

ICSSR Sponsored National Seminar on

SUSTAINABLE AGRICULTURE IN NORTH EAST INDIA: ISSUES, POLICIES AND WAY FORWARD

Date: 24th August, 2019

<u>Organized by</u> Department of Economics Gargaon College



গড়গাঁও মহাবিদ্যালয় GARGAON COLLEGE

historical context, Gargaon was the capital center of the Ahom kingdom from 1539 A.D. to 1695 A.D.The Ahom kingdom from 1539 A.D. to 1695 A.D.The College is affiliated to Dibrugarh University and has three Stream in Arts, Science and Commerce and there are Sixteen Departments at present viz. Assamese, English, Economics, Political Science, History, Education, Sociology, Geography, Mathematics, Physics, Chemistry, Botany, Zoology, Geology, Statistics and Commerce. The college has also two distance Learning study, centre under, Dihugarh distance largering study centre under Dibrugarh University and KKHSOU. The College imparts Education to more than two thousand students in every academic year with an efficient and dedicated teaching staff. The college is accredited with 'B' grade by NAAC in its third cycle, 2019.

SCIENTIFIC PROGRAMME

The seminar will feature on Invited Lectures, Oral Presentations and Poster Presentations. Participants are requested to send the soft copy of abstracts through e-mail attachment to icssrgccco@gmail.com on or before 18th August, 2019. The abstract should be typed in English using MS word single space (Font -Times New Roman, Font size 12) and should not paper, name(s) of author (s) followed by their address and email.

PRESENTATION GUIDELINES

1. Oral presentation

The oral presentations will be restricted to 10 minutes. Participants are requested to prepare presentations on MS power point for LCD presentation.

2. Poster presentation

There will be structured and organized poster sessions to encourage a wide participation. An area of 120 cm x 90 cm (Portrait size) will be provided for the poster. Necessary materials for poster display will also be provided

SEMINAR PROCEEDING

Peer reviewed papers will be published in a Proceeding Volume with ISBN.

REGISTRATION

For Paper Presenter
Academician/ Teacher
Research Scholar
Student

A/c Name : Department of Economics Gargaon College Bank A/c No. : 28010301633 Branch : United Bank of India, Simaluguri IFSC : UTBIOSIM343

Rs. 800/-Rs. 600/-Rs. 200/-

Rs. 1000/-Rs. 800/-Rs. 300/-

On the Spot Registration For Paper Presenter Academician/ Teacher Research Scholar Student

For Participant Academician/ Teacher/Research Scholar : Rs. 200/-Student : Rs. 100/-

IMPORTANT DATES

Last date for abstract submission : 18-08-2019 Notification of abstract acceptance : 20-08-2019 Last date for submission of full length paper : 22-08-2018

Accommodation will be arranged for registered delegates in nearby hotels on payment basis per day per head. Request for accommodation may be sent by 22nd August 2019 to Dr. Arandao Narzary (Email: arandao c@yahoo.co.in, Mobile No. 7002567098) in order to ensure your comfortable stay during the National

ADDRESS FOR CORRESPONDENCE Dr. Surajit Saikia Mobile No- 9101065105 Email- saikiasurajit86@gmail.com

Mr. Nilutpal Chutia Mobile No- 9859210605 Email- nilutpalchhutia@gmail.com



Organised By

DEPARTMENT OF ECONOMICS Gargaon College, Simaluguri-785686 Sivasagar, Assam

Invitation

Dear Sir/Madam.

We consider ourselves privileged to inform you that the Department of Economics, Gargaon College is going to organize an ICSSR Sponsored One Day National Seminar on " Sustainable Agriculture in North East India: Issues, Policies and Way Forward" on 24th August, 2019 at Gargaon College. The goal of the Seminar is to identify, generalise and popularise the concept of sustainable agriculture for policy implication. The Organizing Committee cordially invites you to participate in the Seminar to make it an inspiring and successful one.

