

## BOOK REVIEWS

on fixing the original Parāśara's time as also on unearthing more indigenous astronomical wisdom.

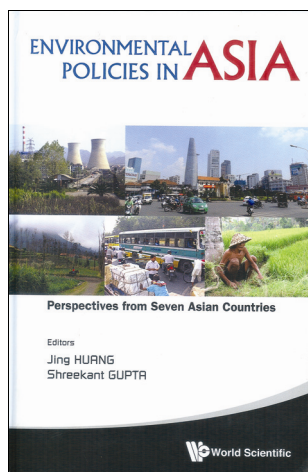
A small note on a possible typo on p. xix under 'Examples for astronomical negative years': 1499 BCE will be (−1498) and not (−1500) as cited. So also 1199 BCE, 1400 BCE and 1350 BCE become respectively (−1198), (−1399) and (−1349) since the year 1 BCE is considered as the year 0 (zero) in mathematical reckoning for astronomical computations.

Iyengar deserves congratulations for bringing out for the first time a compilation of genuine passages attributed to the original Parāśara. This work is bound to prompt scholars to rethink on their erstwhile pet theories regarding the Indian antiquity of astronomical concepts, phenomena, parameters, etc.

S. BALACHANDRA RAO

*Gandhi Centre of Science and Human Values,*

*Bharatiya Vidya Bhavan,  
#43/1, Race Course Road,  
Bengaluru 560 001, India  
e-mail: balachandra1944@gmail.com*



**Environmental Policies in Asia: Perspectives from Seven Asian Countries.** Jing Huang and Shreekant Gupta (eds). World Scientific Publishing Co. Pte. Ltd, 5 Toh Tuck Link, Singapore 596224. 2014. xii + 243 pages. Price: US\$ 95.

The extensive damage to natural ecosystems at large due to climate-led variability and vulnerability poses a serious threat to human life. Environmental sustainability is a criterion for economic

progress and poverty bargain in Asia. Climate change accelerated by human-induced pressures is threatening the development and security of Asia. The poor are particularly vulnerable to these changes and are already suffering from rising sea levels and increasingly devastating storms, droughts and floods. Urgent action is needed to integrate both extenuation of greenhouse gas emissions and climate change adaptation measures into the development strategy of the region.

There are two types of environmental challenges faced by countries of the region, those associated with urban and industrial development, and with natural resource exploitation. The first type is considered as pollution and the second as degradation, and severity of both can differ markedly, as can their interaction with economic processes<sup>1</sup>. Speedy industrialization might reduce burden on the land, as the population moves to cities in search of higher-paying jobs. Soil degradation and deforestation would tend to slow down, while industrial pollution and urban overcrowding would accelerate at first. However, degradation and pollution may rise simultaneously, where government policy promotes resource-based industrialization.

This book focuses on the environmental challenges Asian managers and policymakers face as the continent experiences rapid commercial growth in the 21st century. Viewpoints from seven different Asian countries (Japan, China, India, Vietnam, Malaysia, Indonesia and Singapore) are addressed in this book, with contributions from prominent Asian scholars and practitioners. This is a timely and unique volume on environmental policies and governance from the perspective of seven dynamic Asian countries. The articles in the book include developed economies of Japan and Singapore, emerging giants such as China and India, and rapidly developing nations such as Vietnam, Indonesia and Malaysia. The volume deliberates upon the environmental challenges that have emerged from issues as local as poor recycling practices, to ones that are as vast and complex as global climate change. Appealing, manageable and pan-Asian in scope, the articles also present resourceful ways in which these challenges are being addressed.

The book elucidates the complication of environmental policies in Asia. Poli-

cies discussed in the book are outcome of socio-economic and political developments in Asian countries. Discussed environmental policies in Asia are framed to conserve various aspects of environment. Furthermore, it gives an outlook on future challenges associated with the ongoing economic rumble of developing countries, which has contributed to the serious environmental and natural resource degradation. Therefore, the book is targeted to a wider readership ranging from 'scientists, policy makers, Govt organizations and NGOs in the fields of climate change, energy, forestry, natural resource management and pollution'. It is valuable to anyone who is keen on understanding Asia, its growth, and whether its rise is environmentally sustainable.

Though there are a few books in the same domain addressing aspects of environmental issues and related environmental policies and their implications in Asia<sup>2-4</sup>, this book provides deliberations on the above issues along with solutions, and success stories in a doable way. Therefore, this book has its own outlook, concepts, and considerations to handle the cross-cutting edges of environmental policies in Asia.

Importantly, 'this publication builds upon the ongoing rampant economic development in Asia in the last few decades and how at large it has polluted the air, water and extensively damaged the natural resource base of Asian countries. Chapters also discuss international developments in the last few decades such as IPCC, UNFCCC, CBD, Green Energy, CDM and how Asian countries have aligned the national policies with respect to them'. Moreover, the 'contributions to this book are based on the extensive experience of authors from different countries of Asia'.

