



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

Book Reviews

Agricultural Research, Livelihoods, and Poverty: Studies of Economics and Social Impacts in Six Countries, Edited by Michelle Adato and Ruth Meinzen-Dick, Oxford University Press, New Delhi and International Food Policy Research Institute, Washington, D.C., U.S.A. 2008. Pp. xxiv+388. Rs. 695.00.

The theme of agricultural research impact assessment was initially pioneered by few economists working in international agricultural research centres, notably CIMMYT. This theme gradually expanded and many economists working in agricultural research systems made it as an independent research area. Initially, the objective of research impact assessment work was to develop the analytical framework and quantify the impacts, especially in terms of addressing the issues of food insecurity and poverty. Over a period of time, the importance of this kind of work was realised by research managers and it became a research management tool. The *ex ante* analysis to target research efforts for higher impact and *ex post* analysis to justify the past investment became common. Scarcity of research resources has further proved the utility of such an exercise.

The Green Revolution technologies, mainly the improved varieties, were subjected to impact assessment because these were major research products and it was rather easy to track their spread and quantify the impact. Subsequently, the impact of crop and natural resource management technologies was also assessed. The book under review covers a wide range of technologies for impact assessment. These technologies are crop varieties, resource management, agro-forestry and fisheries technologies, and the evidence are from six countries from Asia, Africa and Latin America. The book begins with a conceptual framework to study the economic and social impacts, followed by five micro-level, country studies and two macro studies on China and India. The main focus of the analysis has been how increases in agricultural productivity has been translated into reductions in poverty and addressing gender issues, and what are the impact pathways.

The studies covered in this volume were commissioned by the Standing Panel on Impact Assessment of the Consultative Group on International Agricultural Research (CGIAR) and it was coordinated by the International Food Policy Research Institute (IFPRI). The studies used both quantitative and qualitative approaches to assess the research impacts on livelihood of the poor. The scope of the investigations could broadly be divided into three parts (a) adoption pattern and its determinants with special focus on institutional issues, (b) impacts on productivity, vulnerability and poverty, and (c) implications for agricultural research, including institutional learning. The studies provide some important messages on these three issues. The evidence from low income countries, especially from Africa showed that

vulnerability of the farmers to various adversities is an important determinant of technology adoption. This also includes risks associated with adoption of new technologies. Participation in technology assessment and demonstration and degree of confidence in its delivery mechanism like seed agency can overcome farmers' hesitation to adopt new technology. Also, the technologies requiring high level of assets for their adoption are likely to exclude poor farmers. For example, rice and vegetable varieties in Bangladesh benefited the rural poor, including women who could grow vegetables on homestead land, but fisheries interventions could not benefit women as fishponds were owned by men, mostly rich. The impact pathways analysis indicates a very significant role of both informal and formal institutions in dissemination of a new technology and its adoption by the farmers. Inadequate capacity of public service delivery system and low confidence of farmers in them discourage technology adoption. On the other hand, local organisations and informal social network can help better convince farmers about the benefits of new technology and therefore contribute positively to technology adoption. This is an important conclusion in the context of low productivity agriculture where public or private delivery systems are not strong. This however may not hold true for the countries like India where technology delivery systems are quite strong and they reach to the farmers. This is shown by high adoption rate of crop varieties whose seeds are supplied by both public and private seed companies.

The evidence on direct research impacts like increase in productivity, income, sustainability of resource use and production system, equity and gender issues is quite revealing. A summary of these and other impacts like on poverty are presented in the concluding chapter. There are widespread large productivity and income increases due to technology adoption, which could result into improvement in family nutrition and welfare of women. In low yield condition, the economic gains were not adequate to escape poverty but these provided a base for diversification of income sources. The economic benefits are not presented in the usual summary measures used for impact studies, owing to data and other limitations. But a more appropriate livelihood approach is used to assess the research impacts in terms of changes in livelihood assets, strategies, activities and outcomes. This is done in the micro-level studies of Bangladesh, Kenya, Zimbabwe and Mexico using household survey data and sometimes longitudinal analysis to establish reliable counterfactuals. These studies show significant direct and indirect impacts on rural livelihoods and poverty. There is also evidence of benefiting non-farm rural poor through wage and employment effect. The impact in terms of strengthening rural social capital, especially in Africa is quite convincing.

