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## **Book Reviews**

*Banking Reforms in India, Consolidation, Restructuring and Performance*, T.R. Bishnoi and Sofia Devi, Palgrave Macmillan, Switzerland, 2017. Pp.xxi+241. \$129.00.

Pursuant to the recommendations of the Narasimham Committee, a number of measures were initiated towards reforming banking system in the country to make it vibrant and competitive. Among others, these measures included capital adequacy and prudential norms, asset classification, clearing up balance sheet of non-performing assets, recapitalisation and allowing entry of new banks in the private sector to impart competitiveness in the financial system.

This book attempts to capture the impact of some of these measures such as mergers and acquisitions on individual banks, extent of competition and concentration, trends in profitability, economies of scale, use of information technology, productivity and growth of banking sector and incidence of non-performing assets. These issues have been delineated in detail in this book contributed by seasoned researchers working for RBI Chair on banking at a renowned university of the country, the M.S. University of Baroda. The book epitomised a sober analysis of facts and figures relating to banking reforms. There are a number of official publications particularly by Reserve Bank of India, viz., *Annual Reports(s)* and *Report of Trend and Progress of Banking in India*, etc. However, these publications relate to one year only with limited degree of freedom. Plausibly the book under review contains time series analysis with high degree of freedom of expression. The reference period of the study is more than adequate covering a quarter century of banking reforms in India.

The book contains nine chapters. The first chapter provides a brief overview of Indian banking structure covering the historical background of Indian banking regulation and operational banking structure, including post financial reforms. Issues like relative size of banking structure assessibility and outreach allocation of credit have been also discussed in this chapter. However the analysis is more academic in nature at macro level and very little on the grass root level. Basic classification of rural and urban is not examined and accepted as given by RBI. It is interesting to note that definition of rural and urban as given by the census of India and Reserve Bank of India is totally different. The data published by census commissioner and RBI are not compatible. The authors should have raised such points with focus of analysis at grass root level. Similarly it is also expected from the researchers that trends in the credit deposit ratio is analysed to throw light on regional distribution of banking resources. The second chapter deals with the banking reforms covering important

items like deregulation such as liberating entry barriers and interest rates, prudential regulations such as capital to risk-weighted asset ratio, variable reserve ratios, classification of non-performing assets, income recognition and provisioning matters relating to governance, transparency and disclosures etc. It has been pointed out that these measures have added stability and dynamism in the economy in general and banking sector in particular. Restructuring and consolidation of banks through mergers and acquisitions have been discussed in third chapter. The analysis reveals that consolidation of the banks for achieving efficiency has not given the desired results.

Evidently enough mergers and acquisitions have not improved efficiency of the banking system. It is intriguing to note that contrary to empirical evidence consolidation and meagers have been pursued in Indian banking at the cost of efficiency. The fourth chapter analyses the degree of competition and concentration of Indian banking system with particular focus on public sector banks having more than 70 per cent of total shares of deposits and advances of scheduled commercial banks in India. The study used K firm concentration ratios and Herfindahl – Hirschman Index (HHI) values. The concentration ratio indicates that an average of 45 to 47 per cent of market share is dominated by four larger firms (banks). HHI value also supports these conclusions. The study noted low competition among banks due to market concentration. The study also concluded that banking industry in India is more akin to an oligopoly type of framework, a rare feature of banking structure of developing countries and other emerging markets. Needless to mention oligopoly banking is characterised by higher interest spread and high entry barriers. The chapter fifth is devoted to cost efficiency and productivity. The study reveals that on scale of economies Indian banks are not size neutral. Manpower productivity ratios indicated positive changes during the period under review. The sixth chapter analyses profitability of public sector banks in terms of return on assets (ROA), return on equity (ROE) and profit margin (PM). The study brings to the fore that banking reforms have significant impact on the performance of banks in terms of growth of profitability.

