

Inaugurator: Sri R. Arjun, IAS,  
District Magistrate, Jhargram District, W.B.

Chief Guest: Prof (Dr.) Kalyan Rudra,  
Chairman, West Bengal Pollution Control Board.

Special Guest & Speaker: Dr. Asok Kanti Sanyal,  
Chairman, West Bengal Biodiversity Board.

National Dignitary & Speaker: Prof (Dr.) Gopal Krishna Panda,  
Emeritus Professor, Dept. of Geography,  
Utkal University, Cuttak, Odisha.

National Dignitary & Speaker: Dr. Jitendra Shukla,  
Associate Professor, Dept. of Geography,  
Ranchi University, Ranchi, Jharkhand

Guest & Speaker: Prof (Dr.) Ajit Kumar Danda,  
Chairman, INCAA

Guest & Speaker: Prof. (Dr.) Laxmi Narayan Satpati,  
Director, HRDC, University of Calcutta

Guest: Block Development Officer, Jamboni Block, Jhargram

Guest: Block Development Officer, Sankrail Block, Jhargram

Guest: Savapati, Sankrail Panchayet Samity, Sankrail.

Resource Person: Prof. (Dr.) Ashis Kumar Paul, H.O.D.  
Dept. of Geography & Environmental management,  
Vidyasagar University, Medinipur,

Resource Person: Prof. (Dr.) Chitta Ranjon Sahu,  
Dept. of Zoology, Kalyani University.

Resource Person: Prof. (Dr.) Ramkumar Bhakat,  
Dept. of Botany & Forestry, Vidyasagar University.

Resource Person: Prof. (Dr.) Soumendu Chatterjee,  
Dept. of Geography, Presidency University, Kolkata

Resource Person: Dr. Ashok Kumar Karan,  
Snr. Soil Scientist, IIT, Kharagpur

Resource Person: Dr. Subrata Bhattacharya,  
Researcher, Folk & Culture, Jhargram

Resource Person: Dr. Deb Narayan Roy,  
OIC, Jhargram Raj College

Resource Person: Dr. M.A Safique,  
Associate Prof. Dept. of Tourism Management,  
University of Bardwan.

&  
**'ENVIRONMENTAL STUDY'**

**Theme: Bio-diversity Conservation and  
Environmental Management: Regional  
Planning for Sustainable Development**

**Date: 25 & 26 March, 2018**

**Registration Form**

Name: Prof./Dr./ Mr./Ms. ....

Professional Status.....

Mailing Address.....

Phone :.....

E-mail :.....

Contributing Paper : Oral-  Poster-  participation-

Under which Sub- theme & Title of the Topic/ Sup-topic.....

Details of Registration Fee: Cash/ Demand

Draft Rs.....Demand Draft No.....

Date.....Drawn on Bank.....

Participant for Jnr. Scientists (only Research Scholars):

Yes  No

Age : 25 yrs-35 yrs( 01.01.2018)

Participant for Photography Contest , theme:

Biodiversity and Geographical Landscape (only students)

Yes  No

Accommodation: Yes-  No-

Food Habit : Non-Veg  Veg

Date: \_\_\_\_\_ Signature \_\_\_\_\_

HOW TO REACH

KANAK ARANYA, CHILKIGARH, JAMBONI BLOCK, JHARGRAM  
S. E. Rly, KGP - TATA Railway section, Jhargram Station,  
From Jhargram 17KM Roadway to Chilkiagarh.



**TWO-DAY NATIONAL SEMINAR  
&  
ENVIRONMENTAL STUDY**

**Theme: Bio-diversity Conservation and  
Environmental Management: Regional  
Planning for Sustainable Development**

Organized by  
Department of Geography,  
Seva Bharati Mahavidyalaya, Kargari, Jhargram,  
West Bengal-721505  
Website- www.sbmahavidyalaya.com



Associate Organizer  
Tropical Institute of Earth and Environmental Research (TIEER),  
Midnapur  
Honorary Sponsored by  
District Administration, Jhargram



**Date: 25 & 26 March, 2018**

Venue:  
Day 1: Kanak Aranya , Chilkiagarh, Jamboni Block, Jhargram (W.B)  
(Opening Ceremony and Academic discussion)  
Day 2: Kodopal Eco-park, Sankrail Block, Jhargram (W.B)

Madam,  
We cordially invite you and your colleagues to attend the 3-day National Seminar and Environmental Study, Theme - 'Bio-diversity Conservation and Environmental Management: Regional Planning for Sustainable Development' organized by the Department of Geography, Seva Bharati Mahavidyalaya and Associate Organizer Tropical Institute of Earth and Environmental Research on 25th & 26th March, 2018.

We firmly believe that your participation will help in accumulation and assimilation of information and knowledge on the central theme through interactive discourses.

**Dr. Pranab Sahoo**  
HOD & Organizing Secretary  
And  
Secretary, TIEER  
pranabsbm@gmail.com  
Mob: 09733574640

**Dr. Sk Mafizul Haque**  
Assistant Prof. Dept of Geography,  
University of Calcutta  
and  
Member, TIEER  
mafi\_haque@yahoo.co.in  
Mob: 09434897192

### ORGANISING COMMITTEE

**Chief Patron:** Sri Samir Dhal,  
President, Governing Body, Seva Bharati Mahavidyalaya, Savapati, Jamboni Panchayet Samity.

