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**The Routledge Handbook of
Environmental Economics in
Asia**

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BOOK REVIEW

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INTRODUCTION

Environmental economics is rapidly gaining its recognition as a paramount field of study with the current phase of competitive development process. The dynamics of such a development phase will naturally lead to create environmental problems globally, across countries and regionally or even across provincially within a same country. The priorities of societies are made more on income, production and employment than natural resource management and environmental impacts of such procedures. In their present forms, for example, almost all the countries national income accounts measure growth rather than measuring sustainable development. However, as countries reach their development goals they gradually draw more

attention to maintain the quality of environment. This phenomenon has been correctly observed by the environment Kuznets Curve (EKC) seems to be a proven fact regarding rich countries as well as middle income and developing countries. The first comers and later comers to the industrialization put more emphasis on the importance on keeping up the developing process with environmental sustainability. Being one of the fast growing regions countries in Asia except for a few newly industrialized countries are currently in the process of gaining their development momentum under the rapid development currently in progress. Thus it is important to keep on tract with possible adverse impact and vulnerable effects on environment and consequences in these countries. Nevertheless the dearth of research, study materials and textbooks has made some limitations to have a broader and updated understanding about the subject as a discipline for the students as well as for the other actors in the field. Hence, the “Routledge Handbook of Environmental Economics in Asia” is undoubtedly a valuable and commendable product collection of chapters that covers many of the vulnerable areas that directly or indirectly link to environment quality and resource economics under the current phase of development in Asia-Pacific region. Therefore, it is worth writing a book review on this publication to provide a better understanding and comments about the book to the readership and to make the readership even wider. Thus the main intention of this book review is to uncover some of the important aspects of using it as a handbook on environmental economics for teaching, learning and awareness of the subject for conducting research and policy making.

Some attributes of the collection of the chapters and intentions of the authors

The chapters of the handbook organized in such way as to understand the evolution/development of the discipline from more traditional topics of economic growth and environment to tax, emissions trading and energy utilization to more growing topics including biodiversity, coastal management and representative country applications. Hence the sequence of chapters is appropriately arranged and thereby the reader or the user of the book can either start with the basic concepts of environmental economics and gradually moving on to contemporary issues or any specific chapter that reader may think is relevant or important for a purpose.

The authors are the most recognized well known academics, researchers and institutional position holders from various parts of the world are the renowned scholars in this field of study. Collecting book chapters from such an internationally outstanding scholars in this field and coordinating them towards getting this final result itself is a great success and a challenging work. The main intention of writing this handbook is to provide a prestige reference work to current scholarship in the expanding discipline of environmental economics particularly applied in Asia-Pacific region. Achievement of this attribute is evident with focusing all chapters directly or indirectly to the contemporary or emerging environmental problems such as coastal development,

biodiversity offsets and issues relating to environmental and resource policy in Asia pacific countries.

As mentioned by the editor of the book this is an *intradisciplinary* collection of papers where environmental economics focuses with wider view to incorporate diverse aspects economy and environmental problems. This intention of authors reflects from the contents of each and every chapter as they all have used economic theory, empirical observations or data collection and analysis to consider the possibility for actual practice in policy. Furthermore, the lack of literature and attention to the economic and environment importance with particularly focus on Asia pacific region identified. Therefore, out of the 31 chapter more than half is dealt particularly on the countries in Asia pacific region. The intention of the authors in this aspect seems to be successful as almost all the chapters have made effort to use innovative/improved techniques to make those assessments to have consistency and show directions of the current practices.

Accomplishment of the Purpose of Writing the Book

As shown in the Table of Contents, the volume of 31 chapters is organized in the order of more traditional topics that provides general understanding about the subject to diverse and specific areas and debates with applied techniques for Asia-Pacific. This collection is therefore appropriately arranged even the beginners to the discipline will find interesting to follow a course of study in environmental

economics since these chapters reflect starting with more general topics to the progress of increasing diversity in the contemporary research based on improved techniques. Also each chapter provides a balanced overview of current knowledge, identifying issues and discussing relevant debates.

The first five chapters in this handbook clearly shows a general overview on the relationship between environment and growth which is relevant not only to Asia pacific but also to any country that making its effort to achieve development goals. This part starts with exploring the possible outcomes of climate change and global economy under three CO₂ mitigation scenarios using two analytical methods. It makes highly relevant for developing countries to draw attention to environmental quality while development process continuing. Although there is missing values to the data the third chapter proves the presence of inverted U shape for Asian countries. This is important for this region since rapid population growth in china, India and south Asian countries will become major emitters of CO₂ and SO₂ in Asia. Therefore environmental friendly technology is required to mitigate the impact. It emphasizes in the 4th chapter proving the need for formulating public policy for making the development process efficiency in energy intensity and energy efficiency. It poses a question on to reconsider GHG emission in consumption and production in chapter 5. This part of the book provides the essentially necessary background for the students, academics and researchers to prepare and

move forward into more specific characteristics and problematic areas in the discipline.

