
Book Reviews

Environmental Economics in Developing Countries –Issues and Challenges, Edited by Achiransu Acharyya, Routledge, Taylor and Francis Group, Oxon U.K, 2023. Distributors: Manohar Publishers and Distributors, New Delhi.Pp.xxxv + 370. Rs.1595.00.

Environmental economics in developing countries faces unique challenges as these nations strive for economic growth while addressing pressing environmental issues. Often characterised by resource constraints, weak institutional frameworks, and competing development priorities, these countries must strike a delicate balance between fostering economic progress and safeguarding their ecosystems. In the context of environmental degradation, such as deforestation, air and water pollution, and climate change, these nations grapple with the immediate need for sustainable development. Policymakers face challenges in designing and implementing strategies that integrate environmental considerations into economic planning, incorporating incentives for eco-friendly practices, promoting renewable energy sources, and establishing effective regulatory frameworks.

The book under review, a collection of essays, is in honour of Prof. Rabindra N. Bhattacharya a pioneer in the field of Environmental Economics. The collection sheds light on the intricate issues faced by the developing countries. In navigating the complexities of sustainable development, this publication explores the unique challenges posed by environmental concerns in the context of limited resources, institutional deficiencies, and competing development priorities. It delves into the urgent need for effective strategies that harmonize economic growth with environmental preservation, addressing issues such as deforestation, pollution, and climate change. The book underscores the importance of integrating eco-friendly practices, fostering renewable energy solutions, and establishing robust regulatory frameworks. By providing insights into the hurdles faced by developing nations, the volume emphasizes the significance of international collaboration, financial support, and technology transfer to facilitate a balanced and sustainable approach to economic progress and environmental well-being. It is enriched by stalwarts such as Partha Dasgupta whose forward underscores the pivotal role of natural capital in the realm of economic development. Dr. Dasgupta's insights emphasize the intricate interplay between environmental resources and economic progress, recognizing the significance of safeguarding natural assets for sustainable development. Jeffrey R. Vincent, another luminary in the field, illuminates the crucial role of economics in addressing humanity's most formidable challenges. By acknowledging the capacity of economics to provide valuable perspectives and solutions, Vincent underscores the discipline's role in unravelling and mitigating complex environmental issues.

The introductory chapter by the editor provides a comprehensive overview of the historical evolution and origins of teaching and research in the field, give insight on the major issues and challenges faced by developing countries. This foundational chapter sets the stage for the subsequent exploration within the book. Comprising 15 essays organized into four parts, penned by eminent scientists in the realm of

environmental economics, the book offers a diverse and insightful collection of perspectives on crucial topics. The detailed contribution of Professor Rabindra further enriches the content, adding depth and expertise to the discourse. This section not only serves as a valuable introduction but also acts as a roadmap for readers, particularly students, facilitating a nuanced understanding of the book's overarching themes and providing a solid background for further exploration.

Part 1 of the book investigate the intricate interplay among environment, ecology, and development, offering a compelling exploration of these interconnected domains. A particularly engaging chapter within this section is authored by Prof. M.N. Murty, focusing on the triad of growth, environment, and poverty nexus. Professor Murty infuses academic vigour into the discussion through the application of the Ramsey growth model thereby challenging the conventional perceptions of conflict between economic growth and environmental preservation. In a refreshing departure from the traditional narrative, Prof. Murty's chapter presents an optimistic perspective, especially pertinent to countries like India. By leveraging the Ramsey growth model, the chapter not only redefines the relationship between growth and the environment but also proposes constructive solutions. This academic contribution not only enhances the understanding of the complex dynamics between economic development and ecological sustainability but also provides valuable insights for policymakers and researchers, offering a nuanced and optimistic lens through which to address these critical issues. The second and third chapters shift the focus to pressing concerns, addressing the decline in natural capital and the profound impact of the COVID-19 pandemic on ecology, economics, and society. These chapters underscore the urgency of grappling with issues surrounding the depletion of natural resources and the interconnectedness of ecological, economic, and societal well-being. The discussion on the spread of zoonotic diseases emphasizes the crucial role of ecosystem services and the intrinsic interdependence between the biotic and abiotic components of the Earth system, which are paramount for human welfare. The chapters prompt a philosophical reflection on the limits to growth, evoking Gandhian principles and encouraging readers to consider sustainable approaches to development. A significant thematic emphasis emerges on the imperative for nations to prioritize the development of alternative, non-conventional sources of energy. This aligns with global efforts towards cleaner energy, reflecting a shared commitment to mitigating environmental impact. In particular, the chapter on electrification and its impacts on development and household welfare highlights direct links while underscoring the pivotal shift towards cleaner energy sources. This nuanced exploration not only sheds light on the challenges posed by the current trajectory of growth but also emphasizes the transformative potential of adopting cleaner and more sustainable energy practices for the benefit of both societies and the environment.