Larger poverty impact of agricultural research is realised through wage, employment and price effects even in non-adoption areas. This is best measured in econometric analysis, which has been attempted in the two macro studies on China and India. This is in a way extension of the earlier study done by IFPRI and reestablished significant role of agricultural R&D in increasing crop productivity and

reducing poverty even in the urban areas. For example, nearly 20 per cent of the increased rice production could be attributed to rice research and about 1.5 million people escaped poverty each year in both the countries. However, there has been a significant decline in the number of poor crossing poverty line over time and this has important implications for research planning, especially for CGIAR system considering poverty reduction as an important research objective.

Besides establishing livelihood improvement and poverty reduction impacts of agricultural research, the book also provides an important message regarding utility of such studies for institutional learning and change for enhancing research impact. The micro-studies analysing the impact pathways has made it possible. But in order to make this lesson more meaningful, it is important to associate agro-biological scientists with impact assessment studies, which was not possible in the studies presented in this book. This limitation was visible in terms of comparatively less focus on measures to accelerate technology adoption, possible refinements, and better ways to organise research and foster partnership with the stakeholders. Also, a more quantitative rigour in assessment of livelihood outcomes and their up-scaling to give some idea about the aggregate benefits in micro-level studies would have improved the utility of these studies. Notwithstanding this rather insignificant gap, the book is a very good addition to the existing literature on the impact of agricultural research. This has successfully shown that agricultural research can improve livelihood of the rural poor, enabling them to escape poverty and CGIAR system has played a significant role in this direction. The book will be useful to donors, policy makers, research managers, professionals working in the area of agricultural research evaluation, and all those associated with agricultural R&D.

*National Centre for Agricultural Economics and
Policy Research,
New Delhi - 110 012.*

Suresh Pal

Poverty Mapping in Rajasthan, P.C. Bansil, Concept Publishing Company, New Delhi, 2006. Pp. xxi + 366. Rs. 750.00.

Poverty has been with us for long now and the number of poor has increased over the years though the proportions might have declined. Poverty also is largely concentrated in Asia and India's share in world's poor is high. There are inter-state variations in poverty in India. The present book under review is an attempt to map poverty in Rajasthan, a state once put in the company of BIMARU states. The book has eleven chapters. The introduction gives us an overview of poverty across states and reports that poverty in India has declined from 47.4 per cent in 1950-51 to 26 per cent in 1999-2000. It looks at land reform in connection with green revolution and rural poverty. It states that land reforms not only yielded some positive results but also removed the unproductive character of the agrarian economy. It has put in place

some growth promoting forces. However, these arguments are contrary to what studies show that land reforms failed in India except in few pockets and there too poverty did not get removed or reduced. Green Revolution too failed to contain poverty. This chapter also hints at special area and group programmes. There is also the description of various national and international programmes and actions that were directed to eradicate poverty. However, a critical review is missing. Chapter 2 deals with rural development and poverty alleviation programmes. It first looks at the concept 'rural'. A comprehensive description of all the rural development projects/programmes is attempted in this chapter minus comments. Chapter 3 deals with definition and measurement of poverty. It lists the various poverty issues and controversies attached to them especially on poverty line and poverty ratios. Here again, no significant comment is made on the terms and ratios. Chapter 4 is on the study in hand. It states the objectives of the study and provides the plan of the book which in fact should have been in the introduction chapter and not on page 123. Chapter 5 is an overview of Rajasthan, i.e., location, topography, climate, rainfall, drought, demographic profile, literacy, per capita income, agriculture and so on.