An attempt has been made to delineate factors that impacted the non-performing assets (NPAs) of banks. Bank group-wise analysis of NPAs have been carried out. Sector-wise analysis did not support the hypothesis that there was no association between high risk NPAs of banks and slow down in the economy. However this may be on account of data constraints relating to priority and non-priority sectors. An analysis of classification of NPAs, viz., substandard assets, doubtful assets and bad debts would have further added to the usefulness of analysis on the severity of the problems as at times, sub-standard assets may be technical phenomenon. Nonetheless the mounting pressure of NPAs in Indian banking sector in recent years indicates that legal provisions and introduction of system of assets reconstruction companies have not produced desired results. There is a dire need to revisit the role of institution of asset reconstruction company on the one hand and efficacy of legal provisions to

arrest rising level of non-performing assets on the other. It is well known that pricing of NPAs is a major problem area between the banks and assets reconstruction companies. While banks prefer to price NPAs on the higher side, companies quote minimum price. As a result deals are not taking place marginalising the utility of the innovation in the dealing with the NPAs and clearing the balance sheet of the banks. An analysis of these aspects would have gone a long way in enriching the usefulness of this study. The chapter eight contains role and progress of information technology in banking system. The study has rightly pointed out that use of technology in banking has enabled banks to undertake vivid financial services in general and payment services in particular. Introduction of technology also enabled banks to promote the financial inclusion in remote villages in the country. Introduction of information technology enabled the banks to improve manpower productivity in banks. It is intriguing small to note that despite use of technology, charges for banking services remained high. The main findings of the study have been lucidly summarised in the last chapter.

In short, the study brings to the fore that due to mergers and acquisitions, concentration ratio is growing in Indian banking at the cost of efficiency and competition. Indian banking industry is enjoying oligopoly conditions. It is also enjoying the economies of scale and higher productivity and profitability. Introduction of information technology has enabled banking system to enlarge its activities and profitability. The study is strong on research findings but somewhat weak on recommendation front. This apart it is broadly silent on the flow of credit to weaker sections of the society particularly in rural areas. In a sense, banking reforms helped the banks and not the people using the banking services. Despite all these limitations, the book is a useful addition to the existing literature on the subject and worth reading for the students of banking academicians, professional bank personnel, policy makers both at mint road Mumbai and south/north block(s) in New Delhi.

*Mumbai-400 063.*

C.L. Dadhich

*Rural Livelihoods in India: Issues, Measurement and Policies*, Edited by Biswajit Chatterjee and Asim K. Karmakar, Concept Publishing Co. Pvt. Ltd., New Delhi, 2015. Pp. xviii+308. Rs. 1350.00.

The book is a collection of 19 essays on various aspects relating to rural livelihoods in India with a special reference to the state of West Bengal. The collection of essays are divided into three major categories: conceptual issues, determinants and case studies.

The concept of livelihood is multi-dimensional involving access to five forms of capital: human, natural, financial, social and physical capital, as the editors argue in this book. Of these, physical, human and financial capital are the most easily measurable forms at the household level. However, natural and social capital are

more tricky to measure, particularly in the context of rural areas, given that they deal with complex issues relating to gender, migration and common property resources, among others. The essays in the book provide mainly data-based, and in some places, theoretical insights into understanding the issue of rural livelihoods. The book also attempts to look at the issues of diversification of rural livelihoods through the growth in non-farm employment in rural areas.

As the editors admit that for a vast country like India, it may be difficult to identify determinants of rural livelihoods and their diversification. Hence, the book focuses on livelihood issues in the state of West Bengal through case studies. Thus, the book sets out to develop a primarily analytical narrative on livelihood by weaving the five types of capital discussed above to understand its determinants as also address the issues of diversification. Although set out to achieve a fairly ambitious objective, the book shows promise only in few parts while failing to provide any additional insight in most others.

First, the opening essay by the editors, using a panel data framework, attempts to establish the determinants of livelihood diversification. They observe, not surprisingly, that population pressures and unemployment are key push factors, while literacy and urbanisation act as pull factors for rural livelihood diversification across various forms of rural non-farm employment as per cent of usual principal subsidiary (ps+ss) status (UPSS) workforce. While the findings from this analysis are appealing at the aggregate level, it is unclear why the authors chose to define their dependent variable as the share of non-farm workers in rural male (female) UPSS workforce instead of share of non-farm male (female) workers in rural male (female) UPSS workforce.

