

11-7-2023

## A Report of National Symposium on Livelihood Challenges and Opportunities during and Post COVID-19 Pandemic

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# A REPORT OF NATIONAL SYMPOSIUM ON “LIVELIHOOD CHALLENGES AND OPPORTUNITIES DURING AND POST COVID-19 PANDEMIC”

ORGANISED BY

**SOCIOLOGICAL RESEARCH UNIT, INDIAN STATISTICAL  
INSTITUTE, KOLKATA AND GIRIDIH  
VENUE: ROSE VILLA, ISI, GIRIDIH**

Date: 6th-7th November 2023



## FACULTY COORDINATORS

- Prof. Tarun Kabiraj, Chairman-Organizing Committee of the National Symposium
- Dr Hari Charan Behera, Convener and Organizing Secretary of the National Symposium
- Dr Rabindranath Jana, Member, Organizing Committee of the National Symposium

## TECHNICAL SUPPORT

- Mr. Vikash Kishku, ISI Giridih

## STUDENT COORDINATORS

- Ms. Adrija Bose
- Shri Keshav Sawarn
- Shri Ishan Dutta

## SYMPOSIUM POSTER AND PROGRAMME SCHEDULE

### NATIONAL SYMPOSIUM ON “LIVELIHOOD CHALLENGES AND OPPORTUNITIES DURING AND POST COVID-19 PANDEMIC”

#### ABOUT THE INSTITUTE

Indian statistical institute, a premier Institute in the country, is well known for its high quality and cutting-edge research. The Institute, which is headquartered in Kolkata has four other Centres located in Delhi, Bangalore, Chennai and Tezpur. Besides, it has a branch in Giridih, Jharkhand, which is dedicated for agricultural, sociological and anthropological researches.

The presence of Giridih branch in the north-Chotanagpurplateau of Jharkhand is an ideal ground for anthropological and sociological researches. This draws special attention for organizing a symposium which is interdisciplinary in nature and the topic is of interest for both the subjects-anthropology and sociology.

#### ORGANISED BY

SOCIOLOGICAL RESEARCH  
UNIT  
INDIAN STATISTICAL  
INSTITUTE KOLKATA AND  
GIRIDIH

#### VENUE

INDIAN STATISTICAL INSTITUTE  
GIRIDIH, JHARKHAND



INDIAN  
STATISTICAL  
INSTITUTE

#### DATE

6-7  
NOVEMBER  
2023

### DESCRIPTION

Rural households who primarily depend on agriculture or daily-wages and households who have limited livelihood access due to geographical disadvantages are among the most vulnerable. Both Covid-19 pandemic followed by natural disasters like cyclones in West Bengal and Odisha posed livelihood challenges for millions of farmers and informal workers. However, these unprecedented challenges also have created opportunities for some to adopt new innovations and adapt to new environment. For instance, rural migrants in some parts of Bihar, Jharkhand and Uttar Pradesh have engaged in agriculture and agri-preneurship through farmer producer organization (FPO) or farmer producer companies (FPCs). Both central and state governments have provided special grants or packages to rural households, particularly farmers in response to the pandemic. Several social protection and risk averse measures by the state and civil societies need to be assessed for future planning. The Government at the Centre provides special grants and incentives through NABARD and other implementing agencies (IAs). There are several such instances that have created opportunities for the rural households, especially farmers and women groups.

#### OPPORTUNITY

The symposium is an opportunity to present successful case studies, identify challenges and opportunities for the rural households who are particularly vulnerable and thus deserve special attention.

**Registration Fee for Indian Nationals:**  
**Faculty and Professionals : Rs. 3000 /-**  
**Research Scholars : Rs. 1500 /-**

### THEMES OF SYMPOSIUM

1. Livelihood challenges for tribal and peasant communities
2. Livelihood impact on mining and industrial workers and other informal workers
3. Social protection and risk averse measures during Covid-19
4. Adaptation and resilience of rural households
5. Occupational transformation during and post Covid-19
6. Agrarian transformation
7. FPOs and agri-preneurship
8. Development of rural sectors
9. Role of NGOs and community based organizations (CBOs)
10. Others related if any

**Abstract Submission Last Date : 10th October**  
**(email: [hcbehera9426@gmail.com](mailto:hcbehera9426@gmail.com))**

### HIGHLIGHTS

**BEST RESEARCH PAPER AWARD UNDER  
RESEARCH SCHOLAR/STUDENTS CATEGORY**

#### PRIZE MONEY:

FIRST PRIZE : RS. 5000 /-  
SECOND PRIZE : RS. 3000 /-  
THIRD PRIZE : RS. 2000 /-



**NATIONAL SYMPOSIUM  
“LIVELIHOOD CHALLENGES AND OPPORTUNITIES DURING AND  
POST COVID-19 PANDEMIC”**

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KOLKATA AND GIRIDIH**

**VENUE: ROSE VILLA, ISI, GIRIDIH**

**Date: 6-7 November 2023**

**PROGRAMME SCHEDULE**

**6<sup>TH</sup> NOVEMBER 2023**

<b>10.00-11.00 AM</b>		<b>INAUGURAL CEREMONY</b>
<b>10.00-10.10 AM</b>		<b>LIGHTING CEREMONY</b>
10.10-10.20 AM		<b>WELCOME ADDRESS: PROF. TARUN KABIRAJ, HEAD, SRU, ISI KOLKATA, CHAIRMAN</b>
10.20-10.30 AM		<b>SYMPOSIUM OVERVIEW: DR. HARI CHARAN BEHERA, SRU, ISI GIRIDIH, CONVENER</b>
10.30-10.40 AM		<b>INAUGURAL ADDRESS: DR. ABHISHEK MUKHERJEE, AERU, ISI GIRIDIH &amp; PROF-IN-CHARGE, BIOLOGICAL SCIENCES DIVISION, ISI</b>
10.40-10.55 AM		<b>GUEST SPEAKER: SHRI ASHUTOSH PRAKASHI, DDM, NABARD, GIRIDIH</b>
10.55-11.00 AM		<b>VOTE OF THANKS: DR. PRADIP BHATTACHARYYA, AERU, ISI GIRIDIH</b>
<b>11.00 – 11.15 AM</b>		<b>TEA BREAK</b>
<b>KEYNOTE ADDRESS</b>		<b>PROF. HABIBUL HAQUE KHONDKER</b>
(11.15 – 11.45 AM)		<b>DEPARTMENT OF SOCIOLOGY, ZAYED UNIVERSITY, UAE</b>
(Online)		<b>TOPIC: The Post-Covid World: Globalization or Deglobalization?</b>
		<b>MODERATOR: DR. H.C.BEHERA, ISI GIRIDIH</b>
<b>TECHNICAL SESSION-1 11.45AM-1.15 PM</b>		
<b>CHAIR: PROF. A.R. BANDYOPADHYAY, CALCUTTA UNIVERSITY</b>		
<b>INVITED TALK</b>		<b>PROF. INDRAJIT PAL ASIAN INSTITUTE OF TECHNOLOGY, BANGKOK, THAILAND</b>



(11.45 – 12.15 PM)		TOPIC: Livelihood Resilience for Delta dwellers
(Online)		
TIME	SPEAKER	TITLE OF TALK
12.15 – 12.30 PM	AIMAN HAQUE SEWA BHARAT	Vulnerabilities during crisis: Can resilience be achieved through income diversification for informal women workers in West Bengal and Jharkhand?
12.30 – 12.45 PM	BYASADEV BHOI JNU, NEW DELHI	Education of Rural Students during COVID-19 Crisis: Evidence from a Village Study in Bargarh District, Odisha
12.45 – 1.00 PM	KESHAV SAWARN ISI GIRIDIH	Understanding Healthcare Disparities in Jharkhand : A PRA- Based Study on Rural and Indigenous People
1.00 – 1.15 PM	SAIKAT DAS ISER, BHOPAL	Economic Instruments and Mental Well-being of Rural Workers: Qualitative Insights from South Asia
<b>1.15 – 2.15 PM</b>		<b>LUNCH BREAK</b>
<b>TECHNICAL SESSION-2 2.15-4.00 PM</b>		
<b>CHAIR: PROF. KUNTAL GHOSH, ISI KOLKATA</b>		
<b>INVITED TALK</b> (2.15 – 2.45 PM) (Online)		PROF. SANTOSH KUMAR SAHU <b>INDIAN INSTITUTE OF TECHNOLOGY MADRAS</b>  TOPIC: Determinants of Health Expenditure: An ex-post analysis of households in rural Odisha of India
<b>INVITED TALK</b> (2.45 – 3.15 PM) (Online)		PROF. SAMBIT MALLICK <b>INDIAN INSTITUTE OF TECHNOLOGY GUWAHATI</b>  TOPIC: Livelihoods not confined to the rural
TIME	SPEAKER	TITLE OF TALK
3.15 – 3.30 PM	RASHMITA DAS JNU, NEW DELHI	The Economic Impact of the Covid-19 pandemic on Rural Households and Coping Strategies: A Case study of Chilipada in Bhadrak District, Odisha
3.30 – 3.45 PM	PUSHKAR KUMAR PUSP VINOBA BHAVE UNIVERSITY, HAZARIBAGH	Food Security In Jharkhand: A Micro-Level Study Of Birhor Community Of Hazaribag District In Jharkhand
3.45-4.00 PM	KIRTI SANGWAN ANANYA PATEL O.P. JINDAL GLOBAL UNIVERSITY, SONIPAT	Examining the post -COVID gendered Work-Life experiences, health and hygiene practices in Rural Areas

4.00 – 4.15 PM

TEA BREAK

TECHNICAL SESSION-3 4.15-5.30 PM

CHAIR: PROF. DUKHABANDHU SAHOO, IIT BHUBANESWAR

INVITED TALK  
(4.15 – 4.45 PM)

PROF. K. ANIL KUMAR  
IGNCA, NEW DELHI

TITLE: Indigenous Knowledge and Agricultural Sustainability in Tribal Areas of Andhra Pradesh