Chapter 6 deals with methodology adopted in the study wherein it describes the data sources and level of analysis and survey districts – Banswara and Chittorgarh. The next chapter deals with rural poor- who, and why at the district level. The reader comes across factors influencing rural poverty in Rajasthan in terms of level of urbanisation, agricultural labour, proportion of scheduled caste and tribes, access to pucca houses, incidence of houselessness, toilets, access to safe drinking water, literacy and access to health facilities. The study finds that there are inter-district variations in these indicators and so also incidence of rural poverty. Some of the interpretations leave much to be desired. For instance, (p.180), "one per cent rise in the proportion of severely malnourished children led to rise in poverty ratio by 0.3 per cent". Malnourished children led to rise in poverty ratio by 0.3 per cent". Malnourished children are in fact the result of poverty and not the other way round. This means model specification is not appropriate. Also when we are talking of rural poverty our denominator in Table 7.7 should have been rural population only. Poverty reduction is more linked to milch animals. They should have been deducted from total livestock population. When poverty is an aggregate figure, to what extent output of cereals, oilseeds, cash crops, average holding size, etc. would have direct impact on poverty reduction is an issue. What about landless population? Poor agriculture, if replaced by non-farm employment, would aid poverty reduction. Such angles have been excluded from the analysis.

Chapter 8 deals with rural poor at the village and household levels. Here the issues of transitory poverty and migration are ignored. Choice of variables in this chapter again is not thought out. For instance, provision of a railway station reduces rural poverty- can a railway line go through all villages. Yes, rural roads make some impact but not alone. Provisioning of rural roads increases mobility, but poverty is greatly affected if watershed, rural market etc. are also provided for. Again, the

incidence of bonded labour at the household level is important, the study finds. But poverty results in bonded labour (it is also result of social/political/economic relations) and not the other way round. The major problem with the study appears to be theoretical basis of choice of variables. One also needs to be careful that what is true at the macro level may not be true at the micro level. Chapter 9 is on poverty debate. This chapter again is misplaced. It has no link with previous field based chapters or other way round. Rather this chapter should have been the second chapter. In chapter 10, the issue of targeting poor is looked at. It describes the methods of targeting. Finally, the last chapter provides conclusions and recommendations. The study is not innovative in the sense that in the early 1980s, Mitra and others had gone beyond identifying variables like utensils, assets, etc., of the households to define poor. Yes, it is true that the local condition specific interventions are required to eradicate poverty as suggested by the study. Though the study started with social differentiation of poverty but the household survey really did not bring out these features. Thus, the study, though important, has not achieved the desired results. It could have been better planned. This is not to say that more of similar researchers are not desired on the subject.

*Institute of Development Studies
Jaipur – 302 004 (Rajasthan).*

Surjit Singh

The Growth Report: Strategies for Sustained Growth and Inclusive Development, The International Bank for Reconstruction and Development and The World Bank, Commission on Growth and Development, Pp. xiii + 103, www.worldbank.org.

“The Elusive Quest for Growth” was the title of a book written in 2002 by William Easterly, a former World Bank economist. The same title perhaps remains appropriate for “The Growth Report: Strategies for Sustained Growth and Inclusive Development”, published by the World Bank in 2008, on behalf of the Commission on Growth and Development.

The publication in 1955 of the Theory of Economic Growth by Arthur Lewis became a classic in what later emerged as the discipline of Development Economics. This pioneering work was regarded as belonging to the same genre as Adam Smith’s Wealth of Nations. Of course, growth is central to achieving a number of development objectives including poverty reduction. In the subsequent 55 years or so, we have built up a mountain of literature on growth and development contributed by academicians and official agencies like the World Bank and some U.N. agencies. One wonders whether we are any wiser today in terms of offering a workable blueprint of growth and development to a developing country, than what we were in the mid-1950s. But one thing is clear. As Peter de Haan puts it: “The study of development economics provides the student with aesthetic pleasure. For instance, the neo-classical growth model and the subsequent improvements do indeed arouse

aesthetic enthusiasm” (Development in Hindsight, Peter de Haan, KIT Publishers, Amsterdam, 2006, page 10). Haan doubts whether increasing sophistication of growth models and the emergence of a new breed of development workers linked to aid disbursement has contributed substantially “to the promotion of growth and eradication of poverty in poor countries”.

No doubt these tomes of research and Reports including the present Growth Report, have facilitated a better understanding of the process of development. But this understanding has, alas, not led us to effectively tackle the problem of poverty. Erudition is no substitute for practical policy. In the final analysis, poverty and hunger are an affront to civilised society. How does one explain then, the alarming increase in hunger world wide? FAO estimates that the number of under-nourished at 923 million in 2007 was higher by 80 million than the figure in 1990-92, the base period for the World Food Summit (WFS) hunger reduction target. “This makes the task of bringing the number of undernourished to 420 million by 2015 more difficult especially in an environment of high food prices and uncertain global economic prospects” (The State of Food Insecurity in the World, 2008, FAO).

