



Report  
on

## Monthly Faculty Lecture

Series	January, 2024-25
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Date: 24<sup>th</sup> January, 2025; Time: 1:00 PM

Title: Nexus Between Ecosystem Services, Livelihood, and Migration  
in Climate-Stressed Indian Sundarbans

On 24<sup>th</sup> January, 2025 the Monthly Faculty Lecture was held under the aegis of Swami Vivekananda University at MSB block, Room No: Hall 2, where **Prof. Tuhin Ghosh, Director and Professor, School of Oceanographic Studies, Jadavpur University, West Bengal**, delivered an insightful lecture on the crucial topic of "Nexus Between Ecosystem Services, Livelihood, and Migration in Climate-Stressed Indian Sundarbans." The event was graced by the presence of SVU officials, directors of various departments, faculty members, staff, and research scholars, making it a significant gathering of academic and professional minds.

### Introduction

The event commenced with an opening address by **Prof. (Dr.) Ranjan Chakrabarti, Director of Research and Academic Development, SVU**. Prof. Chakrabarti highlighted the critical importance of understanding the interplay between natural resources, livelihoods, and human migration in the Indian Sundarbans, a region increasingly affected by climate change and environmental stressors. The keynote speaker, **Prof. Tuhin Ghosh** delivered a comprehensive and thought-provoking lecture that resonated deeply with the audience.

### Key Highlights of the Lecture

Prof. Tuhin Ghosh's session delved into multiple facets of the interconnected relationship between ecosystem services, human livelihoods, and migration patterns in the Indian Sundarbans, with emphasis on the implications of climate change. Below are the major points discussed:

#### 1. Overview of the Indian Sundarbans

Prof. Ghosh began by providing an overview of the Indian Sundarbans, a part of the Ganges-Brahmaputra-Meghna (GBM) Delta, the largest estuarine mangrove ecosystem in the world. Key milestones in its recognition were highlighted:

*M*

- Declared a UNESCO World Heritage Site in 1985.
- Recognized as a Biosphere Reserve by the Government of India in 1989.
- Designated as a Ramsar Wetland of International Importance in 2019 (Ramsar Site No. 2370).

The Sundarbans is unique as the only mangrove tiger habitat globally and boasts exceptionally rich biodiversity. However, the region faces mounting ecological and socio-economic pressures due to population growth, land-use changes, and climate-induced challenges.

## 2. Ecosystem Services and Livelihood Dependency

Prof. Ghosh elaborated on the critical ecosystem services provided by the Sundarbans, which sustain the livelihoods of millions of inhabitants. These include:

- **Provisioning Services:** Fish, crabs, honey, and timber.
- **Regulating Services:** Storm protection, carbon sequestration, and water purification.
- **Cultural Services:** Spiritual significance associated with Bon Bibi, the guardian deity of the forest, and landmarks like the Kapil Muni Temple.

The speaker underscored the rising stress on natural resources due to increasing population density—from 1.4 million in 1872 to over 4.5 million in 2011. This growth has led to heightened competition for land (agriculture, homesteads, infrastructure) and water resources (for drinking and irrigation).

## 3. Climate Change and Environmental Challenges

Highlighting the impacts of climate change, Prof. Ghosh described how rising sea levels, coastal erosion, and salinization are altering the Sundarbans' fragile ecosystem. The increasing frequency of cyclones, such as Amphan and Yaas, exacerbates vulnerabilities, destroying infrastructure, livelihoods, and habitats.

The degradation of mangroves and loss of biodiversity have direct implications for the local communities who depend on these natural resources. Prof. Ghosh emphasized that such environmental stressors are major drivers of out-migration in the region.

## 4. Migration Dynamics

Prof. Ghosh presented detailed insights into the migration trends observed in the Sundarbans. Key findings included:

- **Intention of Migration:** A significant percentage of the population perceives migration as a survival strategy. While 91% of migrants expressed an intention to migrate only once, 25% showed a tendency toward re-migration.



