, Namti	Faculty Exchange Program	2023
29	Gargaon College	Swahed Peoli Phukan College, Namti	Faculty Exchange Program	2024
30	Gargaon College	Dibrugarh University & Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya	Book Chapter	2023
31	Gargaon College	Dibrugarh University	Faculty Exchange Program	2023
32	Gargaon College	Dibrugarh University	Book Chapter	2023
33	Gargaon College	Aranyak, Guwahati & Zoological Survey of London	Research Paper	2023

1. Collaboration between Gargaon College & Jorhat Kendriya Mahavidyalaya, Assam



Outline of the Activity

Collaborative Book Chapter

Sandeepa Agarwalla

Assistant Professor

Department of Botany, Gargaon College

&

Khusboo Agarwal

Assistant Professor

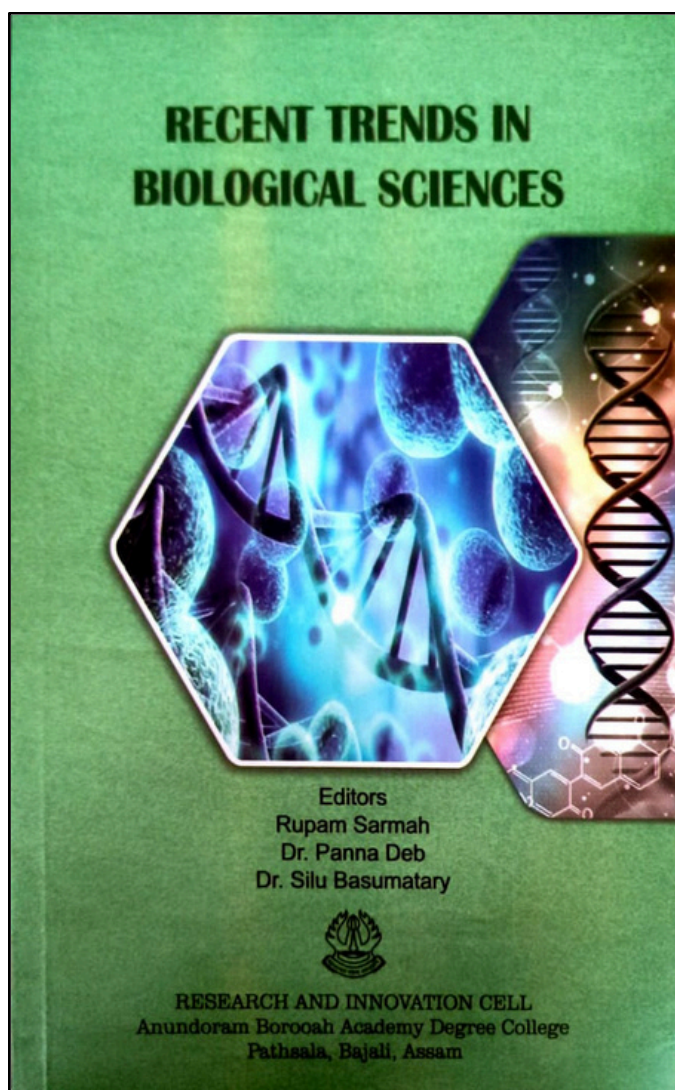
Department of Botany, Jorhat Kendriya Mahavidyalaya, Assam

Title of the Book Chapter: **Hydroponics: A New Approach**

Title of the Book: **Recent Trends in Biological Sciences**

ISBN: 978-93-90706-39-6

Photograph of the Activity



RECENT TRENDS IN BIOLOGICAL SCIENCES : A collection of research articles by several scholars edited by Rupam Sarmah, Dr. Panna Deb & Dr. Silu Basumatary and published by Dr. Ranjit Deka, Chairman, Research and Innovation Cell, Anundoram Borooah Academy Degree College, Pathasala.

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Dr. Ranjit Deka
Chairman
RESEARCH AND INNOVATION CELL
ANUNDORAM BOROOAH ACADEMY DEGREE COLLEGE

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HYDROPONICS: A NEW APPROACH

Sandeepa Agarwalla¹ and Khusboo Agarwal²

¹ Dept. of Botany, Gargaon College, Sivasagar, Assam

² Dept. of Botany, Jorhat Kendriya Mahavidyalaya, Jorhat, Assam

ARTICLE INFO

Keywords:

Chemical fertilizers,
land,
hydroponics,
solve

Abstract:

With the changing time and growing urbanization, there is a decline in cultivation practice along with other problems such as the decrease in land area and high use of chemical fertilizers which is resulting in poor land fertility. Hydroponics is one of the modern strategies which is being accepted for the cultivation of crops, vegetables and fruits which is not only meeting the demand of the growing population but is also trying to solve the issues related to lack of infertile soil as it is a technique which helps in growing the plants without the use of soil. There are various structures of hydroponics, all with their pros and cons. In the present article an attempt is made on the overview of hydroponics.

INTRODUCTION

The term "Hydroponics" was derived from the Greek words 'hydro' which means water and 'ponos' which means labor (Beibel, 1960). Hydroponics is one of the two methods of soil less culture. The other is "aeroponics" which is the practice of growing crops in a moist environment. Hydroponics simply means

*Corresponding author:

e-mail: khushbooagarwal595@gmail.com

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2.Collaboration between Gargaon College & Krishi Vigyan Kendra, Sivasagar, Assam



Outline of the Activity

Collaborative Training Programme

Department of Botany, Gargaon College
&
Krishi Vigyan Kendra, Sivasagar, Assam

Title of the Programme: **Mushroom Cultivation and Entrepreneurship**

Resource Person: **Dr. Prodip Handique, Senior Scientist & Head,**
Krishi Vigyan Kendra, Sivasagar
Date: 4th November, 2023

Photograph of the Activity



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3. Collaboration between Gargaon College & Tezpur University



Outline of the Activity

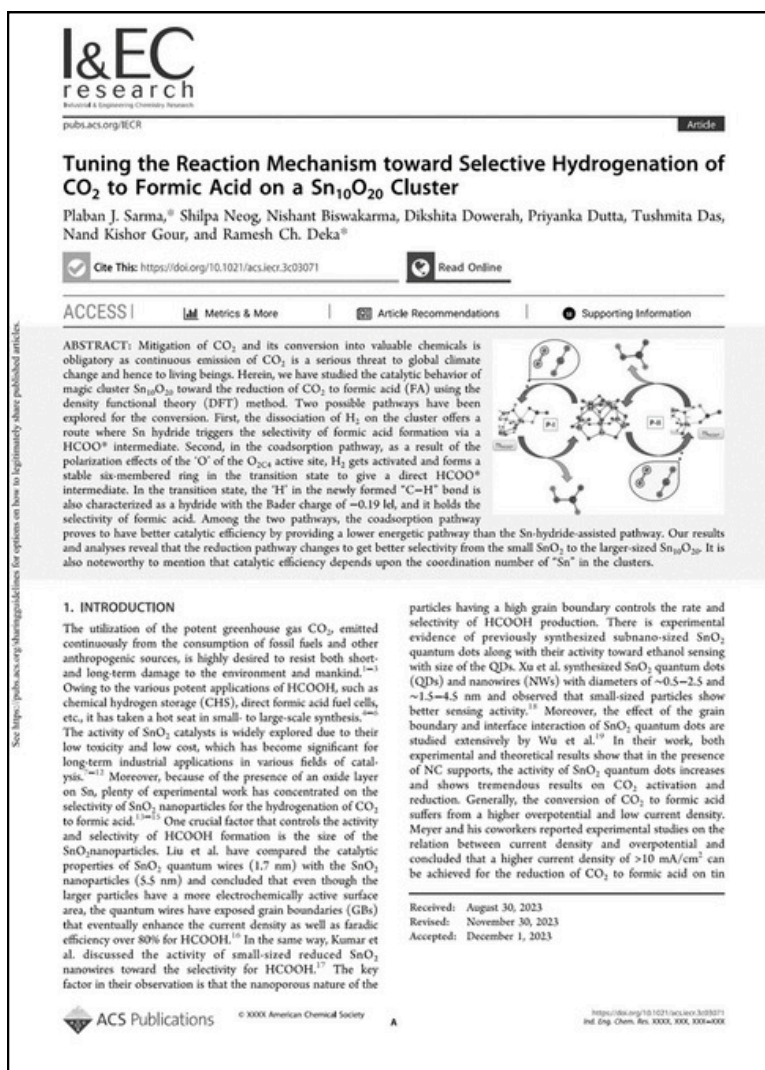
Collaborative Research
Dr. Plaban Jyoti Sarma
Department of Chemistry, Gargaon College
&
Shilpa Neog, Nishant Biswakarma, Dikshita Dowerah, Priyanka Dutta,
Tushmita Das, Nand Kishor Gour and Ramesh Ch. Deka
Department of Chemistry, Tezpur University

Title of the Paper: Tuning the Reaction Mechanism toward Selective Hydrogenation of CO₂ to Formic Acid on a Sn₁₀O₂₀ Cluster

Journal Name: Industrial & Engineering Chemistry Research

Year of Publication: 2023
ISSN:0888-5885

Photograph of the Activity



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4. Collaboration between Gargaon College & Tezpur University

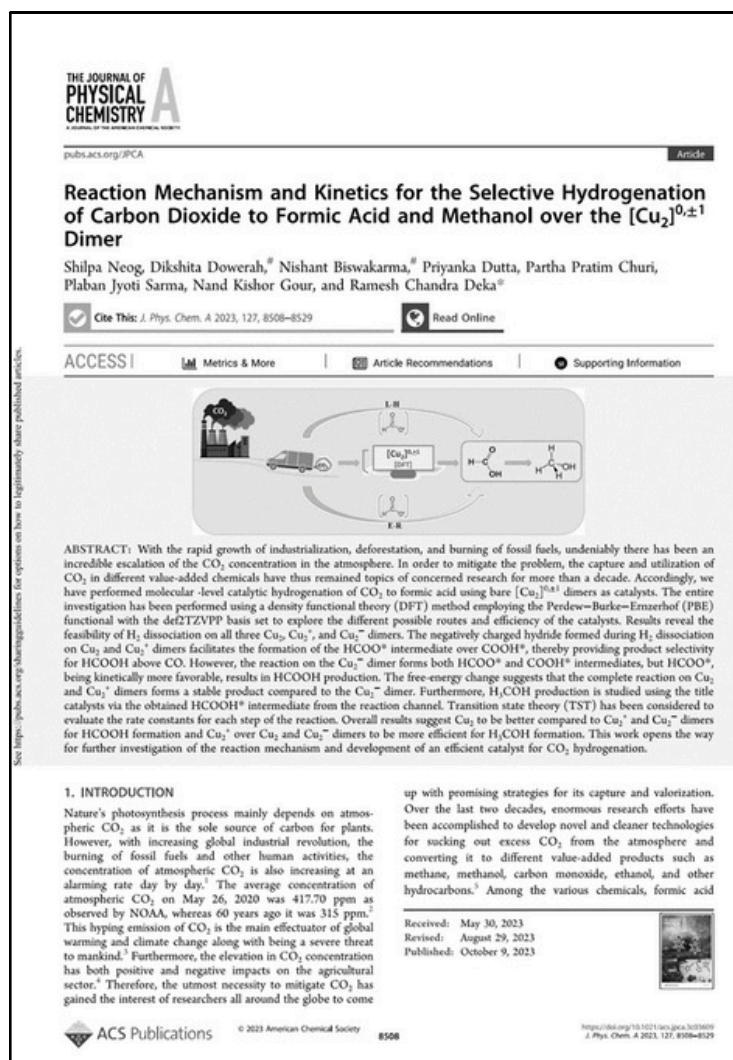
Outline of the Activity

Collaborative Research
Dr. Plaban Jyoti Sarma
Department of Chemistry, Gargaon College
&
Shilpa Neog, Nishant Biswakarma, Dikshita Dowerah, Priyanka Dutta,
Partha Pratim Churi, Nand Kishor Gour and Ramesh Ch. Deka