**Patron:** Dr. Binoy Kr. Chanda,  
Former Inspector of colleges, VU & President, TIEER, Midnapur

**Chairman:** Dr. Binod Chowdhary,  
Teacher-in-charge, Seva Bharati Mahavidyalaya, Kappari

**Organizing Secretary:** Dr. Pranab Sahoo,  
Asst. Professor & HOD, Dept. of Geography & Secretary, TIEER.

**Joint Secretary:** Dr. Subhankar Patra,  
Dept. of Geography, Seva Bharati Mahavidyalaya.

**Convener:** Dr. Sk. Mafizul Haque,  
Asst. Prof. Dept. of Geography, CU & Member, TIEER

**Joint Convener:** Sri Kishor Dandapat,  
Dept. of Geography, Seva Bharati Mahavidyalaya.

**Treasurer:** Sri Chandan Karan,  
Dept. of Geography, Seva Bharati Mahavidyalaya.

**Joint Treasurer:** Sri Narasingha Das,  
Assistant Teacher & Member, TIEER

**Assistant Secretary:** Sri Ashis Ghosh,  
Dept. of Geography, Seva Bharati Mahavidyalaya.  
Miss Arpita Patra,  
Dept. of Geography, Seva Bharati Mahavidyalaya.  
Dr. Mousam Majumder,  
Asst. Teacher & Member, TIEER  
Dr. Subhendu Ghosh,  
Asst. Teacher & Member, TIEER  
Dr. Jaya Dey,  
Asst. Prof. & Member, TIEER  
Sri Suvas Jana,  
Asst. Teacher & Member, TIEER

Asst. Professor, Seva Bharati Mahavidyalaya & Member, TIEER  
Dr. Deb Kumar Mal,  
Librarian, Seva Bharati Mahavidyalaya & Member, TIEER  
Dr. Aloke Sen Barman,  
Asst. Professor, Seva Bharati Mahavidyalaya & Member, TIEER  
Sri Nantu Pal,  
Dept. of Economics, Seva Bharati Mahavidyalaya & Member, TIEER  
Sri Bidhan Pratihar,  
Dept. of Geography, Seva Bharati Mahavidyalaya

### ABOUT THE COLLEGE

Seva Bharati Mahavidyalaya, a dream-project of Prof. P.K. Sen, is dedicated to the service of the nation through dissemination of higher education for more than fifty years. The College is situated at Kappari in the South Western fringe area of Jhargram District, West Bengal. The wonderful atmosphere created by the lush greenery, pollution-free environs, excellent infrastructural facilities, well-qualified and dedicated faculty, and surely, the efficient and liberal administration, have together acted as vital ingredients in the making of this Mahavidyalaya par excellence.

It comes under the 'Queen of Jungle' in Jhargram forest area a linguistically varied and culturally-diversified area, which is populated mostly by the tribal people, and splendidly enriched with their living and throbbing art and culture.

The progress of a nation has to be backed by several strong fundamental factors of which education is of vital significance. Seva Bharati Mahavidyalaya is slowly but steadily marching forward with the objective of creating global citizens who would make India proud. At Seva Bharati Mahavidyalaya our focus is on nurturing this enormous intellectual power into a cohesive force that can penetrate through the strongest of barriers. We look ahead with optimism that the future is only going to get better and better. We have an exciting and challenging task ahead.

### DEPARTMENT OF GEOGRAPHY

The Department was established in 2006. Initially it was opened with Geography as a combination subject with B.A/B.Sc general course. Later on, Geography (Hons.) was introduced in the year of 2007. It has produced many genius and excellent academic students who attained various respectable positions in academics and Organization or Non-Organization sectors as well.

### AIM & OBJECTIVES OF THE SEMINAR

Biodiversity conservation is an investment that yields substantial local, national, and global benefits. To achieve sustainable development, conserving biodiversity requires - Changes in pattern and practices of economic development worldwide. Biodiversity conservation can be sustained only if public awareness and concern are substantially heightened. The climatic associate changes that are comparatively rapid as affect our immediately environment, mainly Heat Waves in summer, little change of Sea Level, Floods, Drought, Desertification, Cyclone, Cloud Burst, Flash-flood and loss of life in Indian sub-continent in recent time. Under these extreme environmental constrains, this is the right time to re-think, re-assess and speak the story of our environment. This attempt of the National Seminar can open a lot of ways to formulate the goal of sustainable development through the Geo-information technique; and it will also build the platform for the justification and evaluation of our close circumstances. Based on the perception of regional and local planning, one can preserve their natural capital with the conservation of ecosystem.

conservation of bio-diversity, Jhargram, the 22nd District of the state, having large number of below poverty line population in respect of her total population contains about 62,000 hector bio-diversity rich dense forest area along with other natural capitals. The confluence of folk and cultures, ethnic mosaic of host people and deep affection of man-environmental relationship develop the unique position of the district's emotion since ancient time. It is the prime destination of eco-tourism, green and healthy place of West Bengal also India. The existing opportunity can bring the range of spectrums for various dimensions of balanced and sustainable economic development. So, this attempt will portray the scope of overall aspect of district development plan from the view points of different academic know-how. As a result we will be kind enough to fulfill the sustainable development goal, which was determined in the Stockholm (1972) to Paris (2015) convention, through the engagement of all stakeholders of this province.

### SEMINAR SUB-THEME

1. Bio-diversity asset, utility and management
2. Geo-informatics for disaster management
3. Climate change, environmental degradation and management
4. Eco-tourism hub and sustainable development
5. Resource management and food security

### SUBMISSION OF ABSTRACT & FULL PAPER

Only those papers will find place in the seminar who have paid registration fee has been received with the papers. The papers (very short) will be selected to read in the seminar will get 10 mts time.

Postal and Mailing Address:

Head of the Department, Department of Geography, Seva Bharati Mahavidyalaya, Kappari-Jhargram, WB -721505

### IMPORTANT DATES:

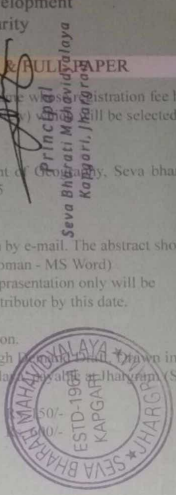
1. 17.03.2018 : Last date of abstract submission by e-mail. The abstract should not exceed 300 words. (New Roman - MS Word)
2. 20.03.2018 : Acceptance for oral and poster presentation only will be communicated to the paper contributor by this date. (Poster - 1m x 1m)
3. 21.03.2018 : Last date of full paper submission.
4. 20.03.2018 : Last Date of Registration through the online system in favor of: 'Seva Bharati Mahavidyalaya, Kappari, Jhargram, WB'

**Registration Fees:** For Students(College): 50/-  
For Others: 100/-

Email : mafi\_haque@yahoo.co.in  
Mob : 09434897192  
Email: subhankar.sbm123@gmail.com  
Contact : 09475114769  
Email: kishordandapat@gmail.com  
Contact : 09775109743

### IMPORTANCE DECLARATION

1. 'SUDIP DEY MEMORIAL JUNIOR SCIENTIST AWARD' for Best Research Paper from Research Scholars.
2. 'BEST SCIENTIFIC PHOTOGRAPHER AWARD' for Best Photograph from students.