The second part of the theme identified from this book review goes from chapter 6 to 20 which spans environmental policy issues and mitigation measures. For instance the chapter 8 raises the point correctly with the theory of emissions trading and taxations which shows commendable effort to formulate good mechanism to policy making for any country but for the Asian countries market power is problematic due to monopoly, welfare and distortions. Thus applicability is problematic due to market inefficiency and uncertainty with ownership and payment problems. Furthermore, the emerging situation becomes more challenging since supply and demand trends of nonrenewable energy in Asian countries with their industrialization, consumption patterns, urbanization, and wealth and income levels living standards improving while population keeps expanding. However, the book chapters 15 and 16 carefully examine the possibility for addressing these dimensions. The necessary technical knowledge and methods are presented in terms of valuation of environmental benefits in Asia using different valuation techniques that are important for research. Revealed preference method, travel cost method, hedonic pricing method, averting behavior method, benefit transfer method, contingent valuation method. In fact these methods are useful for conducting academic research.

This part of the subject could raise some conflicting debates due to the diversity in terms of socioeconomic, cultural and political concerns

especially in Asian region. The book has drawn attention exploring the nature of intractable issues in agriculture and tourism industry where natural resource use and production intensity pose questions on possibility to apply the valuation techniques and priorities for the conservation of natural and bio diversity. The problematic situation and the mitigation measures in this regard is appropriately given in chapter 19 and 20 referring to faster rate of development in coastal areas so that damage done to coral reefs, and wildlife. A large proportion of population is living closer to coastal areas due to many reasons. Therefore coastal development and protecting ecosystem is important. Thus authors suggest that tourism can be used as a conservation tool which is a commendable strategy to mitigate the adverse impacts. The recommendations and the direct actions implies by these chapters may not be feasible and politically desirable in the short run. Nevertheless educating the people improve awareness and introducing new technological methods of production can help to mitigate adverse impacts in the long run.

The rest of the chapters are dealing with specific policy issues and contextual environmental problems plus mitigation measures. The contents of the chapters explore agreeably the diversity and the rigor of the environmental problems that depending on the status of the development in each country and socioeconomic and cultural factors. In chapter 24 refers inequality and the environment where mostly the developing countries in Asian experience economic growth with growing inequality that leading to resulted in greater environmental

degradation. Whereas Japan, Korea and China the situation somewhat different regarding the determination of standards of domestic environmental policy. These examples and cases provide a broader understanding about the nature of this discipline to the reader which is a highly appreciable aspect of this handbook.

Some Comments on the Features of the Book

The first part of the book deals with environmental and resource economics in general applicable not only in Asia-Pacific regions but also in other countries regardless of their development status. The book itself shows that most of environmental damages are created not by developing countries but by the industrialized countries. This includes CO₂ and SO₂ emissions, GHG, E-waste which are tremendously high in extend compare with the countries in Asian region. However, these aspects are lightly referred in this book and less attention is paid to formulate feasible solutions and to explore potentials for some compromise solution among countries such as Japan, China or any other industrialized country. However the geopolitical perspectives relating to environmental problems are not adequately focused in this book. But such moves may play a crucial role to keep up with environmental protocols among the countries in Asia and globally for negotiations.

Also some various methods used in countries to estimate carbon tax, fuel tax and so on but a little or no attention is drawn on how this tax

revenue should be spent on improving the quality of environment. Therefore, inclusion of some comments and chapters in relation to implementation of suggested policies would have contributed immensely to achieve the purpose of this handbook. In most of the cases the biggest problem for protecting and conserving the environment is relating the absence of good institutions and lack of political will. Another practical problem to look at is the economic hardships in particular resulted when addressing the environment problems in developing countries. Thus many limitations to these recommendations arise unless developing countries are adequately compensated otherwise their growth potential would be hindered and will further accentuate the growing divergence between developed and developing world. These practical aspects are lightly touched in this book and probably the reader will have to read alternative sources to understand these complicated nature of the subject. Regarding the technical aspects, the beginners of the subject may find challenging understanding the book if the reader does not equip with quantitative methods adequately. Therefore, laymen and beginners need to undergo some prerequisites to follow a course using this as a handbook.

CONCLUSION

This handbook provides a good collection of papers which provides current state of knowledge, debates and relevant literature. Also this collection will undoubtedly add and enrich the literature available

particularly regarding the environmental economics and its concerns in Asia-Pacific region and filling the gap of inadequate material for students and researchers. Most of the education institutions will find this book as a textbook for expanding the courses not only on this branch in social sciences but also agriculture, engineering and other pure sciences regarding the relationship between development and environment. The stakeholders in this field will find the usefulness of the valuation and analytical techniques to have a better understanding of the subject. The readership will mostly consist of not only graduate and postgraduate students, academics and researchers but also the practitioners in the ground will also find this to be of a valuable handbook for various purposes such as studying, conducting research and policy making.