Department of Chemistry, Tezpur University

Title of the Paper: Reaction Mechanism and Kinetics for the Selective Hydrogenation of Carbon Dioxide to Formic Acid and Methanol over the $[\text{Cu}_2]^{0,\pm 1}$ Dimer
Journal Name: Journal of Physical Chemistry A
Year of Publication: 2023
ISSN:1520-5215

Photograph of the Activity



THE JOURNAL OF PHYSICAL CHEMISTRY A
pubs.acs.org/JPCA Article

Reaction Mechanism and Kinetics for the Selective Hydrogenation of Carbon Dioxide to Formic Acid and Methanol over the $[\text{Cu}_2]^{0,\pm 1}$ Dimer

Shilpa Neog, Dikshita Dowerah,[#] Nishant Biswakarma,[#] Priyanka Dutta, Partha Pratim Churi, Plaban Jyoti Sarma, Nand Kishor Gour, and Ramesh Chandra Deka[#]

Cite This: *J. Phys. Chem. A* 2023, 127, 8508–8529 | Read Online

ACCESS | Metrics & More | Article Recommendations | Supporting Information

ABSTRACT: With the rapid growth of industrialization, deforestation, and burning of fossil fuels, undeniably there has been an incredible escalation of the CO_2 concentration in the atmosphere. In order to mitigate the problem, the capture and utilization of CO_2 in different value-added chemicals have thus remained topics of concerned research for more than a decade. Accordingly, we have performed molecular-level catalytic hydrogenation of CO_2 to formic acid using bare $[\text{Cu}_2]^{0,\pm 1}$ dimers as catalysts. The entire investigation has been performed using a density functional theory (DFT) method employing the Perdew–Burke–Ernzerhof (PBE) functional with the def2TZVPP basis set to explore the different possible routes and efficiency of the catalysts. Results reveal the feasibility of H_2 dissociation on all three Cu_2 , Cu_2^+ , and Cu_2^- dimers. The negatively charged hydride formed during H_2 dissociation on Cu_2 and Cu_2^+ dimers facilitates the formation of the HCOO^* intermediate over COOH^* , thereby providing product selectivity for HCOOH above CO . However, the reaction on the Cu_2^- dimer forms both HCOO^* and COOH^* intermediates, but HCOO^* , being kinetically more favorable, results in HCOOH production. The free-energy change suggests that the complete reaction on Cu_2 and Cu_2^+ dimers forms a stable product compared to the Cu_2^- dimer. Furthermore, H_2COH production is studied using the title catalysts via the obtained HCOOH^* intermediate from the reaction channel. Transition state theory (TST) has been considered to evaluate the rate constants for each step of the reaction. Overall results suggest Cu_2 to be better compared to Cu_2^+ and Cu_2^- dimers for HCOOH formation and Cu_2^+ over Cu_2 and Cu_2^- dimers to be more efficient for H_2COH formation. This work opens the way for further investigation of the reaction mechanism and development of an efficient catalyst for CO_2 hydrogenation.

1. INTRODUCTION

Nature's photosynthesis process mainly depends on atmospheric CO_2 as it is the sole source of carbon for plants. However, with increasing global industrial revolution, the burning of fossil fuels and other human activities, the concentration of atmospheric CO_2 is also increasing at an alarming rate day by day.¹ The average concentration of atmospheric CO_2 on May 26, 2020 was 417.70 ppm as observed by NOAA, whereas 60 years ago it was 315 ppm.² This hyping emission of CO_2 is the main effector of global warming and climate change along with being a severe threat to mankind.³ Furthermore, the elevation in CO_2 concentration has both positive and negative impacts on the agricultural sector.⁴ Therefore, the utmost necessity to mitigate CO_2 has gained the interest of researchers all around the globe to come up with promising strategies for its capture and valorization. Over the last two decades, enormous research efforts have been accomplished to develop novel and cleaner technologies for sucking out excess CO_2 from the atmosphere and converting it to different value-added products such as methane, methanol, carbon monoxide, ethanol, and other hydrocarbons.⁵ Among the various chemicals, formic acid

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J. Phys. Chem. A 2023, 127, 8508–8529

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5. Collaboration between Gargaon College & Tezpur University



Outline of the Activity

Collaborative Research

Dr. Plaban Jyoti Sarma

Department of Chemistry, Gargaon College

&

Priyanka Dutta, Nishant Biswakarma, Dikshita Dowerah, Shilpa Neog, Saiful Islam, Shrutishree Sarma, Moumita Bosumatary, Partha Pratim Churi, Nand Kishor Gour and Ramesh Ch. Deka

Department of Chemistry, Tezpur University

Title of the Paper: Partial

Oxidation of Methane to Methanol by Using Molecular O₂ on Pd²⁺ Catalyst:

An Insight from Theory

Journal Name: Chemistry Select

Year of Publication: 2023

ISSN:2365-6549

Photograph of the Activity

ChemistrySelect Chemistry Europe European Chemical Societies Publishing

Research Article

Partial Oxidation of Methane to Methanol by Using Molecular O₂ on Pd²⁺ Catalyst: An Insight from Theory

Priyanka Dutta, Nishant Biswakarma, Dikshita Dowerah, Shilpa Neog, Saiful Islam, Shrutishree Sarma, Moumita Basumatary, Partha Pratim Churi, Dr. Plaban Jyoti Sarma ... See all authors

First published: 01 September 2023 | <https://doi.org/10.1002/slct.202301920>

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Graphical Abstract

This research investigates partial oxidation of methane to methanol on Pd²⁺ catalyst using molecular O₂. Two plausible mechanistic pathways have been proposed based on the orientation of adsorbed O₂ in two different spin states of [Pd₂]²⁺. DFT method was employed in which B3PW91/def2TZVP combination was utilized to explore various intermediates and transition states on the potential energy surface.

Abstract

The partial oxidation of methane to methanol using cationic Pd₂ dimers is investigated by employing density functional theory (DFT) method. We used B3PW91 functional for geometry optimization, and frequency calculations of all species involved in

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6. Collaboration between Gargaon College & Tezpur University



Outline of the Activity

Collaborative Research
Dr. Plaban Jyoti Sarma

Department of Chemistry, Gargaon College
&

Nishant Biswakarma, Shilpa Neog, Priyanka Dutta, Dikshita Dowerah, Satyajit Day Baruah Nand Kishor Gour and Ramesh Ch. Deka

Department of Chemistry, Tezpur University

Title of the Paper: Termolecular Eley–Rideal pathway for catalytic oxidation of nitric oxide on $[\text{Pt}_2]^{0,\pm}$ dimers using O_2

Journal Name: International journal of Quantum Chemistry

Year of Publication: 2024

ISSN:1097-461X

Photograph of the Activity

International Journal of
QUANTUM
CHEMISTRY

RESEARCH ARTICLE

Termolecular Eley–Rideal pathway for catalytic oxidation of nitric oxide on $[\text{Pt}_2]^{0,\pm}$ dimers using O_2

Nishant Biswakarma, Plaban Jyoti Sarma, Shilpa Neog, Priyanka Dutta, Dikshita Dowerah, Satyajit Dey Baruah, Nand Kishor Gour ✉ Ramesh Chandra Deka ✉

First published: 11 May 2024 | <https://doi.org/10.1002/qua.27390>

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Abstract

A comprehensive density functional theory (DFT) investigation of the catalytic oxidation of NO to NO_2 on neutral and charged $[\text{Pt}_2]^{0,\pm}$ dimers has been considered employing M06L/def2TZVP level of theory. Single as well as co-adsorption energies of NO and O_2 molecules suggest that the traditional Langmuir Hinshelwood (LH) mechanism and less explored termolecular Eley–Rideal (TER) and termolecular Langmuir Hinshelwood (TLH) mechanisms, are suitable for a full catalytic reaction pathway in which two NO molecules are converted to two NO_2 molecules, initiated by an activated O_2 molecule. Activation barrier reveals that the TER mechanism is found to be more reliable in converting two NO molecules into two NO_2 molecules on $[\text{Pt}_2]^-$ dimer. In addition to shedding light on the intrinsic characteristics of Pt_2 dimers, the study will serve as a benchmark for investigating the oxidation process of NO to NO_2 utilizing models of termolecular chemical processes.

