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Book Reviews

Asian Rice Bowls: The Returning Crisis? Prabhu L. Pingali, Mahabub Hossain, and Roberta V. Gerpacio. CAB International (in association with the International Rice Research Institute), Wallingford, UK, 1997, xii + 341pp., US\$100.00 or £55. ISBN 0-85199-162-9

The most important lesson we have learned from the success of the Green Revolution in Asia is the high payoff to investments in agricultural research and irrigation infrastructure. Despite the modest increase in planted areas, rice production is more than doubled in Asia for the last three decades, which implies that yield per unit of planted area nearly doubled. Such dramatic performance can be attributed, to a large extent, to the complete adoption of fertilizer-responsive, high-yielding modern rice varieties in irrigated areas as well as favorable, shallow rainfed areas throughout tropical regions of Asia.

In recent years, however, there has been a substantial reduction in funding for both agricultural research and irrigation investments, in response to the declining trend of real rice prices. As a result, rice yields have been largely stagnant in the 1990s. The question is whether such declining support for rice productivity growth is warranted.

This book addresses precisely this question based on the evaluation of rice supply and demand in the past and future, while paying attention to the technology potential and changing external and internal environments surrounding Asian rice farming. The three coauthors are agricultural economists, formerly and currently on the staff of the International Rice Research Institute, who are highly knowledgeable about rice farming in Asia and the present state of rice research. There is no question that this book represents the most comprehensive, up-to-date assess-

ment of the opportunities for sustaining growth of rice production to meet the future rice demand in Asia. The book is easy to read and the intended readers will include not only economists but more importantly, policy makers, development planners, and agricultural scientists interested in agricultural development in general and the development of the rice sector in particular.

According to the authors, the term 'rice bowls' is used to denote the irrigated and the favorable rainfed lowland rice production environments, where the Green Revolution took place and where productivity growth of rice can possibly be sustained in future. As the present reviewer argued elsewhere, it is scientifically much more difficult to develop new varieties for unfavorable rainfed and upland production environments. Moreover, the unfavorable environments are highly heterogeneous, so that superior varieties, even if successfully developed, can be diffused only in limited areas. Thus, the potential gain in rice production will be sacrificed if rice research is targeted toward the unfavorable rice-growing environments (David and Otsuka, 1994). The basic premise of this study is that "Sustaining productivity growth of the rice bowls of Asia is the primary and all-pervasive concern of this book" (p. 4) is highly appropriate.

This book consists of twelve chapters and an overview of the conclusions is discussed in Chapter 1. While referring to chapters, where the relevant analyses are carried out in parentheses, major conclusions may be briefly summarized as follows:

Productivity gains from the exploitation of Green Revolution technologies are close to exhaustion (Chapter 2) and, hence, rice yields have been stagnant or even declining in rice bowls due to intensification-induced degradation of the resource base (Chapter 4) and to negative environmental externalities such as,

soil erosion and pesticide poisoning (Chapter 5). In the absence of future technological breakthrough, Asian farmers will face increasing costs of rice production due to increasing scarcity of labor, land, and water (Chapter 3) and consumers will face rice shortages (Chapter 6). Economic growth and the commercialization of agriculture will reduce the profitability of rice farming relative to the cultivation of crops with higher income elasticities, which may further reduce rice supply (Chapter 8). Yet, it is possible to achieve sufficient growth in rice production by developing hybrid rice in the short run and a 'super' high-yielding new plant type in the longer run (Chapter 10) and by disseminating management-intensive new techniques which enhance input use efficiencies, such as, integrated pest management (Chapter 11), if the current complacency is replaced by prudence.

The present reviewer supports most of these conclusions. Particularly noteworthy is the fact that these conclusions are drawn from the careful assessment of scientific possibilities in raising rice productivity through the application of conventional breeding methods and biotechnologies. Such assessment is combined with economic analyses of the impacts of rapid economic growth and changing production environments in rice fields in Asia. To my knowledge, no such balanced attempt has been made before in the recent decade. Given the stagnant trend of rice yields and the declining trend of investments in productivity-enhancing technologies and infrastructure at present, it is timely to identify what can be done now to avoid a tragedy in the future.