Further-more, have the more recent events overtaken development economics? The collapse of the American capitalism in 2008 is as traumatic as the collapse of the communist Russia in 1991. It has changed dramatically the development policy making landscape. Market fundamentalism based on the notion that markets are self-correcting, allocate resources efficiently, and serve the public interest well – has collapsed. The so-called “Washington Consensus” in favour of privatisation, liberalisation, and independent Central bank focusing exclusively on a single point agenda of controlling inflation, now stands stripped of its sanctimouious robe.

The Commission on Growth and Development, sponsored by, among others, the World Bank started working on the theme in April 2006 and submitted its Report in June 2008. The Commission consisted of 19 well known leaders, mostly from developing countries, and experienced policy, government and business leaders. It included two Nobel Laureates in Economics – Robert Solow and Michael Spence and the latter chaired the Commission. From India, there is Montek Singh Ahluwalia. The Commission held 12 Workshops on a wide range of policy issues relating to growth and development. More than 300 distinguished academicians presented papers at these workshops. Of course, the Report bears the imprint of the World Bank philosophy because Danny Leipzir of the World Bank was Vice Chair of the Commission, which was serviced by the World Bank staff.

In his Preface, the Chair Michael Spence claims: “There is perhaps for the first time in history a reasonable chance of transforming the quality of life and creative opportunities for the vast majority of humanity. This report is an attempt to increase the likelihood that the hope becomes a reality” (page X). Judging by the main recommendations emerging from the Report, this appears to be a tall claim. This is not to deny that the Report provides useful insights into the development process especially to Indian contemporary policy makers.

The Commission's main recommendations stem from an investigation into the empirical experiences of 13 economies which recorded an average annual GDP growth of 7 per cent for 25 years or longer, since 1950. These countries are: Botswana, Brazil, China, Hong Kong, Indonesia, Japan, The Republic of Korea, Malaysia, Malta, Oman, Singapore, Taiwan, and Thailand.

The Commission adds that two other countries India and Vietnam are on their way to joining this group.

These success stories demonstrate that fast and sustained growth is possible. At this pace of expansion, an economy almost doubles in size every decade. The Commission rejects the view that these are "Economic miracles". When Japan grew at this pace, some critics dubbed it as a special case propelled by post-war recovery. When the four East Asian tigers – Hong Kong, Taiwan, Singapore and Korea matched it, some critics said that it was possible because they were so small. When China surpassed them critics said that it was only possible because China was so big. The Commission believes that there are perfectly rational explanations for these success stories.

Distilling the empirical experiences of these 13 countries, the Commission comes up with these five essential ingredients for fast and sustained growth: (i) These countries fully exploited the world economy; (ii) They maintained macroeconomic stability; (iii) They mustered high rates of saving and investment; (iv) They let markets allocate resources; and (v) They had committed, credible, and capable governments.

So far so good. Can these ingredients help us to draw up blue-prints for growth and development of other poor countries? "But it is hard to know how to replicate these characteristics" (page 28). That is the tragedy of development economics.

The Commission admits that there is no generic formula for growth. "Each country has specific characteristics and historical experiences that must be reflected in its growth story" (page 2). Indian policy makers in the post-1990s phase were soaked in the market theology of IMF/World Bank and tried to mimic the American capitalist model. This was reflected in some financial sector reforms and in the obsession with privatisation. The Commission itself cautions that: "Governments in the high-growth economies were not free-market purists" (Page 7: emphasis supplied). Both the high profile reformers whether it is the Narasimham Committee which submitted its Report in 1998 or the Raghuram Rajan Committee of 2008 advocate privatisation of public sector banks. In the global financial conflagration, when the major private sector icons of commercial banks, investment banks, mortgage houses and insurance giants collapsed like a pack of cards, both in American and Europe, the Indian financial system, dominated by public sector, stood rock-like, unharmed. It is to the credit of Indian public sector banks that they have been able to blend successfully the objectives of social banking with the market philosophy of optimising profitability.

