

BOOK REVIEWS

The New Energy Economy. G. M. Pillai (ed.). World Institute of Sustainable Energy, 'Surya Suman', 49 Hindustan Estates, Road No. 2, Kalyani Nagar, Pune 411 006. 2005. 254 pp. Price: Rs 600.

The book under review is an updated version of the proceedings of a seminar titled 'Future energy' organized by Maharashtra Energy Development Agency in 2002, when G. M. Pillai, the editor of the book was at its helm. All the speakers were invited according to a plan, so that their inputs could weave into a state-of-the-art report on 'green electricity' in the country. This publication is timed with the unbundling of generation, transmission and distribution aspects of power, as also the setting up of Regulatory Commissions and Bureau of Energy Efficiency under the auspices of the Ministry of Power. As such, it is a timely and relevant initiative.

Apart from the first three chapters dealing with energy needed in the new millennium and the role of 'renewable for electrification' – how much and why', the book covers decentralized sources such as power from wind, water at macro/mini/small scale (e.g. few kW/3 MW/25 MW), biomass and biowastes. Solar concentrating systems, hydrogen and off-grid hybrid systems, hitherto neglected and yet of considerable importance, have been considered in such a compilation for the first time. The only earlier comprehensive reviews at state-of-the-art level having been in 1991, published for KSCST, Bangalore with specific stress on economic aspects¹ and in 1998 by Auroville Foundation, Auroville with emphasis on technology², this update is both timely and relevant. It also has other notable and relevant features: coverage of recent steps in energy management via regulation, innovative financing, funding through CDM in terms of the Kyoto Protocol and policy initiatives, such as village electrification of non-grid villages (18000 numbers) through renewable sources. Energy conservation aspects for infrastructure in areas of buildings and transportation which consume one-third of the commercial energy, and role of energy efficiency in primary and service/industry sectors are also touched upon. Recent moves on energy labelling of consumer goods, training of energy managers, auditors and entrepreneurs are also brought out. The integration of all these initiatives into a vision and a plan for sustainable energy economy in the next 15 years, when

10% of the national supplies are targeted to come from renewables has also been highlighted. One notable omission is a chapter on monitoring for performance in terms of design and costs, the weakest link in the Indian renewable energy scene.

There are too many cross-currents in the Indian energy thinking. With the government promoting nuclear energy as the main workhorse of its capacity addition and of financial outlays and extolling of renewables at the same time albeit in a lower key need to be integrated in a national energy plan, something long overdue and urgently awaited. In view of the oil prices and import quantum touching ridiculous levels, there is no escape except to build up the renewable ladder competently and speedily. It does not interfere with any other source.

The cover is subtly suggestive. The production is well got up and quite a few articles have representative graphs, figures and reproductions for more understanding. Few pertinent policy recommendations for sustainable energy economy are given on p. 244. The book is a significant and useful compendium for all energy professionals and could be a profitable guide. The book is well printed and bound, and singularly free from misprints. Its price is high, probably because of being brought out by an NGO. It would be good to have a cheaper paperback for wider readership.

1. Pai, B. R. and Ram Prasad, M. S. (eds), In *Power Generation through Renewable Sources of Energy*, Tata McGraw Hill, New Delhi, 1991.
2. Gupta, C. L. (Compiler), In *Renewable Energy: Basics and Technology*, RETWS lectures, Auroville Foundation, Auroville, 1998.

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Agricultural Sustainability: Strategies for Assessment. Gary W. van Loon, S. G. Patil and L. B. Hugar, SAGE Publications India Pvt Ltd, B-42 Panchsheel Enclave, New Delhi 110 017. 2005. 281 pp. Price: Rs 650.

Ever since the World Commission on Environment and Development produced the now famous, document 'Our Common Future' (1987) there has been increasing recognition that goals of poverty alleviation and enhancing livelihoods must be achieved in ways which do not adversely impact our ability to meet the future needs. The follow-up 'UN Conference on Environment and Development' (1992) held in Rio de Janeiro was considered a launching pad for establishing policies and actions directed towards sustainable development (Agenda 21) and in which the nations around the world would participate. The action plan was supposed to be a major step in initiating a process which would contribute to achieving goals of sustainability. Yet little progress was made over the next decade by way of doing things differently and which will contribute to sustainable development. There appears a major hurdle in translating universally sound concepts into actions and activities, which take place locally. Ten years after the Rio Conference 'World Summit on Sustainable Development' (2002) was held in Johannesburg to take an assessment of the progress. The conference emphasized a clear and vital role for science to be more policy-relevant to address issues of sustainable development. Some of the new-generation tools which will address the policy relevance of science for sustainable development include (ICSU):

Conceptual frameworks which provide powerful insight and organizing qualities for sustainability analysis.
Indicators and indices of development status and environmental change.
Specific forms of analysis relying on indicators that are best selected through the use of sound conceptual frameworks.
Assessments that are carefully constructed and produced to provide policy inputs.

The present volume is a significant contribution to our understanding of what constitutes agricultural sustainability (i.e. a conceptual framework), how to go about assessing agricultural sustainability within