Although this book does not construct and apply a rigorous demand and supply model, the projections of rice markets, which are basically qualitative, are no less convincing than those based on formal modeling. This is because the latter often lack appropriate assessment of productivity potential, which is more difficult to predict than the growth of rice demand. In this regard, the excellent analysis of Chapter 10, entitled 'Post-Green Revolution Seed Technology for Rice Systems' is particularly worth reading.

Nonetheless, this study suffers from the lack of formal modeling and the rigorous empirical analysis. For example, while it states that "the practice of intensive rice monoculture itself contributes to the degradation of the paddy resource base and hence declining productivities" (p. 63), sufficiently convin-

cing statistical evidence on declining productivity is not provided. Given the development of communication and transportation systems in Asia, the food 'crisis' is likely to be manifested in increased grain prices rather than absolute shortages of food. Yet, the projection of rice prices under alternative scenarios regarding technology development and other factors is lacking, which blurs the potential magnitude of the food crisis and the significance of technology breakthrough in alleviating and solving the crisis. If the rice price increases, the relative profitability of rice cultivation will increase contrary to the argument of Chapter 8, which presupposes the diversification out of rice. More importantly, as long as "the declining rice price has caused a slowdown in investment in rice research and irrigation infrastructure" (p. 63), it is critically important to analyze, how future rice prices and investment in research and irrigation infrastructure interact with each other. If prices affect investment, the demonstration of substantial increases in rice prices in the absence of technological breakthrough may help reverse the declining trend of investment in research and irrigation infrastructure.

To summarize, I would argue that, while this study has made a novel and significant contribution to our understanding of post-Green Revolution Asian rice farming, further effort is needed which synthesizes the knowledge and insights developed in this study with formal modeling of future rice supply and demand in Asia.

References

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Quantitative development policy analysis

Quantitative Development Policy Analysis by Elisabeth Sadoulet and Alain de Janvry, John Hopkins University Press, Baltimore, MD, 1995, 397 pp., US\$35.00. 0-8018-4782-6.

Elisabeth Sadoulet and Alain de Janvry have provided a well-written, well-organized and concise textbook for graduate students and a reference book for policy analysts and other interested in agricultural development policy analysis. The authors' stated objective is to 'assist policy analysts and development economists in using the techniques of quantitative policy analysis' (p. xv). The book fully meets this objective, with an appropriate blend of theoretical exposition of the most useful economic concepts and models for quantitative policy analysis, as well as computer exercises that show what data are required, how models should be constructed and solved, and what types of policy questions can be used to address.

The book can be divided into two main parts. The first part deals with the micro issues of consumer demand, production and supply, response to risk, household behavior, and transactions costs and agrarian institutions. The second part examines sectoral and macro problems of trade distortions and real exchange rate, partial equilibrium analysis of policy intervetions, food security strategies, multimarket modeling, input—output tables and social accounting matrices, and computable general equilibrium models.

The book is organized into 12 chapters. The authors set the stage in Chapter 1 with an intorduction and overview of the rationale for government intervention, the role of quantitative policy analysis, and the criteria for policy evaluation. Each chapter includes a list of references, a nice alternative to simply appending a lengthy bibliography at the end, in which the focus and usefulness of each is unclear. The second chapter deals with the consumer demand analysis, its significance for policy-making, various estimation techniques, and problems encountered in estimation, particularly in the case of complete demand systems such as the Linear Expenditure System, the Almost Ideal Demand System, and the Generalized Almost Ideal Demand System. All of these systems are presented in this chapter.

The third and fourth chapters are devoted to the supply side of the economy with an emphasis on how producers repond to changes in product and factor prices, in technology and in access to constraining factors of production. In Chapter 3, the authors employ the profit function as the theoretical basis for deriving output supply and factor demand as an outcome of constrained profit maximization. Examples of profit functions and derived systems of output supply and factor demand are also presented in the chapter, in addition to exercises on the impact of price changes and public investments on Punjabi agriculture and agricultural price policy in Argentina.

Chapter 4 examines supply response with explicit specification of the formation of expectations for unknown future prices and adjustment lags in production. Two set of techniques for measuring supply responses are described in this chapter. First, the structrual-form approach is outlined, which includes: production function estimation from cross-section data, linear programming, production functions with observed price variation, and profit functions. Second, the reduced-form approach is given, including adhoc specifications, complete systems of supply derived from profit functions, and initial structural models of supply and demand equilibrium. The reader is further introduced to the Nerlovian supply functions that are characterized by general, restricted, and simplified models, with either no partial adjustment or no formation of expectations. The chapter ends with an excellent detailed example, taken from the literature, of how to analyze the supply response of groundnuts in sub-Saharan Africa. The reviewer was disappointed, however, that the authors did not include recent econometric advances in the theory of cointegration and error correction models, which have been proved to be superior to the partial adjustment model on both theoretical and empirical grounds in measuring short- and long-run supply elasticities.