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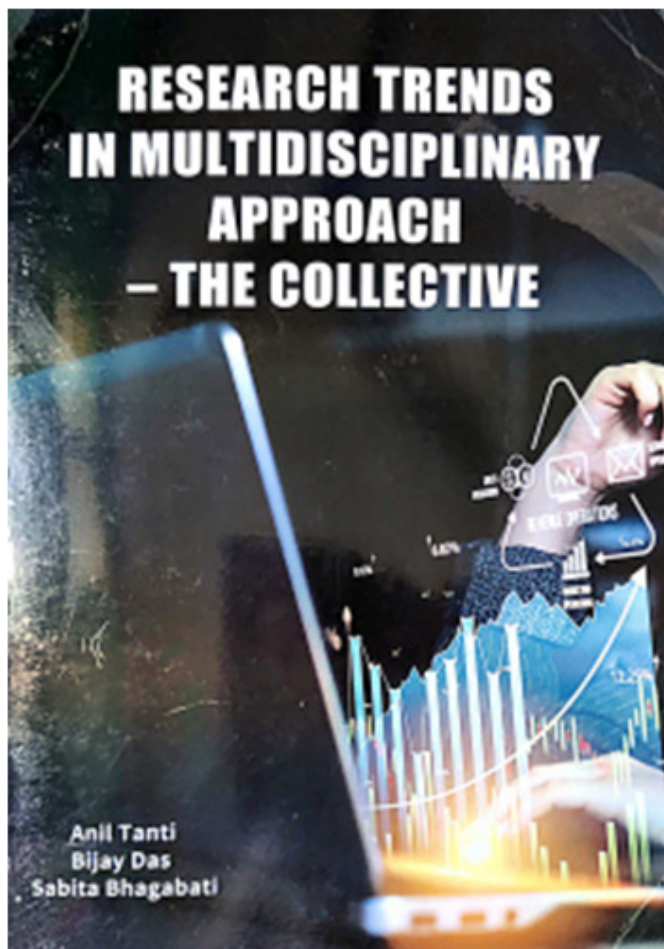
7. Collaboration between Gargaon College with Arunodaya University & USTM



Outline of the Activity

Collaborative Book
Anil Tanti
Assistant Professor
Department of Commerce, Gargaon College
&
Bijoy Das
Assistant Professor
Department of Management, Arunodaya University, Arunachal Pradesh
&
Sobita Bhagawati
Assistant Professor
Department of Business Administration, USTM, Meghalaya
Title of the Book: Research Trends in Multi-Disciplinary approach - The Collective
ISBN: 978-81-966358-4-8

Photograph of the Activity



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8.Collaboration between Gargaon College & Gauhati University

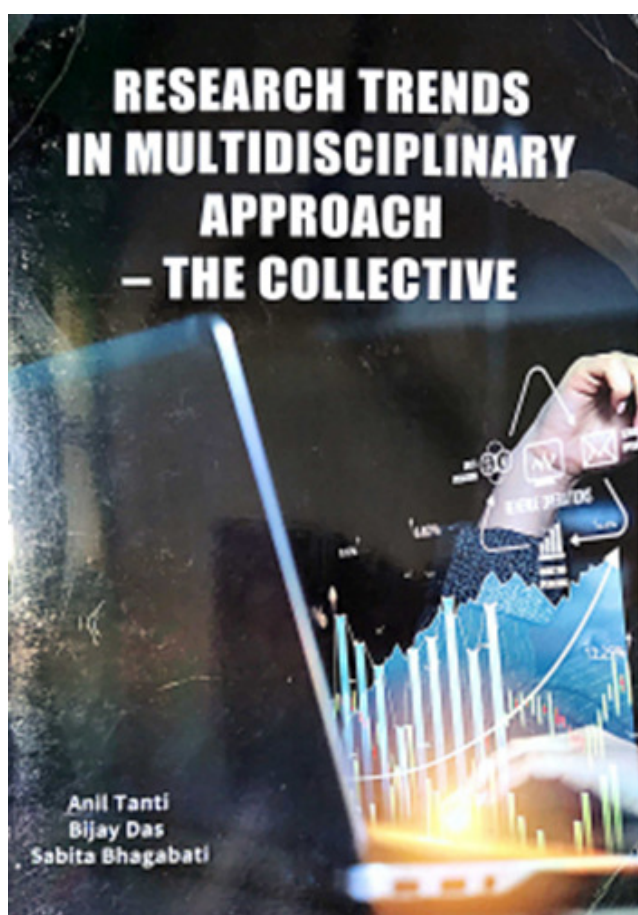


Outline of the Activity

Collaborative Book
Anil Tanti
Assistant Professor
Department of Commerce, Gargaon College
&
Kiran Tanti
Assistant Professor
Department of Commerce, Gauhati University, Assam
Title of the Book: **Research Trends in Multi-Disciplinary approach - The Collective**
Title of the Book Chapter: **The Collective. Socio Economic Status of Tea Garden Workers with special reference to Behora Tea Estate of Golaghat District in Assam**

ISBN: 978-81-966358-4-8

Photograph of the Activity



CHAPTER SEVENTEEN

SOCIO ECONOMIC STATUS OF TEA GARDEN WORKERS: WITH SPECIAL REFERENCE TO BEHORA TEA ESTATE OF GOLAGHAT DISTRICT IN ASSAM

Mr. Kiran Tanti

Anil Tanti

Abstract:

The tea garden workers community official referred to as Tea tribes by the Govt. of Assam are basically multi ethnic, multicultural group of tea workers which consist of different caste, sub-caste, tribe speaking different languages followed by different customs and traditional and are mostly residing in the tea estates of Assam. They were mostly brought by the British during the colonial area (mid of 19th century) as indentured labourers from the region of Chota Nagpur plateau (Jharkhand, Orissa, West Bengal, Chhattisgarh, Andhra Pradesh) into Assam. The main occupation of the tea garden workers is to work as a tea garden labour in the various tea estate of Assam. The community mostly resides in the labour lines built inside tea estate and established by tea planters which are mostly situated in the remote areas of Assam. Lack of education, low Income, poverty, poor infrastructure, poor standard of living and also lack of proper health facilities are the prime factors which deeply effects the socio-economic states of tea garden workers. The people working in the Tea Garden live a life full of misery and suffering mainly due to insufficient and irregular govt programs and initiatives. The prime objective of this study is to provide a brief knowledge and idea about the socio-economic status of the tea garden workers of Behora Tea Estate of Golaghat district in Assam.

Keywords: Tea, Industry, Plantation, Employment, Income, Saving

INTRODUCTION

Tea: In a Japanese proverb says "If a man has no tea in him, he is incapable of understanding truth and beauty. "Tea is such types of beverages which is the most popular drink next to water. Tea is regarded as essential part commodity in our daily life. The varieties of tea black, green, white, oolong, pu-erh, purple, matcha can be obtained from

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9.Collaboration between Gargaon College & Dibrugarh University

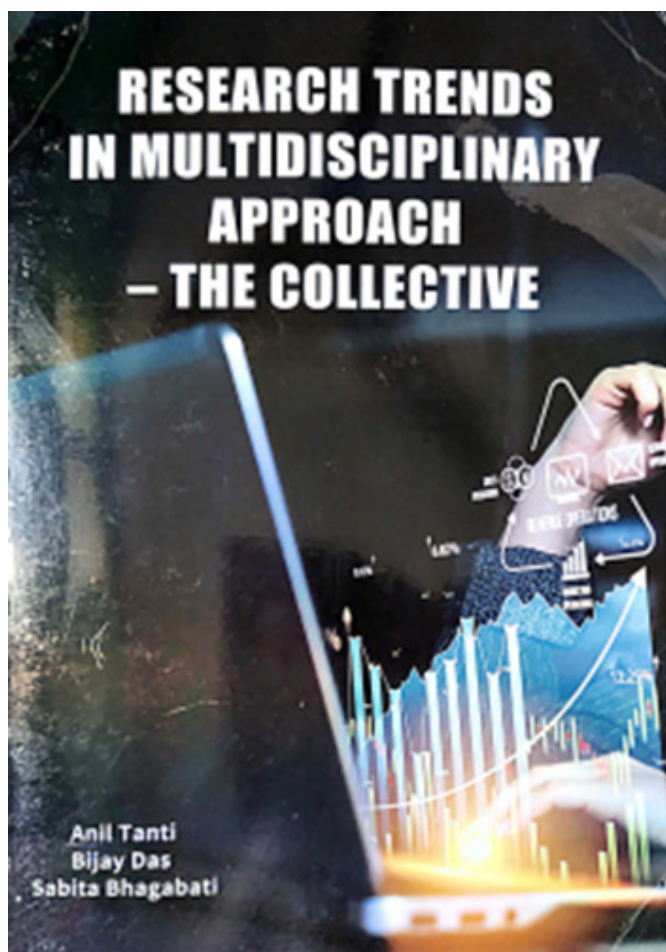


Outline of the Activity

Collaborative Book Chapter
Dr. Nazreen Parveen Ali
Department of Commerce, Gargaon College
&
Isfhan Shaukat Ali
Department of Economics, Dibrugarh University

Title of the book chapter: Festive Mood of Stock Market Returns: A study on the Impact of Indian Festivals on Movement of Indian Capital Market
Title of the Book: Research Trends in Multi-Disciplinary approach - The Collective
ISBN:978-81-966358-4-8
Year of Publication: 2023

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10. Collaboration between Gargaon College with BPP College, Dhubri & Arunodaya University



Outline of the Activity

Collaborative Book Publication
Dr. Nazreen Parveen Ali
Department of Commerce, Gargaon College
&
Bishakha Chetia
Department of Management, B P P College, Dhubri
with
Bijay Das
Department of Management, Arunodaya University, Arunachal Pradesh

Title of the Book: Dimensions of Recent Trend in Research: A
Multidisciplinary Approach
Year of Publication: 2024
ISBN:978-81-972536-1-7

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**"Dimensions of recent trends in Research:
A
Multidisciplinary Approach"**

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vaagdevi2008@gmail.com

ABOUT THE EDITORS



Dr. Nazreen Parveen Ali

M.Com., Ph.D., PGDCA, NET JRF, SLET

Assistant Professor, Department of Commerce

Dr. Nazreen Parveen Ali (M.Com., Ph.D., PGDCA, NET JRF, SLET) is currently working as an Assistant Professor in the Department of Commerce, Gargaon College, Simoluguri (Sivasagar), Assam. She was formerly a Guest Faculty in Tezpur University. She has 6 years of experience in the field of research and has served as a JRF for 2 years and SRF for 2 years in the Department of Commerce, Dibrugarh University. She has done her Ph.D. in the area of Financial Economics and is currently pursuing MA in Economics under DODL, Dibrugarh University. She has presented 8 research papers in various National and International seminars and conferences. Moreover, she also has 6 research articles in edited books with ISBN and 2 in peer reviewed journals, 5 publications in UGC care listed Journals and 2 publications in SCOPUS indexed journals to her credit.



Bishakha Chetia

M.Com., M.Phil., DCA, Pursuing PhD

Assistant Professor, Department of Management

Bishakha Chetia (Assistant Professor, Department of Management, Pramathesh Barua College, Gauripur, Dhubri, Assam), pursuing her PhD at the Department of Commerce, Dibrugarh University, has teaching experience of more than 5 years at both college and university levels. Moreover, she was a mentor and research supervisor to an International Student of Dibrugarh University. She has published numerous articles in both National and International Journals including ISSN, ISBN, SCOPUS and UGC care-listing to date. She has also presented notable research works at various national as well as international seminars and conferences. Other notable achievements of Bishakha include her completion of a certified course on the Fundamentals of Digital Marketing from Google. Moreover, she is a certified Apple Teacher from Apple Education Community, Apple Inc. and has also been a member of the Organising Committee (Finance and Accounts) and the Departmental Coordinator (Commerce) for Dibrugarh University Alumni Meet, 2023. Further, she is a life member of the Dibrugarh University Alumni Association and a volunteer at the Isha Foundation, Coimbatore, Tamil Nadu.



