

Knowledge Economy: The Indian Challenge. Ashoka Chandra and M. K. Khanijo (eds). Sage Publications India Pvt. Ltd. 2009. 324 pp. Price: Rs 850.

The book under review consists of six parts and 27 articles written in the context of India's transition into the knowledge economy. The Ministry of Communications and Information Technology, Government of India, initiated a project on the development of national competitiveness in a knowledge economy. As a part of this initiative, a national symposium was conducted in 2006 to understand the macro level changes needed as India moves into a knowledge economy. This book consists of some of the articles presented at the symposium. This edited book is segmented similar to the way the technical sessions of that symposium were segmented. The book starts with a rather lengthy overview by the editors, describing the articles. The overview begins with insights on the concept of Knowledge Management (KM). The six parts consist of interesting headings worthy of mention. They are directions of change when moving towards a knowledge economy, formulation of policy and change management, Human Resource Development (HRD), technology, Research and Development (R&D) and innovation, creation of a network of knowledge institutions and application of KM in the context of social objectives.

Part 1 of the book, attempts to understand the directions of change to be initiated to enable India to move from an industrial economy to that of a knowledge economy. In the first article, 13 areas of importance are identified. Some of the areas mentioned here such as environment, natural resources, energy, water, health, agriculture and inequalities, are

valid whether the economy is agrarian, industrial or knowledge based. It is true that if a knowledge economy is to gain ground, then the Information Systems solutions will help experts of the country speed up their decision making and their implementations, giving them more time on their hands to address traditional directions. Swinging away from the national level perspective is the next article that deals with the implementation of KM practices in corporate companies like Tata Steel and Wipro. The use of Knowledge Management Assessment Tools developed by American Productivity and Quality Centre and Arthur Anderson are described. The article implies that such assessments will become imperative as the country moves into a knowledge economy. The following articles, worthy of mention in this section, deal with directions for KM practice in manufacturing organizations and also the status of the IT industry in India. Narayanan and Bhat in their article on the Indian IT industry, describe a sample (taken from the Centre for Monitoring Indian Economy (CMIE), database, Prowess, $n = 155$) on the age of the company, growth rate of fixed assets, sales, profits, presence of R&D and foreign equity participation. They classified their sample into software, hardware and services companies and found software and services companies to be older and having more profits.

Part 2 has two articles worthy of special mention especially from the perspective of the importance of monitoring economic data in a knowledge economy. The authors Banik and Bhaumik describe data published by CMIE on various aspects of the Indian economy shown for different Indian states. This article raises an interesting view worthy of future research, stating that, economic factors alone may not be suitable for human capital development. They add that culture will also dominate and influence economic outcomes. Culture is indeed a difficult term to measure and it is assumed that the authors mean culture as understood by sociologists. The data is from around 2003–2004 and does not reflect anything exciting about the IT based states such as Karnataka, Andhra Pradesh and Tamil Nadu. Can this imply that these knowledge capital states are far from their 'leapfrog' into progressive knowledge economies? The second article by Mahajan, Chandra and Sarkar, describes the Knowledge Economy Index

(KEI). The KEI is based on World Bank's description of the four pillars in the knowledge economy forum series and the work of prolific writers Chen and Dahlman (2004, 2005), and Dahlman and Utz (2005). They describe the Knowledge Assessment Methodology framework provided by World Bank for country analysis and suggest a model for calculation of a state-wise KEI. The brief paper in Part 3, on HRD, only suggests new areas of knowledge streams (educational programs and R&D areas?) based on a workshop at IIT-M. Some areas to note are biotechnology, power and communications, nanotechnology and mechatronics.

Part 4, a lengthy part in this book, is focused on the area which needs critical emphasis if India must transit into a knowledge economy. This part looks at technology, R&D and innovation. It has a series of brief papers highlighting the importance of R&D, linkages with academia, potential of Indian scientists and importance of science and technology. Key drivers of innovation and public-private partnership are stressed in these articles. One article is dedicated to the role of intellectual property rights in the contexts of individual and organizational research, and collaborative R&D. The role of KM practices in the context of intellectual property is stressed. A case study on CSIR is described in the article by Naresh Kumar. The case describes the R&D management practices at CSIR, and the process adopted for R&D objectives identification during the tenth five-year plan grants. A case within a case on IMTECH, a laboratory of CSIR, is described. The technology transfer success at IMTECH in the areas of production of urokinase, a thrombolytic enzyme and in genetic improvements of strains of yeast for conversion of molasses to ethanol is highlighted. The article on Knowledge Process Organizations (KPO) is extremely important, but brief and low on content about what a KPO is. An important area that is underplayed in this book is that of the role of Small and Medium Enterprises (SME). Challenges to Indian SMEs such as lack of capital, information system costs (including KM systems), R&D costs and intellectual property challenges in the big markets, especially in a knowledge economy, needs erudite writing. The philosophical conclusion of the article on SMEs can leave an SME frustrated, and it brings no

new insights. The author Krishna Murthy must be commended for his article on new public management practice. He stresses upon an important agenda that is complicated to solve and yet absolutely essential to address if India must move into a robust knowledge economy. It is clear that transitions into the knowledge economy will bring new information systems, better processes and structure; however all these will fail if good governance does not condition attitudes and values of citizens in India into transparent honesty.