With regards,

Dr. Sabyasachi Mahanta Principal & Chairperson	Dr. Surajit Saikia Convenor
Dr. Krishna Jyoti Handique	Mr. Nilutpal Chutia
Working Chairperson	Assistant Convener
Dr. Rimjim Dr. Pobon Kr	
Mr. Lohit G	
Membe	

THEME OF THE SEMINAR

During the third five year plan, the agriculture sector of India experienced green revolution and the process of transformation in Indian agriculture has got momentum. However, the rising concept of mechaniza-tion and modernization of agriculture has badly affected the automotion of agriculture in different ways like ground water degradation, land degradation, land sedimentation, water salinity etc. in the country. Uncontrolled and unscientific use of chemical fertilizers without adding adequate quantities of organic manures has resulted in the deterioration of soil health and environment. To sustain fertility, productivity and sustain-ability of Indian tropical soils, there is an urgent need to promote liberal application of organic manures by the

Therefore, to achieve sustainability in the agricul-ture sector, in the recent year's Government of India has given emphasis on practices of sustainable agriculture in given emphasis on practices of sustainable agriculture in its 12th five year plan via second green revolution. Moreover, the Government of India has taken different policy measures to boost up the practices of sustainable agriculture among the farmers of the country. It is well-known that the impact of green revolution was limited within a very few states in India and in the North East India the impact was completely negligible. One of the causes of limited impact of green revolution in this part of India was geographical isolation, lack of institutional arrangements (like credit, agriculture, market etc.) to the small and marginal farmers of the region, frequent natural calamities etc. In addition to this mechanization and modernization of agriculture has very limited scope in the modernization of agriculture has very limited scope in the hilly parts of the country. Thus, practice of agriculture in the this region is traditional and more eco-friendly in nature. This traditional agricultural practice develops a balance between meeting our present needs, conserving natural resources and protecting the environment for the benefit of the future generations. Identification and utilization of indigenous knowledge from the elderly people of rural and tribal will surely bridge the gap between the current

science and age-old practices. The North-East India is a tribal belt of the region where about 200 different types of tribal people and different communities live. The livelihood of most of these tribes and communities is renewable forest resources and practices of traditional agriculture that incorporates both crop and non-crop sector (livestock, poultry, fishery etc.). It seems that majority of the tribes use traditional tools

and techniques in their agriculture to a large extent. Most of the tribes of this region are found to use some homemade insecticides, pesticides, manures etc., to reduce the risk of production in agriculture. Some bio-control measures are also common in the agriculture practices. In addition to this practice of sustainable agriculture or use of some coordinated to a substitution agriculture or use of some coordinated to a substitution techniques are reflected in the folk songs and dances of the tribal people and communities of the region. The utilization of bioresources by tribes and other communities is based on indigenous and traditional knowledge that help in sustainable use and conservation of natural resources. The tribal farmers have been using hundreds of locally adapted major and minor crops in their various agricultural systems that help them to survive under risk and hard prone conditions. Therefore, identification and generalization of this information related to sustainable agriculture among the tribal people will be very fruitful for policy implication or reorganization of these traditional ideas

SUB-THEMES

- Sustainable agriculture practices among the tribes and communities of North East India.
- Relation of traditions and culture with sustainable agriculture in North East India.
 Organic farming in North East India prospects and

- Intensive farming and sustainable agriculture. Agricultural diversification and sustainable agriculture.
- ture. Ground water depletion and sustainable agriculture
- Rain water harvesting and sustainable agriculture.
 Hill agriculture and sustainability.
- Role of soil testing and plant analysis in sustainable agriculture. Globalization and sustainable agriculture. Any other topic related to sustainable agriculture.

ABOUT THE COLLEGE

The Gargaon College is located at Gargaon, a place of Historical and tourist importance and at a distance of 16 KM east of Sivasagar town. The Simaluguri Railway Station lies at a distance of 2.5 Km from the College premises. Gargaon College, estab-lished on 7th September 1959, is one of the premier institutions of higher education in Assam. In the



PROGRAMME DETAILS

ICSSR Sponsored National Seminar on SUSTAINABLE AGRICULTURE IN NORTH EAST INDIA: ISSUES, POLICIES AND WAY FORWARD

24th August, 2019

Organised by : Department of Economics Gargaon College

PROGRAMME

Registration	: 8.30 AM onwards
Inaugural Session	: 9.30 AM to 11.30 AM
Felicitation of the Invite Invitation of Rapporteu	
Rapporteur	: Dr. Dilip Kumar Deka
Chairperson	: Dr. Sabyasachi Mahanta Principal cum Chairperson, National Seminar Organizing Committee
Welcome Address	: Dr. Krishna Jyoti Handique Head, Department of Economics Gargaon College
Inaugural Address	: Prof. S.C. Kakati Department of Statistics Dibrugarh University
Keynote Speech	: Prof. Deb Kumar Chakraborty Department of Economics Dibrugarh University