Take another example of our over-zealous attempt, in the post-1990s phase, to propitiate foreign capital, both in terms of foreign direct investment (FDI) and portfolio investment. The Growth Commission is categorical on the issue. “But capital inflows over the past several decades have a mixed record. Our view is that foreign Saving is an imperfect substitute for domestic saving, including public saving, to finance the investment a booming economy requires” (page 3). If India’s growth story continues to be in tact, despite the global financial mess, it is because India has emerged as a high saving economy with gross domestic savings of 34 per cent of GDP. Investment as a percent of GDP increased from 25 per cent in 2002-03 to 38 per cent in 2007-08. Of this 13 percentage points increase as much as 10 percentage points was financed domestically through higher household, public sector and corporate savings. It is high time that contemporary policy makers begin paying greater attention to raise domestic savings.

Some market theologians, including the World Bank, have been highly critical of the employment provided under the National Rural Employment Guarantee Act. The Growth Report provides the rationale for such schemes “governments should also establish social safety nets-which provide a source of income to people between jobs - and ensure uninterrupted access to basic services. These policies are both ethical and practical. Without them popular support for a growth strategy will quickly erode” (page 6).

On the whole, the Growth Report provides useful insights into formulating appropriate development policies.

This is a defining moment in the history of world economic thought. In more recent years, the Indian policy makers were soaked in the market theology of the World Bank and IMF and there was the danger that they could become “free market purists”. This is reflected particularly in the proposals, for financial sector reforms. Now there is a need for introspection on the part of contemporary Indian policy makers. Both the lessons derived from the collapse of the American capitalist system and the useful insights into the process of growth provided by this Growth Report should assist Indian policy makers in their process of introspection.

Mumbai – 400 028.

N.A. Mujumdar

Natural Resource Management in Agriculture: Methods for Assessing Economic and Environmental Impacts, Edited by B. Shiferaw, H.A. Freeman and S.M. Swinton, CABI Publishing, Oxon, U.K. and Cambridge, U.S.A., 2005. Pp.381. £65.00.

Of late, there has been an increasing awareness about and concern over the adverse economic and environmental impacts of development projects aimed at modernisation of agriculture through its chemicalisation and mechanisation, and natural resources development. Degradation of natural resources and environment now poses a serious threat to the sustainability of agricultural production systems and thereby survival of millions of people in general and the poor in particular in most of

the developing countries of the world, who mainly depend on agriculture for their livelihood. In view of this, restoration and judicious use and management of natural resources and the environment are essential to ensure sustainable livelihoods and well being of people. Duly recognising this, several national and international development organisations and funding agencies have launched research and development projects that aim at restoration and conservation of natural resources comprising land, water, forests, and fisheries and assess their economic and environmental impacts. Among other agencies, the Consultative Group for International Agricultural Research (CGIAR) has substantially increased its investment in the area of Natural Resource Management (NRM). Although the methods of evaluating the socio-economic impacts of crop improvement projects are well developed and widely used, there is dearth of tools and techniques suitable for assessing the economic and environmental impacts of NRM projects. This is due mainly to several conceptual, methodological and empirical problems in biophysical measurement and economic valuation of impacts of NRM projects. This book represents a pioneering attempt to address some of those problems and fill in the knowledge gaps in this emerging field of interdisciplinary research and action in the field of NRM.

The book comprises 16 chapters which are organised into five parts. Part I consists of only one chapter, which identifies the key issues involved in assessing the impacts of NRM projects, and provides an overview of the underlying basic concepts, techniques and conceptual and empirical approaches to NRM impact assessment. In particular, concepts like 'impact assessment' 'ex ante assessment' and 'ex post assessment' are defined and three quantitative methods are suggested to identify an appropriate counterfactual for NRM impact assessment, namely, randomised experimental design, non-randomised quasi-experimental methods and non-experimental designs. A mix of quantitative and qualitative methods is suggested for impact assessment. The quantitative techniques include econometric methods and bioeconomic optimisation models, and qualitative techniques comprise focus group discussions, key informant surveys, and participatory appraisals.