TIME	SPEAKER	TITLE OF TALK
4.45 – 5.00 PM	AMARNATH DSPMU, RANCHI GANGANATH JHA VBU, HAZARIBAGH	Economic Issues of Female Domestic Workers of Ranchi City during COVID - 19: A case study
5.00 -5.15 PM	SHIVANAND PAWAR <i>Department of Social Work,</i> Kalasalingam ACADEMY OF RESEARCH AND EDUCATION, KRISHNANKOIL, SRIVILLIPUTHUR, TAMIL NADU,	Knowledge attitude and practices level the Covid-19 pandemic among fisherman community in Tamil Nadu, Odisha
5.15 – 5.30 PM	SUREN MURMU BCKV, KALYNAL, WB	Role of agroforestry systems: enhancing resource resilience, sustainability and economic growth for famers and women groups amidst the post covid-19 pandemic
5.30- 6.30 PM		FARM VISIT
7.30-9.00 PM		DINNER (ROSE VILLA CAMPUS)

7<sup>TH</sup> NOVEMBER 2023

VALEDICTORY ADDRESS

PROF. AMITABH PANDEY

10.00-10.30 AM

(Online)

DIRECTOR  
NATIONAL MUSEUM OF MANKIND  
INDIRA GANDHI RASHTRIYA MANAV SANGRAHALAYA  
MINISTRY OF CULTURE,  
GOVT OF INDIA

**MODERATOR: DR. H.C. BEHERA, ISI GIRIDIH**

TECHNICAL SESSION-4 10.30 AM-1.00 PM

CHAIR: PROF. TARUN KABIRAJ, ISI KOLKATA

SPECIAL ADDRESS  
(10.30 – 11.00 AM)

PROF. ARUP RATAN BANDYOPADHYAY

DEPARTMENT OF ANTHROPOLOGY,  
UNIVERSITY OF CALCUTTA

TOPIC: COVID-19 Host risk factors, variation & Immune Response: An Anthropological Perspective

INVITED TALK  
(11.00 – 11.30 AM)

DR. DIPTENDU CHATTERJEE  
DEPARTMENT OF ANTHROPOLOGY,  
UNIVERSITY OF CALCUTTA

**TOPIC:** Socio-economic status, iron deficiency anaemia and COVID-19 disease burden – an appraisal

**11.30-12.00PM**

**TEA BREAK**

TIME	SPEAKER	TITLE OF TALK
12.00 – 12.15 PM	SUMIT MAITRA <b>DEPARTMENT OF ANTHROPOLOGY CALCUTTA UNIVERSITY</b>	A study of the psychosocial aspects related with Vitamin-D deficiency during the lockdown period- An Anthropological appraisal
12.15 -12.30 PM	ARKAPALA BOSE <b>DEPARTMENT OF ANTHROPOLOGY CALCUTTA UNIVERSITY</b>	Disentangling the interaction between Melanin content and Vitamin-D in COVID-19 infection: A Review
12.30-12.45 PM	KUSUM GHOSH <b>DEPARTMENT OF ANTHROPOLOGY CALCUTTA UNIVERSITY</b>	HLA, Haptoglobin Polymorphism and Covid-19 Disease Burden: An Anthropological Approach
12.45-1.00 PM	RIMA GHOSH <b>DEPARTMENT OF ANTHROPOLOGY CALCUTTA UNIVERSITY</b>	The Relationship Between Chronotypes and Obesity-Related Risk Factors in Rural & Urban Population, West Bengal, India

**1.00-2.00 PM**

**LUNCH BREAK**

**TECHNICAL SESSION-5 2.00PM-3.30 PM**

**CHAIR: PROF. DIPTENDU CHATTERJEE, CALCUTTA UNIVERSITY**

<b>INVITED TALK</b> <b>(2.00-2.30 PM)</b> <b>(Online)</b>	PROF. ARUN KUMAR ACHARYA <b>SAMBALPUR UNIVERSITY, JYOTIVIHAR</b> <b>TOPIC:</b> An assessment of multi-dimensional vulnerability among Paudi Bhuiya tribe of West Odisha
<b>INVITED TALK</b> <b>(2.30 – 3.00 PM)</b>	PROF. AJIT KUMAR BEHURA <b>IIT-ISM, DHANBAD</b> <b>TOPIC:</b> Ethical challenges and opportunities during and post Covid-19 pandemic
<b>INVITED TALK</b> <b>(3.00-3.30PM)</b>	PROF. DUKHABANDU SAHOO <b>INDIAN INSTITUTE OF TECHNOLOGY-BHUBANESWAR</b> <b>TOPIC:</b> Economy and livelihood of the tribes in Odisha: Some reflections and policy challenges

**TECHNICAL SESSION-6 3.30-5.00 PM**

**CHAIR: PROF. A.K. BEHURA, IIT-ISM DHANBAD**

<b>TALK</b> <b>(3.30-4.00PM)</b>	DR. K. GHOSH/DR. H.C. BEHERA <b>INDIAN STATISTICAL INSTITUTE</b> <b>TOPIC:</b> Livelihood risk and resilience in Sundarban delta areas during and post COVID-19 pandemic
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**INVITED TALK**  
**(4.00-4.30PM)**

DR. ASHISH AMAN SINHA  
**O.P. JINDAL GLOBAL UNIVERSITY**  
DR. AMIYA KUMAR SAHOO  
**CSD, HYDERABAD**

**TOPIC:** Occupational Resilience and Transformation in Tribal Communities During and After the COVID-19 Pandemic: A Stimulus-Organism-Response Analysis

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**INVITED TALK**  
**(4.30-5.00 PM)**

DR. NEHA PRASAD  
**DR. RAM DAYAL MUNDA TRIBAL WELFARE RESEARCH INSTITUTE, RANCHI**  
**TOPIC:** Status of Informal Women Workers in Urban Slums of Ranchi: Challenges Before and After Covid

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**5.00-5.30 PM**

**JURY DECISION ON BEST PAPERS PRESENTED BY RESEARCH SCHOLARS/STUDENTS AND DISTRIBUTION OF CERTIFICATES**

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**5.30 PM**

**HIGH TEA**

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## 1. INTRODUCTION AND OBJECTIVES OF SYMPOSIUM

In the wake of the COVID-19 pandemic and subsequent natural disasters such as cyclones in West Bengal and Odisha, rural households dependent on agriculture and daily wages have encountered unprecedented challenges. These challenges have disproportionately affected vulnerable communities with limited livelihood access, exacerbating the socio-economic disparities prevalent in these regions. The symposium aims to delve into the multifaceted impact of these crises on rural households, shedding light on the adversities faced by farmers and informal workers while also exploring the newfound opportunities that have emerged in the face of adversity.

The primary objective of this symposium is to comprehensively assess the ramifications of the COVID-19 pandemic and natural disasters on rural households, particularly those heavily reliant on agriculture and daily wage labour. By scrutinising the challenges posed to these communities, the symposium seeks to facilitate a nuanced understanding of the vulnerabilities inherent in their livelihoods. Additionally, the symposium aims to highlight instances where innovative approaches and adaptability have empowered certain sections of the rural population, such as the engagement of rural migrants in agriculture and agri-preneurship through Farmer Producer Organizations (FPOs) or Farmer Producer Companies (FPCs) in regions like Bihar, Jharkhand, and Uttar Pradesh.

Furthermore, the symposium will critically examine the response of both central and state governments to the crises, focusing on the special grants and packages provided to rural households, especially farmers. This includes an exploration of the role played by institutions like the National Bank for Agriculture and Rural Development (NABARD) and other implementing agencies in disbursing incentives and support. The symposium aims to assess the efficacy of these interventions and their impact on rural livelihoods, considering aspects of social protection and risk aversion measures implemented by both the state and civil societies.

Ultimately, the symposium aims to generate insights to inform future planning and policy formulation. By understanding the challenges and opportunities that have arisen from these crises, the symposium aspires to contribute to a more resilient and sustainable future for rural households, with a particular emphasis on farmers and women groups.



## 2. THEME OF SYMPOSIUM

1. Livelihood challenges for tribal and peasant communities
2. Livelihood impact on mining and industrial workers and other informal workers
3. Social protection and risk averse measures during Covid-19
4. Adaptation and resilience of rural households
5. Occupational transformation during and post Covid-19
6. Agrarian transformation
7. FPOs and agri-preneurship
8. Development of rural sectors
9. Role of NGOs and community-based organisations (CBOs)
10. Others related, if any

## A. FIRST DAY – 06TH NOVEMBER 2023

### INAUGURATION CEREMONY

At the Inaugural Ceremony of the event, Professor Tarun Kabiraj, Chairman of the Organizing Committee, delivered the Welcome address. This was followed by an address from Dr. H.C. Behera, In-Charge of ISI Giridih and Convener of the Symposium, providing an overview of the event. Dr. Abhishek Mukherjee, Professor-In-Charge of the Biological Sciences Division at ISI, then delivered the Inaugural Address.

Professor Ajit Kumar Sinha, the Vice Chancellor and Chief Guest for the occasion, graced the delegates with his thought-provoking address. Dr. Pradip Bhattacharyya, Associate Professor of the Agricultural and Ecological Research Unit at ISI Giridih, extended the Vote of Thanks.

### KEYNOTE ADDRESS

Moving forward, Prof. Habibul Haque Khondker, Department Of Sociology, Zayed University, UAE, joined us via virtual mode and carried forward the session with the Keynote Address on the topic titled “The Post Covid World: Globalisation or De-globalisation?” which had been chaired by Dr. Hari Charan Behera, ISI Giridih.

In the meantime, he introduced the idea of a virus beyond virology to the session. The talk addresses whether globalisation has ended or is likely to end soon. Quotes from classical social scientists and sociologists like Weber, Durkheim, and Marx highlighted that some professionals were aware of the potential for global crises.