Bijay Das

M.Com., M.Phil., PGDCA, Probin, Pursuing Ph.D

Assistant Professor, Department of Management

Bijay Das (M.Com, M.Phil, PGDCA), is an Assistant Professor, Department of Management, Arunodaya University, Arunachal Pradesh. He is pursuing his Ph.D degree at Rajiv Gandhi University (A Central University), Arunachal Pradesh. He has participated and presented a good number of research articles in various National and International seminars and conferences. Moreover, he has published various research articles in edited books having ISBN, peer reviewed journals, UGC care listed journals and one paper published in SCOPUS indexed journal. The editor also have authored one text book as per syllabus of Gauhati University B.Com course and he has edited a book having ISBN (Jointly).

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11. Collaboration between Gargaon College & Dibrugarh University

Outline of the Activity

Collaborative Webinar (Faculty Exchange) Program

Department of Economics, Gargaon College
with
Department of Economics, Dibrugarh University

Title of the Program: IS-LM Model

Date of the Program: 18/11/2023

Resource Person: Mr. Rantu Hazarika, Assistant
Professor, Department of Economics, Dibrugarh
University, Assam

Photograph of the Activity

youtube.com/watch?v=mcFerHSob8A

YouTube

Search

Open Economy IS-LM model

- The open Economy IS curve:
 - $Y=C+I+G+NX$
 - Where NX stands for net exports, i.e., exports minus imports
- Determinants of NX:
 - Income of the domestic country
 - Higher the domestic economy's income, smaller will be NX.
 - Income of the foreign country
 - Higher the foreign economy's income, larger will be NX.
 - Exchange rate – the amount of domestic currency required to purchase one unit of foreign currency, e.g., exchange rate of Indian rupee against dollar is 83.

Class on Mundell Fleming Model

Unlisted

GARGAON COLLEGE OFFICIAL
3.63K subscribers

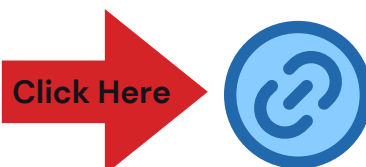
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12. Collaboration between Gargaon College & Dibrugarh University



Outline of the Activity

Collaborative Webinar (Faculty Exchange) Program

Department of Economics, Gargaon College
with
Department of Economics, Dibrugarh University

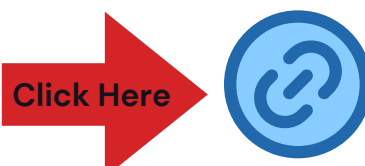
Title of the Program: Mundell-Fleming Model
Date of the Program: 21/11/2023
Resource Person: Mr. Rantu Hazarika, Assistant
Professor, Department of Economics, Dibrugarh
University, Assam

Photograph of the Activity

The screenshot shows a YouTube video player interface. The address bar at the top displays the URL: youtube.com/watch?v=_HCB6wWqXMY. The video title is **Macroeconomic Policies in an Open Economy: The Mundell-Fleming Model**. The video content includes a list of bullet points and sub-points:

- The Mundell-Fleming model analyses the effects of macroeconomic policies on output in an open economy set up.
- The model can be discussed under different assumptions relating to capital mobility and exchange rate regime:
 - (a) Macroeconomic policies when there is imperfect capital mobility which can again be analyzed under two considerations regarding the exchange rate regime – fixed exchange rate and flexible exchange rate.
 - (b) Macroeconomic policies when there is perfect capital mobility which can again be analyzed under two considerations regarding the exchange rate regime – fixed exchange rate and flexible exchange rate.
- We will consider effectiveness of monetary policy and fiscal policy under flexible exchange rate with perfect capital mobility.

The video player shows a progress bar at 6:22 / 42:28. Below the video, the channel name is **UNIVERSITY FACULTY PROGRAMME**, and the channel profile picture is **GARGAON COLLEGE OFFICIAL** with 3.63K subscribers. The video has 11 views and was streamed live on Nov 21, 2023. The interface includes standard YouTube controls like like, share, download, clip, and save.



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13. Collaboration between Gargaon College & Dibrugarh University



Outline of the Activity

Collaborative Webinar (Faculty Exchange) Program

Department of Economics, Gargaon College
with

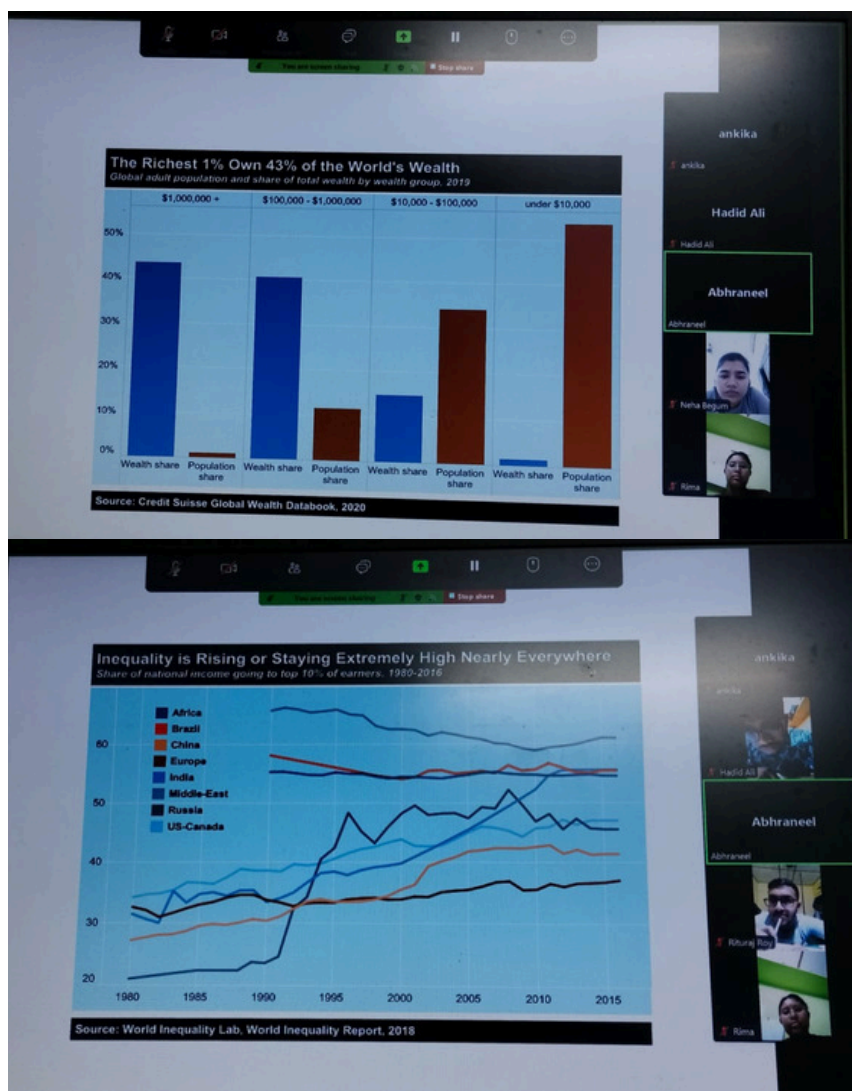
Department of Economics, Dibrugarh University

Title of the Program: **Globalization, the Rise of the
Global Middle Class and Global Plutocrats and Other
Issues**

Date of the Program: 17/05/2023

Resource Person: Dr. Pranjal Protim Buragohain,
Associate Professor & Head
Department of Economics
, Dibrugarh University, Assam

Photograph of the Activity



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14. Collaboration between Gargaon College & Digboi College, Tinsukia



Outline of the Activity

Collaborative Webinar (Faculty Exchange) Program

**Department of Economics, Gargaon College
with
Department of Economics, Digboi College, Tinsukia**

**Title of the Program: World Trade Organisation and
International Trade**

Date of the Program: 21/11/2023

Resource Person: Mr. Karuna Phukan

Assistant Professor

Department of Economics, Digboi College

Photograph of the Activity



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15. Collaboration between Gargaon College & Cotton University