**A BOOK OF**  
**SEMINAR REPORT AND JHARGRAM DISTRICT PLANNING FOR**  
**SUSTAINABLE DEVELOPMENT –2018**

**A TWO- DAY NATIONAL SEMINAR AND ENVIRONMENTAL STUDY**  
*(25-26 March, 2018)*

**Theme: *Bio-diversity Conservation & Environmental Management:***  
***Regional Planning for Sustainable Development***

***Organised by***

**DEPARTMENT OF GEOGRAPHY**

*SEVA BHARATI MAHAVIDYALAYA, KAPGARI- JHARGRAM, W.B.*

***Associate Organiser***

TROPICAL INSTITUTE OF EARTH AND ENVIRONMENTAL RESEARCH (TIEER), MEDINIPUR, W.B.

***Hosted by***

District Administration, Jhargram District, W.B.

**A BOOK OF**  
**SEMINAR REPORT AND JHARGRAM DISTRICT PLANNING FOR**  
**SUSTAINABLE DEVELOPMENT –2018**

**Copy Right:** *Dr. Pranab Sahoo*

**Published by:** *Department of Geography*

Seva Bharati Mahavidyalaya

Kapgari, Jhargram-721505

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Dr. Deb Narayan Roy    Dr. M. A. Safique



in the memory of  
***Late Dr. Sudip Dey***

## ORGANISING COMMITTEE

- Chief Patron:** **Sri Samir Dhal**  
*President, Governing Body, Seva Bharati Mahavidyalaya & Savapati, Jamboni Panchayet Samity*
- Patron:** **Dr. Binoy Kr. Chanda**  
*Former Inspector of colleges, VU & Presidents, TIEER, Midnapur*
- Chairman:** **Dr. Binod Chowdhary**  
*Teacher-in-charge, Seva Bharati Mahavidyalaya, Kaggari*
- Organizing Secretary:** **Dr. Pranab Sahoo**  
*Asst. Professor & HOD, Dept. of Geography & Secretary, TIEER*
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- Convener:** **Dr. Sk. Mafizul Hauque**  
*Asst. Prof, Dept. of Geography, CU & Member, TIEER*
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- Dr. Subhendu Ghosh**  
*Asst. Teacher & Member, TIEER*
- Dr. Jaya Dey**  
*Asst. Prof. & Member, TIEER*
- Sri Subhas Jana**  
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- Official Secretary:** **Sri Samit Maity**  
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- Dr. Deb Kumar Mal**  
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- Dr. Alope Sen Barman**  
*Asst. Professor, Seva Bharati Mahavidyalaya & Member, TIEER*
- Sri Nantu Pal**  
*Dept of Economics, Seva Bharati Mahavidyalaya & Member, TIEER*
- Sri Bidhan Pratihar**  
*Dept of Geography, Seva Bharati Mahavidyalaya*

## Honorable Guest and Resource Persons:

- Inaugurator:** **Sri R. Arjun**  
*IAS, District Magistrate, Jhargram District, W.B.*
- Chief Guest:** **Prof. (Dr.) Kalyan Rudra**  
*Chairman, WBPCB, Govt. of West Bengal*
- National Dignitary:** **Dr. Jitendra Shukla**  
*Associate Professor, Ranchi University*
- Guests:** **Prof. (Dr.) Laxmi Narayan Satpati**  
*Director, HRDC, Calcutta University*
- Md. Alim Ansari**  
*BDO, Jamboni Block, Jhargram District*
- Md. Wasidulla**  
*BDO, Sankrail Block, Jhargram District*
- Smt. Madhurima Patra,**  
*Savapati, Sankrail Panchayet Samity*
- Resource Persons:** **Prof. (Dr.) Ajit Kumar Danda**  
*Chairman, INCAA*
- Prof. (Dr.) Ashis Kumar Paul**  
*Professor, Dept. of Geography & Evs. Management, Vidyasagar University*
- Prof. (Dr.) Chitta Ranjon Sahu**  
*Professor, Dept. of Zoology, Kalyani University*
- Dr. Ram Kumar Bhakat**  
*Associate Professor, Dept. of Botany, Vidyasagar University*
- Prof. (Dr.) Soumendu Chatterjee**  
*Professor, Dept. of Geography, Presidency University*
- Dr. Ashok Kumar Karan**  
*Snr. Soil Scientist, IIT, Kharagpur*
- Dr. Debnarayan Roy**  
*OC, Jhargram Raj College & Associate Professor, Dept. of Zoology*
- Dr. M.A Safique**  
*Associate Professor, Dept. of Tourism Management, The University of Bardwan*
- Dr. Sumit Manna**  
*Associate Professor, Dept. of Botany, Moyna College & Representative of W.B Biodiversity Board*

Prof. (Dr.) Saumen Kumar Mahapatra



**MINISTER-IN-CHARGE**  
DEPARTMENT OF WATER RESOURCES  
INVESTIGATION AND DEVELOPMENT  
GOVERNMENT OF WEST BENGAL  
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DO III/MFC (NR/2018)

DT 16/3/18

MESSAGE

*I am very happy to learn that Seva Bharati Mahavidyalaya, P.O.-Kaggari, Dist.-Jhargram is going to organize a two-day National Seminar & Environmental Study on Bio-diversity Conservation and Environmental Management on 25<sup>th</sup> and 26<sup>th</sup> March, 2018 at Kanak Aranya, Chilkigari, Jamboni Block, Jhargram.*

*I extend my best wishes to all the members / organizers of Seva Bharati Mahavidyalaya.*

*I also wish the programme all success*

  
Prof. (Dr.) Saumen Kumar Mahapatra

*Dr. Pranab Sahoo,  
Asst. Prof. & HOD,  
Department of Geography &  
Organizing Secretary,  
Seva Bharati Mahavidyalaya,  
Kaggari, Jhargram.*





## VIDYASAGAR UNIVERSITY

**Professor Ranjan Chakrabarti**  
*Vice-Chancellor*

**Date: 15.03.2018**

### **MESSAGE**

I am happy to learn that the Department of Geography, Seva Bharati Mahavidyalaya, Kapgari, along with Tropical Institute of Earth and Environmental Research, Midnapur, are going to organize a Two-day National Seminar on *Bio-diversity Conservation and Environmental Management: Regional Planning for Sustainable Development* to be held on March **25 & 26, 2018**

I commend this collective endeavour and hope that the deliberations in the Seminar will really be enriching to all the participants.