PROGRAMME DETAILS

Lead Paper :	"Climate Change- Impact on Agriculture in Assam" Dr. Raju Mandal Department of Economics Assam University, Silchar
Chairperson's Address :	Dr. Sabyasachi Mahanta Principal, Gargaon College
Vote of Thanks :	Nilutpal Chutia
Tea Break :	11.30 AM to 12.00 PM
Technical Session: I	
Time :	12.00 PM to 1.45 PM
Venue :	Academic Gallery
Chairperson :	Dr. Amarjyoti Mahanta
Technical Session: II	
Time :	12.00 PM to 1.45 PM
Venue :	Golden Jubilee Hall
Chairperson :	Prof. Deb Kumar Chakraborty
Technical Session: III	
Time :	12.00 PM to 1.45 PM
Venue :	Department of Economics
Chairperson :	Dr. Anup Kumar Das
Technical Session: IV	
Time :	12.00 PM to 1.45 PM
Venue :	IQAC Room
Chairperson :	Dr. Raju Mandal
Technical Session: V	
Time :	12.00 PM to 1.45 PM
	PGDCA Classroom
Chairperson :	Dr. Prabhat Chandra Nath



PROGRAMME DETAILS

Valedictory Session Time	: 2.30 PM to 3.30 PM
Venue	
	: Dr. Amar Jyoti Mahanta
	Associate Prof. & Head
	Department of Economics
	Dibrugarh University
Speech of Guests	: Prof Deb Kumar Chakraborty
	: Dr. Raju Mandal
	: Dr. Anup Kumar Das
	: Dr. Prabhat Chandra Nath
	: Alok Ranjan Dutta
Observation/Opinion	ofParticipants
Repporteur's Report	
Recommendations of	Seminar
Distribution of Certific	cates
Chairperson's Addres	s
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Introduction

The Department of Economics organised the ICSSR Sponsored National Seminar on Sustainable Agriculture in North East India: Issues, Policies and Way Forward on 24th August, 2019. The aim of the seminar was to discuss the present status of agriculture in North East India, and how to improve its production, productivity and its contributions to income, employment and exports.

Along with the main theme, the seminar tried to cover various subthemes such as diversification of agriculture, Cooperative farming, Organic Farming, Sustainable Agriculture, etc. issues related to the main theme etc.

The inaugural session and five technical sessions were held on the day of the seminar. After the welcome Speech, Professor Deb Kumar Chakraborty delivered his keynote speech. After the Keynote speech, Dr. Raju Mandal made the Lead Paper presentation. Following this the other guests of the seminar delivered their address on the importance of agriculture, challenges faced by the sector etc.

The inaugural session was followed by the technical sessions and valedictory session.



Sample Photographs







TECHNICAL SESSION – I

- Time : 12.00 PM to 1.45 PM
- Venue : Academic Gallery

Chairperson : Dr. Amarjyoti Mahanta

Sl. No.	Name	Topic
1	Papori Sarmah	Organic Farming in North East India- Prospects and Implications
2	Niranjan Deori	Organic farming prospects and challenges for the North East India
3	Farbin Sultana Begum	Organic Farming in North-East India: Status, Problems and Prospects
4	Priyanshu Koustoov Saikia Krishna Saikia	Sustainable Agriculture in Assam during the Reign of the Ahom Empire
5	Navajyoti Gogoi Bharat Bonia	Organic farming in Assam: Prospects and Challenges
6	Ankika Dutta	Status and Scope of Organic Farming: With Special Reference to North Eastern Region
7	Lakhi Narayan Bharadwaj Chumki Handique	Sustainability of Indian Agriculture in the Face of Growing Food Demand



8	Rinashree Khound	Reflections of Globalization on Sustainable Agriculture
9	Ujjal Sut Prabhat Kumar Singh	Organic Farming for Sustainable Agriculture in India
10	Kaushik Chetia Uttam Narah	Effectiveness of Sustainable Agricultural Development in North East Region of India.
11	Shweta Devi Chauhan	Assessment and Constraints of Sustainable Agriculture in Assam
12	Nilakshi Gogoi	Export of Organic Products of India: Opportunities and Challenges
13	দেৱমানী বকলীয়াল	অসমীয়া লোকসাহিত্যত কৃষি সম্পৰ্কীয় আচাৰ-বিধি: এটি বিশ্লেষণাত্মক অধ্যয়ন
14	Amrita Devi	Role of Social Media for Sustainable Agricultural Development
15	Ashomi Kalita	Agricultural Production in North-Eastern Region Problems and Prospects of Development
16	Anil Tanti	Agro Tourism in Assam Opportunities and Challenges