The case study of SHGs in Nadia district in West Bengal by Bhajan Chandra Barman sets out to measure the impact of micro finance on livelihoods. He observes a favourable impact of micro finance on occupations, income and savings of SHG members. However, the essay does not offer any insights into (a) what was the method of data collection. If the survey is based on the recall method, it may suffer from various biases, including the recall bias, particularly with regard to income; (b) the method for controlling for various changes in the livelihood of members before and after joining SHGs. In other words, there could be other factors at play which may be responsible for the rise in income or changes in occupation of members before and after they joined an SHG; (c) details about whether these members of SHGs actually borrowed from the SHG or not, which possibly prompted this change in their incomes/occupations. Surely, just the membership cannot by itself be a factor of change in their livelihoods. Hence, this essay leaves several questions unanswered.

The essays by Suhas Roy and Swapan Kumar Roy on the livelihoods of rickshaw pullers and handloom weavers in Nadia district by Mahasweta Bhattacharya and A. K. Bhukta offer some interesting insights about the threats posed to the livelihoods of these sections. The essay on rickshaw pullers succeeds in offering us a snapshot into the current state of livelihood in this occupation. However, it does not present the

scope of diversification for these pullers by way of any enhancement in human/finance capital or introduction of any public schemes to facilitate diversification, and hence, appears incomplete in some respects.

Among the three sections in the book, there are useful takeaways from the section on case studies. However, the remaining two sections offers limited new insights into the issues of rural livelihoods. Illustratively, the essay by Pritha Ghosh appears dated and fails to bring out new developments with regard to financial challenges to livelihood diversification. The problems of Regional Rural Banks (RRBs) are discussed in the paper with reference to the period from 2006-07 to 2010-11. However, numerous new initiatives have been taken with regard to these institutions in recent years by the Reserve Bank of India, including their consolidation, strengthening capital base and priority sector guidelines. Any discussion about the operations of these institutions without referring to the recent developments may thus be incomplete. A reference is also made to the 11th Five Year Plan in the essay, when the Planning Commission itself is now replaced by Niti Ayog. Thus, while a discussion of historical issues is welcome, one would like to see more of the recent discussion given the fact that livelihood issues are evolving in nature.

Besides, a discussion on credit/non-credit cooperatives and their role in rural livelihoods is conspicuously missing in this chapter or elsewhere in the book. Caste-based discrimination continues to challenge livelihood diversification in rural areas by impending human, physical and financial capital gains. While this issue is touched upon in the book, the narrative is primarily about the discrimination per se, including crimes against Dalits. Although socially this is an important issue, one would have liked to see how this discrimination actually impedes livelihood diversification. This could have been presented by, say, comparing the opportunities to human, financial and physical capital enhancement for Dalits *vis-à-vis* other sections of the rural population.

Further, given the fact that the book is about West Bengal, one would also have liked to see some backgrounder on West Bengal by putting together some secondary database on the State. This could have provided some context for a better understanding of the various studies taking data from the State. Moreover, the issue of land reforms which distinctly separates West Bengal from other States is crucial in understanding agriculture and livelihood diversification (particularly crop diversification) in the State. However, this issue also does not find any place in the book.

On the whole, the book covers a lot of issues. However, it fails to establish credible links of these issues with the existing state of livelihoods or livelihood diversification in rural India, particularly rural West Bengal.

*Department of Economics and Policy Research  
Reserve Bank of India  
Mumbai-400 001.*

Pallavi Chavan

*Smart Farming: Problems and Prospects*, Edited by Kamal R. Gupta and V.B. Angadi, Gaurang Publishing Globalize Pvt. Ltd., Mumbai, 2017. Pp. xvi + 289.

The goal of any development planning in agriculturally dominant economies is to reduce poverty among the masses through optimal use of resources and efficient use of existing arable land without causing environmental degradation. A recent report of FAO has raised grave concern on the problem of surging demand for food in the world due to intensifying pressures on these natural resources, mounting inequality and the fall out from a changing climate. It is estimated by the FAO that the population of the world would be reaching 10 billion by 2050 which will push up the global demand for agricultural products and will further intensify the pressures on the already strained resources. To meet food demand of the growing population, the world will need to shift to more sustainable food systems which make efficient use of land, water and other inputs and sharply reduce their use of fossil fuels, leading to drastic cut of agricultural green house gas emissions, greater conservation of biodiversity and a reduction of waste. In this context, smart farming is considered the most appropriate measure to deliver a more productive and sustainable agricultural production based on a more precise and resource efficient approach. The book under review is thus of interest and is a collection of papers contributed by different authors from different perspectives. The papers included in this volume are not systematically presented and edited. Neither the book is organised in sections or parts to clear the focus or thrust of the book. These papers appear to have been organized into two groups. It contains 12 papers and keynote address as well as a background paper of which a few papers form part of a one day national Seminar on “Smart Farming and Agriculture- Problems and Prospects” which was organized by Lala Lajpatrai Institute of Management, Mumbai in January 2017. Besides there are 10 other papers which are not relevant and technical in nature, presented at various seminars conducted by the institute in the fields of operations, finance and marketing and therefore not covered in this review.