I convey my best wishes for the success of the programme.

**(Professor Ranjan Chakrabarti)**

**Dr. Binod Choudhury,**  
**Teacher-In-Charge,**  
**Seva Bharati Mahavidyalaya,**  
**P.O. – Kapgari,**  
**Jhargram – 721 505**

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**UGC-Human Resource Development Centre (HRDC)**  
(Formerly UGC-Academic Staff College)  
University of Calcutta  
92, Acharya Prafulla Chandra Road, Kolkata-700 009  
Phone & FAX: 033-23519754, (P) 2350 8386 Extn. 291; Email: director@hrdc@gmail.com



No. SBM/Msg/01

20 March, 2018

### Message

I am delighted to be invited in the Two-day National Seminar & Environmental Study on the theme '*Bio-diversity Conservation and Environmental Management: Regional Planning for Sustainable Development*', to be organized by the Department of Geography, Seva Bharati Mahavidyalaya, Kaptari, Jhargram, W. B. during 25-26 March, 2018. The endeavour being collaborated and supported respectively by TIEER and the administrative authority of the newly formed Jhargram District needs appreciation.

The focal theme of the seminar has been rightly chosen in the context of developmental priorities vis-à-vis environmental concerns pertaining to the unique physical and socio-economic-cultural milieu of the region, where it is being organized.

My heartfelt good wishes for all round success of the seminar.

[L. N. Satpati]  
Professor of Geography  
& Director, UGC-HRDC,  
University of Calcutta

**আব্ব অর্জুন**, আই.এ.এস  
জেলা শাসক ও সমাহর্তা, ঝাড়গ্রাম  
পোস্ট ও খালা: ঝাড়গ্রাম  
জেলা: ঝাড়গ্রাম, পিন: ৭২১৫০৭  
ফোন নং : ০৩২২১ ২৫৭৯১৫  
ফ্যাক্স নং : ০৩২২১ ২৫৭৭৯৭  
ই-মেল : jhargramdm@gmail.com



सत्यमेव जयते

**R. Arjun, IAS**  
District Magistrate & Collector, Jhargram  
P.O. & P.S. : Jhargram,  
Dist : Jhargram, PIN : 721507  
Phone No. : 03221 257915  
FAX No. : 03221 257797  
e-mail ID : jhargramdm@gmail.com

No. \_\_\_\_\_

Date \_\_\_\_\_

**!!GREETINGS!!**

*I am glad to know that a Seminar on the theme 'Bio-diversity Conservation and Environmental Management: Regional Planning for Sustainable Development' and academic discussion is scheduled to be held at Seva Bharati Mahavidyalaya, Kargari on 25<sup>th</sup> March, 2018.*

*I convey my best wishes and heartiest thanks to all the participants as well as the Teaching and Non-teaching Staff of the College for the grand success of the aforesaid Seminar.*

To  
The Assit. Professor & HOD Deptt. of Geography,  
Seva Bharati Mahavidyalaya, Jamboni Block, Jhargram.

  
DISTRICT MAGISTRATE  
JHARGRAM



DEPARTMENT OF GEOGRAPHY  
Ranchi University, Ranchi, Jharkhand

**Seminar Message**

I extremely happy to learn that the Department of Geography, Seva Bharati Mahavidyalaya, Jhargram is hosting the National Seminar on Bio-diversity conservation and Environmental management :Regional Planning for Sustainable development during 25-26 March 2018. The theme of the seminar is essentially pertinent and considering the challenge of the country to meet the needs of its population to the of more than 1.26 billion . Rapid increase in population and economic growth in India has certainly led to environmental degradation that undermines its resource base. Gradual squeeze and depletion of land, water and forest resources as the consequences of their overuse and misutilization have already started affecting economic performance of the country. Economic pursuit is taking its toll on ecology. The future socio-economic scenario of the country becomes absolutely unpredictable when the Global Environmental Change is brought into consideration.

I am glad that galaxy of intellectuals and experts from various parts of the country are participating in the conference and I am sure that the occasion would provide good opportunity of interaction to the experts working in the field to come out with some important deliberations which will become guiding force for future research & other allied fields. I extend my warm greetings to organizers, faculty members, students, participating delegates and send my best wishes for the success of seminar.

Thanks & Regards

Sd/-  
Prof. Jitendra Shukla  
Department of Geography  
Ranchi University, Ranchi