- **Perception of Successful Migration:** Migrants generally reported higher satisfaction compared to non-migrants, with 54% perceiving their migration as successful.
- **Desired Destinations:** Preferred destinations varied, with popular choices including Kerala, Tamil Nadu, Gujarat, and metropolitan hubs like Kolkata.

The speaker highlighted that migration is often cyclical, with seasonal labor being a common trend. However, the loss of traditional knowledge and weakening of social cohesion are notable consequences of migration.

#### 5. Case Studies and Local Narratives

Prof. Ghosh shared compelling stories from the region to illustrate the human dimension of migration. For instance, he recounted the experiences of fishers and crab collectors who ventured into perilous areas to sustain their families. Village dramas and folklore about Bon Bibi's protection reflected the deep cultural ties of the locals to their environment.

#### 6. Policy Implications and Recommendations

Prof. Ghosh concluded his lecture by outlining actionable strategies to address the nexus of ecosystem services, livelihoods, and migration:

- **Mangrove Restoration:** Strengthening natural defenses to mitigate climate impacts.
- **Alternative Livelihood Programs:** Promoting eco-tourism, handicrafts, and aquaculture to reduce dependency on declining natural resources.
- **Migration Management:** Implementing policies to support safe and dignified migration, including skill development and social security for migrant workers.
- **Community-Based Adaptation:** Enhancing local capacity to adapt to environmental changes through participatory decision-making.

#### Discussion and Q&A Session

The lecture was followed by an engaging Q&A session. Attendees posed questions on topics ranging from the role of women in resource management to the challenges of implementing alternative livelihoods. Prof. Ghosh provided insightful responses, emphasizing the importance of integrating local knowledge with scientific research to develop sustainable solutions.

#### Concluding Remarks

The event concluded with a vote of thanks, acknowledging the efforts of the organizers, speakers, and attendees. The event's conclusion also featured a reflective summary of the session's major insights:

A handwritten signature in blue ink, consisting of a stylized 'R' followed by a checkmark.



- Prof. Ghosh's ability to intertwine environmental, socio-economic, and cultural dimensions of the Sundarbans offered the audience a holistic understanding of the region's challenges.
- The emphasis on actionable strategies, particularly mangrove restoration and livelihood diversification, left a lasting impression on policymakers and researchers present.
- Attendees highlighted the significance of the Sundarbans as a living laboratory for studying climate resilience and adaptation, urging further collaboration among academia, local communities, and policymakers.

The event concluded with a collective commitment to fostering sustainable development in the Sundarbans, ensuring that the region's ecological and cultural heritage is preserved for future generations. The audience expressed enthusiasm for follow-up events and workshops, underscoring the session's impact as a catalyst for continued dialogue and action.

### Glimpses for Lecture Session:



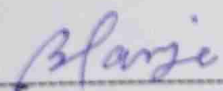



### Impact and Takeaways


The event provided several key takeaways for policymakers, researchers, and practitioners:

- **Ecosystem Preservation:** The need to prioritize the conservation of mangroves and biodiversity as a buffer against climate change.
- **Livelihood Diversification:** Encouraging alternative income sources to reduce ecological pressure.
- **Migration Insights:** Understanding migration as both a challenge and an opportunity for regional development.
- **Community Empowerment:** Recognizing the agency of local communities in shaping adaptive responses.

The session was widely regarded as a success, fostering meaningful dialogue on the critical issues facing the Indian Sundarbans. Participants expressed a strong interest in organizing follow-up discussions and workshops to further explore solutions to these pressing challenges.