The seminar was organised with a view to gain insight on the challenges and opportunities of smart farming and agricultural finance in India in order to assess the feasibility and current initiatives taken so far by global organisations as well as by the functional and technology experts in the global context. Furthermore, the choice and sequencing of papers is rather haphazard. Therefore it is not possible to make comments on each and every chapter. As highlighted earlier these papers which are diverse in their contents address a wide range of issues related to smart farming and its prospects, potentiality of shrimp farming, processing for growth in horticultural products, drip irrigation, technology, trends in marketing strategies, agricultural finance, climate etc.

The first paper provides a critical analysis of smart farming with special reference to agriculture in state of Maharashtra and highlights on the successful efforts of and

problems encountered by an Israelian start-up company in its attempt to integrate climate friendly technologies like condensation system as well as root zone optimisation system to boost agricultural production which can be replicated in India. In fact the climate friendly technology in the form of dew deposition system has already started in India more than a decade ago and has already been covered in one of the papers published in our Journal in 2012.

In his keynote and inaugural address, C.L. Dadhich has succinctly brought out the concept of smart farming, highlights the need for smart farming in the Indian context, identifies the six pillars of smart agriculture and discusses smart farming technologies. Besides he has recapitulated the main sources of agricultural finance in India and brought to the fore their limitations and their future prospects. There are two papers on aquaculture. One paper by I. Sivaraman and M. Krishnan has analysed the growth and export potential of shrimp farming industry in India. The paper also provides extensive discussion on the Indian legal regulatory framework as well as the institutional dimensions governing the shrimp farming industry. The paper has underlined the need for strengthening our institutional infrastructure as well as modernisation of farming systems for competing at the global level. The other paper by Nilesh Pawar *et al.* which deals with technologies and requisites for smart aqua farming, provides an excellent account of various smart technologies like robotics, computer based imaging, GPS and remote sensing technology, ICT based decision making support, science based solutions, weather forecasting, environmental control etc. and how these technologies can be used to revolutionise fish production all over the world. The Himalayan region's experience in horticulture in general and apple cultivation in particular provides an excellent example of how a combination of sound economic policies and technological and institutional capabilities can dynamise this industry's growth. Farheen Naqash *et al.* have outlined the evolution of apple industry and its growth in the North West Himalayan region. The basic concept of bioeconomy have been explained clearly with examples and related policy issues for sustainable development are reviewed in a paper by K.R. Ashok.

Amit Saha provides an overview of the Indian dairy industry and suggests ideas and ways to make dairy farming a smart option in the near future. While presenting future strategies for sustainable dairy development in India, he calls for a strategy that is smart locally and competitive globally to overcome the future challenges. A few recommendations include to identify the most optimal and suitable dairy farming models that are sustainable under Indian conditions as with all stakeholders and service sectors, embark on plan with public-private partnership which would help achieve a self reliant progressive and futuristic dairy industry in India. The paper by A. Narayanamoorthy *et al.* examine evidence from farm level survey data to analyse the economics of drip method of irrigation on the productivity and profitability of short duration crop namely chilli in Sivagangai district of Tamil Nadu. While concluding that the cultivation of green chilli is economically viable to the marginal and small farmers, they have brought out the well known positive developments like



saving water and increase in productivity and emerging concerns like lack of awareness among farmers about the advantages of drip method of cultivation, shortfall in initial investing requesting for installing this method of cultivation and stress on water resources.

Other papers include a study on the economical and biological aspects of present system of farming and its linkage with smart farming by N.Rajalakshmy, smart farming technology areas and technological challenges by Manish Pawar and N. Balasubramanian and of the factors influencing in creating the effective supply chain for smart farming by G.S.Muppavaram.