## DEPARTMENT OF GEOGRAPHY

**Name: Dr. Pranab Sahoo (Ph.D)**

**Designation:** Assistant Professor  
Head, Department of Geography

**Teaching Experience:** 20 Years

**Research Area:**  
Geomorphology, Human Ecology,  
Climatology, Environment Study

**Research Publication:**  
National Journals: 7  
International Journals: Nil

**Presented Paper on Seminar**  
National: 25  
International: 8

**Symposia:** 30



**Name: Dr. Subhankar Patra (Ph.D)**

**Designation:** Govt. Approved College Teacher

**Teaching Experience:** 14 Years

**Research Area:**  
Coastal Geomorphology, Agricultural Geography

**Research Publication:**  
National Journals: 4  
International Journals: 5

**Presented Paper on Seminar**  
National: 15  
International: 8



**Name: Mr. Chandan Karan**

**Designation:** Govt. Approved College Teacher  
Department of Geography

**Teaching Experience:** 11 Years

**Research Area:** Geomorphology, Coastal  
Geomorphology  
Agricultural Land Use study & Environmental Geography

**Research Publication:**  
National Journals: 5  
International Journals: 4

**Presented Paper on Seminar**  
National: 10  
International: 8



**Name: Mr. Asish Ghosh**

**Designation:** Govt. Approved College  
Teacher  
Department of Geography

**Teaching Experience:** 10 Years

**Research Area:**  
Agriculture geography, Vital Statistics

**Research Publication:**  
National Journals: Nil  
International Journals: Nil

**Presented Paper on Seminar**  
National: 1  
International: Nil



**Name: Mr. Kishor Dandapat**

**Designation:** Govt. Approved College Teacher  
Department of Geography

**Teaching Experience:** 10 Years

**Research Area:**  
Geomorphology, Fluvial Geomorphology  
Natural Hazard and Disaster Management

**Research Publication:**  
National Journals: 3  
International Journals: 6

**Presented Paper on Seminar**  
National: 12  
International: 3

**Book Published:** 1



**Name: Miss Arpita Patra**

**Designation:** Guest Lecturer  
Department of Geography

**Teaching Experience:** 4 Year

**Research Publication:**  
National Journals: Nil  
International Journals: Nil

**Presented Paper on Seminar**  
National: 1  
International: Nil



**Name: Mr. Bidhan Pratihar**

**Designation:** Lab. Assistant  
Department of Geography

**Lab. Experience:** 15 Years



## **NATIONAL SEMINAR REPORT AND JHARGRAM DISTRICT PLANNING-2018**

The Department of Geography, Seva Bharati Mahavidyalaya, Kapgari, Jhargram, a



State Govt. affiliated college under the Vidyasagar University and the Tropical Institute of Earth and Environmental Research (TIEER), Midnapore have Jointly organized a Two-day National Seminar and Environmental study on '*Bio-diversity Conservation &*

*Environmental Management: Regional Planning for Sustainable Development*' at Kanak Aranya, Chilkigarh, Jamboni Block, Jhargram District for Day-1 and Kodopal Eco-park, Sankrail Block, Jhargram District for Day-2; on March 25 & 26, 2018. The entire programme was hosted by District Administration, Jhargram. This seminar and environmental study was encompassed a wide spectrum of academic theme between interdisciplinary arenas of scientific know-how.

Biodiversity conservation is an investment that yields substantial local, national, and global benefits. To achieve sustainable development, conserving biodiversity requires – Changes in



pattern and practices of economic development worldwide this seminar has been organised. Biodiversity conservation sustained only through public awareness and concern are substantially heightened with the help of local people. The climatic associate changes that are comparatively rapid as affect our immediately environment, mainly heat waves in summer, little change of sea level, floods, Drought, Desertification, cyclone, Cloud burst, Flash-flood and loss of life in Indian sub-continent in recent time. Under these extreme environmental constrains, this is

the right time to re-think, re-assess and speak the story of our environment in the context of Jhargram District. The attempt regarding the national seminar opened a lot of ways to formulate the goal of sustainable development through the geo-information technique; and it built the platform for the justification and evaluation of our close circumstances. Based on the perception of regional and local planning, one people preserve their natural capital with the conservation of ecosystem in this natural capital region of the state. Bottom-top planning which have been discussed in this academic platform definitely encourages the various scope of environmental management as well as advocates the local indigenous knowledge for the conservation of bio-diversity.

Academically this seminar has an interdisciplinary scope to interact the various expertises on a topic of bio-diversity conservation & environmental management, regional planning for sustainable development. All most all the branches of earth and biological science have been participated in this seminar and



environmental study programme covering different corners of the country. More than forties abstracts have been received within due data and approximately hindered seventy five delegates were registered their participation in the same purpose. Besides these administrative personalities, bureaucrats as well as decision makers along with peoples' representatives were gather in this seminar.

### **DAY-1 (March 25, 2018; Sunday)**

**Venue: Kanak Aranya, Chilkigarh, Jamboni Block; Jhargram District**

The seminar was started with the inaugural programme graced by congregation of notable personalities from the various field of knowledge as well as administrative department. This inaugural programme was chaired by the President of Governing body of Seva Bharati Mahavidyalaya, Kapgari, Jhargram Shri Samir Dhal and lighted by the District Magistrate of Jhargram Shri R. Arjun (IAS) with the presence of

Chairman, INCAA Prof. Ajit Kr. Danda; Director of HRDC, University of Calcutta Prof. L. N. Satpati; HoD of the Department of Geography and Environment Management Prof. Ashis Kr. Paul; Retd. Prof. Chitta Ranjan Sahoo; Scientist Prof. Ram Kr. Bhakat; HoD of the Dept. of Geography, Presidency University, Kolkata Prof Soumendu Chatterjee etc.

The welcome speech was delivered by the Organising Secretary *Dr. Pranab Sahoo*



stating that climate and its associate changes are comparatively rapid as affect our immediately environment. Under these extreme environmental issues and constrains, this is the right time to re-think, re-assess and speak the story of our environment. This attempt

regarding the National Seminar can open a lot of ways to formulate the goal of sustainable development theory the geo-information technique, and will also build the platform for the justification and evaluation of our close circumstances. Based on the perception of regional and local Planning, one can preserve their natural capital with the conservation of biodiversity and ecosystem.



In newly born Jhargram District, the confluence of folk and culture, ethnic mosaic of host people and deep affection of man-environmental relationship develop the unique position of the district's connotation since ancient time. It is the prime destination of eco-tourism, green and healthy place of West Bengal also India. The existing opportunity can bring the range of spectrums for various dimensions of balanced and Sustainable economic Development.



In his presidential address, *Shri Samir Dhal* greeted all the dignitaries with warm welcome in this newly formed district. At the very beginning he pointed out the consequences of our lost environment from local level to global scale. Simultaneously, he addressed the various environmental projects launched by Govt. of West Bengal for this district along with the different prospects of development activity to preserve our environment beside the sustainable development. Hon'ble District Magistrate of Jhargram and our inaugurator *Shri R. Arjun*, IAS precisely deliberated the environmental scenario of India pointing the diversity of Indian



geographical setting and how the people of India have adopted their livelihood in the different settings of landscape variation. He also mentioned the necessity of preserving the environment for the craving of our next generation. BDO of Jambomni CD Block *Shri Md. Alim Ansari* enlighten the importance of

'Chilkigarh', a bio-diversity hot-spot and unique micro-climate setting of the rugged area of West Bengal. *Prof. Binay Chandra*, the president of TIEER and former IC of Vidyasagar University, Midnapore pointed out the role of TIEER and its team for the initiatives of development programme of environmental awareness and management in the backward region of the state. He did not forget to mention the idea and continuous programme for the micro level planning and policy orientation.