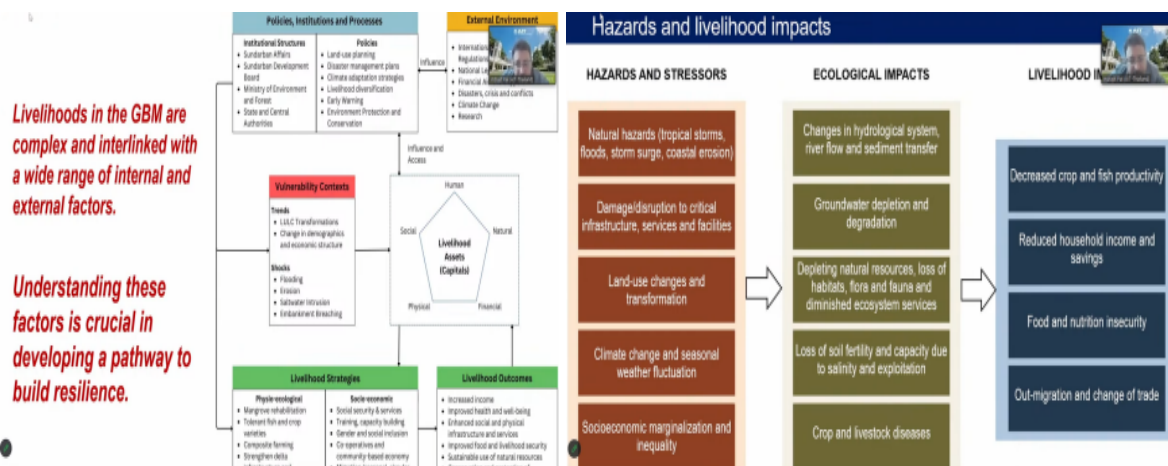
#### Key points of the presentation:

- Globalisation Status: Explores if globalisation is ending or transforming.

- **Pandemic Insights:** Views the pandemic as a revealer of global societal issues.
- **Sociology's Role:** Urges sociologists to contribute to global justice and solidarity.
- **Nuanced Globalisation:** Rejects simplistic views and presents globalisation as historical and contingent.
- **Challenges and Opportunities:** Identifies post-pandemic challenges and stresses education and values for global problem-solving.

## 1ST TECHNICAL SESSION

Moving forward, we went for the First Technical Session, chaired by Prof. A.R. Bandyopadhyay, Calcutta University. In this session, a distinguished sociologist and geologist, Prof. Indrajit Pal, currently at the Asian Institute of Technology, Bangkok, Thailand, joined us via virtual mode and delivered the talk on “Livelihood Resilience for Delta Dwellers.” Prof. Indrajit Pal is a distinguished sociologist and geologist at the Asian Institute of Technology in Bangkok, Thailand. In this talk, Prof. Pal focuses on the livelihood resilience of the GBM Delta dwellers, specifically in natural and anthropogenic stressors.



### Key points of the presentation:

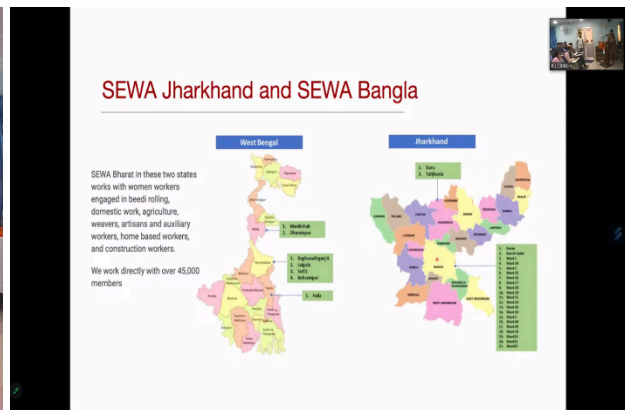
- **GBM Delta Challenges:** Sea-level rise, climate change, and land-use shifts pose significant challenges affecting ecosystems and local livelihoods.
- **Livelihood Transformations:** Climate-induced shifts from agriculture to aquaculture in the GBM Delta lead to irreversible land changes, impacting communities.
- **Innovative Resilience Tool:** Prof. Indra Pal introduces an automated tool for assessing livelihood security resilience, utilising diverse indicators.
- **Scientific Policy Integration:** Emphasis on integrating scientific findings into policy frameworks for informed decision-making and sustainable adaptation in the GBM Delta.

- **Advocacy for Action:** Implicit call for proactive measures and sustainable strategies to enhance livelihood resilience amid environmental and human-induced changes.

After that, a researcher from SEWA BHARAT, Aiman Haque, gave an insightful presentation in the house titled “Vulnerabilities during crisis: Can resilience be achieved through income diversification for informal women workers in West Bengal and Jharkhand?”

**Key points of the presentation:**

- **Informal Economy Challenges:** Highlights the hardships faced by women in the informal economy, including exploitation, low wages, and inadequate social security, particularly in West Bengal and Jharkhand.
- **Collective Advocacy:** Stresses the importance of collective efforts in addressing issues like fair wages and improved working conditions for informal economy women.
- **Digital Literacy and Resources:** Emphasizes the need for digital literacy and tangible resources like computers, stating that training alone is insufficient for women to leverage digital skills effectively.
- **Tailored Livelihood Interventions:** Recommends specific support measures based on individual scenarios, recognising the diverse needs of older women in traditional trades versus younger women seeking alternative livelihoods.
- **Subsequent Generation Empowerment:** Highlights the aspirations of young girls and underscores the necessity of a supportive ecosystem for their occupational transformation towards more dignified professions.



**Discussion:**

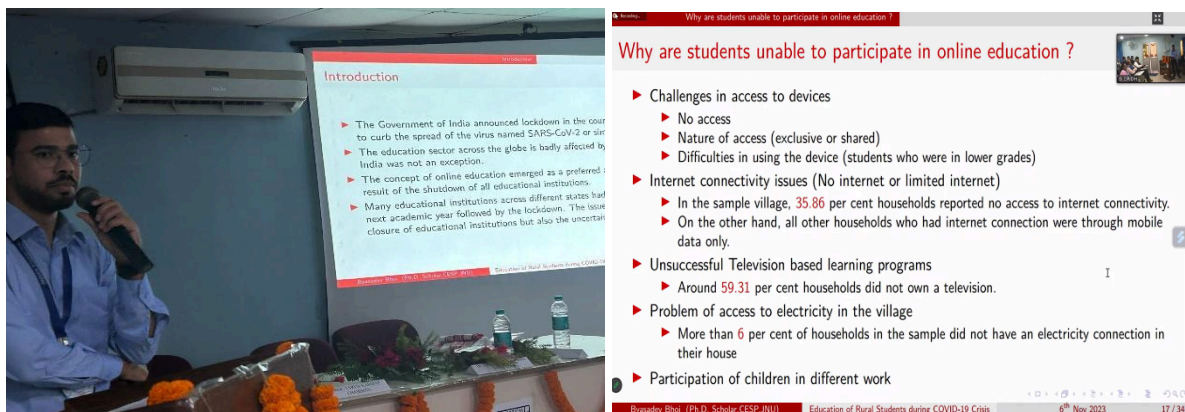
The presentation provides a comprehensive exploration of vulnerabilities faced by women in the informal economy during crises, focusing on income diversification in West Bengal and Jharkhand. By delving into specific trades like rolling, weaving, and agriculture, it unveils the harsh realities of exploitation, health issues, and limited access to resources. The emphasis on collective advocacy as a powerful tool for addressing these challenges and the call for digital literacy with tangible resources reflect a nuanced approach. The tailored

interventions proposed for different scenarios and the acknowledgement of the aspirations of the next generation highlight a holistic perspective towards improving women's livelihoods in the informal economy.

After this beautiful presentation, momentum has been forwarded with the fantastic presentation by a research scholar, Byasdev Bhoi, from Jawaharlal Nehru University, New Delhi, on “Education of Rural Students during COVID-19 Crisis: Evidence from a Village Study in Bargarh District, Odisha.”

### Key points of the presentation:

- Gender Disparities in Online Education: Female students demonstrate higher participation in online education, revealing gender-specific trends.
- Parental Occupation Influence: Children of employed or business-oriented parents are likelier to attend online classes than those from landless manual worker households.
- Challenges in Device Access: Unequal access to devices is a significant barrier, particularly for female students, impacting their ability to engage in online learning.
- Economic Activities and Attendance: Male students are more involved in economic activities, potentially contributing to lower attendance in online classes, while female students are more engaged in household and care work.
- Dropout Trends during the Pandemic: Dropout rates are noticeable, especially in the 17 to 19 age group, with gender-specific variations suggesting potential challenges in retaining students during crises.



### Discussion:

In this presentation, he highlights gender disparities in online education, with higher female participation. Parental occupation significantly influences attendance, favouring children of employed or business-oriented parents. Unequal device access poses a barrier, particularly for female students. Male students' engagement in economic activities may contribute to lower online class attendance, while females are more involved in household and care work. Dropout rates, notably in the 17 to 19 age group, indicate challenges in retaining



students during the pandemic. Policy recommendations include infrastructure improvement, teacher training, targeted interventions for disadvantaged students, and initiatives to discourage child labour, emphasising the need for multifaceted solutions in crisis contexts.

Intellectual momentum has been carried forward with another research scholar who mesmerised the session with his presentation. He was Keshav Sawarn from the Indian Statistical Institute, Giridih, Jharkhand, on “Understanding Healthcare Disparities in Jharkhand: A PRA- Based Study on Rural and Indigenous People”. In this paper, he looked at the various healthcare disparities among the rural and indigenous people in Jharkhand.

**Key points of the presentation:**

- Title and Focus: "Understanding Healthcare Disparities in Rural Indigenous Communities: A PR-Based Study." It Investigates health challenges during and after the COVID-19 pandemic.
- Link to Sustainable Development Goals (SDGs): Aligns research objectives with the UN's 17 SDGs for global development and well-being.
- Research Objectives: Identify healthcare disparities in rural areas. It also explores structural factors contributing to disparities. It develops a cognitive strategy for improving healthcare access and outcomes.
- Methodology: Applies Participatory Rural Appraisal using techniques like focus groups, interviews, mapping, and ranking. Maps offer crucial information on resources, health services, and social aspects.
- Healthcare Disparities: Highlights critical issues, including sanitation, clean water, maternity services, integrated child development, and primary health centres. Structural factors involve water sources, community toilets, and the availability of healthcare facilities.