Part II includes four chapters (Chapters 2-5) that together deal with valuation of ecosystem services and measurement of biophysical indicators of NRM impacts. Chapter 2 provides an overview of various valuation methods and discusses the major issues involved in measuring social benefits from NRM investments. Some of the valuation methods discussed include Productivity Change Approach, Defensive Expenditure, Provision Costs, Hedonic Pricing, and Contingent Valuation methods, especially the Willingness-To-Accept (WTA) method and Choice Modeling. Chapter 3 identifies and illustrates a few biophysical indicators of impact of NRM interventions on soil quality. Some of the soil quality indicators discussed include 'top soil depth', 'texture', 'bulk density', 'biochemical pH', and 'electrical conductivity'. Chapter 4 deals with various biophysical indicators of the impact of NRM practices on water quality and quantity and highlights the need for developing

and applying simulation models for monitoring the availability and quality of surface water and groundwater. Chapter 5 presents the indicators that can be used to monitor the changes in the flow of such ecosystem services as biodiversity conservation, carbon sequestration and ecosystem regulation.

There are three chapters in Part III (Chapters 6-8) which are devoted to the discussion of a few selected quantitative methods of NRM impact assessment. Chapter 6 deals with the use of econometric methods using survey data collected from sample farmers in Uganda to assess the impact of NRM and other agricultural practices on a number of dependent variables including the value of crop production, choice of crops, and participation of farmers in agricultural development programmes. In Chapter 7, its author summarises the 'economic surplus' approach to impact assessment and outlines the elements of methods for incorporating NRM indicators into that approach. He argues for integrating sustainability indicators into the 'economic surplus' framework. Chapter 8 presents a theoretical basis for formulation of applied 'bioeconomic models' for rural economies and illustrates the applications of various types of models for NRM impact assessment.

Part IV comprises five chapters (Chapters 9-13) which together deal with the practices used in NRM impact assessment as illustrated by several case studies. In Chapter 9, a brief review of economic approaches that are used to value soil nutrient change is presented and four case studies, one each from Ghana, Mexico, Sub-Saharan Africa, and India, are used to illustrate the use and limitations of two of the economic approaches, i.e., 'Replacement Cost' approach and 'Change in Productivity, approach. Chapter 10 deals with the evaluation of the impact of watershed management technologies using econometric methods and illustrates the application of a practical approach through a case study from India. Chapter 11 presents a case study from central India to illustrate the complexities involved in assessing the impact of crop and resource management technologies using the 'economic surplus' approach. Chapter 12 illustrates how a multi-period bioeconomic household level model can be used to explore the economic and environmental impacts of NRM technologies and policies in the rural economy of central highlands of Ethiopia. Chapter 13 presents a case study from Ethiopian highlands to assess the welfare and environmental impacts of NRM policy interventions using a village computable general equilibrium model.

Part V consists of three chapters (Chapter 14-16) which highlight some of the existing challenges and issues relating to NRM impact assessment, outline best practices, identify issues for future research and make recommendations for future work in the area of NRM impact assessment. More specifically, Chapter 14 deals with the concept of Integrated Natural Resource Management (INRM) and examines its implications for developing evaluation methods. INRM is defined as a conscious process of incorporating the multiple aspects of natural resource use (e.g., bio-physical, socio-political and economic) into a system of sustainable management to meet the production goals of farmers and other direct users (e.g., food security and

risk aversion) as well the goals of wider community (e.g., poverty alleviation, and welfare of future generations). The focus of the chapter is on the investigation of the types of evaluation models that are suitable for building and supporting INRM. Chapter 15 investigates the trends in the investment made by the CGIAR and shows that the NRM-related research and policy research are both a growing part of the overall research portfolio of the CGIAR. The authors explore some of the definitional issues related to NRM and identify some of the challenges facing NRM impact evaluation research. They recommend, *inter alia*, that the CGIAR should gear up rapidly to document all *ex-post* tangible and intangible impacts of their research in NRM and INRM to demonstrate its international public goods character and thereby justify the CGIAR investment in it. The concluding chapter (Chapter 16) synthesises the conceptual, methodological and empirical issues involved in evaluating the impacts of NRM technologies and policies, draws some key lessons, and policy conclusions and identifies knowledge gaps and areas for future research. The major issues identified include measurement problems, valuation problems, and attribution problems and attribution problems and the knowledge gaps include the lack of appropriate techniques for incorporating the non-productivity impacts (e.g., resource and environmental services flow) into the economic impact assessment and the lack of understanding of how NRM affects ecosystem functions and services. To overcome some of those problems, the authors highlight the need for close interdisciplinary collaboration among agricultural scientists, ecologists, economists and other social scientists in planning and conducting NRM impact evaluation.