The fifth chapter focuses on how risk affects optimal behavior and the welfare of rural households, as well as the food security of a nation. The authors discuss the theoretical underpinnings of the supply behavior of risk-neutral and risk-averse farmers and welfare impacts. There is also a good exposition of net-selling and net-buying households, and discussion about the instruments of price stabilization, market

integration and measures of food security at the national level.

Chapter 6, which is devoted to the household models, incorporates producer, consumer, and labor decisions into the analysis of household decision-making, leading to the specification of a household model suited to research on labor–leisure choices and the decision-making process of net buyers versus net sellers of food. A detailed examination of household models – both with and without perfect markets for imputs and outputs – is also undertaken within the section on market failure, stressing the significance of transaction costs, risk aversion and shallow markets. Intertemporal models and household risk strategies are also discussed in the chapter.

Chapters 7 and 8 deal with the international trade. These chapters are very useful for the agricultural policy analysis. Measures of price distortions are discussed in chapter seven, along with a presentation of a partial equilibrium analysis of welfare and efficiency of price distortions due of exports, tariffs, subsidies, exchange rates, and trade policy. Chapter 8, on the real exchange rate, presents the concept of the effective exchange rate, the market for foreign currency, the real exchange rate, and the equilibrium exchange rate. It analyzes forces affecting the real exchange rate and the impact of trade distortion on the real exchange rate.

Chapter 9 is devoted to efficiency and production gains as sources of growth. The chapter itself is organized in sections of increasing complexity. First, the authors presents an overview of technical, allocative and economic efficiencies. Next, a discussion of efficiency and productivity under transactions costs is undertaken. Finally, rigorous treatment is given to household behavior under transactions costs and productivity differentials, along with the theory and choice of contracts in the presence of transactions costs.

Chapters 10 through 12 examine the various ways of analyzing interactions among the sectors and institutions. Input—output tables, social accounting matrices, and multipliers are clearly explained in Chapter 11 include a discussion of multimarket models, in the context of interactions among factor and product markets, the effect of price and nonprice policy insturments, and the use of sectoral econometric models for policy analysis. Chapter 12, on

computable general equilibrium (CGE) models, is especially insightful. It provides a useful description of the structure, macroeconomics, and consturction of CGE models. Well-explanined examples of CGE analysis of policy scenarios are also provided in the chapter. The authors, however, caution readers against the temptation to consider them as *panaceae*, as models that can answer all the questions. They do show that notwithstanding the limitations of CGE models in forecasting and detailed predictions, they can serve as policy laboratories within the process of broad policy analysis.

Sadoulet and de Janvry have contributed an outstanding textbook for graduate students and a reference book for policy analysts, as well as those interested in rural development and agricultural development policy. I was particularly impressed with the rigor and consistency of the quantitative modeling across different chapters dealing with diverse topics. This book is an excellent resource for academics, students, and others who are interested in development policy analysis but are not at home with the current quantitaive methods. It is not only worth reading but worth adding to your library.

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The political geography of sustainable agriculture

Countrysides at Risk: The Political Geography of Sustainable Agriculture by Robert Paarlberg, Policy Essay No. 16, Overseas Development Council, Washington, DC, and John Hopkins University Press, Baltimore, MD, 1996, ix + 99 pp. US\$ 13.95. 1-56517-0210.

Sustainable agriculture has become the subject of a growing debate especially in the last few years. Issues related to sustainability take on particular significance in the context of developing countries where agriculture is the main source of food, income, foreign exchange, employment and, in general, of the necessary 'surplus' for overall development. And yet, following that debate one gets the eerie feeling that not a whole lot has been achieved by the way of progress towards specific policy directions.

Fundamental disagreements exist among the participants in the often ideologically-charged debate as to 'what is to be sustained', and on the nature of the trade-offs between the environmental or resource conservation and agricultural growth, to the extent that such trade-offs are admitted in the first place.