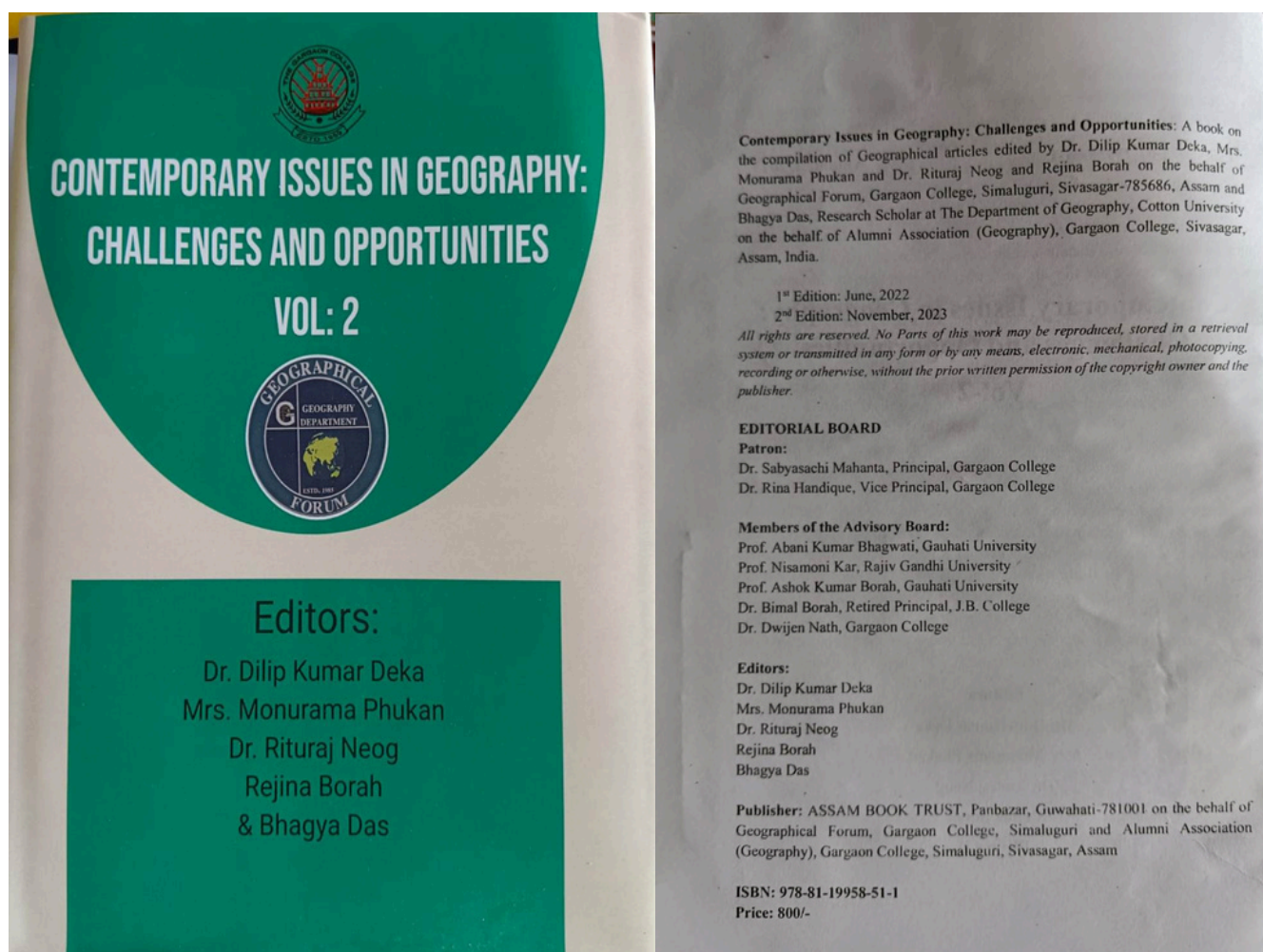
Outline of the Activity

Collaborative Book
Dr. Dilip Kumar Deka
Associate Professor
Mrs. Monurama Phukan, Dr. Rituraj Neog & Rejina Borah
Assistant Professor
Department of Geography, Gargaon College
&
Bhagya Das
Department of Geography, Cotton University, Assam

Title of the Book: **Contemporary Issues in Geography:
Challenges & Opportunities**

ISBN: 978-81-19958-51-1

Photograph of the Activity



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16. Collaboration between Gargaon College and Dibrugarh University with Smithsonian Marine Station, USA & Dana Farber Cancer Institute, USA



Outline of the Activity

Collaborative International Workshop

Department of Applied Geology & Chemistry
Gargaon College
with

Department of Applied Geology, Dibrugarh University

Title of the Program: Career planning: Exploring the Recent Trends in the Ocean of Science

date: 8th and 9th June, 2023

Resource Person: Dr. Ariel Pezner, Smithsonian Marine Station, USA

Dr. Utsarga Adhikary, Dana Farber Cancer Institute, USA

Photograph of the Activity

গড়গাঁও মহাবিদ্যালয়
GARGAON COLLEGE

WORLD OCEANS DAY

8th & 9th JUNE 2023

Two Days International Workshop on Career Planning: Exploring the Recent Trends in the Ocean of Science

Day 1

Inauguration:
Dr. Sabyasachi Mahanta
Principal
Gargaon College

Invited Speakers
Dr. Ariel Pezner
Postdoctoral Fellow
Smithsonian Marine Station, USA

Dr. Utsarga Adhikary
Postdoctoral Fellow
Dana Farber Cancer Institute, Boston, USA

Day 2

Invited Speakers
Dr. Kalyan Raidongia
Associate Professor, Deptt. of Chemistry,
IIT, Guwahati, India

Dr. Sumit Dandapat
Postdoctoral Fellow
King Abdullah University of Science and Technology, Saudi Arabia

Registration link: <https://forms.gle/B36Ft1DVpe8LWdX9>

Coordinator:
Dr. Chirantan Bhagwati,
Assistant Professor, Deptt. of Geology
Email: chirantanhagwati@gmail.com
Mobile: 8080559801

You can also register by

Organised by

Coordinator:
Mr. Rituraj Taha
Assistant Professor, Deptt. of Chemistry
Email: rttaha@gmail.com
Mobile: 8011348750

IQAC Coordinator
Dr. Surajit Saikia,
Assistant Professor, Deptt of Economics
Email: saikiasurajit06@gmail.com
Mobile: 8080559801

Department of Geology, Gargaon College
Department of Chemistry, Gargaon College
Department of Applied Geology, Dibrugarh University

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17.Collaboration between Gargaon College with University of Calcutta & Jadavpur University



Outline of the Activity

Collaborative Research
Dr. Dipankar Buragohain
Department of Geology, Gargaon College
&
Ishita Das
Department of Geology, University of Calcutta
&
Anupam Ghosh
Department of Geological Science, Jadavpur University

Title of the Paper:
Journal Name: Records of the Zoological Survey of India
Year of Publication: 2023
ISSN:2581-8686

Photograph of the Activity



Rec. zool. Surv. India: Vol. 123(1)/83-98, 2023
DOI: 10.26515/rzsi/v123/i1/2023/153208

ISSN (Online) : 2581-8686
ISSN (Print) : 0375-1511

Recent Benthic foraminiferal biofacies in the Bakkhali region, West Bengal, India

Ishita Das^{1*}, Anupam Ghosh² and Dipankar Buragohain³

¹Department of Geology, University of Calcutta, Kolkata – 700019, West Bengal, India;
Email : ishita.mishra@gmail.com

²Department of Geological Sciences, Jadavpur University, Kolkata – 700032, West Bengal, India

³Department of Geology, Gargaon College, Simaluguri, Sivasagar - 785686, Assam, India

Abstract

Coastal areas are transition zones and hence, are susceptible to dynamic changes. To understand the seasonal changes in benthic foraminiferal distribution, a study based on surface sampling was carried in two distinct sub-environments – intertidal flats (Bakkhali, Fraserganj) and marsh areas (Patibhunia and Henry's Island). Two short cores (~16 cm) were procured to observe the changes in foraminiferal signatures from top sediment surface to down the core. The characteristic foraminiferal population consists of *Ammonia beccarii*, *Ammonia tepida*, *Asterorotalia pulchella*, *Haynesina depressula*, *Haynesina germanica*, *Nonionella labradorica*, *Nonionella turgida*, *Quinqueloculina seminulum*, *Criboelphidium hispidulum*, *Criboelphidium poeynum*, *Trachammina inflata*, *Miliammina* spp., *Haplophragmoides canariensis*, *Haplophragmoides wilberti* and *Ammodiscus evolutus*. The abundance of foraminifera increases from tens to few hundreds and species richness increases from 4 to 8 on an average as we move from the western locations to the eastern locations of the study area. Agglutinated species were dominant in the marsh areas whereas, the intertidal flat consists of calcareous forms. Overall, the diversity of foraminiferal assemblages is poor.

Keywords: Bakkhali, Bay of Bengal, Benthic Foraminifera, Intertidal Flats, Marsh

Introduction

Foraminifera are unicellular protists with a perforated chalky shell through which thin protrusions of the protoplasm extends. They are mostly marine and form thick ocean floor sediments when they die. Foraminifera of the coastal areas are typically benthic which dwell in the bottom sediments. Typical mangrove foraminiferal assemblages help to identify ancient tidal beds. Foraminifera have the advantage of possessing a mineralised test as compared to other microorganisms, which make them important biological proxies that can be used to reconstruct environmental changes (Alve and Murray, 1999). Foraminifera are also helpful in monitoring environmental pollution in coastal areas (Horton and Edwards, 2006).

Bakkhali is a small island situated at the southern portion of the Sunderban landmass. The formation of Bengal basin was related to different global processes like

plate tectonics, breaking of the Gondwana land, closure of Tethys Sea along with the tectonic upliftment of great Himalayas because of Alpine-Himalayan orogenies (Banerjee *et al.* 2012). The Sunderban landmass has a very recent origin (6000–7000-year B.P.). This stretch of coastal landmass displays various geomorphologic features like sand dunes, intertidal sand flats, beach ridges and tidal shoals. Meiobenthos found in the east coast of India have been studied previously by Choudhuri and Choudhuri, 1994; Jayaraju and Reddy, 1995; Kathal, 2002; Hameed and Achyuthan, 2011; Ghosh, 2012; Ghosh *et al.* 2014; Chakraborty and Datta, 2018 and Das *et al.*, 2019. Foraminiferal studies from this area of the Indian subcontinent have received inadequate attention. Some studies on foraminifera from Bakkhali have been done by Sabyasachi *et al.*, 1996; Ghosh *et al.*, 2014 and Das, 2015. The present study focuses on understanding the seasonal distribution pattern of intertidal and marsh foraminifera in the southern part of Sunderbans, West Bengal.

* Author for correspondence

Article Received on: 17.06.2020

Accepted on: 01.02.2023

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18.Collaboration between Gargaon College & Sibsagar Girls College



Outline of the Activity

Collaborative Faculty Exchange Program
Department of Physics, Gargaon College

&

Department of Physics, Sibsagar Girls College

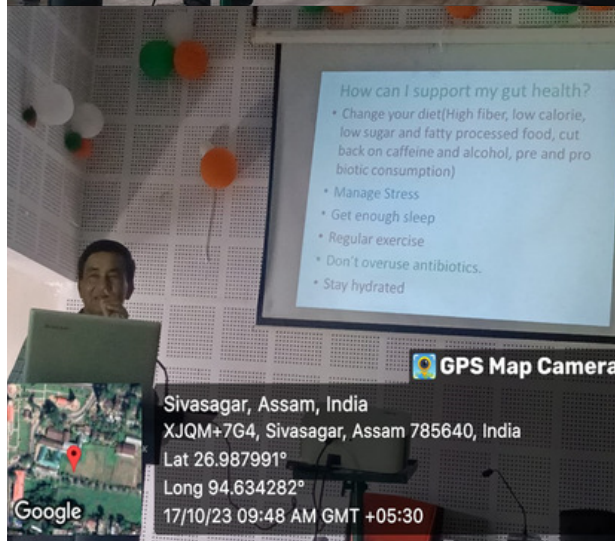
Title of the Program: Healthy Gut, Healthy Living

Date of the Program: 17th October, 2023

Venue: Sibsagar Girls College

Resource Person: Mr Diganta Konwar, Associate Professor
Dept. of Physics, Gargaon College

Photograph of the Activity





19. Collaboration between Gargaon College & Dibrugarh University

Outline of the Activity

Collaborative Research
Dr. Pobon Kumar Gogoi
Department of Political Science, Gargaon College
&
Upama Saikia
Department of Political Science, Dibrugarh University

Title of the Paper: Politics of Bihu: Interface between culture and Politics
Journal Name: Anandam ABILAC
Year of Publication: 2023
ISSN:2394-9023