  
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Dr. Bikash Panja  
Joint Co-ordinator  
Monthly Faculty Lecture Series, SVU

  
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Prof. (Dr.) Ranjan Chakrabarti,  
Director, Research & Academic  
Development, SVU

  
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Dr. Liton Mallick  
Joint Co-ordinator  
Monthly Faculty Lecture Series, SVU



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Professor Tuhin Ghosh  
Director & Professor  
School of Oceanographic Studies  
Jadavpur University, Kolkata

Dear Esteemed Professor Ghosh,

Greetings from Swami Vivekananda University!

At the outset let us acknowledge your research contribution in the field of Oceanographic Studies and Coastal Environment.

Swami Vivekananda University, Barrackpore, West Bengal, organizes a Faculty Lecture every month. I am pleased to invite you on behalf of the University, to deliver the Faculty Lecture on 'Nexus Between Ecosystem Services, Livelihood, and Migration in Climate Stressed Indian Sundarbans' on January 24, 2025. It will be held at our campus on 24.01.25 at 1:00 P.M.

Your expertise and insights will greatly enrich the program, and your presence will inspire our faculty and research scholars.

All logistical support will be provided by the University.

A line in confirmation will be much appreciated.

For any further clarification, please feel free to contact the undersigned or Dr Liton Mallik at Mobile no 7003185671.

Best regards

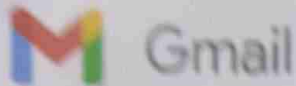
Sincerely

*R. Chakrabarti* . 16-01-25

Professor Ranjan Chakrabarti,  
Director Research and Academic Development, Swami Vivekananda University  
Hony. Visiting Professor, Jadavpur University  
Former Vice Chancellor of Vidyasagar University and Netaji Subhas Open University (WB)

*Received  
Int. Coll.  
24/01/2025*





Bikash Panja &lt;bikashp@svu.ac.in&gt;

**Fwd: Cordially invited to faculty lecture on 24th January**

4 messages

Director, Research &amp; Development &lt;director.research@svu.ac.in&gt;

Mon, Jan 20, 2025 at 2:36 PM

To: Bikash Panja &lt;bikashp@svu.ac.in&gt;

Bcc: bikashp@svu.ac.in

Bikash

Kindly forward to all hods

**SVU Faculty Lecture Series (Lecture 4), 24 January, 2025, Invitation regarding**

Dear Esteemed HOD

Greetings !

Swami Vivekananda University, Barrackpore, West Bengal, regularly organizes a monthly Faculty Lecture and it is delivered by distinguish scholars from within SVU or outside.

In this context, I am pleased to invite you to kindly make it convenient to attend the upcoming Faculty Lecture of the University on 24 January 2025, to be delivered by **Prof Tuhin Ghosh, Professor and Director, School of Oceanographic Studies, Jadavpur University, on 24 January at 1.30 pm. Please find the poster of the event attached herewith for your kind perusal.**

Your graceful presence along with your departmental colleagues shall greatly enrich the program and inspire our faculty and research scholars.

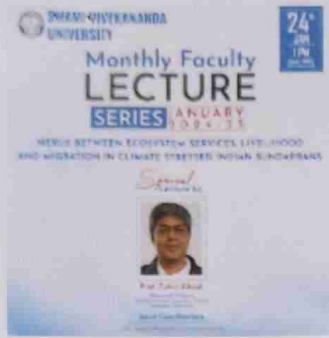
Time : 1.30 pm

Venue : NND 307

Warmly

Professor Ranjan Chakrabarti,  
Director Research and Academic Development, Swami Vivekananda University  
Hony. Visiting Professor, Jadavpur University  
Former Vice Chancellor of Vidyasagar University and Netaji Subhas Open University (WB)

Fulbright Scholar, Brown University 1994-95  
Charles Wallace Fellow, London University 1997  
Alexander O'Vietor Memorial Fellow, Brown University 2004



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Director, Research & Development <director.research@svu.ac.in>