An inhibiting factor towards a more conclusive debate is the high degree of generality of the discourse. Developing regions, sub-regions, and countries are lumped together as 'the developing world', or 'developing countries' and assigned all types of environmental evils. While no one could disagree with the need for a general guiding framework for the analysis of environmental and resource issues in agriculture-based, institutionally weak economies – especially in the early stages of the debate where there is a great scarcity of data – the discussion has been too general for too long. Robert Paarlberg's book carries the debate one step forward.

The book's main objectives are (a) to show that proper analysis of environmental problems and proposals regarding how to deal with them should involve careful consideration of the socioeconomic and political factors, along with the agro-ecological factors that surround those problems, and (b) to propose some general prescriptions for national policies and international action that could contribute towards a solution to those problems.

It starts by stating the importance of promoting environmentally friendly agricultural practices in developing countries. For Paarlberg, environmentally destructive agricultural practices in developing countries compromise the ability of agriculture to feed 88 million additional people every year. He asks: 'How can this production challenge be met if environmentally destructive farming practices continue?' (p. 1).

The author paints a grim picture of how agricultural practices throughout today's developing world are harming the natural environment: 'lands not suited to sedentary farming are being cleared and plowed, habitat is being destroyed, biodiversity is being lost, soil nutrients are being exhausted, trees are being cut and burned, watersheds are being degraded, rivers and reservoirs are silting up, irrigated land is becoming waterlogged or saline, surface water and groundwater are becoming polluted with chemicals, and farmworkers are suffering from being exposed from increased exposure to toxic pesticides, even the pests are becoming resistant to them' (p. 12).

Nevertheless, Paarlberg claims, decision makers at the national level and international agencies alike are caught in a 'paralyzing policy deadlock' due, to a large extent to the lack of clear solutions proposed to deal with the problem. The latter is mainly the result of radically differing solutions proposed by the 'production-oriented agriculturists', as opposed to those of the 'environmentalists'. The former see the solution to the problem in the increasing use of modern, input-intensive farming, which will halt the extension of the traditional farming practices onto fragile lands or into the forests. The latter group, not only does not see a solution in such practices, but it considers then the very source of the problem to the extent that modern, scientific high-input farming practices, if spread in the developing countries will only lead to more chemical pollution, faster depletion of water supplies, and a dangerous loss of biodiversity.

Environmentalists instead support traditional farming systems less dependent on purchased modern inputs and with proven historical sustainability.

The problem, according to Paarlberg, lies not with the views of the opposing camps as such, but with the tendency by their respective proponents to generalize their applicability to all the developing countries ('the South', or the 'Third World'). While environmentalists may be right about the need to reduce modern inputs in some countries with 'second generation' environmental problems – those associated with the excess use of modern inputs such as salinization, poisoning from chemicals, groundwater contamination by fertilizers – they are certainly wrong in opposing increase of chemical inputs and irrigation in countries or regions where low application of modern

inputs and the attendant low land productivity promotes the expansion of farming onto fragile lands, increasing erosion and deforestation. Countries in east and southeast Asia belong to the former category, while first generation environmental problems are typical in most countries in sub-saharan Africa. In some cases, argues Paarlberg, both camps are partially wrong, and the solution to the environmental problems requires political as well as technical interventions. A case in point is Latin America, where extreme inequalities in land ownership 'frustrate the technical advice of both the agriculturists and environmentalists'.

The 'units of analysis' in the paper are the three main developing regions: Asia, Africa, and Latin America. For each region, a succinct analysis of the nature of first and second generation environmental problems is followed by a summary of remedial actions that take into consideration the socioeconomic, political and agro-ecological dimensions in each region. Each regional chapter includes examples for specific countries or region within a country to illustrate the points made in the analysis. The regional chapters are followed by a discussion of the remedial actions by the international assistance community in support of national actions.

The last section of the book outlines the roles which bilateral and multilateral donors can play in making farming environmentally sustainable. The great need to support agricultural research is emphasized in this section and the dangers associated with the decline in funding of the same are flagged. Declines in funding for agricultural modernization projects by the World Bank are associated with the criticisms by environmental groups of past bank projects for their 'unfriendly' environmental impacts. Finally, the section puts the role of nongovernmental organizations in perspective as catalytic factors for the emergence of good policies by governments.

I found the discussion on 'resource abuse as power abuse' included in the conclusions of the book extremely interesting and well worth expanding. Paarlberg outlines a framework for mapping environmental abuses and damage due to unbalanced power relations between different kinds of farmers, between farmers and non-farmers (urban dwellers) or between farmers and privileged elites that influence government power.