There are many good books on Natural Resource and Environmental Economics available in market now. But most of them do not adequately deal with the methods suitable for assessing the economic and environmental impact of NRM projects. This book is intended to fill in that void. The book rightly highlights the complexities involved in biophysical measurement of impacts of NRM interventions and their economic valuation and explores some practicable approaches to get around those problems. All in all, the book presents a fairly comprehensive yet crisp treatment of both theoretical and applied aspects of assessment of economic and environmental impacts of NRM projects and is a welcome addition to the scanty literature available on the subject.

The volume can serve as a valuable reference for natural resources and environmental economists, impact assessment professionals, agronomists, soil scientists, graduate and post-graduate students, teachers, researchers, natural resources and environment managers, and agricultural development advisors, consultants, and policy makers interested in the assessment of impacts of NRM projects.

*India Natural Resource Economics and
Management (INREM) Foundation,
Anand – 388 001.*

Katar Singh

Decentralisation, Forests and Rural Communities – Policy Outcomes in South and Southeast Asia, Edited by Edward L. Webb and Ganesh P. Shivakoti, Sage Publications India Pvt. Ltd, New Delhi, 2008. Pp.321. Rs. 695.00.

There are at least thirty-five developing countries which are officially engaged in promoting some form of decentralisation in forest management. Yet, there is no single definition of decentralisation in forest management. The definition seems to depend on the state's relative willingness to move away from the command and control towards forest management. For example, in India, it implies government efforts that seek the participation of local communities with centrally set objectives under the Joint Forest Management (JFM), while in Nepal, it refers to significant devolution of forest rights to local communities under community forestry projects. The different connotations of decentralisation in forest management, as well as forestry itself, are very much rooted in the socio-economic, cultural and political situation, especially regarding the key stakeholders, legal land status, property rights regimes and institutional arrangements. These differences affect the opportunities for comparisons; the drawing of general and broader conclusions about the policy as well as the implementation and outcome of decentralisation in forest management in a systematic manner. This is so in spite of the rapid pace of change in forest policies in developing countries. Besides, it is technically difficult and costly to provide precise information about the interaction between policy, implementation, and outcome of decentralisation in forest management. Not much attention has been paid to this shortcoming in literature while policy makers demand improved mechanisms for planning, monitoring and evaluating the decentralisation programmes for effectiveness and in response to the community need. This is exactly the void that this book fills. This book containing eleven chapters and organised into three sections—an introduction, the case studies, and a synthesis investigates the outcomes of decentralised and community-based forest policy developments in the context of South and Southeast Asia.

Chapter 1 presents forest policy in the changing context in Asia by focusing on historical perspective—the change from centralisation of authority over forests towards forest decentralisation and towards community participation. It also raises the central question, the policy outcomes of the recent decentralisation solutions to forest-dependent rural communities, which forms the conceptual framework of this book. Chapter 2 provides a theoretical sense of the decentralisation and community-based forestry. The coauthors of this chapter, Arun Agrawal and Elinor Ostrom, drawing from their immense research experience on institutional change and property rights—the distinctive attributes of environmental conservation—emphasise that any analysis of decentralisation policies requires an examination of the incentives and roles of a number of actors rather than those of states or central governments alone. They raise a moot question: Are governments also decentralising forestry-related decision-making process? This question per se is the subject of recent studies in view

of government obstruction of resource management decentralisation by undermining communities to influence goal-setting and decision-making processes. Chapters 1–2 providing a deeper perspective into historical and theoretical sense are very helpful in comprehending the rest of the chapters and making this book a quick read.

