# India's Pathways to Sustainability Economy, Ecology and Equity

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#### Preface

Sustainability has emerged as a guiding principle in shaping global, national, and local development agendas. For a country as diverse and dynamic as India, achieving sustainable development requires a holistic approach that balances economic growth with social equity and environmental stewardship. Recognising the importance of dialogue and research in this direction, the Department of Economics, MSCB University, Odisha, organised a two-day International Conference on "India's Pathways to Sustainable Development" on 19–20 April 2025. The event was generously sponsored by the R&D Cell of MSCB University and the Bank of India.

The conference served as a vibrant platform for scholars, practitioners, policymakers, and students to share ideas, empirical findings, and policy insights on India's multifaceted journey toward sustainability. The deliberations spanned across four wide themes—economic sustainability, environmental sustainability, digital sustainability, and social sustainability—reflecting the evolving landscape of sustainable development research.

This edited volume, India's Pathways to Sustainability: Economy, Ecology, and Equity, brings together a curated selection of high-quality papers presented at the conference. The chapters represent rigorous academic contributions as well as field-based insights that together highlight the diversity of India's development experiences and the complex interplay between policy intent and grassroots realities. The book is thematically organised into chapters that capture core areas such as sustainable growth, environmental governance, sectoral sustainability, social equity, technological innovation, and regional development challenges. This volume contains the first set of proceedings from the conference.

We believe this compilation will be a valuable resource for academicians, policymakers, researchers, and students engaged in the fields of economics, public policy, development studies, and environmental science. More importantly, it is hoped that the book stimulates critical thinking and constructive debate on crafting inclusive and sustainable futures for India.

We sincerely thank the authorities of MSCB University, all organising committee members, all contributors, resource persons, and peer reviewers, for their support and cooperation. We also acknowledge the efforts of our internal expert committee and external review committee, who have helped bring this volume to publication.

Last but not least, we really thank Empyreal Publications, India, for the publication of this edited book.

Prof. Kabita Kumari Sahu Dr. Pratap Kumar Jena Prof. Sudhakar Patra Mr. Biswajit Sarangi

#### About the Editors



#### Prof. Kabita Kumari Sahu

Prof. Sahu is currently serving as Professor and Head, Department of Economics at MSCB University (erstwhile North Orissa University), Baripada, Odisha. She earned her M.Phil. & PhD degrees from Utkal University, Bhubaneswar, and has contributed over 125 publications to reputed journals and edited volumes to date. Her academic work includes four textbooks, four research books, and three edited books. She has also completed two ICSSR-funded research projects, with one ongoing project funded under UFIRP. She has to her credit the supervision of 07 Ph.D. and 35 M.Phil. scholars, while 07 Ph.D. scholars are still pursuing their research under her guidance.



#### Dr. Pratap Kumar Jena

Dr. Jena is working as a full-time Assistant Professor of Economics (teaching and research) in the Department of Economics, Maharaja Sriram Chandra Bhanja Deo University. He has nearly 13 years of teaching experience at the PG level. Before joining this university, he worked for a short period at **GITAM** University, Vishakhapatnam and Central University of Karnataka. He obtained his Master's degree, M.Phil. degree and Ph.D. degree from the University of Hyderabad. He has been teaching Macroeconomics, International Trade & Finance, Econometrics and Time Series Modelling to MA students. His research interests are broadly in the commodity market, climate change, agriculture, rural development and applied macroeconomics. He has published 3 books, 7 book chapters and 22 research papers in refereed journals, and also completed 4 research projects.



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Prof. Patra is presently serving as RBI Chair Professor, PG Department of Analytical & Applied Economics, Utkal University, Bhubaneswar. He was a former Professor & Head, Economics and Dean, Faculty of Humanities and Social Sciences, Berhampur University, Odisha. Prof. Patra has 36 years of teaching and research experience, completed 05 research projects and published 23 Books, 109 research papers in Journals & 48 chapters in edited books. Prof. Patra has guided 17 research scholars for Ph.D./D.Lit degree and has made 13 academic visits to different foreign countries. He teaches financial Programming, Monetary Management, Econometrics, Mathematical Economics. Apart from many NAAC visits as a Peer Team Member, he is an expert in data analysis in SPSS, STATA, and EViews.



#### Mr. Biswajit Sarangi

Mr. Sarangi is currently serving as an Assistant Professor in Economics at CDOE (Centre for Distance and Online Education), MSCB University (erstwhile North Orissa University), Baripada, Odisha, and is also pursuing his PhD from the same University. He completed his Graduation in Economics from F. M. Autonomous College, Balasore, in 2020 with a CGPA of 8.51, and his Post-graduation Analytical in & Economics from Utkal University, Bhubaneswar, in 2022, securing a 9.05 CGPA with specializations in Econometrics, Mathematical Economics, and Financial Institutions & Markets. To date, he has published seven papers in various reputed journals, three books and one book chapter.