Although the democratization of institutions may address some of these problems, it will not do so if the democratic process is dominated by urban elites.

Despite its limited size (85 pages excluding references), the book provides a succinct and inclusive description of the nature of the environmental problems in each developing region, and some of the common historical social and political factors underpinning environmental problems that may be unique to the region in question. As such, it gives the uninitiated reader a good background and framework for further study and analysis, while it reminds the initiated one that 'examining the problem of sustainable farming in a region-specific fashion is analytically demanding but nonetheless essential.'

Analysis of the social and political determinats of environmental problems in developing countries often escape 'economistic' approaches whereby 'textbook' solutions and analysis can be as highly sophisticated as much as they can be irrelevant. The book, written in a simple non-technical manner, should be of interest to a wide audience including all those who are interested in getting a good start to understanding the environmental and natural resource constraints facing developing regions in expanding their agricultural/food production. It is also addressed to those participating actively in the debates and actions that influence environmental constraints, including international donors and agencies. The book is a 'must' for the students of environmental and development economics at all levels, in order to remind them of the complexities of analyzing real world problems where economic theory, while a 'sine qua non', cannot be the only guide to policy.

The book could be more precise in stating its objectives and limitations. While reading the first few pages, one gets the impression that more specific analysis and proposals are included than they actually are. Although it wakes us up to the multiplicity of factors behind environmentally destructive practices, the book can only be a beginning, a framework of analysis. Going from global to regional, from 'developing countries or the third world' to 'Asia' or 'Africa' is a step in the right direction, but only a step. Factors behind resource-degrading practices vary within the regions, countries, and ethnic groups. This fact does not escape the author, who does

make reference to environmental problems of 'both generations' in the countries of Asia. Differentiation should be even finer in Africa, where national boundaries may enclose a variety of land tenure relations, ranging from customary rights to fully individualistic ones. In such cases, 'wholesale' allocations of land rights may be good in some cases and disastrous in other, from the point of view of resource management. Similarly, the determinants of successful management of common are many and complicated, having to do inter alia with historical and cultural characteristics, in addition to the factors such as the size of the group.

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Rural finance for food security for the poor

Rural Finance for Food Security for the Poor: Implications for Research and Policy by Manfred Zeller, Gertrud Schrieder, Joachim von Braun and Franz Heidhues. Food Policy Review No. 4, International Food Policy Research Institute, Washington, DC, 1997, single copy free on application to IFPRI, 139 pp. ISBN 0-89629-503-6.

One of the most distinguishing features of poor, rural communities is the extraordinary cross-sectional and intertemporal variability of income found therein. Since human health depends on reasonably stable intake of nutrients and health services, smoothing consumption across individuals and over time in the face of such instability is central to the task of improving rural livelihoods. This excellent new volume by IFPRI highlights the role of rural finance in meeting the consumption smoothing needs of rural households and individuals.

There has been a conceptual revolution over the past decade or so in the literature on and practice of rural finance. What were once treated as 'agricultural credit' issues – in both graduate courses and in donor and government offices – are now widely recognized as more complex problems of assuring universal

access to a suitably broad array of financial services necessary to meet the myriad needs of heterogeneous subpopulations vulnerable to a variety of shocks. Demand for diverse financial products necessitates variety in institutional delivery mechanisms, through not only formal banks, but also informal arrangements like money lenders, reciprocity networks, savings and credit groups, etc. Where considerable cross-sectional variation in interest rates, loan maturities, collateral requirements, etc. were once seen as signs of inefficiency in agricultural credit markets, now these are increasingly understood as indicators of appropriate product variety in a complex system. The one-sizefits-all approach to financial services delivery under the state-led directed credit regimes of the 1960s and 1970s has given way to an explosion of heterogeneous commercial or non-profit microfinancial institutions in the 1990s. This shift has been heavily influenced by innovations in information and neostructural microeconomics, which pay close attention paid to transactions costs, imperfect and asymmetric information, strategic interpersonal interactions, nonseparable household modeling, and choice under uncertainty. One of this volume's most commendable features is the skillful manner in which the authors have woven these themes together in a manner accessible to nonspecialists.