Chapters 3–10 present the case studies from Bhutan, India, Indonesia, Nepal, Thailand and Vietnam. Majority of the authors use the analytical framework developed by the International Forestry Resources and Institutions (IFRI) Programme at Indiana University (now hosted in University of Michigan) (IFRI, 2009). The IFRI programme uses the Institutional Analysis and Development (IAD) Framework to devise a systematic and rigorous way to collect, store, and analyse data on forests and communities by recognising three levels of activities—operational, collective choice and constitutional level— in order to support wider analyses that compare data collected in different regions and countries (Ostrom, 1999). In fact there is no other set of studies, other than those undertaken by IFRI scholars, employing same method examining how governance arrangements affect forests and the people who depend on them.

The literature review reveals that there is a huge gap in empirically based knowledge on the conservation outcomes of the ongoing decentralised forest policy initiatives in the developing countries. Here, the IFRI approach fares well as it uses interdisciplinary methods that allow assessments of hypothesised relationships among demographic, socio-political, economic, institutional and biophysical variables to explain the impact of community-based forest management (CBFM) initiatives on forest conservation and the availability of forest products for the rural communities or the user households. This is shown by the case studies from Nepal (Chapter 6 and Chapter 8) and Thailand (Chapter 9).

Chapter 3 specially provides rich insight into the evolution of forest-related institutions under centralised administration and the people-forest relationship over time in Bhutan. The forest management and policies in Bhutan are relatively less explored than other South and Southeast Asian countries. Chapter 4 highlights the need for integrating informal with formal grassroot forest management institutions, quasi-legal arrangements under Joint Forest Management, to sustain collective action. It reiterates that without legal backing for dealing with disputes and infractions, sustainability of the informal collective efforts is questionable.

Chapter 5 analyses the need for revitalisation of local institutions including the village-level institutions for co-management of protected areas in Indonesia and also the need for recognising the local initiatives in the decentralised polices. The findings of this chapter are significant as Indonesia provides a typical case of decentralised forest policy initiatives that has failed to overcome the ecological destruction associated with the traditional operation of the state forestry regime, mainly due to involvement of government at different levels in decentralisation reforms.

Chapter 7 pays attention to the implications of decentralised forestry programmes on poverty alleviation by analysing community and leasehold forestry in Nepal.

Poverty alleviation is seen as one of the intended policy outcomes of decentralisation programmes in the developing countries. However, recent literature reveals that there has been an overall failure of the governments on this front, despite good intentions. The community and leasehold forestry in Nepal with similar objectives but with differences in structure, the latter targeting small groups of poor households who are allocated degraded forestland, are being implemented simultaneously in the same location that often creates problems. This chapter examines the rules and incentives provided under these two programmes and the reactions of the beneficiaries to the incentives. Chapter 10 evaluates the incentives of another forest land allocation programme but in a different policy context in Vietnam. Under the new forest policies, designed to give forestry a market-oriented approach, the forestland is allocated to households in Vietnam for forestry related purposes with an aim to move wood utilisation away from natural forests toward tree plantations. This chapter evaluates the incentive structure of the three main actors involved in forest allocation process.

These eight case studies, selected on the basis of the opportunities and limitations of the Editors and their collaborative network, cover the diversity of decentralisation policies and the diversity of responses by rural communities inhabiting and accessing diverse forest ecosystems in South and Southeast Asia. Drawing from this strength, Chapter 11 develops a framework for comparing experiences and then explains successful or unsuccessful policy outcomes. It also makes cross-nation recommendations for facilitating policies for sustainable governance.

On the whole, this book shows that there is at least one common method to measure the policy outcomes of decentralisation in forest management, in the developing country contexts in a unified manner, which is helpful to allow comparisons for upright policy conclusions.

*Indian Institute of Management Kozhikode,
IIMK Campus P.O.,
Kozhikode – 673 570*

Kulbhushan Balooni

REFERENCES

- International Forestry Resources and Institutions (IFRI) (2007), *Field Manual, Version 13*, Center for the Study of Institutions, Population, and Environmental Change, Indiana University, Bloomington, Indiana. Available online: <http://www.umich.edu/~ifri>
- Ostrom, E. (1999), "Institutional Rational Choice: An Assessment of the Institutional Analysis and Development Framework", in A.S. Paul (Ed.) (1999), *Theories of the Policy Process*, Westview Press, Boulder, CO, pp. 35-71.