## **Discussion:**

The presentation addresses healthcare disparities in rural indigenous communities, focusing on post-COVID-19 challenges. Linking research objectives to the UN's Sustainable Development Goals (SDGs) adds a global perspective. Methodologically, Participatory Rural Appraisal, including focus groups and mapping, provides valuable insights. The research zeros in on critical issues like sanitation, clean water, maternity services, and healthcare facility accessibility. Structural factors, such as water sources and community toilets, are explored, offering a comprehensive understanding. The work culminates in a call to action, emphasising the urgency of eradicating health disparities for holistic societal development, aligning with SDGs 1, 3, 6, 10, and 17.

The last talk of technical session one was presented by Saikat Das, from IISER Bhopal, on “Economic Instruments and Mental Well-being of Rural Workers: Qualitative Insights from South Asia”. The forthcoming presentation examines the interplay of economic instruments and mental well-being among rural workers, spotlighting challenges like financial stress and the aftermath of natural disasters in regions of India and Bangladesh. It calls for tailored government initiatives to alleviate the psychological burden on farmers.

## **Key points of the presentation:**

- The presentation focuses on rural workers' economic and mental well-being, particularly in agriculture and farming.
- The study highlights farmers' psychological challenges, emphasising the increasing stress due to economic and environmental factors, such as changing climate conditions and market uncertainties.
- Qualitative analysis is employed to understand how different economic instruments impact the mental well-being of rural workers in low and middle-income countries, focusing on India and Bangladesh.
- Challenges mentioned include financial stress, lack of access to credit, issues with insurance, and the impact of natural disasters on farming, all contributing to mental health concerns among rural workers.
- The study discusses various government schemes and support programs to alleviate farmers' economic and psychological burdens, emphasising the need for effective implementation and addressing specific challenges in different regions.



• Expected Government Support to get Psychological Well-being

Availability of subsidized loan: Rural workers are advocating for subsidized loans with low interest rates and extended repayment periods. This would enable them to expand their farming operations, raise domestic animals, or start small businesses alongside farming to enhance their livelihoods.

Soil Test: Interviews highlight the absence of soil testing facilities in many regions. In numerous areas, farmers rely on trial-and-error fertilizer application, often following advice from fertilizer shopkeepers. Access to soil testing would allow them to apply fertilizers more efficiently, leading to increased crop yields and cost savings.

Water Supply: Farmers are reliant on the government to address the pressing issue of water scarcity, which significantly affects their ability to cultivate, particularly during the summer season. The consequence of water scarcity often leads to the abandonment of their lands, resulting in substantial losses.

High-quality seed and fertilizer: Farmers increasingly encounter counterfeit seeds, causing frustration as their efforts result in minimal yields. Additionally, the soaring costs of seeds and fertilizers prompt farmers to seek government subsidies to alleviate financial burdens.

Farmers seek expert guidance and advice: Farmers often lack awareness of new agricultural technologies, so they desire the guidance of agriculture officers who can advise them on beneficial harvesting techniques.

### Discussion:

The study delves into the intricate connection between economic instruments and the mental well-being of rural workers, particularly in the challenging agricultural landscape of India and Bangladesh. Through in-depth interviews, the research highlights significant issues such as financial stress, the impact of natural disasters, and the complexities of government schemes. The findings underscore the critical need for targeted policies addressing these challenges, emphasising the importance of accessible information, subsidy availability, and community support. By shedding light on rural workers' nuanced realities, the study contributes valuable insights to the ongoing discourse on sustainable rural development and mental health initiatives.

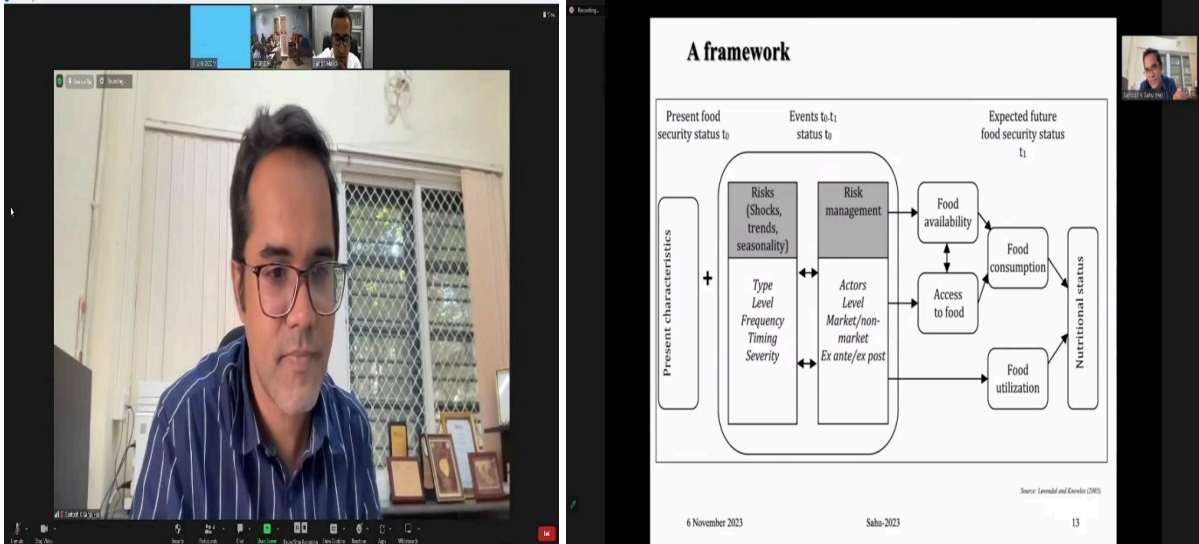
## 2ND TECHNICAL SESSION

After the lunch break, the symposium resumed with Technical Session 2, which Prof. K. Anil Kumar, from IGNSA, New Delhi, chaired. The re-energized session after lunch break was started with the invited talk by Prof. Santosh Kumar Sahu, from IIT Madras, who joined us via virtual mode, on the topic titled “Determinants of Health Expenditure: An ex-post analysis of households in rural Odisha of India”.

### Key points of the presentation:

- Holistic Vulnerability Framework: Integrates demographic, climate, agricultural, and occupational factors.
- Dynamic Risk Assessment: Treats COVID-19 as a shock and assesses climate risk management effectiveness.
- Food Security Challenges: Analyzes food availability and access amidst climate events and pandemics.

- Tailored Policy Advocacy: Urges specialised public policies, especially for vulnerable east coast regions.
- Multilevel Impact Understanding: Explores impacts at macro, meso, and micro levels, identifying coping strategies.



### Discussion:

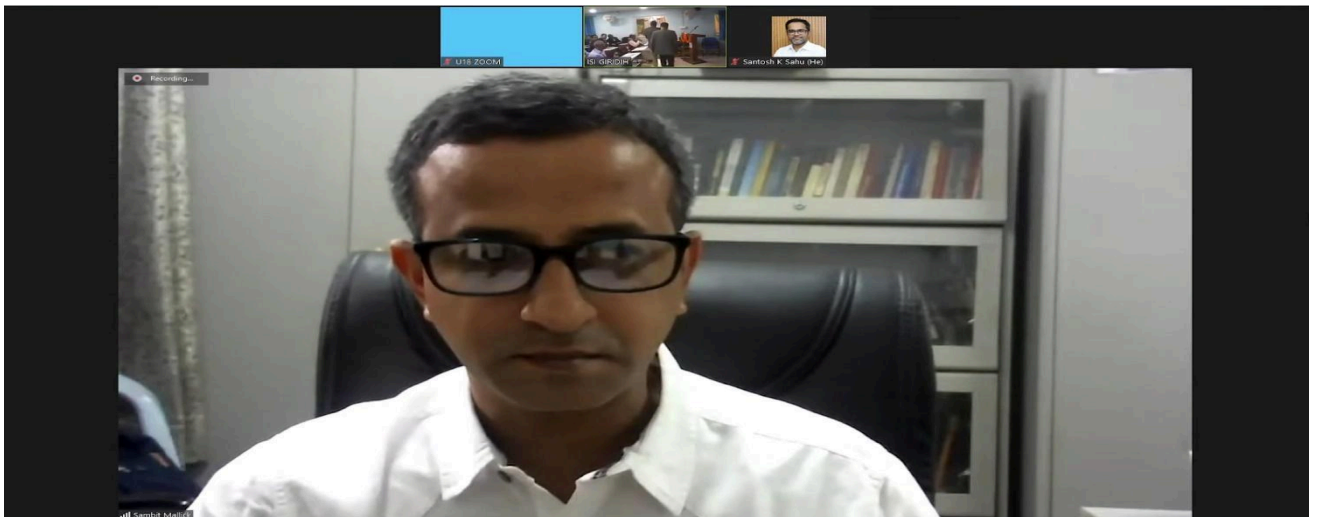
The framework intricately weaves demographic, climate, agricultural, and occupational facets into a holistic vulnerability analysis. The model evaluates climate risk management efficacy by categorising COVID-19 as a discrete shock and underscores the need for specialised public policies, particularly on the vulnerable East Coast. It delves into the nuanced interplay of food security, considering availability and access during climate events and pandemics. The discussion advocates a dynamic risk assessment, emphasising differentiated policy measures for varied geographical and socioeconomic contexts. This multilevel approach, exploring impacts at macro, meso, and micro scales, provides a nuanced understanding of effective coping strategies amidst the dual challenges of climate extremes and health hazards.

The session was moved forward with another enlightening invited talk by Prof. Sambit Mallick from IIT Guwahati, who virtually joined us on “Livelihoods not confined to the rural”. Here, he delves into the philosophical underpinnings of livelihood and poverty, weaving a narrative that transcends traditional boundaries and urges a holistic examination of social relations, state dynamics, and knowledge ethics.

### Key points of the presentation:

- Philosophical Foundation: Integrates livelihood and poverty discussions within the broader philosophical context, connecting the discourse to the history of natural and moral philosophy.