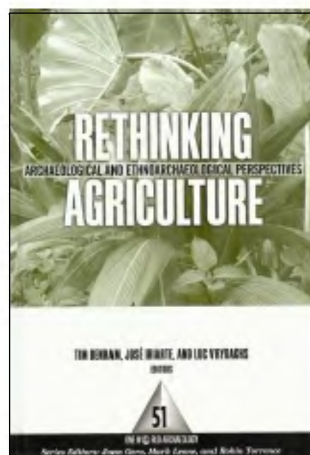
The Part 5, on networking of knowledge institutions, is proactive, interesting and pertinent in the context of the book. It addresses various aspects of international networking and the knowledge network system. An article by Mathew and Rajagopalan describes some interesting experiments on collaborations at the level of 'university to university'. This is yet another important area to address when a country transits into a knowledge economy. The authors describe the reuse culture at Honeywell as a useful role model. The Knowledge Centre at Weimer that collaborates with USA, South Africa, Switzerland and UK is described and plans for networking of knowledge institutions in India are briefly described. The areas of earthquake, disaster management and sustainable development appear to be their focus during collaborations. Another article describes the Indian Institute of Foreign Trade's initiative in bringing together international universities for the development of modules related to innovation management, which is yet another important area of education for a knowledge economy to address. The last part, Part 6, on social objectives stresses the importance of KM for the larger good of society. The article by Batra highlights the 'development' context and knowledge management initiatives at the World Bank and other developmental agencies. The case studies mentioned by Sarkar and Mahajan are worthy of re-mention; they are the KM system of World Bank, OneWorld Online, Solutions Exchange at United Nations and the Honey Bee Network of Anil Gupta. Sarkar and Chatterjee describe the role of information and communications technologies (ICT) in agriculture based knowledge communities in projects on 'digital ecosystem for agriculture and rural livelihood' (DEAL) and the Digital Mandi Project, using

insights gained from Krishi Vigyan Kendra (KVK) initiatives.

The articles in this book vary in writing style, ranging from few that are research papers, to others that are just informative, bulleted, non-academic articles, even describing project proposals and project details. The ones that can be classified as poor are the ones that are brief, vague, poorly structured and lacking insight. Overall, the entire book touches upon important areas that India must consider while transiting into a knowledge economy; it also touched upon some KM concepts.

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Rethinking Agriculture: Archaeological and Ethno-archaeological Perspectives. Tim Denham, José Iriarte and Luc Vrydaghs (eds). Left Coast Press Inc., Walnut Creek, CA, USA. 2007. 468 pp. Price: US\$ 99.00.

One World Archaeology volumes 'contain carefully edited selections of the exemplary papers presented at the World Archaeology Congress (WAC) held every four years...'. The series is published by Left Coast Press, Inc. beginning volume 48. Previous volumes in this series were published by Routledge, London.

The book under review developed from a session entitled 'Inherited models and the denial of prehistory: challenging existing concepts of agriculture' at the

Fifth World Archaeology Congress (WAC 5) held in Washington DC, in June 2003. The purpose of the session was to bring together researchers who work on agriculture, especially early agriculture, in non-Eurasian parts of the world and 'to assess the relevance of concepts and methods inherited from studies in Eurasia to their work'. The contributors have come from three broad geographical regions: Island southeast Asia and the Pacific, the Americas and Africa.

Most contributions to this volume were written in 2004. But, possibly because of the delay in publication (which was beyond the control of the editors), it appears that original contributions of 11 original participants could not be included, and instead, contributions of seven others were solicited. The present volume has 21 chapters that includes two overviews, six each dealing with Island southeast Asia and the New World, and seven with Africa. The editors of the volume, Tim Denham, José Iriarte and Luc Vrydaghs, possess field experience in one of the above three regions.

The editors had asked each contributor was asked 'to rethink agriculture in terms of the existing regional chronologies, or techniques employed, or of the concepts that frame the interpretations'; this, because of the lingering tendencies to evaluate agricultural origins all over the world using concepts and methods derived from Eurasian research.

The editors appear to have broadly succeeded in their efforts as seen from the contents of the present volume. However, certain problems continue to fester: for instance, the persistent problems with domestication-based definitions of agriculture, the diffuseness of early agricultural practice, and so on. It may be possible to resolve these problems only if more extensive and intensive archaeological excavations are carried out in the largely unexplored/under-explored regions of the tropical and subtropical central and south America, Island southeast Asia and Africa.

This volume highlights the prominent features of the Eurasian template, as propounded by the early archaeologists, Childe and Piggot: (a) clear morphological changes are brought out in plants and animals and are termed domestication; (b) large-scale environmental transformations have been brought about from forest clearance for agriculture; and (c) the above changes have resulted in trans-