

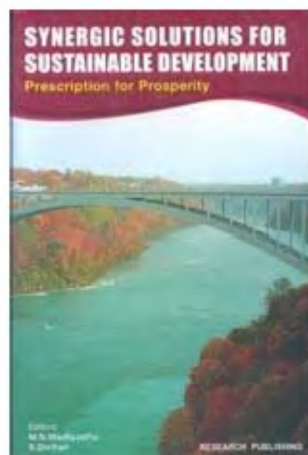
The role of the private sector has been limited, but NGOs have played a significant role in both VCT and ART; in case of hepatitis B and NSV, NGOs have not played much role. However, supply infrastructure and availability, information and knowledge dissemination have been found wanting. The experience of UIP (including hepatitis B, though limited) indicates that coverage has remained low in backward areas and small and inaccessible villages. Poor accessibility (UIP), uneven quality of services (VCT) and drug supply (ART) have been major constraints. The shortcomings in the implementation of each of the technologies have been clearly highlighted. The book brings to attention that effective programme management and adoption of technology critically depend on data management. However, corrective strategies and intervention points for the success of the analysed health technologies have not been delineated.

The authors have emphasized that it is critical to develop a strategic plan for the AIDS vaccine well ahead of time by introspection of experiences of introduction of varied health technologies, including UIP and hepatitis B. They suggest that special attention needs to be given to the target group, point of service delivery, schedule of phased roll-out, approval/regulation and dissemination of information, education and communication. However, the book has failed to recognize that with the current efforts for HIV/AIDS management and control, India has contained this disease and there are now about 2.5 million people living with HIV as against 5.1 million in 2006. There is 16% fall in estimated number of people infected with HIV worldwide, from 39.5 to 33.2 million in 2006. The annual number of new infections has dropped since 2006, from 4.3 to 2.5 million (*Science*, 30 November 2007).

The book provides insight into four health technologies and one major health programme adopted in India. It is educative for planners and all players in the health sector. It is an effort to look back to plan ahead for the adoption/introduction of new health technologies, particularly in the case of AIDS.

V. P. KAMBOJ

C-1111, Opposite St. Dominic Church,
Indira Nagar,
Lucknow 226 016, India
e-mail: kambojvp@yahoo.com



Synergic Solutions for Sustainable Development: Prescription for Prosperity.

M. N. Madhyastha and S. Shrihari (eds). Research Publishing Services, H, 12F, Double Tank Colony, K. K. Nagar, Chennai 600 078. 2007. 300 pp. Price: Rs 550/US \$30.

For a long time sustainable development was 'relegated' as the domain of social scientists bemoaning or literally lamenting about 'leaving unto our children a planet not worth living in...'. Over a period of time the architects and practitioners of this great modern world, of the giant urban structures of steel, concrete, aluminium, plastics, glass and ceramics – who till today have been admired for the modernity they created – are now asked to turn back and introspect. Such a turn around is and has been difficult. Then if it ever happened, such introspections were always at international conferences held at star hotels and far removed from realities. Opposed to this common criticism the SSSD2005 Conference Proceedings, which the book contains is refreshingly different. Scientists, engineers and technologists have addressed real, neighbourhood-based problems that we all encounter on a daily basis. The proceedings of the national conference titled 'Synergic Solutions for Sustainable Development' is thus a collection of papers presented at this conference held at NITK Suratkal. The volume is divided into eight sections loosely described as Energy, Environment, Urbanization, Water and wastewater, Ecology and natural resources, Pollution, etc., Environmental ethics and education and Biotechnology.

Water quality and resources in the west coast area of Karnataka had been of legendary purity, but are now been chal-

lenged. Thus issues of water quality, water resources and its management, wastewater treatment, etc. dominate the topics addressed in the papers and perhaps reflect the concerns on the ground as well. About a third of this volume is devoted to this burning subject of eroding water resources, its diminishing quality, means of purification and issues underlying them. Papers in this section bring to the forefront a variety of issues ranging from marine sources, water re-use and recycling of industrial wastewater, technical issues of specific component removal in various types of reactor systems, addressing new and emerging technical issues, resource recovery from treatment of wastewater, irrigation and water resource management, etc. The locations of the problems posed and addressed are also varied, ranging from the coastal belt to peninsular India. All these papers reveal the severity and nature of the problems being faced in this area and difficulties to be surmounted in the greater challenge of sustainable technology led-development. This helps a reader formulate the problem in a more technical way that lends itself to future problem-solving exercises that address issues of sustainability. Urbanization that we are faced with now brings in its wake wastes, both solids and liquids, and among liquids, wastes of domestic and industrial origin. Sustainability concepts dictate that wastes are something that society needs to put back into another use – resource recovery. Many articles refer to the nature of the problem in this approach and how toxic materials could be detoxified so that wastes containing these harmful substances could be reused.