- **Interconnected Themes:** Emphasizes the interconnected nature of livelihood questions, extending beyond rural contexts to encompass urban areas, focusing on the impact of the COVID-19 pandemic on inequality.
- **Integration of Epistemology and Ethics:** Advocates for integrating epistemology with ethics, underscoring the importance of considering knowledge production and ethical dimensions in addressing poverty and livelihood issues.
- **Social Relations of Production:** Highlights the significance of analysing social relations of production in understanding poverty, stressing the diverse and complex relationships within households and between different social groups.
- **Macro Perspective on the State:** Calls for a macro perspective on the state, critiquing traditional views and urging a deeper examination of the state's role in class, region, and caste-divided societies, particularly in various development trajectories.



### **Discussion:**

Prof. Mallick adeptly intertwines philosophy, science, and societal dynamics in the context of livelihood and poverty. Artfully bridging disciplines, the presentation challenges traditional dichotomies, emphasising the integral connection between epistemology and ethics. Highlighting the profound impacts of macro-level models and diverse modes of life, the discussion discerns the complexities of social relations, urging a nuanced understanding. The critical examination of the state's role within class-divided societies emerges as a pivotal theme. The discourse serves as a compelling call for an integrated perspective, transcending disciplinary confines, and prompts contemplation on the intricate interplay shaping livelihood and poverty paradigms.

Moving forward, the session has been joined by a research scholar named Rasmita Das from JNU, New Delhi, on the topic titled “The Economic Impact of the Covid-19 Pandemic on Rural Households and Coping Strategies: A Case Study of Chilipada in Bhadrak District, Odisha”. Here, she delves into the profound economic repercussions of the COVID-19 pandemic, scrutinising its impact on various facets, from the vulnerability of migrant workers



to the intricate dynamics of rural-to-urban migration. Unpacking challenges in government initiatives and exploring the coping strategies employed by rural households, this discussion paints a comprehensive picture of the far-reaching consequences and resilience strategies amidst a global crisis.

### Key points of the presentation:

- **Economic Disruption Due to COVID-19:** The presentation explores the extensive economic impact of the COVID-19 pandemic, mainly focusing on the challenges faced during the lockdown period.
- **Vulnerability of Migrant Workers:** Migrant workers, especially those in casual labour, were disproportionately affected due to factors such as lack of social benefits, low income, and acceptance of lower-quality jobs.
- **Rural-to-Urban Migration Dynamics:** The study delves into the dynamics of rural-to-urban migration, highlighting the consequences of workers returning to rural areas and its implications for local economies.
- **Challenges in Government Initiatives:** The presentation identifies challenges in implementing government initiatives, including gaps in reaching eligible households and issues related to the timely distribution of benefits.
- **Coping Strategies and Income Loss:** Rural households employed various coping strategies, such as borrowing money, seeking assistance from relatives, and selling assets, to mitigate the impact of income loss during the lockdown.



**The Macroeconomic Impact of Covid-19**

- The initial primary impact of COVID-19 due to the closure of factories and places of work was on the supply side which led to the contraction in the macroeconomic supply of goods and services. With a sudden fall in the income level of people and the prospect of this uncertainty, consumers cut back their spending, shifting the demand curve inward, and further fueling unemployment.
- **Who were economically the big sufferers in this pandemic in India?**
  - a) Daily wage laborers and other informal workers, especially migrant workers from economically poor states, were most affected during the lockdown period (Singh, 2020). In fact, in any such emergency, these workers have to suffer the most.
  - b) Because informal workers are basically people who are not provided any social security benefits by their employers. Secondly, the average wage income of such workers in India is not at a level that allows them to accumulate savings for future emergencies.

### Discussion:

This study meticulously examines the economic fallout triggered by the COVID-19 pandemic, spotlighting its ramifications on diverse sectors. From the abrupt lockdowns causing widespread unemployment to the nuanced challenges migrant workers face, the presentation

dives into the intricate interplay of socio-economic forces. Scrutinising the coping mechanisms adopted by rural households, it unravels the resilience exhibited amidst adversity. Critical analysis of government interventions reveals gaps in reaching the most vulnerable, necessitating policy adjustments. As the world grapples with the enduring effects, this discussion provides valuable insights into the multifaceted dimensions of economic impact and recovery strategies in the wake of a global crisis.

After that, another scholar, Pushkar Kumar Pusp, from Vinoba Bhave University, Hazaribagh, came to the podium to deliver his presentation on the topic titled “Food Security In Jharkhand: A Micro-Level Study Of Birhor Community Of Hazaribagh District In Jharkhand”. In this presentation, he delved into a critical analysis of food security in Jharkhand, shedding light on the four dimensions of availability, accessibility, absorption, and sustainability. Unveiling the stark reality of child mortality and socioeconomic challenges, the study also explores dietary patterns and calls for targeted government interventions to enhance education, nutrition, and sanitation in the region.

**Key points of the presentation:**

- Four Dimensions of Food Security: The study focuses on availability, accessibility, absorption, and sustainability in the context of food security.
- Child Mortality: Alarming statistics reveal that 4,500 children die daily under the age of 5 in Jharkhand due to hunger and malnutrition.
- Socio-Economic Profile: Examination of the socioeconomic conditions in Jharkhand highlights challenges, including low education levels, limited occupational diversity, and reliance on hunting and food gathering.
- Dietary Patterns: The research identifies a predominant starchy diet, reliance on forest resources for vegetables, and low consumption of protein-rich foods like pulses and dairy.
- Government Intervention: The presentation emphasises the necessity for government support, particularly in providing protein-rich diets, improving education, and enhancing sanitation and hygiene in the studied villages.





## **Discussion:**

The presentation on food security in J vividly exposes the multifaceted challenges faced by its population, emphasising the critical dimensions of availability, accessibility, absorption, and sustainability. The alarming statistics of child mortality underscore the urgency for targeted interventions. By scrutinising dietary habits and socio-economic factors, the study advocates for comprehensive government measures. The incorporation of protein-rich diets, improvements in education, and enhanced sanitation emerge as crucial components to uplift the community. The presentation prompts a poignant reflection on the need for immediate action, stressing that addressing food security is paramount for the overall well-being and development of the region.

The last talk of the Technical session-2 was by a research scholar, Ananya Pandey, from O. P. Jindal Global University, Sonapat, on the topic titled “Examining the post -COVID gendered Work-Life experiences, health and hygiene practices in Rural Areas”. Here, she delves into the post-COVID-19 landscape, exploring how gendered work-life experiences, health, and hygiene practices have been shaped in rural areas. This investigation addresses critical gaps in understanding the nuanced influence of cultural factors, aiming to unravel the long-term implications of gender equality in these communities.

## **Key points of the presentation:**

- **Research Focus:** Investigating the impact of the COVID-19 pandemic on gendered work-life experiences, health, and hygiene practices in rural areas.
- **Variables Studied:** Examined work-life experiences, health, and hygiene practices, specifically focusing on the gendered aspects in rural communities.
- **Methodology:** Employed a Likert scale for data collection. Utilised one-way ANOVA analysis through SPSS. Selected participants randomly from Venur and Mura.
- **Research Gap and Significance:** Identified gaps in understanding cultural factors' influence on changes in post-COVID work-life dynamics. She emphasised the need to explore potential long-term effects on gender equality in rural settings.
- **Hypothesis and Results:** Hypothesized a more significant disruption in work-life balance for women in rural areas post-COVID. Findings indicated no statistically significant relationship between gender and the studied variables in the rural post-COVID context.



**Discussion:**

This study navigates the post-COVID-19 dynamics in rural areas, dissecting the interplay of gendered work-life experiences, health, and hygiene practices. The findings reveal a non-significant statistical association between gender and the variables examined, suggesting a complex interaction influenced by cultural norms. The research underscores a critical gap in exploring cultural factors and their evolving role in post-pandemic scenarios. As rural communities grapple with unique challenges, understanding the long-term effects of gender equality becomes paramount. This study lays the groundwork for a deeper exploration, emphasising the need for tailored interventions and a nuanced understanding of cultural influences on health and work-life dynamics.

**3RD TECHNICAL SESSION**

After the tea break, the last session of the day, Technical Session-3, was resumed, chaired by Prof. Dukhabvandhu Sahoo from IIT Bhubaneswar. In this session, the first invited talk was by Prof. K. Anil Kumar, from IGNC, New Delhi, on “Indigenous Knowledge and Agricultural Sustainability in Tribal Areas of Andhra Pradesh”. Here, he delves into indigenous knowledge and its pivotal role in fostering agricultural sustainability among tribal communities in Andhra Pradesh. The research sheds light on traditional wisdom, farming practices, and the challenges these communities face, offering insightful recommendations for preserving and integrating indigenous knowledge into contemporary development strategies.

**Key points of the presentation:**

- Focus on Indigenous Knowledge: The presentation centres on indigenous knowledge and agricultural sustainability in tribal areas of Andhra Pradesh, emphasising the significance of traditional wisdom held by local communities.

- **Definition of Indigenous Knowledge:** Clearly defines indigenous knowledge as the cumulative and complex set of knowledge developed by local communities, especially relevant for the management of the environment.
- **Importance of Indigenous Knowledge:** Discusses the crucial role of indigenous knowledge in the survival, social, and economic well-being of communities worldwide. Highlights its impact on various aspects of life, including agriculture, health, and biodiversity.
- **Agricultural Practices:** Explores indigenous agricultural practices, such as shifting cultivation, terrace cultivation, and mixed cropping. Describes the use of simple technologies and rituals associated with farming activities.
- **Challenges and Recommendations:** Addresses challenges faced by indigenous knowledge, including the loss of oral traditions and urban migration. It recommends further research, the establishment of knowledge databases, integration into education, and validating indigenous knowledge for sustainable development.



### **Discussion:**

The talk on indigenous knowledge and agricultural sustainability in Andhra Pradesh's tribal areas meticulously explores the profound significance of traditional wisdom. By elucidating the intricate linkages between indigenous knowledge and sustainable farming practices, the study underscores its pivotal role in the survival and economic well-being of tribal communities. The rituals, festivals, and agricultural techniques deeply rooted in indigenous knowledge are revealed as invaluable cultural assets. However, the discussion also underscores the urgent need to safeguard this knowledge, as external influences and urban migration threaten its erosion. The research advocates integrating Indigenous knowledge into educational curricula and national development plans for more inclusive and sustainable progress.