Photograph of the Activity

Anandam ABILAC

333

Anandam ABILAC, Vol. XIII
ISSN: 2394-9023
UGC - CARE LIST-I: 26

Politics of Bihu: Interface between culture and politics

Pobon Kr. Gogoi
Upama Saikia

Abstract

The celebration of Rongali Bihu at the Sarusajai Stadium in Guwahati on April 13 and 14, 2023, was a significant event, marked by the attempt to set a Guinness World Record for the most number of folk dance performances. The Assam Government's goals for this event were multifaceted, and various viewpoints exist regarding its significance. One perspective views the government's involvement in the celebration as a political strategy, particularly by the BJP government, to connect with the cultural roots of Assam, as Bihu is a major cultural festival in the state. The presence of the Prime Minister and the roadshow leading to the Sarusajai Stadium were seen as attempts to garner support for the BJP's political agenda, particularly in light of the upcoming 2024 Lok

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20. Collaboration between Gargaon College & Dibrugarh University

Outline of the Activity

Collaborative Research
Dr. Pobon Kumar Gogoi
Department of Political Science, Gargaon College
&
Upama Saikia
Department of Political Science, Dibrugarh University

Title of the Paper: Nagas: More Autonomy and less than independence
Journal Name: Journal of Namibian Studies
Year of Publication: 2023
ISSN:2197-5523

Photograph of the Activity

Journal of Namibian Studies, 33 S3 (2023): 4334-4339 ISSN: 2197-5523 (online)

Nagas: More Autonomy And Less Than Independence

Upama Saikia¹, Dr. Pobon Kr.Gogoi²

¹Phd scholar, Political Science Department
Dibrugarh University

Email.idupamasaikia123@gmail.com

²Associate Professor, Gargaon College
Email id.pobongogoi@gmail.com

Abstract:

Northeast India is a multi-ethnic diversified region of India. Since past years the ethnic groups of this struggle for their independence to protect their distinct ethno-cultural identity. Among the various tribes Nagas of Nagaland develop a sense of nationalist consciousness to establish their self-determination and freedom. Due to hegemonic role of the Indian state they have been consistently urging their so called demand of 'Nagalim' or 'Greater Nagaland'. Through a carrot and stick policy, the Indian state tried to ensure that majority of indigenous ethnic communities living in the Northeast join the Indian federation. The Nagas, considered by the colonial rulers as backward tribes, however resisted the assimilative policies of the Indian state. By invoking the right to self-determination on the basis of their 'distinct' ethnic identity and 'unique' history, the Nagas defied the Indian state that sought to make them a constituent part of the post-colonial Indian Union. Therefore Nagas have been indulging in the autonomy movement with its

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21. Collaboration between Gargaon College & Dibrugarh University

Outline of the Activity

Collaborative Research
Dr. Pobon Kumar Gogoi
Department of Political Science, Gargaon College
&
Upama Saikia
Department of Political Science, Dibrugarh University
Title of the Paper: Nagas: A Case Study of The Threat to Human Security
Posed by The Assam Movement
Journal Name: Rivista Italiana di Filosofia Analitica Junior
Year of Publication: 2023
ISSN:2037-4445

Photograph of the Activity

Rivista Italiana di Filosofia Analitica Junior
ISSN: 2037-4445

Vol 14, No. 2 (2023)

A Case Study of The Threat to Human Security Posed by The Assam Movement

Upama Saikia

Phd Scholar, Dibrugarh University
Email.id: upamasaikia1234@gmail.com

Dr. Pobon Kr. Gogoi

Associate Professor, Gargaon College
Email id: pobongogoi@gmail.com

Abstract

Assam movement is an anti-foreigner's movement launched by the dissidence of Assam against the illegal migrants. The illegal migrants are those who comes from prior East Pakistan, now Bangladesh, some from Nepal. There were political, economic and social base of this movement. The agitators demand for 3D's i.e. Detection, Disenfranchisement and Deportation as the people of Assam can protect their cultural identity and demography from the threat of foreign nationals. The subsequent period of the movement was 1979-1985. Geographically, the movement was confined to the Brahmaputra Valley which has been traditional homeland of Asomiyas and the people who were participated in this movement. The movement started in 6th November 1979 under the leadership of All Assam Student Union(AASU) and All Assam Gana Sangram Parishad(AAGSU) and officially ended on 15th August, 1985 after signing a historic 'ASSAM ACCORD 1985'. Initially, the movement was conducted most disciplined and peaceful manner but the evolvement of ethnic tension and anti-election seeds had given birth of violence. That violence lead to extreme threat to human security, as human security is a non-traditional security that pose threats to the survival and development of a sovereign state and human kind. The air of Assam mingled with violence mob with individual killing and bomb attack as well as communities pitting against each other. Many people had died, the women and the children were main victims of the movement. This paper discusses the Assam movement, its genesis and how it had affected the security of life of the people.

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22.Collaboration between Gargaon College & Sikkim University



Outline of the Activity

Collaborative Research
Dr. Pobon Kumar Gogoi
Department of Political Science, Gargaon College
&
Himanshu Bora
Department of Sociology, Sikkim University
Title of the Paper: Reservation Politics in India: An Analysis of the Indian
Reservation System
Journal Name: Journal of Research in Humanities and Social Science
Year of Publication: 2023
ISSN:2021-9467

Photograph of the Activity

Quest Journals
Journal of Research in Humanities and Social Science
Volume 11 ~ Issue 10 (2023) pp: 74-78
ISSN(Online):2321-9467
www.questjournals.org



Research Paper

Reservation Politics in India: An Analysis of the Indian Reservation System

¹Dr. Pobon Kr. Gogoi
Associate Prof., Gargaon College

² Mr. Himanshu Bora
PG (MA) in Sociology, Sikkim University

ABSTRACT: The reservation in educational institutions and jobs for SC and ST communities of India initiated by our founding fathers of the Constitution passed 72 years and it is extended to next 2030 years in a periodic interval of 10 years terms. The novel objective was to uplift the underprivileged sections of people by facilitating reserve quota in jobs and education which was later included to OBC people. During this period it was scrutinized by different scholars and policy makers and the question of rationality was evaluated. Some of them opined positively in favour of it while others negatively. Thus this paper is an academic exercise to identify the positive and negative aspects leading to political intervention of reservation. The study concealed within India and debates on reservation system in greater domain of political system is analysed.

KEYWORDS: Reservation, politics, meritocracy, caste and underprivileged section, Government.

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Published with open access at www.questjournals.org

I. INTRODUCTION:

India, a varied and complex country, has long struggled with the challenges of social inequality and traditional prejudice. The Indian government established a system of reserves or affirmative action to address this deeply rooted imbalance which initially attempted to empower marginalized and underprivileged people. This strategy has changed significantly throughout time as a result of the intricate interaction of historical, political, and sociological forces.

According to The National Sample Survey reports, 20 per cent of Indians are members of Scheduled Caste (SC), 9 per cent are Scheduled Tribe (ST), and 41 per cent are Other Backward Classes (OBC). This indicates that around 70% of the populace fits into a group that is currently reserved, while 30% belongs to the general category.

Although 41% population belongs to OBCs but still the precise number of OBCs in India is still heavily disputed and some social scientists claim that party politics have tainted census statistics. Statistically, the Mandal Commission and the National Sample Survey configured this as smaller in numbers but it is widely believed to be a sizeable one.

The SC community in India is made up of close to 260 million individuals which receive 15% reservation share in the government sector. Scheduled Tribes make up about 9% reservation share which is estimated to be over 1.17 million people. The general category population is estimated at 1.21 billion as per the 2011 Census. The general category which is called as unreserved category includes Upper Caste and Creamy

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23.Collaboration between Gargaon College & Dibrugarh University



Outline of the Activity

Collaborative Faculty Exchange Program
Department of Political Science, Gargaon College

&

Department of Political Science, Dibrugarh University

Title of the Program: Special Lecture Series on issues of Public Administration

Date of the Program: 8 April, 2024

Vaue:Department of Political Science,Gargaon College

Resource Person: Dr. Linamee Das, Assistant Professor
Department of Political Science, Dibrugarh University

Photograph of the Activity

The poster is yellow with a blue and white dotted pattern on the left. It features the Gargaon College logo and name in Assamese and English. The text on the poster includes:

- গড়গাঁও মহাবিদ্যালয়**
GARGAON COLLEGE
- Special Lecture Series on Issues of Public Administration**
- Organised by:**
Department of Political Science
Gargaon College
- In Collaboration with IQAC**
- Date:** April 08, 2024
Time: 2.30 to 3.30
Via : Google Meet
- A circular portrait of Dr. Linamee Das.
- Resource Person:**
Dr. Linamee Das
Assistant Professor
Department of Political Science
Dibrugarh University
- Meet Link:** <https://meet.google.com/aum-yvxu-cpq>



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24. Collaboration between Gargaon College & Dibrugarh University

Outline of the Activity

Collaborative Faculty Exchange Program
Department of Political Science, Gargaon College
&
Department of Political Science, Dibrugarh University

Title of the Program: Special Lecture Series on issues of Politics of Development

Date of the Program: 3 May, 2024

Vanue: Department of Political Science, Gargaon College

Resource Person: Dr. Priyanka Sharma, Assistant Professor
Department of Political Science, Dibrugarh University

Photograph of the Activity



গড়গাঁও মহাবিদ্যালয়
GARGAON COLLEGE


Special Lecture Series on Issues of Politics of Development

Organised by:
Department of Political Science
Gargaon College

In Collaboration with IQAC

Date: May 03, 2024

Venue: PG CLASSROOM



Resource Person:
Dr. Priyanka Sharma
Assistant Professor
Department of Political Science
Dibrugarh University



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25.Collaboration between Gargaon College & Dibrugarh University

Outline of the Activity

Collaborative Faculty Exchange Program
Department of Political Science, Gargaon College
&
Department of Political Science, Dibrugarh University

Title of the Program: Special Lecture Series on issues of International Relations

Date of the Program: 24th March, 2024

Venue: Department of Political Science, Gargaon College

Resource Person: Dr. Obja Borah Hazarika, Assistant Professor
Department of Political Science, Dibrugarh University

Photograph of the Activity



গড়গাঁও মহাবিদ্যালয়
GARGAON COLLEGE

Special Lecture Series on Issues of International Relations

Organised by:
Department of Political Science
Gargaon College

In Collaboration with IQAC

Date: March 26, 2024 to March , 2024



Resource Person:
Dr. Obja Borah Hazarika
Assistant Professor
Department of Political Science
Dibrugarh University

Day 1: March 26, 2024- Time: 2 pm
Day 2: March 27, 2024- Time 10 am
Day 3: March 28, 2024- Time 10 am