The director of HRDC *Prof. L. N. Satpati* advocated the unique sign of this programme regarding the joint venture of academic and local people along with the administration and students-researchers-scientist to build the capacity planning orientation at the ground level. He



also summarized the basic environmental problems of the Jhargram District. The Chairman, INCAA *Prof. Ajit Kr. Danda* highlighted the lives and livelihood of aborigines of Jhargram as well as central part of India. He also elucidated what are



the lacunas to understand and identify the basic problems of tribal groups in our country. The inaugural programme was completed with the vote of thanks given by the convener of this seminar *Dr. Sk. Mafizul Haque*.

Beside the field observation and environmental study, the entire discussion in day-1 of this seminar was divided into three technical sessions and one session for young scientist award competition. The **first technical session** (from 01:0 pm to 02:30 pm) arranged in the Hall No. I at ground floor of Chilkiagarh Community Hall was chaired by Prof. C. R. Sahoo, co-chaired by Mr. Amit Biswas and key note speaker was Prof Ram Kumar Bhakat and this session was mainly on the different aspects of Jhargram District.



In his presentation Prof. Bhakat catered the whole scenario of

Chilkiagarh bio-diversity area and other secrets' grooves in Jhargram district from the

view point of scientific platforms. He claimed the presence of more than 388 species and unique medicinal hub of western part of Bengal. He also stated that the this district support a rich collection of plants having direct economic use, socio-cultural value of the grove, indirect economic-material benefits through the devotees, visitors, fairs and festivals.

His lecture was very interesting and fascinating one, long interaction was established



with the present research scholars and delegates. Then Dr. U. K. Sen and other were delivered their original work entitled on Role of a Sacred Grove in Conservation of Medicinal Plants in Jhargram District. Subsequently Pallab Mahata and Dr. Subhankar Patra had presented his paper

on Emperical Observation and emerging prospects of the Eco-tourism Practices in Jangal-Mahal Belt of Jhargram and Kishor Dandapat had focused on scenario of Drought to Water Security: Paschimanchal Experiences and Challenges. All the lectures were very much interesting from research findings and content analysis, although the Chairperson and other senior academicians have raised some suggestion especially for the young scholar.

On the other hand **second Technical Session** was organized at Hall No. II at the first floor of the same venue, actually it was a parallel session covered the same time period of first technical session. And this session was chaired by Prof Asish Kr. Paul and co-chaired by Dr. Sumit Manna. In this session the key note lecture was delivered by Prof. Soumendu Chatterjee on constructing understanding of thinking on climate change covering the intelligence of scientific controversy to movements of social-economic and political behavior. His interaction with Prof. L. N. Satpati was very fruitful and interesting regarding the modeling of local climatic phenomena for understanding the impacts of that phenomenon on local people livelihood.

Gradually other presenters were delivered their works one by one on the different subject matters from various disciplines of science.

As for example Amit Bera et al. presented their paper on Identification of Soil Erosion Vulnerable Areas using Remote Sensing, GIS and Multi-Criteria Analysis Methods: A Case study of Karha River Basin, Maharashtra; and Amrit



Kamila, et al. on the Assessment of Floristic and Ecological Diversity on Coastal Landscapes Using Geo-Spatial Technology: A case study of Ramnagar I & II Blocks, Purba Medinipur, West Bengal. Whereas Chandan Karan et al. summarised the Agro Geomorphic and Agro Climatic Situation on Coastal Area - A case study at Purba Medinipur coastal blocks – successfully and Monali Banerjee et al. raised

some contemporary issues regarding the Grain Size Parameter and Sedimentary Environment of Tropical River System for Sustainable Planning: A Case Study in South Bengal. In his session command Prof. Paul mentioned that the ideas of all the presenters' discussion will



be of great help to the existing scholars and students to develop an overall scientific preparation on Bio-diversity Conservation & Environmental Management.

After the lunch break **third technical session** was started on 03:00 pm and this session was chaired by Prof. L. N. Satpati and co-chaired by Dr. Ahsok Karam. In this session the key note addresses were delivered by Prof. Ashis Kr. Paul on the Role of Geomorphological and Drainage in Regional sustainability of environment in Jhargram District. Under this theme Prof. Paul was tried to focus the whole geo-



morphological and geo-tectonic scenario of Jhargram District and its surroundings along with the regional characteristics of environment towards the sustainable management of bio-diversity. Pradip Patra focused the Variability and Trend of Climatic Extremes in Paschim Medinipur District in association with extrem climatic phenomena and heat flow in association with surface re-radiance. Whereas, Nantu Pal highlighted the unstable situation in food security in India since last two decades. Mr. Pal has been advised by the Chairperson Sir a lot of



suggestion along with some epistemological evidences for his work. Rabindra Nath Bera et al. emphasized on the Urban Residential Structure of Midnapur town and Tripti Nandi et al. illustrated her work on Relative contributions of different honey sources for commercially reared *Apis mellifera* L. at different seasons in North 24 Paraganas district. This session was finished by the comments of Prof. Satpati and Dr. Karan and they pointed out few advices for research scholars to develop their research skills in general. On the other hand, young Geographer Contest was organized at the Hall-II in same time period. Before it a general announcement was delivered for giving the name of interested delegates. Based on this information eight papers were enrolled for contest.



This was actually in the memory of Late Dr. Sudip Dey and this **Young Scientist's Competition** (restricted only for research scholar) was judged by Prof. Soumendu Chatterjee, Dr. Debnarayan Roy and Dr. M. A. Sofique. After the scrutiny of all judgment the result was

announced by Chairperson of this session Prof. Soumendu Chatterjee. Simultaneously, a **Photography Exhibition cum Competition** (only for college students) was also organized based the theme of this seminar and environmental study and this competition was judged by Prof. Ram Kr. Bhakat. Dr. Ashok Kran. Dr. Mousam Majumder. Lastly, a thunderstorm with heavy downpour creates unavoidable interested to visit the Kanak Durga forest patch to



observe the process of short lived sub-system and the development of micro features. All the participant s enjoyed the charms of visit.