After that, a research scholar, Amarnath, from DSPMU, Ranchi, came for the talk on “Economic Issues of Female Domestic Workers of Ranchi City during COVID - 19: A case study”. Here, he critically explores female domestic workers' socioeconomic challenges, a group long overlooked within the unorganised sector. Based on raw data, this study sheds light

on their exploitation, lack of legal protection, and the impact of the COVID-19 pandemic on their livelihoods. This study unravels the complexities of this often unnoticed workforce and explores potential avenues for their upliftment and recognition within the broader labour framework.

### Key points of the presentation:

- The presentation introduces the socioeconomic condition of female domestic workers, highlighting their vulnerability and exploitation within the unorganised sector.
- Lack of legal protection, absence of labour laws, and the absence of formal unions contribute to the precarious situation of female domestic workers.
- The study is based on primary data collected from 25 female domestic workers in a specific area of Ranchi City, focusing on their socioeconomic challenges during the COVID-19 pandemic.
- The research reveals health and hygiene problems faced by female domestic workers, including issues related to housing, working conditions, and family conflicts.
- Recommendations include recognising domestic work as a formal sector, registering workers for government benefits, and addressing female domestic workers' social security, health, and insurance concerns.

## **Problems of female Domestic workers**



- Female domestic workers are belonging to the economically disadvantaged group and most of them lived in this area. Without any uniformity in their wage structure they work in the unorganized sector with a very low paid wage. Still they are compelled to do this job because of illiteracy as well as poor financial condition.
- The major problem for the female domestic workers is financial coupled with drinking problem of their husband or son ,which is ruining their peace of the house and hard earned money
- Most of the female domestic workers live their life on rented house,which has a very common toilet,and living area is not clean .
- Women domestic workers face several problems in their personal and occupational life. They work for long hours and are poorly paid. They don't have job security. If they take leave even for genuine reasons, they may lose their job.
- Some of them work in more than 2 houses and they become sick Women Domestic workers have health problems like respiratory disease, bodyache and skin disease, due to their occupational life. Their family life is marked by family conflicts poverty and debts.

### Discussion:

The study delves into the underexplored realm of female domestic workers, revealing their vulnerable status within the unorganised sector. Despite contributing significantly to household activities, these workers lack legal safeguards and remain excluded from labour laws. The research highlights the profound impact of the COVID-19 pandemic on their already precarious livelihoods, emphasising health challenges, financial struggles, and the absence of support structures. The findings underscore the urgent need for tailored policies recognising

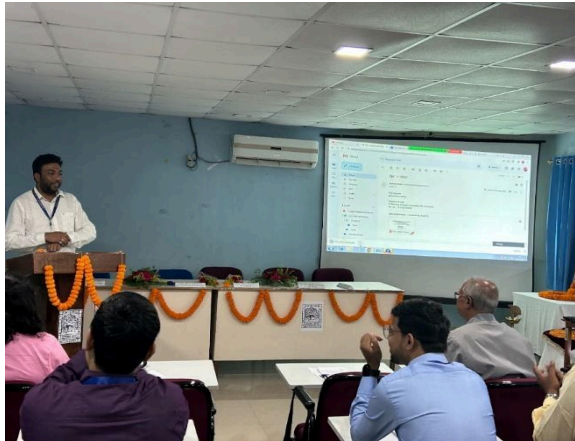
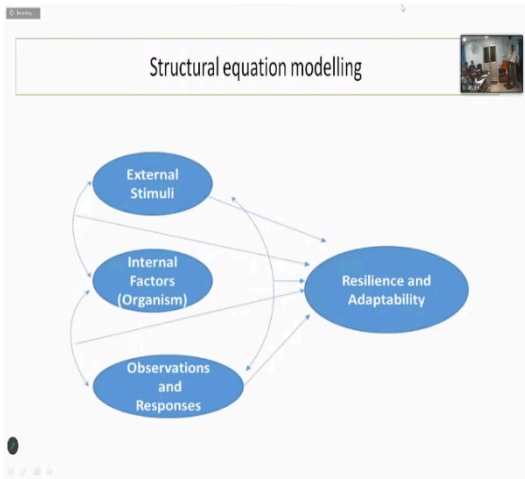
female domestic workers as essential contributors to society. Initiatives like formal registration, social security measures, and acknowledgement within labour frameworks could mitigate their hardships, fostering a more equitable work environment.

The last talk of day 1 was by an invited speaker, Dr. Ashish Aman Sinha, from O.P.Jindal Global University, Sonapat, on the topic titled "Occupational Resilience and Transformation in Tribal Communities During And After the COVID-19 Pandemic: A Stimulus-Organism\_Response Analysis". Here, he explores "Occupational Resilience and Transformation in Tribal Communities during and after the COVID-19 Pandemic," employing a unique theoretical framework inspired by marketing strategies. The research aims to understand the impact of external challenges, such as lockdowns, on tribal communities' occupational dynamics, adaptability, contributing factors, and resilience strategies.

**Key points of the presentation:**

- Research Focus: The study delves into "Occupational Resilience and Transformation in Tribal Communities during and after the COVID-19 Pandemic," employing a unique theoretical framework.
- Framework Inspiration: The presenter adapts the "Stimulus, Organism, and Response" framework from marketing to understand socioeconomic and psychological behaviours in tribal communities affected by the pandemic.
- Objectives: Four interconnected objectives guide the research, focusing on the impact of COVID-19 on tribal communities' occupational dynamics, adaptability, contributing factors, and resilience strategies.
- External Stimuli and Internal Factors: External stimuli, identified as challenges, include lockdowns, disruptions in traditional livelihoods, and health concerns. Internal factors or the organism's response involve cultural values, community identity, social support, and resource sharing.
- Analysis Plan: The study's analytical approach includes constructing variables for external stimuli and internal factors, possible reduction through Principal Component Analysis (PCA),
- and utilising structural equation modelling to explore correlations and causation effects.





**Discussion:**

The study delves into the intricate dynamics of occupational resilience and transformation in tribal communities amidst and after the COVID-19 pandemic. Utilising a distinctive theoretical framework inspired by marketing strategies, it navigates through external challenges like lockdowns, internal cultural values, and responses of tribal communities. The research unveils these communities' profound adaptability and resilience by examining shifts in livelihood strategies, cultural continuity, and social cohesion. This analysis contributes to understanding the nuanced interplay between external stimuli, internal factors, responses, and the subsequent resilience observed in the face of disruption to traditional occupations.

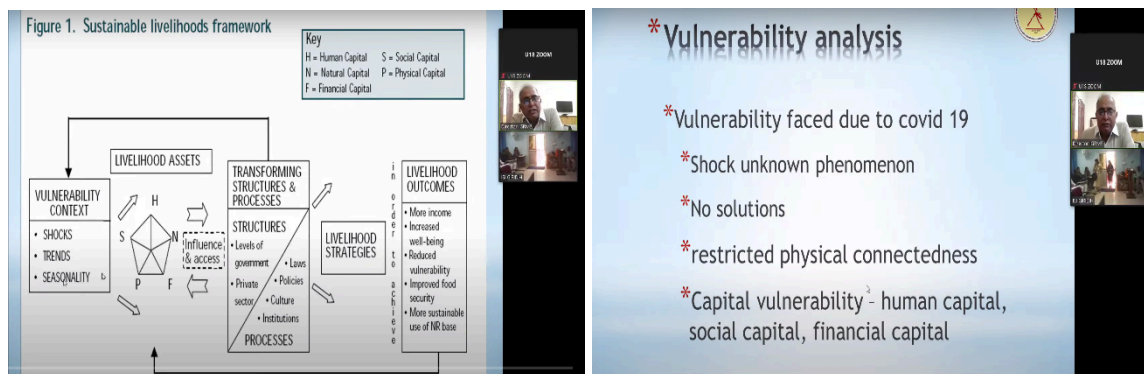


## B. SECOND DAY - 07TH NOVEMBER 2023

The second day of the symposium started with the valedictory address of Prof. Amitabh Pandey from the National Museum of Mankind, Indira Gandhi Rashtriya Manav Sangrahalaya, on the topic ‘Livelihood Vulnerability and Strategies during Covid-19’ (P.S- the exact title is unavailable at this moment) in the presence of the moderator of this seminar Dr. Hari Charan Behera.

### Key points of the presentation:

- Components and flow in a livelihood
- Possible vulnerabilities
- What are the sectors and segments or communities impacted by COVID-19?



### Discussion:

Lastly, Prof. Pandey discussed the different approaches to overcoming the vulnerabilities, such as the community approach, government approach, etc.

## 4TH TECHNICAL SESSION

After that, the 4<sup>th</sup> technical session started, Prof. Tarun Kabiraj, the Chairman of the Sociological Research Unit, Indian Statistical Institute, Kolkata and Giridih, chaired this session. This session was started by the special address of Eminent Speaker Prof. Arup Ratan Bandyopadhyay from the Department of Anthropology, University of Calcutta, on the topic ‘Covid-19 Host risk factors, Variation & Immune Response: An Anthropological Perspective’.

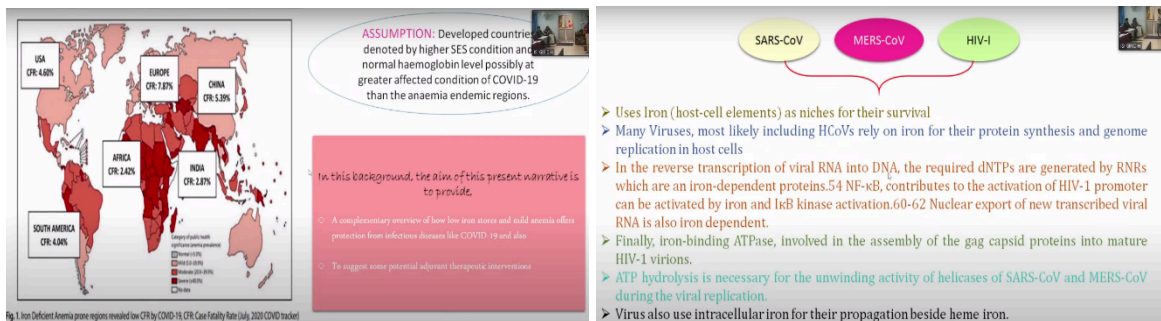
Prof. Arup Ratan Bandyopadhyay's special address ended with a very interesting doubt-solving session.