This field being highly inter-disciplinary, all books on sustainable development have their share of omissions and over-emphasis on a specific area depending upon the dominant discipline of specialization of the authors. Thus this book is not an exception to this prevalent custom. The civil engineering perspective predominates and is not necessarily a fault. An attempt is made to bring in other fields; however, perhaps due to the absence of adequate number of papers in this field, weaving the cross-disciplinary fabric of sustainable development in this book has left many gaps leaving the broader picture to the imagination of the reader. A large fraction of our unsustainability woes arise from our technologies, choices in technologies and so-

ciety's inability to address the energy issues and find suitable technology solutions that embed into society – this segment has been insufficiently addressed in the book. Pursuing the thought on the continuum within the sustainable development process, starting from problem identification, scientific investigations, evolving technologies, creating a basket of solutions, evolving a basis for rational choice, facilitating implementation and solving teething problems, technology improvement (with people's participation at all stages), this book addresses the first two stages and provides insights into the first and half of the second. Stopping at the stage, as the book has done, potentially leaves a basket of solutions for the 'market' to choose. This has its own potential problems because markets choose solutions that bring most profits, leaving behind the less profitable ones that may be far more sustainable. In this oversight the book inadequately justifies the title – it addresses synergy only partially. Secondly, defining and contextualizing 'sustainable development' are also not visible and consequently some focus is lost. These are greatly desirable inputs for the first chapter that has been brought out as single-line statements quoting Padmanabhan and Mugeraya, or may perhaps have been lost in the reporting process. In spite of these, the book provides a good initiation to the student into the S&T in sustainable development.

By bringing together such a large number of problems within a single area, e.g. that of water, it seems clear that synergy is possible. Addressing these various problems for a specific location can bring in a basket of potential solutions, which many papers have individually reported and that seems to be the objective of the overall exercise. This synthesis and identifying synergy is, however, left to the reader. The nature of the problems tackled and content in the papers are also varied, ranging from providing a canvas of kaleidoscopic solutions (as in the case of energy), to problem description (as in papers on pollution), multiple approaches to resource management (irrigation or GIS), etc. Postgraduate students in technical varisities attempting to carry out research projects in sustainable technologies or sustainable development will greatly benefit from reading this book as it provides a wide repertoire from where they can seek stimulation. A good thing is that the internal debate has shifted to

location-specific problems and potential solutions. This book then has the potential to spark greater local debates and the quest for local and sustainable solutions.

H. N. CHANAKYA

*Centre for Sustainable Technologies,
Indian Institute of Science,
Bangalore 560 012, India
e-mail: chanakya@astra.iisc.ernet.in*

Geology of NW Bengal Basin. A. B. Das Gupta and Basudev Mukherjee. Geological Society of India, P. B. No. 1922, Gavipuram, Bangalore 560 019. 2006. 154 pp. Price: Rs 250/US \$25.

The book under review is part of a textbook series on the geology of various states in India, being published by the Geological Society of India. The book is authored by two experienced geologists of the ONGC. It deals with the north-western part of the huge Bengal basin. Most of the critical data generated on the area is the result of extensive exploratory activities carried out by oil sector companies, mainly the ONGC. The book presents a synthesis of information which would have otherwise remained in company archives. It is full of geophysical data, well data and numerous cross-sections. The voluminous data are organized in just four chapters – Introduction, Geology, Geological history and Mineral resources. The first chapter provides information of basic and regional nature. The second chapter elaborately describes the evolution of the Bengal basin in the context of plate tectonics theory and the northward drift history of the Indian plate. The chapter begins with a brief introduction about the plate tectonics concept and highlights the evolution of the Bay of Bengal. It also dwells upon the torching of the Bay floor and shape of the Bay. The geotectonic limits of the Bengal basin, its main depositional centre and sources of sediments are described in a succinct manner. The chapter has good illustrations and summarizes the important findings pertaining to the geological evolution of the Bengal basin.

The third chapter begins with the geology of the adjoining peninsular land mass and describes the important mobile

belts that transect the Peninsula. Description about the Delhi–Aravalli mobile belt, the Eastern Ghats mobile belt and the variously termed Narmada–Son–Tapi zone is brief, but well-structured. The Vindhyan basin of the Bundelkhand block, the Cuddapah, the Chhattisgarh and basins of the Dharwar–Bastar–Singhbhum block and the Shillong Mikir plateau are considered to have been formed during Late Proterozoic, whereas the Gondwana basin formation took place during end Carboniferous to early Cretaceous. Also summarized are the important geological features of these basins, including a brief account on Gondwana succession. The geology of the Bengal basin is the distinctive feature of this chapter. It starts with its early history, and highlights the views of the various workers. Discerning the influence of the structural/tectonic setting of the basement in the evolution of a sedimentary basin is not an easy task. The authors have been successful in doing so as they had the access to the kind of geophysical data needed to address the basin configuration. The magnetic data have been used to comprehend the Mesozoic anomaly isochrones. The E–W and N–S cross-sections through the Bay of Bengal evidently portray the overall pattern of the basin fill. The structural and Bouger anomaly maps of the West Bengal shelf visibly show the major faults and areas of gravity anomalies and active riverine alignments. The NNE–SSW section given as figure 24 through the Baidyapur depression, is a good example of sinking of the basin floor through geological time. The geological setting of the basin is described in various sectors; the West Bengal shelf, Dinajpur–Rangpur saddle, the Orissa coast, the Open Bay, etc. Each of these sections is well illustrated by seismic lithostratigraphic logs, stratigraphic successions and well sections. The unconformities discerned in the Mahanadi offshore provide a clue to the stratigraphic events. Towards the later part of the chapter, a complete picture of the evolution of the Bengal basin right from its formative phase sometime in the Upper Jurassic to Pleistocene is provided. Discussion on link-up with deep sea sediments of the Bay is a source of information in this book. While the authors have to be complimented for writing this exhaustive chapter on geological history of the Bengal basin, which is otherwise a complex one with varying lithology, thickness and tectonic setting, it would have