After the field visit all delegates moved to Kodopal Eco-nest center, it is newly formed river char stabilized due to lean flow of River Subanarekha at Rohini, Sankrail Block for night stay. Cultural programme by the local tribal people, delegates

and students adds some extra flavor with the resort environment.

## DAY-2 (March 26, 2018; Monday)

**Venue: Community Hall of BDO Office, Rohini, Sankrail Block; Jhargram District**

Extensive field visit in the morning of Day-2 ( March 26, Monday, 2018) has encourage all the students and research scholar to rove the entire eco-agriculture



site and identify the symbiotic relationship between managed eco-system with the river system. Dr Sumit Manna, a member of State Bio-diversity Board advocates his knowledge with the student and described the adaptation characteristics of the common plant species. The academic discussion of



day-2 programme was inaugurated by BDO Sankrail along with the Savapati Madam, Dr. Kalyan Rudra, Chairmam WBPCB and Prof. Jitendra Sukla, Prof of Geography, Ranchi University. Simultaneously, a poster session was also inaugurated for the visualizing the

total research work especially for students and local people. In this session BDO Sir hearty greeted all the resource persons and delegates noticed a brief environmental asset of Sankrail Block and Savapati Madam, who also was a member of block bio-diversity committee enlighten all



the aspects of environmental degradation, our responsibility and needs for bio-diversity conservation for our next generation in a precise way. After a short introduction regarding the seminar topic given by Prof. Sukla, Dr. Rudra canvassed the concept of ecological security and environment degradation during anthropocene period under the chaired of Prof. Ashis Kr. Paul in **forth technical session**. He started his talk with the ecological crisis of environment sustainability and law of ecology, gradually encompassed the present scenario of pollution and our role.

Finally he pointed the basic area of our concerns in the context of present day's development and achievement. Prof. Sukla tried to focused that human society must learn to control population size and develop more efficient technologies. He also told that we must guide the human race living in a historic transitional period of burgeoning awareness of the conflict between human activity and environment



assets. As people continue their endless quest for new materials, new energy form and new process, various constrain imposed by depletion of natural resource and the pollution caused by human activity, which are more relevance in the context of Jhargram District.

Then Dr. M. A. Sofique elaborately discussed the prospects of tourism activity in the district of paradise of the state West Bengal. He intelligently focused all the scopes to develop this emerging economic activity in and around the surrounding of Jhargram with the conservation of natural resources. He also shown the ways of formulating community



based tribal tourism in this district along with the state's policies, which can bring the wide span of developed livelihood of the local people.





In the **fifth technical session**, chaired by Prof. Jitendra Sukla, Dr. Sumit Manna, Anirban Roy conferred the total scenario regarding the concept of Sacred Grove and the role of Natural Heritage successfully; Dr. Kathakali Bandopadhyay illustrated the Prospects of

Green Entrepreneurship in the Jhargram District, West Bengal.

On the other hand Dr. Pranab Sahoo delivered a lecture on Environment Management and Planning: A Journey of Observing.

The final ceremony of this *Two-day National Seminar and Environmental study* followed with valedictory ceremony and



award distribution.

All the awards were presented by the eminent persons who were present on that day.



Award on Dr. Sudip Dey memorial Young Scientist was delivered by Dr. Kalyan Rudra and awards regarding photography competition

were forwarded by Prof. Jitendra Sukla, Prof Ashis Kr. Paul and Dr. M. A. Sofique respectively. The Seminar was declared as closed by Dr. Sk. Mafizul Haque, Convener of this seminar with the permission of president after the vote of thanks.

## FINDING, PROBLEMS AND CHALLENGES IN THE JHARGRAM GEOGRAPHICAL AREA:

### *Finding:*

1. The Jhargram District is a green gold district in our State; having super natural beauty and Healthy environment.
2. Jhargram Geographical area is a rich Bio-Diversity and most valuable forest resources area.
3. This Bio-Diversity area is high rich non-timber forest resources area.
4. Overall, 60%of the fringe villagers in the District directly and indirectly dependent on NTFRs from local forest while others make indirectly use, that is, many household brought forest product such as fuel wood, Sal leaf, Mushroom and others item when required .
5. About three major and ten micro local sacred groves are located in the different blocks of the District.
6. The sacred groves are local bio-diversity hot spot and maintained by Host people.
7. Chilkigarh Kanak Aranya is a rich collection of plants and heritage medicinal forest, having direct economic use uses; socio-cultural value of the groves and indirect economic or material benefits coming through the devotees, visitors, fairs and festival etc. from the groves.
8. Now, It is 3rd Bio-Diversity heritage site in West Bengal and 12<sup>TH</sup> Sacred heritage site in India.
9. This sacred grove traditionally maintain by local community through the hundreds years.
10. Rocks and Minerals are the most economic resource of the Districts. Mainly; Pre Cambrian-Archean rocks are found in the Banspahari-Belpahari un--hilly region. Quartzite, Gneiss, Schist, Gravels, Iron Oxide, Conglomerate, Duricrust etc are dominated earth resource in north- western part of the District.
11. Sand mining is the another significant economic resource in the valley of Subarnarekha, Kansaboti and Dulung.

12. Jhargram Geographical area is a major tourist destination by promoting the unexplored locales as tourist attractions. Chilikigarh Kanak aranya, Jhargram city, Amlachati, Khandarani lake ,Hatibari-Satma, Topoban- Rameswar, Rohini-Kodopal eco nest park, Belpahari, Laljal, Kakrajhor, Ghagra falls are main tourist destination in Jhargram District. It is main destination to Eco-tourism hub in the South Bengal.
13. South-eastern railway, Asian Highway-46, SH-5,SH-9, are most important lifelines with district and PMGSY roads and also Jangal Kanya bridge, Kamakhya bridge' Birsha setu and many kalvats-bridges are linked to destinations; having a good network system.
14. This area has brought an outstanding colourful cultural heritage. Tribal dance, Folk song and music , social and spiritual activities, fairs and festivals make an unique cultural heritage site for complete tourist destination in the Jhargram District.
15. Recently, the Jhargram district is a dream and paradise land of state for free and peaceful geo-spatial region from political violence.