TECHNICAL SESSION – II

Time : 12.00 PM to 1.45 PM

Venue : Golden Jubilee Hall

Chairperson : Prof. Deb Kumar Chakraborty

Sl. No.	Name	Торіс
1	Unmilan Kalita	Status Of NMSA Vis-À-Vis Insurance And Credit Support Among N.E. States
2	Saurish Bhattacharjee Mridusmita Patowary	Problems and Prospects of Organic Farming in India with Special Reference to North- Eastern Region
3	Debajit Gogoi	Sustainable Agriculture Practice among the Tribes and Communities of NE India with special reference to the Traditional Paddy-cum-Fish Cultivation of ApataniTribe, Ziro Valley, Arunachal Pradesh
4	Yuvaraj Gogoi	Has Globalisation Made Agriculture and Environment more Sustainable?
5	Alok Regon	Modernization of Agriculture and Sustainable Agriculture in North East India
6	Anuraj Mahanta	Role of Borshillah Tea Estate on Socio Economic Development of The Locality
7	Dr. Jitu Tamuli	Issues of Conservation Agriculture and Farm Sustainability: A Review



8	Kabyashree Boruah	Impact of Politics of Globalization on Sustainable Agriculture
9	Debyani Roy Bhowmick	Problems and Prospects of Small Tea Agriculturalists in Assam- A Theoretical Understanding
10	Mousumi Gogoi	Importance of GPS and GIS in Digital Agriculture: A Way to Sustainability
11	Lila Bora	Sustainable Agriculture: Issues Challenges and Prospects in North East India
12	Dr. Mintu Gogoi	Green Marketing : A Conceptual Framework
13	Dr Meghali Bora Nomami Dutta	Problems and Prospects of Agricultural Marketing In the light of New Reforms in North East Region
14	Shiv Kumar Sharma	Benefit - Cost Analysis of Pine Apple Growers in Karbi Anglong District of Assam
15	Dr. Hemanta Saikia	Diversification of Croping Pattern in Flood Affected Areas with Special Reference to Golaghat District of Assam
16	Ananta Chetia	Agricultural Sustainability and Agricultural Practices of 18 th Century Ahom Monarch : Reflections in Buranjis and British Document.



<u>List of Participants</u>

TECHNICAL SESSION – III

- Time : 12.00 PM to 1.45 PM
- Venue : Department of Economics
- Chairperson : Dr. Anup Kumar Das

Resource Person : Alok Ranjan Dutta

Sl. No.	Name	Торіс
1	Kaberi Hazarika	Status and Potentiality of Organic Farming in North Eastern Region of India
2	Deboshree Chakraborty Susmita Debi Mridupaban Gogoi	Organic Farming: Its Benefits, Prospects in North Eastern Region of India and Impact
3	Lipikajyoti Dowarah	Organic Farming in North- eastern states: Present status and Prospects
4	Suraj Hajong Nandeswar Banai	Organic Farming in North East India: Prospects and Implications
5	Daisy Basistha	Sustainable Agriculture and prospect of organic farming in Assam
6	Kashmiri Boruah	Organic Farming and Economic Conditions of Farmers: A Study on Chepangani Development Block of Sivasagar District, Assam
7	Nabaniaha Bhuyan	Sustainable agriculture practices among the Apatani tribes of ArunachalPradesh



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8	Devasish Hazarika	The Sustainability of Jhum Cultivation of North East India
9	Ratnamoni Dutta Beauty Boruah	Prospects of Sustainable Agriculture through Indigenous Seed Conservation: A study of Annapurna Seed Lending Library
10	Gautom Hazarika	Prospects of Assam's Organic Tea in Tea Market
11	Utpal Goswami	Use of Solar Energy for Sustainable Agriculture – Its Prospect and Challenges with Special Reference to the Jorhat District of Assam
12	Nilutpal Chutia	A District Level Analysis of Agricultural Sustainability in Assam
14	Kauranga Borgohain	Sustainable Farming for Economic Acceleration in Rural - A Study on Rural Farmers in Konwerpur Area of Sivasagar
15	Pragya Jyoti Boruah	An Analysis of Sustainable Agricultural Development in Rural India —Issues Challenges and Rural Development Policy
16	Dr. Surajit Saikia Bhagyalakhi Gogoi	Changing Pattern of Paddy Cultivation and the Issue of Sustainability –A Study among the Ahoms of Sivasagar