Link to Join the Programme:
Via: Google Meet

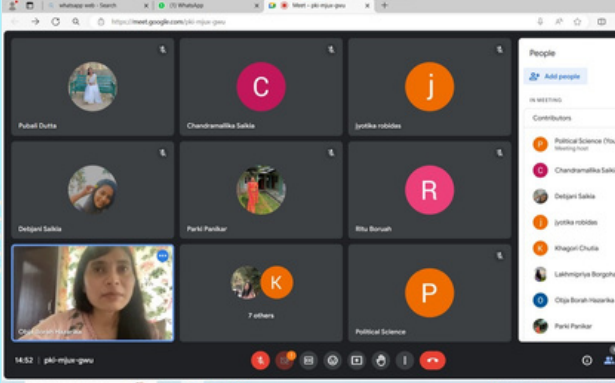
THE ASSAM POST ■ GUWAHATI EDITION ■ THURSDAY, APRIL 04, 2024

Special Lecture Series on Issues of International Relations

Khairuddin Ahmed, Sibsagar, Apr 3: Department of Political Science, Gargaon College organized a special online lecture series on issues of International Relations (IR) from March 26 to March 28. Dr. Obja Borah Hazarika, Assistant Professor of Department of Political Science, Dibrugarh University was invited as the resource person of the lecture series. Dr. Hazarika deliberated on a range of IR issues. On Day 1, she spoke on Civil Liberties and National Security. She highlighted how powerful regimes are curtailing the civil liberties of people in the name of national security. On Day 2, she deliberated on humanitarian intervention and its implications in world politics. On the final day, Dr. Borah reflected on themes like challenges to global commons like Oceans, Seabed and Outer Space.

The lecture series was attended by students of Department of Political Science of Gargaon College and Dibrugarh University. Head of the Department and all other the faculty members of the Department of Political Science, Gargaon College actively participated in the event. The programme was moderated by Yuvaraj Gogoi, an Assistant Professor of the Department of Political Science.

Noted speaker, poet and Principal of Gargaon College, Dr. Sabyasachi Mahanta highly praised the initiatives of the organizers for enhancing the knowledge base of the students.



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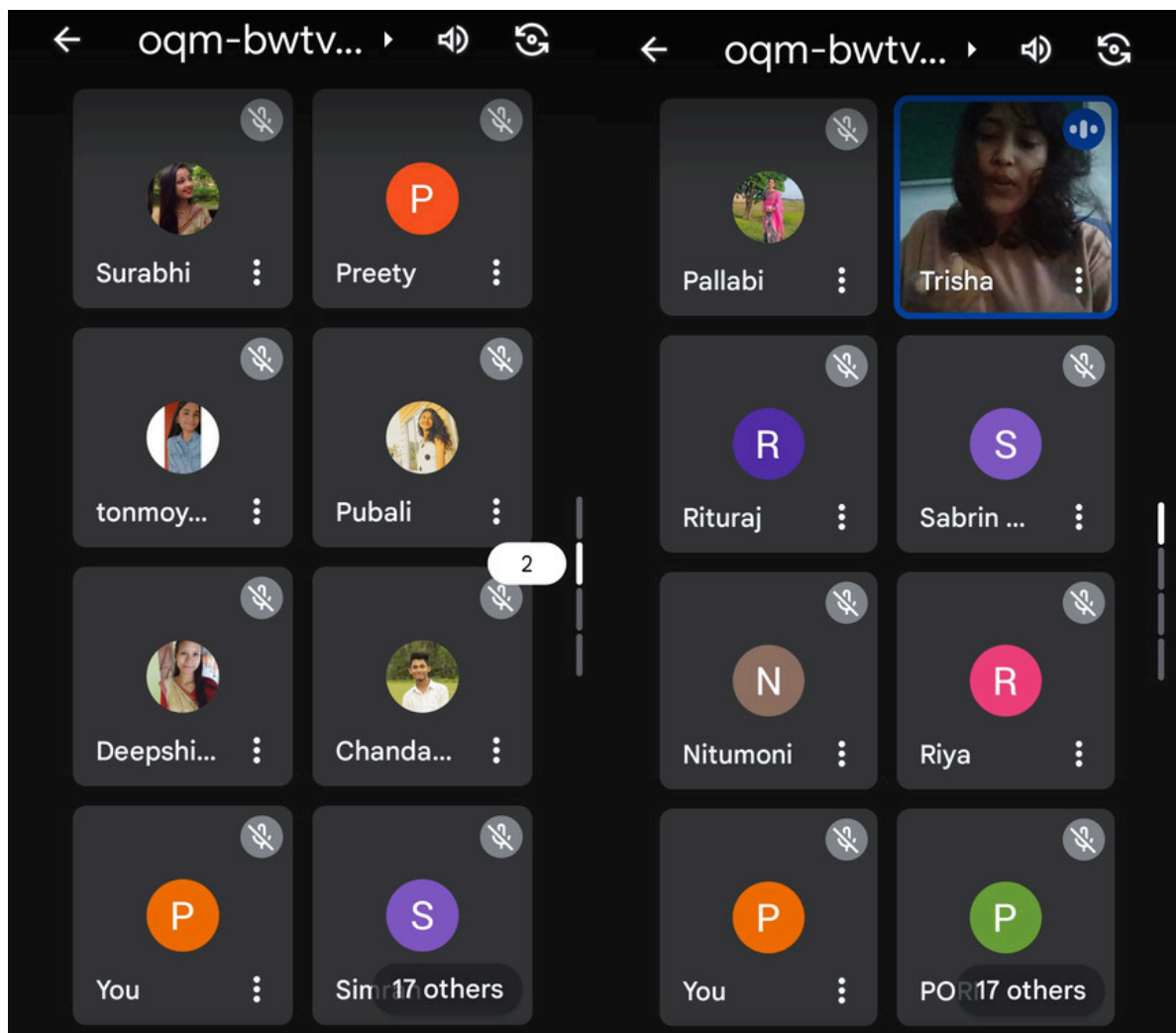
26. Collaboration between Gargaon College & Dibrugarh University



Outline of the Activity

Collaborative Faculty Exchange Program
Department of Political Science, Gargaon College
&
Department of Political Science, Dibrugarh University
Title of the Program: Human Rights: Concepts & Debates
Date of the Program: 11 -22nd May 2024
Vanue: Department of Political Science, Gargaon College
Resource Person: Ms. Trishna Bharadwaj , Assistant Professor
Department of Political Science, Dibrugarh University

Photograph of the Activity



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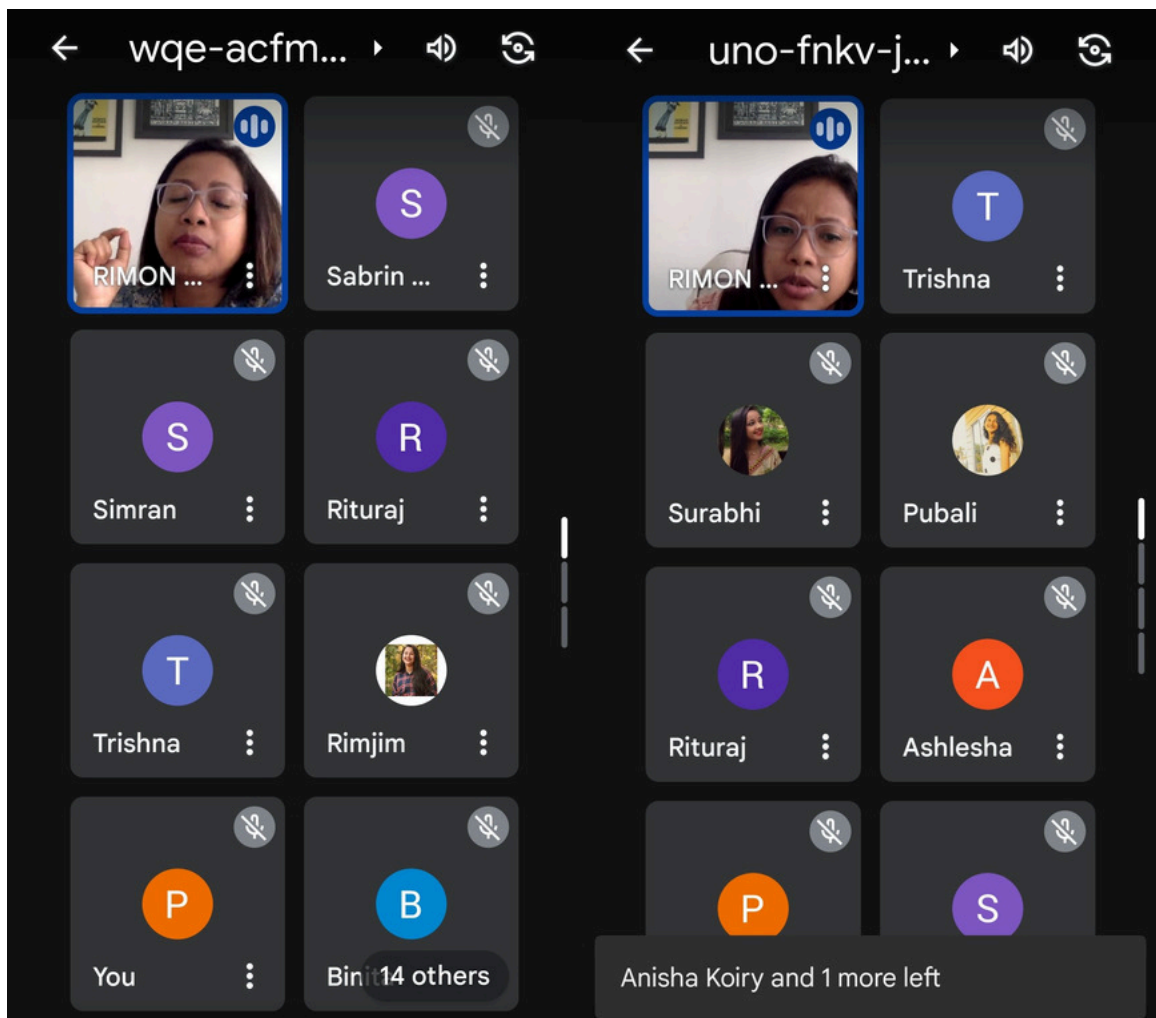
27.Collaboration between Gargaon College & Dibrugarh University



Outline of the Activity

Collaborative Faculty Exchange Program
Department of Political Science, Gargaon College
&
Department of Political Science, Dibrugarh University
Title of the Program: Concept of Growth and Development
Date of the Program: 6 -11th May 2024
Vanue: Department of Political Science, Gargaon College
Resource Person: Dr. Rimon Bhuyan Gogoi , Assistant Professor
Department of Political Science, Dibrugarh University