Part II of the book comprises four chapters that centre on the economics of nature conservation. These chapters delve into the intricacies of policy instruments aimed at conserving natural capital, emphasizing the growing importance of economic valuation in shaping market-based conservation strategies. E. Somanathan provides a detailed analysis of major incentive-based policy instruments, evaluating their relative merits and shedding light on their potential application. A noteworthy aspect of this

section is the exploration of carbon sequestration and ecosystem services in forests, introducing the novel concept of determining rotation age based on the provision of ecosystem service value. This innovative idea is presented with a call for further research, suggesting a potential shift in forestry management practice. The discussion extends to the incentivisation of rural households to adopt agroforestry, particularly in the context of Andhra Pradesh. This case study provides valuable insights that can serve as a foundation for shaping forestry-related policy decisions. Shifting focus to a different dimension, Susmitha Dasgupta and colleagues assess the damages inflicted on natural capital and ecosystem service flow due to non-urban road infrastructure development. This becomes especially pertinent in rapidly developing economies, where infrastructure expansion can pose a threat to natural resources and biodiversity. Their approach involves mapping areas based on the level of damage, offering a valuable tool for policy decisions. The model's application in Bolivia, Cameroon, and Myanmar suggests its potential adaptability to similar situations in other developing countries. Overall, this section presents a comprehensive examination of economic strategies for nature conservation, ranging from incentive-based policies to innovative approaches in forestry management and infrastructure development.

Part III of the book comprises a collection of essays focused on the pressing and widely-discussed topic of climate change. The initial paper underscores the crucial importance of comprehending the science behind climate change and its potential impacts across various economic sectors. Despite being a global challenge, the significance of local solutions is emphasized. Taking a specific lens to the agriculture sector, the editor's chapter highlights the substantial impacts on agriculture and the limited adaptive capacities of farmers in developing economies. The chapter skims through the challenges associated with the widespread adoption of Climate Smart Agriculture as a strategy to manage climate change, considering factors such as social, financial, technological, and cultural aspects. By drawing parallels with experiences from the COVID-19 pandemic, the paper by Dr Parikh endeavours to establish connections between climate change, pandemics, and sustainable development. It delves into the complexities of these intertwined issues and suggests that institutional capacity and social awareness-building efforts could pave the way for enhanced cooperation towards more sustainable lifestyles. This section not only addresses the immediate impacts of climate change on specific sectors but also explores the broader intersections with other global challenges, providing a holistic perspective on the path forward. The final section on environmental policy features four papers that grapple with the inherent conflicts between development pathways and environmental conservation, emphasising the need for policies that align social, political, economic, ecological, and sustainability aspects. Kanchan's paper provides a comprehensive analysis of environmental policy issues in India, considering both global and national perspectives. She advocates for a more robust legal and governance mechanism in the country to ensure sustainable growth. The other critical concern addressed in this section is household waste, a natural byproduct of increased consumption and rapid urbanization, particularly prevalent in many developing economies. Drawing on a study in Nepal, the paper suggests programs to increase awareness, recognizing the pivotal role of women as homemakers. The escalating conflicts arising from human-wildlife interactions, the spread of zoonotic diseases, and the resulting life and

property losses due to wildlife attacks have gained media attention. The paper by Choda and co-authors scientifically validates the economic viability of employing electric fences as a mitigating measure to protect crops, acknowledging the additional expenditure involved in crop production. The concluding chapter provides a comprehensive overview of regional networks dedicated to research, knowledge sharing, and capacity building in the field of environmental economics. These networks play a vital role in nurturing a community of environmental economists, ensuring the continuation of their impactful work. This section underscores the multidimensional challenges of environmental policy and showcases diverse strategies and solutions for fostering sustainable development. The publication provides a helpful overview of the subject of environmental economics, highlighting its coverage of the genesis and history of environmental economics, and its focus on the challenges faced by planners, policymakers, and researchers. The systematic narration and clear language make it a valuable resource for readers, and the absence of specific issues like pollution externalities is duly noted. The inclusion of a freely downloadable chapter on household waste management adds an extra dimension to the book's accessibility. The book is so clearly structured and lucidly written that it can enrich the knowledge base on the subject of environmental economics for the general readers also.

Kerala Agricultural University,
Kerala State Farmer's Welfare Board,
Thrissur.

P.Indira Devi