Next, at the request of Prof. Tarun Kabiraj, chair professor of this session, Dr. Diptendu Chatterjee came to start the talk on ‘Socio-economic status, iron deficiency anaemia and Covid-19 disease burden- an appraisal’. Dr. Diptendu Chatterjee is an associate professor of the Department of Anthropology at the University of Calcutta.



**Key points of the presentation:**

- The zoonoses cause pandemics.
- Order, family, sub-family and pathogenesis of COVID-19 virus.
- Acute respiratory distress syndrome is the major clinical symptom of COVID-19.
- Roles of Iron in the human body.
- Prevalence of iron deficiency in relation to lower socio-economy based area.
- Relation of iron with COVID-19 disease.



**Discussion:**

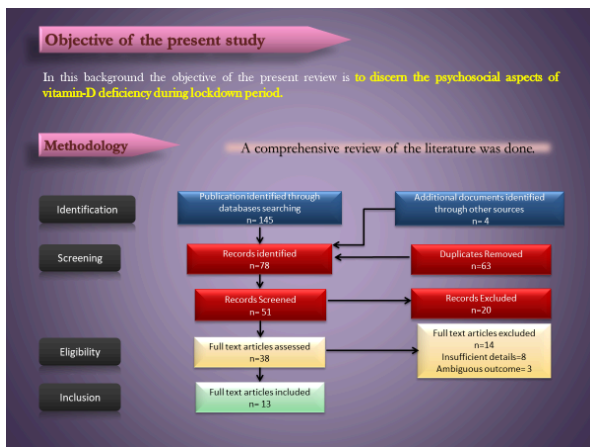
According to Dr Chatterjee, there is a possibility that a mild deficiency of iron serves a beneficial role in lessening the severity of infection by restricting the virus replication. That's why the regions with Iron Deficient Anaemia have low CFR due to COVID-19.

After that, a research scholar from the Department of Anthropology, University of Calcutta, Sumit Maitra, came on the podium with his graceful presentation on the topic ‘A Study of the psychosocial aspects related to Vitamin-D deficiency during the lockdown period- An Anthropological Appraisal’.



**Key points of the presentation:**

- The basic perception of Vitamin-D deficiency and Vitamin-D deficiency in the Indian Scenario.
- The main objective of the study is to identify the psychosocial aspects of vitamin D deficiency during the lockdown period.



**Discussion:**

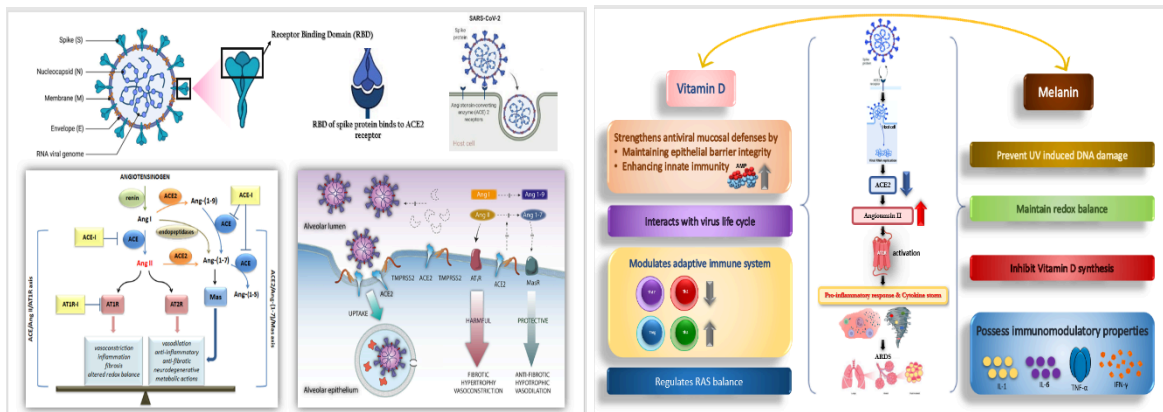
At last, it is concluded that Vitamin-D deficiency is a silent killer. It is clinically silent but triggers various other health issues. In the context of vitamin D deficiency, psycho-social factors played significant roles in the COVID-19 lockdown. But the degree of influence is still to be understood.

Next, another research scholar from the same department, Arkopala Bose, started the presentation on ‘Disentangling the interaction between Melanin content and Vitamin-D in COVID-19 infection: A Review.’

**Key points of the presentation:**

The objective is to discern a range of mostly overlooked host factors, like vitamin D status and skin melanin content, and their role in influencing the course and outcome of COVID-19.

- How Vit-D helps the innate immune system to kill viruses.
- The potential crosstalk between the pigimentary and immune system via vitamin D requires special attention concerning COVID-19.
- How the ARDS (Acute Respiratory Distress Syndrome) is activated.



### Discussion:

People with dark colour skin or highly pigmented skin, especially those who are deficient in Vit-D, might be in the risk zone for COVID-19. Lastly, it is already evident that the prevalence of vitamin D deficiency in Europe, particularly in the northern mid-latitudes, seems to be closely aligned with increased COVID-19 morbidity and mortality. Moreover, certain non-white ethnic groups that are at higher risk of severe vitamin D deficiency [Black, Asian, and Minority Ethnic (BAME)] appear to be disproportionately affected by COVID-19.

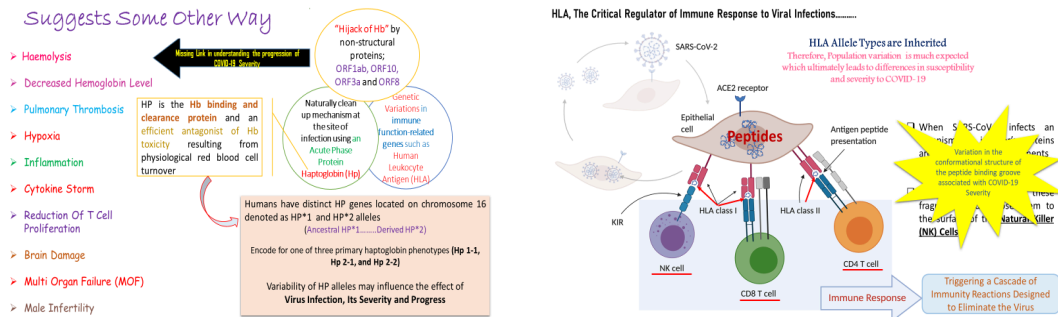
We were overwhelmed to get a number of participants from the University of Calcutta, Department of Anthropology. Next, Kusum Ghosh was also from the department of Anthropology, University of Calcutta. She gave a beautiful presentation on ‘HLA, Haptoglobin Polymorphism and Covid-19 Disease Burden: An Anthropological Approach.’





**Key points of the presentation:**

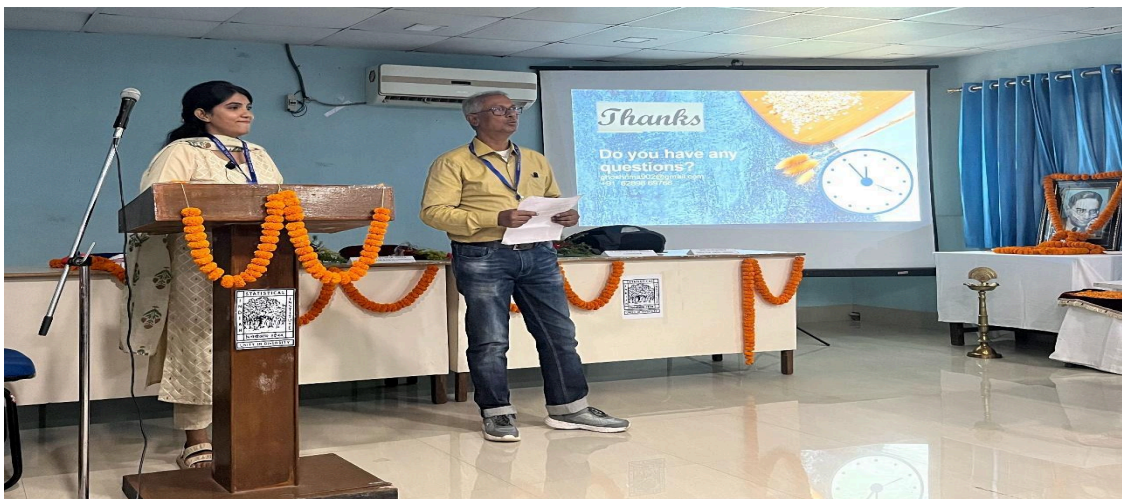
- Missing link in understanding the progression of Covid-19 severity
- Different characteristics of HLA
- Describing HLA as the determinant of protective immunity against the SARS-CoV-2



**Discussion:**

Lastly, according to the author, it was concluded that Occurrence, development and severity of SARS-CoV-2 depend on the interaction between the virus and the host. And once again, we have learned that ‘Prevention is better than Cure’.

It was the last talk of the 4<sup>th</sup> technical session, which was presented by a Senior Research Scholar, Rima Ghosh, from the Department of Physiology, University of Calcutta. She gave a graceful presentation on ‘The Relationship Between Chronotypes and Obesity-Related Risk Factors in Urban Population, West Bengal, India’.



**Key points of the presentation:**

- How the Lock-down situation break our Lifestyle Pattern
- Obesity: A Major Threat in Covid 19



- The relationship between chronotypes and Chrono-Nutrition with obesity and some Metabolic Risk Factors

**Discussion:**

While discussing these, it was learnt that there was no association between energy intake and energy expenditure with the Chronotypes. The study showed how chronotype groups significantly differ in their sleep quality. Not overeating but eating patterns in a timely manner can improve overall health.