Mon, Jan 20, 2025 at 2:40 PM

To: debnarayanb@svu.ac.in, Subrata Dey <vc@swamivivekanandauniversity.ac.in>, Pinak Pani Nath <registrar@swamivivekanandauniversity.ac.in>, Director School Of Management <director.som@svu.ac.in>, director.sos@svu.ac.in, info@swamivivekanandauniversity.ac.in, tanmoys@svu.ac.in, TANMAY SINHA ROY <tanmoysinha.roy@gmail.com>, deputy.registrar@svu.ac.in  
Cc: "Dr.Liton Mallick" <litonm@svu.ac.in>, Bikash Panja <bikashp@svu.ac.in>

### SVU Faculty Lecture Series (Lecture 4), 24 January, 2025, Invitation regarding

Dear Esteemed Professor

Greetings !

Swami Vivekananda University, Barrackpore, West Bengal, regularly organizes a monthly Faculty Lecture and it is delivered by distinguish scholars from within SVU or outside.

In this context, I am pleased to invite you to kindly make it convenient to attend the upcoming Faculty Lecture of the University on 24 January 2025, to be delivered by **Prof Tuhin Ghosh, Professor and Director, School of Oceanographic Studies, Jadavpur University, on 24 January at 1.30 pm. Please find the poster of the event attached herewith for your kind perusal.**

Your graceful presence along with your departmental colleagues shall greatly enrich the program and inspire our faculty and research scholars.

Please do attend.

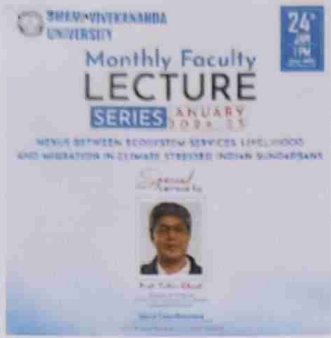
Time : 1.30 pm

Venue : NND 307

Warmly

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**Bikash Panja** <bikashp@svu.ac.in>

Mon, Jan 20, 2025 at 2:46 PM

To: abirs@svu.ac.in, Ranjan Kumar <ranjank@svu.ac.in>, rituparnam@svu.ac.in, digantab@svu.ac.in, ranjankm@svu.ac.in, subhabratatab@svu.ac.in, tanmoys@svu.ac.in, prithap@svu.ac.in, souravm@svu.ac.in, dipanwitag@svu.ac.in, manisham@svu.ac.in, nilanjanam@svu.ac.in, olyb@svu.ac.in, subhranilm@svu.ac.in, rituparnac@svu.ac.in, pramitir@svu.ac.in, litonm@svu.ac.in, kallalb@svu.ac.in, anirbanh@svu.ac.in, debanjalia@svu.ac.in, Sujoy Bhowmik <sujoyb@svu.ac.in>, subratan@svu.ac.in, najnin.islam92@gmail.com, kazi hasibur rahman <via.kazi786@gmail.com>, sudips@svu.ac.in, srijanh@svu.ac.in, subhasiss@svu.ac.in, arups@svu.ac.in, moumitad@svu.ac.in, papiam@svu.ac.in, rajend@svu.ac.in, shubhamb@svu.ac.in, moumitac@svu.ac.in, Amitava Bhowmick <amitavabmce@gmail.com>, shantanuc@svu.ac.in

Cc: deputy.registrar@svu.ac.in, director.research@svu.ac.in

Dear all HODs and Research Coordinators

Please find the said matter and circulate among our faculty members and research scholars.

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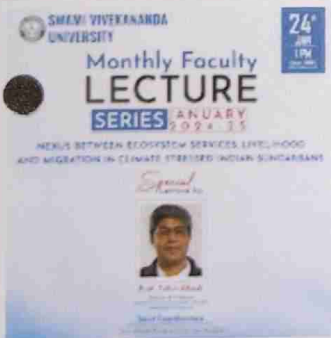
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Thanks & Regards.