The deficiencies indicated earlier do not in any way detract the utility of the study due to the limited contribution on this subject. It is very informative and lucidly written and would be of great help to the lay reader, policy maker, bankers etc. apart from students for whom it is primarily intended, in understanding the various aspects of smart farming and agricultural finance in India.

*Mumbai-400 063.*

Vijaya Venkatesh

*Achieving Food Security in China: The Challenges Ahead*, Zhang-Yue Zhou, Routledge Publication, Oxon, U.K., 2017. Pp. xii+156.

China, with a population of 1.4 billion, accounts for nearly one-fifth of the world population. Any international policy seeking to alleviate human deprivation has to recognise the facts and realities pertaining to China. In this context, food insecurity is definitely a contemporary issue which calls for serious policy attention.

Policy solution for any economic issue depends upon its conceptualisation and information base. This book is one such document which does not disappoint the reader from these two perspectives. It provides a good evidence of the author's knowledge of concept and challenges faced by China and the policy solutions pursued.

The concept of food security, its understanding, and policy emphasis has changed from time to time in response to the different phases of economic development experienced by mankind. Still the fundamental challenges of pursuing food security have remained the same, that is ensuring both economic and physical access to food for the entire population at all points of time. In this context, the saga of China's pursuit from scarcity to abundance makes for an interesting read. This book is an excellent attempt by the author to discuss China's food security practices in the past and the present and the future challenges being faced by it.

Reflecting on the time period from 1950 to date, China's story from a food scarce country (1950-1979) to a food adequate country (1980 to date) is a remarkable one. The book sheds light on the food availability in China over the past six decades with a special emphasis on the current scenario and the future challenges. Before 1980 China suffered from extreme food shortages. The food scarce period, i.e., from 1950

to 1979 is divided into sub-periods which cover the major events that affected China's food security situation, for example, the 1950-1952 land reforms, 1953-1957 agricultural co-operative movement and the rise of Deng Xiaoping. The author shares some of his own personal experiences during the two most food-scarce periods, the 1958-1962 Great Famine and the 1966-76 Cultural Revolution. There is a description of causes and impacts of Great Famine and the consequent food shortages faced by China during the Cultural Revolution. The state of food security significantly improved in China post-1980. It is illuminating to learn about the key drivers that led to the shift from scarcity to abundance. The key drivers include changes in the economic institutions, China's willingness to import from the world market, and improvement in China's foreign reserves.

The survey of the literature related to China's food security practices is quite informative. It identifies the major challenges China is facing to achieve its quest for food security and discusses the potential ways to overcome such challenges. Of course, the review of China's food security practices is comprehensive touching upon the strengths as well as the gaps. Two major shortcomings are highlighted. The first is the lack of research on forecast of China's food demand and supply situation, both globally and domestically. The second is the dearth of proper research in developing policy measures to address the gravity of a particular food crisis.

Although China has done exceptionally well in improving its food availability position, there are certain concerns that it needs to address. The existence of low quality goods, increasing income inequalities, alarming levels of environment pollution, wastage of food and degradation of natural resources are few of the challenges that China is facing at present.

The potential solutions to overcome China's current food security concerns have also been highlighted in the book. Emphasis is laid on conserving the agricultural resources, improving the food quality, narrowing income inequalities and reducing food wastage. Widespread corruption is a major concern for China. Thus, the need for necessary reforms in government, economic and educational institutions is specifically pointed out. One interesting suggestion put forward by the author is to develop "food security museums". These museums will help people in understanding the food security "battle" that China has fought in the past, the current concerns and the role that each one of us can play in ensuring food security.

The issues, concerns and solutions about China's food security are illustrated with empirical evidence based on official statistics. Data, particularly on China's food self-sufficiency ratios, per capita income, net imports of grains, per capita consumption, and environmental pollution among others facilitate a better understanding of the matter.

The book ends with a chapter on linking China's food security with that of the world. A food shortage faced by China could lead to an increase in food prices globally. It could also put a pressure on the resources of food production worldwide.

Thus, it is important to study the linkages between China's food security situation and global food market.

This book is an excellent read for people who keep an interest on China's food security issue. Finally, this book may also be helpful for students, academicians and policy makers from other food insecure countries to take home some of the experiences of China's food security journey.

*Indira Gandhi Institute of Development Research  
Mumbai-400 065.*

Heena Kapoor