**5TH TECHNICAL SESSION**

After the lunch break, the symposium resumed as the 5<sup>th</sup> technical session, which was chaired by Dr. Diptendu Chatterjee, Associate Professor, Dept. of Anthropology, University of Calcutta. The invited talk by Prof. Arun Kumar Acharya from Sambalpur University was started. He enlightened us with a presentation on ‘An Assessment of multi-dimensional vulnerability among Paudi Bhuiya tribe of West Odisha.’

**Key points of the presentation:**

- The possible vulnerabilities in different domains among the Paudi Bhuniya tribe of West Odisha, like standard of living, health, education, language etc.

**Discussion:**

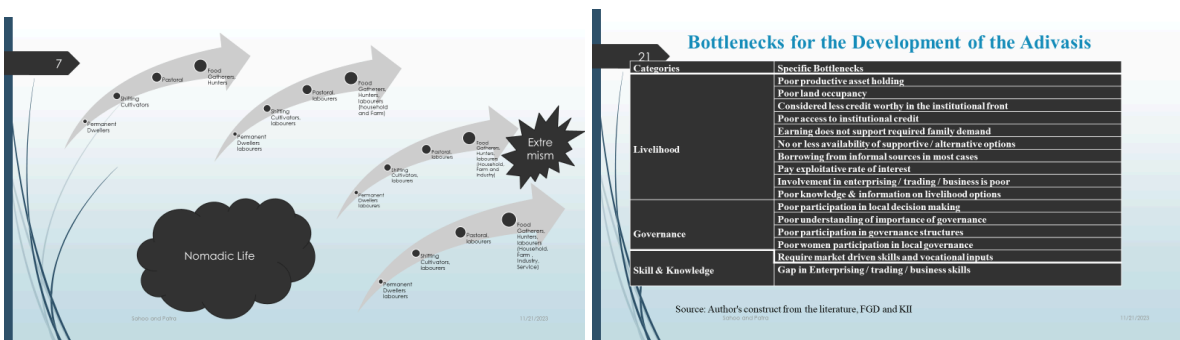
This study gave us the idea about the vulnerability that even language can be vulnerable. Only 31% of this tribe communicated in their tribal language. The author concluded that three major dimensions are more vulnerable: identity, health, and livelihood.

After That, an eminent speaker, Prof. Dukhabandu Sahoo, from IIT-Bhubaneswar, was invited to give his talk on ‘Economy and Livelihood of the tribes in Odisha: Some reflection and policy challenges’.



**Key points of the presentation:**

- Basic concept and context of the Tribe in Odisha.
- Division of tribes on the basis of subsistence patterns.
- The current scenario of the economy, education, and health of the tribe.
- Category-wise livelihood pattern among the tribes.



**Discussion:**

In closing, we got to know about the Diversification of Livelihood sources (Agriculture, Floriculture, Horticulture), Area-and-tribe specific skill, Marketing facilities for the produce of the Adivasis and MSP, Proactive role of the governance.

## 6TH TECHNICAL SESSION

With this talk, the 5<sup>th</sup> technical session ended. This symposium's 6<sup>th</sup> or last technical session started, chaired by Prof. Tarun Kabiraj.

Next, a renowned speaker from the Dr Ram Dayal Munda Tribal Welfare Research Institute, Ranchi, Neha Prasad, ma'am was invited to present her talk on "Status of Informal Women Workers in Urban Slums of Ranchi: Challenges before and after Covid."



### Key points of the presentation:

- Socio-economic Profile of Women Workers.
- Specific Features of Women Workers Residing in Slums of Ranchi
- Specific Characteristics of Each Type of Informal Job.
- Reasons behind Low Earnings of Women Workers.
- Challenges faced during Covid and Coping Mechanisms.
- Future Implications (Identification of tiny spaces to initiate the changes).

Per Day Income (In Rs.)		
Income Group	Freq.	Percent
Up to 50	23	6.39
51 to 100	96	26.67
101 to 200	93	25.83
201 to 300	79	21.94
301 to 400	33	9.17
400 to 1000	36	10
Total	360	100

Type of School	Freq.	Percent
Govt.	188	91.26
Private	11	5.34
NGO	5	2.43
Missionaries	2	0.97
Total	206	100

Marital Status	Freq.	Percent
Married	273	75.83
Unmarried	11	3.06
Widow	69	19.17
Live-in	1	0.28
Separated	6	1.67
Total	360	100

Addiction	Freq.	Percent
Yes	22	6.11
No	338	93.89
Total	360	100

### Overall Challenges before Women Slum Dwellers

- Low level of standard of livings despite having larger number of physical assets and relatively high opportunities
- High level of loan trap (Is easy availability of loans a boon)
- Poor quality of private sector education in and around urban slums (consumes largest part of their income)
- Invisibility of mild but high level of few forms of violences in public spaces
- Extremely high level of domestic violence
- Poor control over self-earned income
- Access, outreach and utilization of Government schemes is highly uneven
- Identification crisis
- Unsafe, crowded and costly public transportation
- Non-responsive Government measures for protection against GBV



Meanwhile, a research scholar from the Department of Soil and Water Conservation, Bidhan Chandra Krishi Viswavidyalaya, Mohanpur, Nadia, West Bengal, Suren Murmu, was requested to start his talk on “Role of Agroforestry systems: Enhancing natural resource resilience, sustainability and economic growth for farmers and women groups amidst the post covid-19 pandemic.”



**Key points of the presentation:**

- Background and basic concept of agroforestry.
- Examples of some of the successful agroforestry models.
- Environmental, social and economic benefits of agroforestry.

**Conclusion:**

Agroforestry systems are helpful in improving and maintaining good health and filling up the deficiency of nutrients in locality. It is essential to improve soil fertility in rainfed areas together with fruit, tree and different crops for attaining maximum and sustainable gross monetary returns apart from improving soil health under erosion-prone areas for marginal and resource-poor farmers.

With this presentation, the technical sessions of this symposium were finished.

### 3. WINNERS OF THE SYMPOSIUM

#### **First Prize: Arkopala Bose**

Arkopala Bose secured the first prize for his outstanding presentation on the national symposium's theme. Arkopala Bose's research presentation provided valuable insights into the often overlooked factors influencing COVID-19 outcomes. The study not only shed light on the scientific intricacies of the interaction between melanin content and Vitamin D but also drew attention to the disproportionate impact on certain demographic groups. This research contributes significantly to the growing body of knowledge surrounding COVID-19 and underscores the importance of considering diverse factors in understanding and addressing the complexities of the disease.

#### **Second Prize: Saikat Das**

Saikat Das was awarded the second prize for his impactful presentation on the livelihood challenges and opportunities during and post-COVID-19. Saikat Das's research presentation contributes valuable insights to the ongoing discourse on sustainable rural development and mental health initiatives. By shedding light on the challenges rural workers face in the context of economic instruments, the study advocates for tailored government interventions to alleviate the psychological burden on farmers. The findings underscore the significance of a holistic approach that considers both economic and mental well-being in the formulation and implementation of policies for rural development.

#### **Third Prize: Ananya Patel**

Ananya Patel received the third prize for her commendable presentation on the symposium's central theme. Ananya Pandey's study lays the groundwork for a deeper exploration of the post-COVID dynamics in rural areas, emphasising the need for tailored interventions and a nuanced understanding of cultural influences on health and work-life dynamics. The non-significant statistical association challenges preconceived notions, prompting further research and discussion on the complex interplay of gender, culture, and post-pandemic experiences in rural communities.

### 4. OUTCOME OF THE SYMPOSIUM

The symposium, marked by its interdisciplinary approach, in-depth research presentations, and robust discussions, fostered a nuanced understanding of the multifaceted impacts of the COVID-19 pandemic on livelihoods, health, and vulnerable communities. Scholars, researchers, and experts from diverse fields explored the intersections of anthropology, economics, sociology, and health sciences, shedding light on the intricate dynamics that unfolded during and after the pandemic.



## 5. KEY TAKEAWAYS

**Interdisciplinary Insights:** The symposium served as a platform for scholars to bridge the gaps between disciplines, fostering collaborative discussions that intertwined philosophy, science, sociology, and anthropology. The holistic approach enabled a more comprehensive understanding of the complex challenges posed by the pandemic.

**Vulnerabilities and Resilience:** Presentations delved into the vulnerabilities faced by diverse populations, including tribes in Odisha, informal women workers in urban slums, and specific communities grappling with health and socio-economic challenges. Simultaneously, the discussions highlighted the resilience exhibited by these communities amidst adversity.

**Health Dynamics:** Researchers explored the health dynamics related to COVID-19, unraveling the relationships between vitamin d deficiency, iron levels, and psychosocial aspects during lockdown. The implications of these findings have broad-reaching consequences for public health strategies and interventions.

**Socio-Economic Impact:** The symposium provided a comprehensive analysis of the socio-economic impact of the pandemic, particularly on vulnerable groups like migrant workers and rural households. Discussions emphasised the need for targeted government interventions, policy adjustments, and community-based approaches to alleviate economic disruptions.

**Cultural Influences:** Anthropological perspectives enriched the discussions, highlighting cultural factors influencing post-pandemic work-life experiences, health practices, and coping strategies in rural areas. This cultural lens underscored the importance of tailored interventions and a nuanced understanding of community dynamics.

**Policy Recommendations:** The symposium concluded with valuable insights and recommendations for policymakers. From integrating indigenous knowledge into sustainable agricultural practices to identifying policy challenges in supporting tribal economies, the discussions provided actionable suggestions for informed decision-making.

In summary, the symposium not only contributed to the academic discourse but also laid the foundation for practical interventions, policies, and collaborative efforts to address the complex and evolving challenges presented by the COVID-19 pandemic.

## 6. CONCLUSION

The National Symposium on "Livelihood Challenges and Opportunities during and post-Covid-19 Pandemic" concluded with a sense of accomplishment and optimism. The diverse perspectives presented by Arkopala Bose, Saikat Das, and Ananya Patel underscored the need for collaborative efforts to address the evolving nature of livelihoods in the post-pandemic era. The symposium catalyzed exchanging ideas and generating actionable insights that can contribute to building a more resilient and adaptive society in the face of future challenges.