<u>List of Participants</u>

TECHNICAL SESSION – IV

Time : 12.00 PM to 1.45 PM

Venue : IQAC Room

Chairperson : Dr. Raju Mandal

Sl. No.	Name	Торіс
1	P. Hatikakoty M. Phukan D. Nath D.K. Deka	Traditional Methods and Techniques used in Sustainable Agricultural Practices – With Reference to Tai Ahom Community of undivided Sivasagar District of Assam
2	Himanshu Gogoi	A Review on Economic Aspect of Natural Farming as Sustainable Agriculture – Special Reference to Natural Tea Producers of Tingkhong (Dibrugarh), Assam
3	Morami Dutta	Organic Farming in North Eastern Region of India
4	Udeshna Buragohain	Economic Aspects Sustainable Agriculture Importance of Organic Farming in an Economy with Special Reference to Sikkim
5	Payel Priya Kashyap	Farmer's Distress in Assam Vis-À-Vis India-Is Crop Insurance A Way Out?
6	Naba Kumar Das Arup Roy	A Study on Factors influencing Students Buying Behaviour for Organic Foods in Assam



7	Annesha Mech	Sustainable Consumption of Food: An Analysis from Consumers' Perspectives
8	Bhargab Das	Determinants of Farm Productivity in Flood Prone Area: A Study in Dhemaji District of Assam
9	Pubali Hazarika	Sustainable Agricultural Practice in North-East India – Prospects and Implication.
10	Asmrita Bordoloi	Sustainable Agriculture as a New Vision of Agriculture in North East States of India
11	Ankur Saikia	Changing Agricultural Landscape and the Emerging Political Realities: A Study of DimaHasao
12	Jogesh Changmai Arotee Newar	Sericulture as a Sustainable Agriculture Allied Activity and Role in Empowerment of Rural People
13	Purnima Newar	Role of Sustainable Agriculture in the Agri- Entrepreneurship Development of Assam
14	Chandini Sonowal	Organic Farming in Northeast India: Prospects and Implications
15	Debajit Phukon	Crop diversification in hilly areas of Assam with special reference to Karbi Anglong District of Assam



TECHNICAL SESSION – V

- Time : 12.00 PM to 1.45 PM
- Venue : PGDCA Classroom

Chairperson : Dr. Prabhat Chandra Nath

SI. No.	Name	Topic
1	Anuradha Gogoi L. R. Saikia	Growth of Puntiussophore in Dikhow River, Assam in monsoon season with the changes of water parameters
2	Bonika Borgohain Gitartha Nath	Sustainable Agriculture and its Relation with Ground- water Depletion
3	Salma Begum Purabi Saikia	Organic Farming in North- East India – Prospects and Implications
4	Aandrisha Borthakur Bijoy Neog	PHYTOCHEMICALS OF MyricaesculentaBuchHam ex D. Don - A REVIEW
5	Pranjal Borah Dr.Jayanta Barukial	Azolla: The Economic Bio fertilizer for Sustainable Agriculture
6	Punam Chanda	Organic Farming in North East India-Prospects and Implications
7	Gauri Mohan	Role of Soil Testing and Plant Analysis in Sustainable Agriculture
8	Indira Gogoi Bijoy Neog	Wild Edible Macrofungi as Source of Food in Northeast India



9	R.K. Borah	$\mathbf{T}_{\mathbf{T}}_{\mathbf{T}_{\mathbf{T}}}}}}}}}}$
9		Use of \mathbb{R}^2 Misleads in Some
	K.K. Singh Meitei	Practical Situation" with
	S.C. Kakaty	Special Reference to Rice
		Plant of Parijat Variety,
		where the Length of Panicle
		and No of Grains are
		Observed
10	Masuma Ahmed	Sustainability of Shifting
		Cultivation:Finding a Way
		Out of It
11	Daisy Konwar	Predator-prey interaction
	DS Bora	between
		Coccinellatranversalis and
		Aphis fabae in
		Cucurbitapepo plants.
12	Durlov Lahon	Importance of Sustainable
	Kusumbor Bordoloi	Agriculture for the
	Dhrubajyoti Sahariah	Conservation of Wetland
		Ecosystem: A Case Study of
		Disangmukh, Sivasagar,
		Assam, India
13	Pulin Saikia	Dikharu River Seasonal Dam
	Ritrishna Kashyap	Irrigation at Dikharumukh of
	51	Hojai district: A Successful
		Community Based Irrigation
		in a Highly Fluoride
		Affected Area
14	Arnob Paul	The Role of Organic
		Farming in Agricultural
		Sustainability with Special
		Reference to India
15	Akshayjit Podder	Soil Testing as a Means of
		Sustainable Intensification
		for Environmentally
		Resilient Ecosystems
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