In the first three chapters, the authors provide a good, albeit incomprehensive, review of the theory and empirical evidence on the saving and borrowing behavior of the rural poor and on the design and performance of rural financial institutions. They emphasize three channels through which financial services might help to reduce food insecurity. First, financial services can facilitate investment, including acquisition of durable agricultural inputs, and can obviate binding working capital constraints to the hiring of nondurable inputs. Through both channels, finance - chiefly credit - can stimulate production and income. This is largely the classic agricultural credit model of rural finance. Second, financial services can increase risk bearing capacity, by enabling households to diversify asset holdings to improve portfolio risk-return-liquidity characteristics and by providing insurance. Increased risk-bearing capacity may induce households to undertake riskier activities with higher expected returns. Third, financial services directly facilitate consumption

smoothing through short-term credit, savings with-drawal or insurance receipts. Given that human capital – good nutrition, health, and education – is the primary asset of many of the rural poor, particularly the landless, consumption smoothing is no less attractive an investment than agricultural equipment or tools for household manufacturing. The authors emphasize this point heavily, arguing persuasively for an expanded notion of savings, to include human capital as well as marketable monetary and nonmonetary assets. By emphasizing the inextricability of production, consumption and investment decisions, this volume makes a strong case for the legitimacy of consumption credit.

The factors determining the disintegration or persistence of microfinancial institutions remain a bit of a mystery. Chapter 4 offers an interesting, if sketchy, set of case studies highlighting differences in institutional structures and performance. Two clear implications of the review are the absence of a universally appropriate design, and, relatedly, that successful rural financial systems are built from the bottom up, not the top down. The most successful microfinancial institutions have adapted to local macro-, group- and individual-level attributes conditioning participation and performance incentives. Unfortunately, the review provides no framework for understanding the optimal scale of an institution's financial activity – as a function of the covariance of risks faced by the depositors, borrowers, and insured, of the scale of monitoring and enforcement requirements, etc. - nor of how to integrate microfinancial institutions, horizontally or vertically, so as to mitigate risks that are highly covariate at community-level. The design of reasonably integrated national or regional rural financial systems, through relending and reinsurance functions, is a crucial topic about which we still know relatively little.

While much of the case for financial liberalization has been on the efficiency arguments, Zeller et al. emphasize that there are equity as well as efficiency reasons to work on broadening and deepening rural financial systems. Imperfect rural financial markets tend to be highly regressive, characterized by wealth-rationed access to savings, credit, and insurance products. True liberalization is not merely a matter of getting prices right, but perhaps more of getting the institutions right. Toward this

end, the authors rightly emphasize issues of institutional sustainability. Initial, temporary subsidization of the start-up costs of rural financial institutions will generally be appropriate and necessary. But lenders and insurers must be able to mobilize the funds themselves, and not just from donors or subsidizing governments. The authors do not argue that rural financial institutions must be entirely self-sustaining financially. Indeed, Zeller et al. conclude that modest long-term fiscal support may be justified if it can be established that rural financial institutions are cost-effective providers of desired social safety nets.

This is an intriguing idea. At present, there is little theoretical or empirical evidence with which to evaluate when rural financial systems might hold a comparative advantage over alternative policy interventions – for example, food subsidies, price stabilization schemes, public employment programs – in the provision of social safety nets. Nor is there good evidence available to identify the holes in alternative safety nets: can we identify, or better yet predict, who might slip through? In principle, one would want to identify the lowest cost portfolio of policies that would provide a satisfactorily complete safety net. Zeller et al. make a good case for considering the place of (perhaps publicly subsidized) rural financial systems in that portfolio.

Although the review asserts that access to financial services enhances food security, this remains an underresearched hypothesis. The relationship between access to or use of particular types of financial services, and nutritional, health, or educational performance, or intertemporal consumption variability (at both low and high frequencies) remains largely unknown. The authors present evidence from some of their own recent, empirical research on the topic, but this falls well short of conclusively resolving the question. Moreover, it will be important to disentangle the permanent and transitory benefits and costs of improved access to rural finance. Surely this is caught up in the participants' expectations with respect to institutional sustainability. Despite considerable recent research, we still have a highly incomplete understanding of the savings, investment, and insurance behaviors of the rural poor at multiple (individual, household, community) levels of analysis.

In summary, the IFPRI team has provided an excellent, compact summary of recent innovations in thinking about rural finance. It should prove helpful to both the researchers and practitioners.

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