#### **Problems and Challenges:**

1. The District is under the Drought prone area due to insufficient water.
2. Maximum area of the District has covered with Lateritic infertile soil top.
3. About 60% area is covered with dense forest.
4. Minimum percentage of land is under the alluvium soil of Rivers valley.
5. Where, Minimum percentage of people engaged to agricultural practices, only 40%.
6. There are not applying the micro level water harvesting methods to agricultural practices around the District. It is one crop production area.
7. Maximum percentage, about 50% of the district people directly and indirectly engaged to forest based economic status.
8. So, More than 90% people of the District are engaged to primary economic activities as a result low standard living status.
9. Maximum percentage of Rural people of the District are BPL.
10. Maximum percentage of people suffering from Food crisis and food insecurity through the year by year.

11. Insufficient NTFRs industries and hidden Market, price gap are major problems for the Tribal economic status.
12. Human resource Development is very poor from PQL, Malnutrition, Low standard of living, illiteracy and little percentage of students attached to Higher education and low economic status.
13. Minimum percentage of people, only 5% host people directly involve to eco-tourism in the district.
14. Minimum host people are engaged to tertiary activities.
15. River bank erosion during the flood is alarming hazards at the area of Satma( Gopiballavpur-II), Andahri, Rahini, Karloi( Sankrail block) in Subarnarekha Valley, Baita , Dherua, Dharampur, Nachipur, satmile , Bandgora in Kansaboti river valley, and Chilkiagarh , Goyalmara- Rohini –Fenko in Dulung river valley. The rate of erosion is about 5m-10m per year.
16. Satma- Hatibari, Rohini- kodopal, Kalma pukuria( Subarnarekha river valley), Nachipur- Baita- Dherua- Bandgora( Kansabati River valley) and Chandri-fenko area are red alarming flood prone area during monsoon.
17. A percentage of fertile top soil in the area of agricultural land has degraded due to Bricks kiln activities, the programme of MGNREGA, Extension of roads and filling the low land for domestic and house building purpose in area of Rivers valley.
18. There, have not sufficient weather Station for weather forecasting to villagers during flood.
19. Insufficient drinking water in the area of Belpahari, Banspahari, Silda , Laljal and Kantapahari is major problem during summer season.
20. Lack of good communication by bus service and motor vehicles to School, college, office, market, academic and health centre during the time and hour.
21. Environmental degradation and loss of Bio-Diversity due to man-made forest fire result as depletion the forest resource in the District.
22. Agricultural land degradation and loss of fertile soil due to Bank erosion caused by the unscientific work and illegal process of Sand mining in the river valley .

**Proposal and policy on district planning for sustainable economic development in Jhargram District:**

1. To be conserve and management of Chilkigarh Kanak Aranya Bio-Diversity heritage site and protect the Natural Organic Research Laboratory ( NORL).
2. An eco-tourism hub for tourist and villagers for sustainable economic development among local communities can be setup at Chilkigarh.
3. To be organize for man–environmental interrelation of host people and Kanak sacred groves to the bio-diversity protection.
4. A market complex can be established for handicrafts and non-timber forest products by host people for the economic development.
5. To be setup a natural guard wall in the left bank of Dulung at Chilkigarh Kanak aranya to management of extended Gullies, Rills and bank erosion for the protection of bio-diversity.
6. An eco-tourism hub can be establish around the paradise natural beauty place of Belpahari- laljal-Banspahari- Ghagra with resort, ropeway, guest house, watch tower, traditional food park, Open theater platform for cultural activities, rest bench, wash room, water tank for drinking water, and shopping stall for Handicrafts and metal road ways.
7. To be establish a non-timber forest resources industrial hub for engagement of host people in Belpahari- Banspahari area.
8. Can be establish of Weather monitoring stations at Belpahari , Lalgarh and Rohoni to weather forecasting for cultivators and local villagers to alert the natural hazards.
9. Watch tower can be setup to watch the movement of elephants and their corridor to alert for the Villagers at the point; Belpahari, Dherua, Lalgarh, Banstala, Lodhasuli, Nayagram .

10. To be apply the micro water harvesting methods around the catchment area of rivers and streams to sustainable agricultural practices for food security of western part of the District mainly; Binpur-I &II, Jamboni and Jhargram Block.
11. Can be establish guard wall to protect and management of red alarming Flood and bank erosion at Kodopal eco-nest Park in the Subarnarekha river valley and Rohini of Sankrail Block.
12. Can be introduce the boating and water sports around the Kodopal eco-nest park in Subarnarekha River.
13. To be apply the eco-sustainable agricultural practice for the production of fruits, vegetables, flowers and medicinal plants by organic and biotic methods at Kodopal eco-nest park.
14. To be setup the guard wall for the flood and bank erosion management at the point Hatibari- Satma in Gopiballavepur –II block .
15. To be apply the crop rotation and Intercropping system around the Kansaboti, Subarnarekha , Dulung and Kupai river valley to the maintain of fertility of top fertile soil.
16. Can be apply the dry farming cultivation and step or terraces cultivation methods for livestock farming and intensive subsistence agriculture at drought prone and undulating hilly land surface in the western part of the District for food security.
17. To be maintain and reform the water bodies ( bandh) and ponds for aquaculture and fish farm.
18. Can be establish the small industry of rocks and minerals and ceramic at Silda –Belpahari region for employment of host people.

19. Can be establish the agro based small industry at Gopiballavpur and Sankrail, Lalgah,mainly; Oil mill , rice mill, sugar mill ,and ayurvedic medicine product centre.
- 20.To be establish the house hold and handicrafts industry at Hatibari, Nayagram, Dhumsai and Kultikri, Netai and Belpahari for engagement of local women because, Bamboo, Bent, Babui Grass, Sarkanthi and many other leaves available here.
21. To be apply the proper policy to management of sand mining because, it is high economic resource in the District.
- 22.Tourism centre and Office Can be established at District head quarter and Sub-divisional head quarter for good communication.
23. To be create the travel and transport agency for tourism in the District.
- 24.To be arrange the workshop for Tourist guide and skill development for collection of weather and atmospheric data for weather furcating and Disaster management.
- 25.The seminar, symposium, awareness programme can be organize to concern to the bio-diversity and environment conservation and management among student and local communities.
- 26.Can be a planning design for paradise green and healthy District in Bengal.

**Dr. SK Mafizul Haque**

Convener  
&

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**Dr. Pranab Sahoo**



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