The book basically focuses on the following aspects: (i) key issues in combating environmental concerns in Asia that include environmental policy and governance in a Federal framework; (ii) role of developed countries like Japan in climate change issues and how recent nuclear disasters have increased dependency on coal-fired power plants after closing down a large number of nuclear power plants; (iii) environmental impacts of fast-growing economies in India that include perspectives from Vietnam; (iv) resource-environmental foundation for green and low-carbon development with

a case study from China; (v) evolution and limitation of environmental governance; (vi) effects of natural resource degradation; (vii) environmental policy implementation and challenges; (viii) governing the common firm by evolution of environmental policy for small businesses in India; (ix) pollution, sustainability and transparency and governance in Indonesia; (x) environmental law, policy, governance and management for future sustainable cities, and (xi) trade-offs and synergies for climate stabilization in the Asian region.

The editors have presented the envisioned themes in a systematic and liberal manner through the well-organized, interconnected and well-structured chapters. Furthermore, chapters of the book reveal that in Asia, there is a mix of developed and developing countries with different levels of socio-economic and political developments. There is a close examination of how the environmental policy is framed in various Asian countries, given their varied priorities in dealing with ecological stakes shared by the developed and developing countries in Asia and how most importantly, North and South can work together to preserve the ecosystem in economic development. Moreover, it also describes that these environmental policies can be 'used as an add-on to environmental impact assessment'.

The introductory chapter delivers a theoretical framework regarding the current scenario where Asia is at the crossroads in environmentally sustainable development. The book through case studies from different countries of Asia projects the gigantic economic development that has happened in almost all Asian countries in the last few decades. The economic development at large scale has helped in alleviating poverty but unfortunately at a cost of natural resource depletion and deterioration of environmental quality. Deforestation, contaminated air and filthy water are few of the abuses of nature resulting from non-sustainable economic development. Severe air and water pollution in China has been discussed by one of the authors and how weak environmental governance due to lack of funds has immensely contributed to worsening of the scenario in last few years, considering the fact that Asia

as a whole and China are among the biggest contributors to global warming.

Discussions regarding environmental challenges reveal concerns about the conceptual limitations, institutional limitations, legislative weakness for implementation and lack of public understanding surrounding the environment. It has been argued by almost all authors that the evolving environmental conditions will affect natural resources, air, water and energy constraints. Largely, the concerns raised are that Asia as one of the important biodiversity hot spots and natural resources hub, is 'eating up' its natural capital (forests, mineral wealth, water resources, etc.) and converting it into GDP growth that is not going to sustain into the future and ensure human security.

Two of the chapters highlight success stories as important examples where ensuring environmental conservation parallel to ongoing economic development has helped improving environmental conditions. One of this success stories is from India where effective environmental governance has ensured pollution reduction due to large number of small scale industries in South India. Another success story is from Singapore where effective environmental management system (EMS) has helped regulating urban activities that has contributed at large towards enhanced quality of life (QoL) of its citizens. For the developed countries, the authors have given priority to preservation, efficiency and effectiveness, whereas for the developing countries, the main issues pivot around fairness, poverty and development. And reconciling these two outlooks will be a major task.

Crucial questions raised in the book are whether the renaissance of Asia and Asian countries is environmentally sustainable? While in the Asian economies, especially the larger ones like China and India, there is rampant loss of resources for their progressive economic growth, there are also large-scale environmental impacts in all energy-intensive areas. Given Asia's rise and dynamism, it is important to take into account environmental consequences of growth, since on-going and future degradation may prove costly to Asia's GDP, such as slowing down the future growth trajectories.

In the concluding multi-authored chapter, the authors state that, 'while economic growth can advance many of the indicators for sustainable development, it can also lead to environmental degradation such as ocean acidification and a non-intervention or baseline scenario. On the other hand an excessive emission cuts may derail sustainable development particularly in some Asian regions'. They argue that balanced measures are required for sustainable development. Hence they call for more balanced measures that differ from country to country.

Although the current climate change scenario is central to most of the case studies (except for a case study from Malaysia), it would be better if separate sections or chapters with specific case studies on mining, forest degradation had also found some space in the book. However, our overall impression is that the book is a well written 'guideline to assess the implications of environmental policies in Asia for scientists, practitioners, and decision makers who are interested in understanding different perspectives of success, failure and implementation of environmental policies in different Asian countries'.

1. Jha, R. and Whalley, J., *The Environmental Regime in Developing Countries*, NBER Working Paper No. 7305, Cambridge, MA, USA, 1999.
2. Inoue, M., *Multi-level Forest Governance in Asia: Concepts, Challenges and the Way Forward*, Sage India Publications, 2015, p. 508; ISBN: 978-9351502593.
3. Brassard, C. and Giles, D. W., *Natural Disaster Management in the Asia Pacific: Policy and Governance (Disaster Risk Reduction)*, Springer, 2014, p. 203; ISBN-13: 978-4431551560.
4. Sridhar, K. S. and Wan, G., *Urbanisation in Asia: Governance, Infrastructure and the Environment*, Springer, 2013, p. 287; ISBN-13: 978-8132216377.

SHALINI DHYANI  
S. K. GOYAL\*

*EIRA Division,  
CSIR-National Environmental  
Engineering Research Institute,  
Nehru Marg,  
Nagpur 440 020, India  
\*e-mail: sk\_goyal@neeri.res.in*