#### Table of Contents

Title of Chapters	Page No.
PART I: DYNAMICS OF SUSTAINABLE ECONOMIC GROWTH IN INDIA	1
Health Expenditure and Sustainable Economic Growth in India: An Inter-State Analysis	1 – 13
Dr. Diptimayee Samal	
Prospects and Challenges of Sustainable Economic Growth in India	14 – 23
Shom Bhattarai	
Fintech and Green Finance's Effects on Long-Term Sustainable Growth: Empirical Evidence from India	24 – 32
Rupak Kumar Tung and Prof.Satyabrata Mishra	
Trend and Structural Breaks In Income Inequality Evidenced from the Issue of Convergence	33 – 51
Abhishek Das, Prof. Maniklal Adhikary and Soudipta De	
Tracing A Decade of Financial Inclusion Research (2014–2024): A Comprehensive Bibliometric Analysis of Scopus Data	52 – 62
Prof. Sanjay Sonawane and Sneha J. Pandey	
Analyzing the Growth and Impact of Social Stock Exchange Literature: A Comprehensive Bibliometric Study	63 – 85
Sagar Uttam Shinde and Akash Kiran Deshmukh	

Role of FdI Inflow in India Towards Sustainability: A  $\,\,\,86-102$  Comparative Study in Selected States of India

Dr. Chaitali Pal

Crop Substitution Between a few Selected Food and Commercial Crops in India: An Empirical Study 103 – 113

Dr Samrat Chowdhury and Prof. Maniklal Adhikary

PART II: ENERGY, INDUSTRY, AND ENVIRONMENTAL SUSTAINABILITY	114
Impact of Air Pollution on Economic Development: A Comparative Analysis of Delhi and West Bengal	115 – 140
Soham Adhikary	
Decarbonization Strategies in India's Steel Industry: A Strategic Roadmap to Achieve Net Zero By 2070	141 – 150
Laxami Kumari	
Low-Carbon Energy Sources in India: What Affects its Adoption and Usage?	151 – 159
R U Megha and Dr. Kalpana Sahoo	
Green Manifestos and Political Parties in India: Reflections on 2024 General Elections	160 – 171
Manas Ranjan Behera and Dr. Rajshree Dutta	
The Clean Cooking Conundrum: Insights from Pmuy	172 – 183
Saswata Chaudhury and Dr. Enakshi Sinha Ray Chaudhury	

PART III: TECHNOLOGICAL INNOVATIONS AND SUSTAINABLE SOLUTIONS	184
Embracing Technological Advancements and Inclusive Leadership: Driving Innovation And Sustainability in the Pharmaceutical Industry	185 - 195
Venkatesh Karthikeyan	
Optimizing IT Supply Chains: Leveraging AI, Green Innovation, and Circular Economy for Sustainability in Emerging Markets	196 – 213
Viraj P. Tathavadekar and Dr. Nitin R. Mahankale	
Innovating For Impact: Leveraging Technological Solutions to Develop a Strategic Visibility and Trust-Building Platform for Sustainable NGO Growth and SDG Fulfilment	214 – 229
Shuvajyoti Kar and Dr. Ananya Mitra	
PART IV: SECTORAL AND REGIONAL PERSPECTIVES ON DEVELOPMENT AND FOULTY	230

PART IV: SECTORAL AND REGIONAL PERSPECTIVES ON DEVELOPMENT AND EQUITY	230
A Bibliometric Study of Heatwave, Health, and Labour Productivity in Urban Areas	231 – 247
Madhumalati Soren and Dr. Saswat Kishore Mishra	
<b>Empowerment of Marginalized Communities in Aspirational Districts of Odisha: Evidence from Field</b>	248 – 261
Dr. Samir R. Samantara	
An Analysis of Education Outlay in Odisha through a Gender Lens	262 – 276
Du Poiglin Pohona and Prof Aditus Varman Datus	

### Sustainable Management of Common Property Land 277-300 Resources in a Tribal Economy of Odisha

Dr. Anirudha Ojha

Cultural Practices and Environmental Adaptations in 301-309 Nepal's Hill Communities

Rishav Jha, Shubham KC, Aaditya Dahal, Dr. Ananya Mitra and Dr. Smrutirekha Mohanty

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#### ABOUT THE BOOK

This book presents a collection of twenty-one scholarly papers that explore different aspects of sustainable development, economic growth, and social equity in India. Divided into four thematic parts, the book covers a broad spectrum of issues. The first part examines the dynamics of sustainable economic growth, addressing health expenditure, income inequality, financial inclusion, FDI, and agricultural transformation. The second part focuses on energy, industry, and environmental sustainability, with chapters on air pollution, decarbonization strategies, low-carbon energy adoption, clean cooking initiatives, and green political agendas. The third part highlights technological innovations and sustainable solutions, showcasing the role of AI, green innovation, the circular economy, and inclusive leadership in driving change. The final section presents sectoral and regional perspectives, with studies on heatwaves and labour productivity, education through a gender lens, empowerment of marginalized and tribal communities, and management of land resources. Importantly, it also features a study on Nepal's hill communities, reflecting shared ecological challenges and cultural adaptations between India & Nepal, thereby broadening the book's regional relevance. Altogether, the book offers fresh evidence, regional insights, and policy directions for achieving inclusive and sustainable growth.