Photograph of the Activity



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28.Collaboration between Gargaon College & SPP College



Outline of the Activity

Collaborative Faculty Exchange Program
Department of Sociology, Gargaon College
&
Department of Sociology, SPP College, Namti, Sibsagar

Title of the Program: Faculty Exchange Program
Date of the Program: 3rd August, 2023
Venue: Department of Sociology, Gargaon College
Resource Person: Dr. Paochon Tuboi, Assistant professor
SPP College, Namti

Photograph of the Activity



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29.Collaboration between Gargaon College & SPP College



Outline of the Activity

Collaborative Faculty Exchange Program
Department of Sociology, Gargaon College
&
Department of Sociology, SPP College, Namti, Sibsagar

Title of the Program: Faculty Exchange Program
Date of the Program: 25 March , 2024
Vanue:Department of Sociology,Gargaon College
Resource Person:Dr. Papu Kumar Nagatey, Assistant professor
SPP College, Namti

Photograph of the Activity



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30.Collaboration between Gargaon College & Dibrugarh University &PDUAM



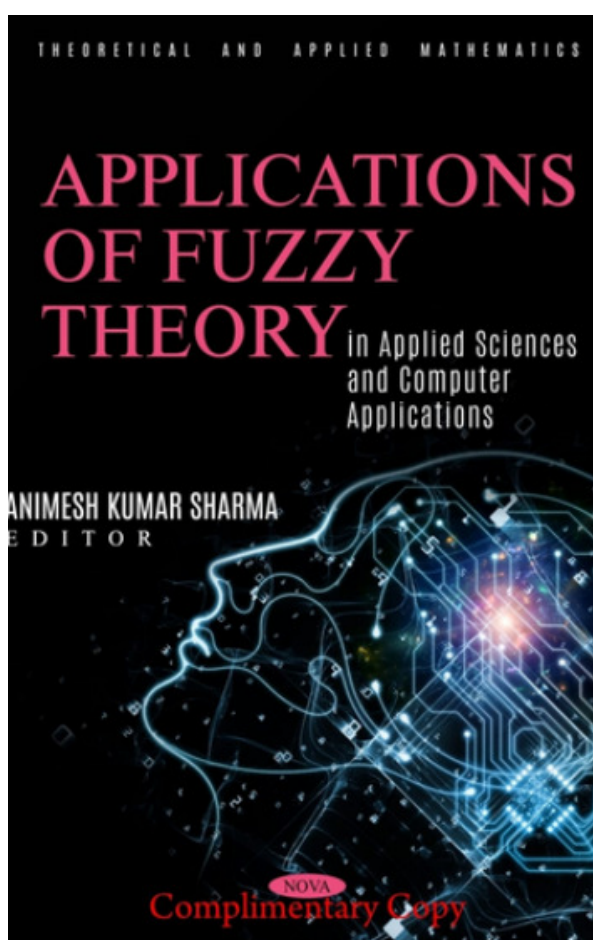
Outline of the Activity

Collaborative Book Chapter Publication
Dr. Barnali Dutta
Department of Statistics, Gargaon College
&
Dr. Manas Pratim Barman

Department of Statistics, Dibrugarh University
with PDUAM, Karimganj, Assam

Title of the Book Chapter: Application of Fuzzy Interface system in Mortality
Studies: A Review
Title of the Book: Thoeoretical and Applied Application of Fuzzy Theory in
Applied Science & Computer Application
Year of Publication: 2024
ISBN:978-8- 89113- 666-3

Photograph of the Activity



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Sam Kault (Editor)
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2023. ISBN: 979-8-88697-972-5 (eBook)

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L. Rajendran (Editor)
R. Swaminathan (Editor)
M. Chitra Devi (Editor)
2020. ISBN: 978-1-53618-257-6 (Hardcover)
2020. ISBN: 978-1-53618-356-6 (eBook)

A Closer Look at Boundary Value Problems

Mustafa Avcı, PhD (Editor)
2020. ISBN: 978-1-53617-857-9 (Hardcover)
2020. ISBN: 978-1-53617-861-6 (eBook)

More information about this series can be found at
<https://novapublishers.com/product-category/series/theoretical-and-applied-mathematics/>



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Chapter 2

Application of Fuzzy Inference System in Mortality Studies: A Review

Debajyoti Bora^{1,*}
Manash Pratim Barman²
and Bornali Dutta³

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Abstract

The fuzzy inference system is essential in model building and the decision-making process. Lotfi A. Zadeh first proposed the concept of fuzzy set theory in the 1960s. It deals with partial truth values, ranging from entirely true to false. It has since developed into a potent tool for dealing with imprecision and uncertainty to attain tractability, robustness, and feasible solutions to problems that exist in the real world. A fuzzy inference system is widely used in analyzing mortality by different researchers. The main objective of this study is to discuss the effectiveness of fuzzy inference systems in mortality studies conducted so far by various researchers. The study also discussed the process of fuzzy inference systems, their strengths and weaknesses in model building for analyzing various mortalities, and their adaptability in the future. The use of fuzzy inference systems in mortality analysis is a relatively new field of study, and this aspect needs to be addressed. As the fuzzy inference system becomes an efficient tool in building a computational interface for prediction, this paper will help various

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31.Collaboration between Gargaon College & Dibrugarh University



Outline of the Activity

**Collaborative Faculty Exchange Program
Department of Statistics, Gargaon College**

&

Department of Statistics, Dibrugarh University

Title of the Program: NEP 2020 and its future scope

Date of the Program: 5 August , 2023

Vanue: Department of Statistics, Gargaon College

**Resource Person:Prof. Sarat Ch Kakoty
Department of Statistics, Dibrugarh University**

Photograph of the Activity



**Motivational Talk
on
NEP-2020 and its future prospects**

Resource Persons



Prof. Sarat Ch. Kakoty
Professor Department of Statistics
Dibrugarh University

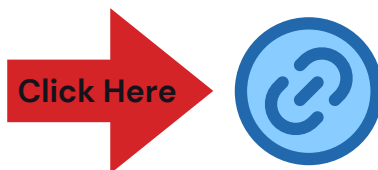


Dr. Manash Pratim Barman
HoD, Department of Statistics
Dibrugarh University

Date:05-08-2024

**Organized by
Department of Statistics, Gargaon College
In Collaboration with
Department of Statistics, Dibrugarh University**





32. Collaboration between Gargaon College & Dibrugarh University



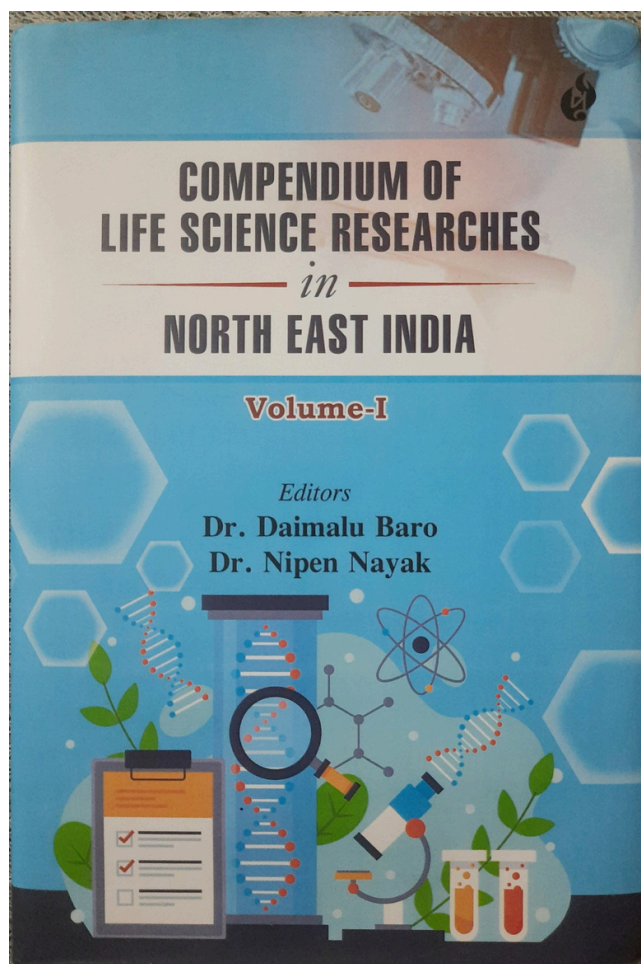
Outline of the Activity

Collaborative Book Chapter Publication
Dr. Anurag Protim Das
Department of Zoology, Gargaon College
&
Prof. Shyama Prasad Biswas

Department of Life Sciences, Dibrugarh University

Title of the Book Chapter: Inventorization of Fish Germplasm of Dikhow River; Current Threats and Conservation Status
Title of the Book: Compendium of Life Science Research in Northeast India
Year of Publication: 2024
ISBN: 978-93-58640-420-7

Photograph of the Activity



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Inventorization of Fish Germplasm of Dikhow River; Current Threats and Conservation Status

*Anurag Protim Das
Shyama Prasad Biswas*

Abstract

The historic Sivasagar district of Assam known for its historic significance is endowed with a rich wealth of unique aquatic resources such as the river Dikhow and many wetlands which is home to many rare and native fish species. In this work, the fish diversity of river Dikhow was inventoried for a period of two years. A total of 48 species belonging to 16 Families with dominance of the Cyprinidae family with 14 species, followed by Channidae with 5 species and Belontiidae with 4. The results reveal the occurrence of rich piscine diversity in the Dikhow River. However, due to increasing anthropogenic activities such as indiscriminate fishing, destruction of breeding grounds, the flow of pesticides from the adjacent agricultural fields caused a steady decline in fish diversity. Adequate measures need to be adopted for the sustenance and conservation of the fish diversity of the river.

Key words : Fish Diversity, Conservation, Dikhow River

Introduction

The diversity of the freshwater ecosystems in the north-eastern region of India, which is a component of the Himalayas and Indo Burma, is extremely diverse and significant for the life and economic well-being of the local populace (Allen et al., 2010). There are 2500

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33.Collaboration between Gargaon College with Aranyak Guwahati & Zoological Survey of London



Outline of the Activity

Collaborative Research
Dr. Anurag Protim Das
Department of Zoology, Gargaon College
&
Abhijit Boruah & Rubul Tanti
Aranyak, Guwahati
with
Jyoti Prasad Das
Regional Project Manager, Edge of Existence, Zoological Survey of London,
NW1 4RY, United Kingdom.
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Distribution and Occurrence of White-Winged Wood Duck (*Asarconis scutulata*) in and around Digboi Region, Assam, India

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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