**Dr. Bikash Panja**

Professor, Department of Mechanical Engineering  
School of Engineering, Swami Vivekananda University  
Kolkata - 700121, India

Mobile: (+91) 9635973141



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**TANMAY SINHA ROY** <tanmoysinha.roy@gmail.com>

Thu, Jan 23, 2025 at 9:34 PM

To: "Director, Research & Development" <director.research@svu.ac.in>

Cc: debnarayanb@svu.ac.in, Subrata Dey <vc@swamivivekanandauniversity.ac.in>, Pinak Pani Nath <registrar@swamivivekanandauniversity.ac.in>, Director School Of Management <director.som@svu.ac.in>, director.sos@svu.ac.in, Swami Vivekananda University - Info <info@swamivivekanandauniversity.ac.in>, tanmoys@svu.ac.in, deputy.registrar@svu.ac.in, "Dr.Liton Mallick" <litonm@svu.ac.in>, Bikash Panja <bikashp@svu.ac.in>

Respected Sir,

**Monthly Faculty Lecture Series**  
**Swami Vivekananda University**

January - 2025



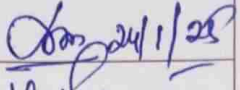
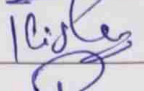
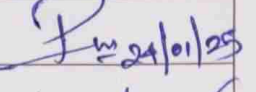
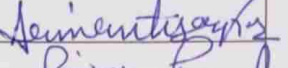
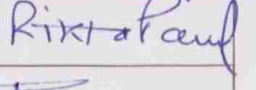
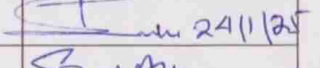
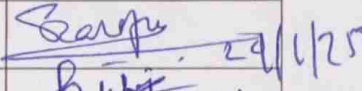
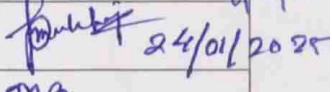
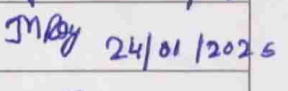
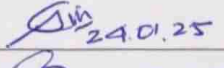
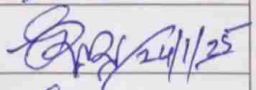
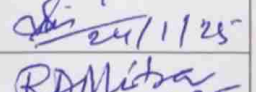
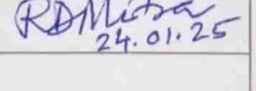
24/01/2025

SL No.	Name	Department	signature
1	Anirban Hazra	Management	
2	Jonny Ghosh	ME	
3	Subhabrata Mondal	MATH	
4	Paushan Banerjee	EE	
5	Anik Datta	EE	
6	Saugita Bose	CSE	
7	Dr. Rituparna Mitra	EE	
8	Sumanjyal Dutta	EE	
9	Dr. Sabyasachi Ghosh	Biotech	
10	Sujoy Bhattacharya	EE	
11	Christina Banerjee	English	
12	Paromita Mukherjee	Food & Nutrition	
13.	Mausika Maity	Food & Nutrition	
14.	Sapanita Ghosh	Optometry	
15	Oly Banerjee	MLT	
16.	Dr. Animesh Ghosh Bag	Agriculture	
17.	Dr. Rea Mukherjee	Agriculture	
18.	Siganta Bhattacharyya	ECE	
19.	Dr. Samudra Pal	Biotechnology	
20.	Rupesh Dutta Bair	Microbiology	
21.	Rakesh Das	Agricultural	
22.	Priyanku Barua	Biotechnology	

**Monthly Faculty Lecture Series**  
**Swami Vivekananda University**

January - 2025

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SL No.	Name	Department	signature
1	Dr. Mousmita Chakraborty	Journalism and mass comm.	
2.	Sujoy Goswami	Journalism and Mass Communication	
3.	ARUNIMA MAHAPATRA	ELECTRICAL ENGINEERING	
4.	Kishor Kumar Hira	Journalism & Mass Com.	
5.	Priyanka Misra.	Journalism & Mass Comm.	
6.	SRIHANTE SARKAR.	OPTOMETRY.	
7.	RIKTA PAUL	OPTOMETRY	
8.	PRABIRBENDRA NATH SINHA	Optometry	
9.	SURYENDU DASGUPTA	ELECTRICAL ENGINEERING	
10.	Dr. Papiya Mukherjee	Psychology	
11.	Dr Madhanti Roy	Language, Literature & Culture Studies	
12	Souven Mitra	PHYSIOTHERAPY	
13	Gourab Jyoti Roy	Physiotherapy	
14	Sayani Bhattacharya	AGRICULTURE	
15	Dr. Rupali Drask Mitra	Food & Nutrition	



# Monthly Faculty Lecture Series

## Swami Vivekananda University

January - 2025

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1	Dr. Tanmay Sinha Roy	ECE	T.S. Roy
2.	Dr. Chattu Mondal	Education	Mondal
3.	Dr. Jayati Maiti	Education	JM
4.	Pallabi Halder	Education	Halder
5.	Dr. Kajal Das	Education	Das 24/01/2025
6	Shreyoshi Dhar	Language, Literature & Cultural Studies	24/01/2025
7.	Natasha Chatterjee	Language, Literature & Cultural Studies	24/01/2025
8	Shubham Bhattacharjee	Language, Literature & Cultural Studies	24/01/25
9	Trina Datta	Language, Literature and Cultural Studies	24.01.25
10.	Sourav Chatterjee	Management	Chatterjee
11.	Tomal Suvo Samyashri.	ECE	24.01.25
12.	Sumi Prayadashi	CE,	24.1.2025
13.	Sourav Karmakar.	OPTOMETRY	24.1.25
14	Asup Saha	Optometry	24-1-25
15	Dr. Manas Chakraborty	Optometry	Manas Chakraborty 24.01.2025
16.	Dr. Aniruddha De	Agriculture	Aniruddha De 24/01/2025
17.	Dr. Mahafuzar Rahaman	Agriculture	Mahafuzar Rahaman 24.01.25
18	Dr. Sudip Sengupta	Agriculture	Sudip Sengupta 24/1/25
19.	Dr. Suprabuddha Kundu	Agriculture	Suprabuddha Kundu 24/01/25

# Monthly Faculty Lecture Series

## Swami Vivekananda University

January - 2025

24/01/2025

SL No.	Name	Department	signature
1.	Moumita Acharya	Management-	M. A.
2.	Chandrika Banerjee	Management	CB
3.	Sayoni Banerjee	Management	Say
4.	Sudipta Dutta	Language, Literature & Cultural Studies	Sdpt
5.	Dr. Rajdeep Ray	ECE	R.R.
6.	Swarnjana Sarkar	Microbiology	Sw
7.	Dr. Moumita Ghosh	Maths.	M.G.
8.	Dr. Poo Samui	Mathematics	P.S.
9.	Dr. Jagannath Ghosh	Food and Nutrition	J.G.
10.	Dr. Govind Tewari	Food and Nutrition	G.T.
11.	Debarshi Anandhan	Language, Literature and Cultural Studies	D.A.
12.	Agnidepto Datta	Language, Literature and Cultural Studies	A.D.
13.	Dr. Ashu Banjee	Civil Engineering	A.B.
14.	Dr. Md Ershed	Mechanical Engg	M.E.
15.	Rupak Bera	MLT Dept.	R.B.
16.	Rajen Dey.	MLT Dept	R.D.
17.	Bikrom Maity	MLT Dept	B.M.
18.	Semanti Ghosh	Biotechnology	S.G.
19.	Soujan Halder	Biotechnology	S.H.
20.	SOUKAM BOSE	Mechanical	S.B.
21.	ARJIT MUKHERJEE	Mechanical	A.M.
22.	SAMRAT BISWAS	MECHANICAL	S.B.

