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REVIEW ARTICLE

Looking at Agriculture without the Grassroots*

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I

INTRODUCTION

This is a thematic review of a mega book[†] having 626 pages, 20 chapters and nearly forty contributors. It has all the ingredients to make it a nightmare for a reviewer—agricultural diversification encompasses activities from oilseeds to apples, mushrooms and tulips; South Asia is the fastest growing and still, one of the poorest region accounting for nearly a quarter of world population; the chapters are written in a variety of jargons ranging from agri sciences to information technology! We were thrilled to see in this welter of confusion a familiar face—the smallholder whose welfare, according to Gandhiji, should provide the criterion to judge development policies and programmes in India. The central concern of the book is also with the policies to help the smallholder in improving his efficiency and welfare. It, hence, seemed reasonable to focus the review on the growth and development opportunities which are likely to be available to the smallholder in India in the emerging phase of agricultural diversification. The contributors to the book include the leading researchers on the issues relating to agricultural diversification as well as those engaged in innovative programmes to help the smallholders. It should be of wide interest to scholars, researchers and policy makers to know about the prospects for the smallholder as assessed by this group. It is fair to mention that we focus on India leaving out other countries in South Asia and, also, other themes dealt with in the book.

The book is decidedly optimistic about the prospects for the smallholder. Having the advantage of abundant family labour, the book visualises that the smallholder can “leapfrog” from foodgrain-based systems to high-value agriculture. According to the projections presented in the book (Table 2.2 on p. 52), the demand for high-value agricultural products (fruits and vegetables, milk, meat, eggs and fish) would increase by 100 per cent or more by 2025 as compared to 33 per cent increase in the demand for cereals. The book identifies powerful drivers on the demand side—increasing

*This review article is based on the following book: *Agricultural Diversification and Smallholders in South Asia*, Edited by P.K. Joshi, Ashok Gulati and Ralph Cummings Jr., published by Academic Foundation, New Delhi, 2007. Pp. 626.

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incomes, urbanisation, globalisation and rapidly changing diets towards high-value products—fuelling a demand-driven revolution. If anything, these projections seem to understate the thrust and the product range of the revolution as agricultural diversification has the potentiality of covering many more products than those entering the diet with sharper responsiveness to rising incomes and changing tastes and preferences. The pastures are indeed green with a promise of sustained increase in demand over the coming decades.

II

ROAD MAP

The part of the book crucial for this thematic review is the road map which the book recommends for helping the smallholder (cultivated holding of 2 hectares or less) to participate in agricultural diversification and reap fully its benefits. The elements of road map are scattered over many chapters but they are all brought together in a coherent formulation in the short last chapter in the book—Chapter 20: “The Way Forward”. What is presented below is drawn from this chapter, some of it in the book’s own words.

* “The process of agricultural diversification is largely demand-driven in contrast to the supply-driven process of green revolution. The private sector will lead this next phase of growth and development”.

* “Smallholders will participate and benefit if risks and transaction costs could be reduced and food safety and quality standards could be met”.

* The public sector has a vital role to play...there is a need to promote the well-tested ‘three I’s – Incentives, Institutions and Investments. The composition and blending of ‘three I’s’ would be different than what was applied during the green revolution for the grain-based system.

Incentives:

* “adjusting of incentives starts with ‘what should not be done’—continuing to provide guaranteed high prices and input subsidies for staple grains.... These policies are becoming a major hurdle in promoting high-value food commodities. It is unambiguous that the public sector intervention in price-stabilisation of high-value commodities would be complex and cost-ineffective”.

* “a balanced approach of gradual withdrawal of the public sector from grain management and greater involvement of the private sector in grains as well as high-value commodities needs to be evolved”.

* “The private markets for staple foodgrains are now much stronger due to better infrastructure such as roads and information...Promote agri-business by greater involvement of the private sector in strengthening supply chain of high-value food commodities”.

*Regarding input subsidies: “a large share of subsidies has gone to rice and wheat producers in the irrigated environments, thereby encouraging them to continue producing these commodities...(they are) impeding the transition towards high-value agriculture”.

*The road map recognises that subsidies are “very difficult to eliminate or even reduce as these are falling in the political quagmire in democratically elected governments...one way is to take an indirect route of promoting input-saving technologies (such as) micro-irrigation systems” (like drip and sprinkler irrigation).

*“These efforts would have twin effects: (i) provide incentives to efficient producers to continue to grow staple food crops, and (ii) accelerate the transition to greater production of high-value commodities. These processes would not only enhance food security but also lead to higher agricultural and economic growth and higher employment”.

Institutions:

**Market Reforms:* Markets for high-value commodities which are perishable are “fragmented, thin and distant”. Smallholders with small marketable surpluses are confronted with volatile prices, high transaction costs and risks negating the “higher production efficiency of smallholders.... Different forms of vertical co-ordination—particularly co-operatives and contract arrangements—have successfully responded” to the needs of reducing transaction costs and risks. “Supermarkets are revolutionising the retail food system”... “Forward markets are a market-compatible way to protect against risk”.

**Land and Credit Reforms:* The book considers the ceiling laws and restrictions on leasing as barriers in the way of agricultural diversification and participation by the smallholder in it. Removing these barriers would allow the agribusiness units to grow to viable size and , also, enable the smallholders to increase their holding by leasing in land. Regarding credit, the book expresses hope that the Self-Help Groups and the initiatives now being taken by the banks will strengthen the credit supply chain to the smallholder.

**Agricultural Research:* To promote agricultural diversification, targeted research and development is needed at production stage (good agricultural practices), post-harvest stage (storage, grading, cleaning, packaging and transportation) and processing stage (efficient processing of alternative products and by-products).

**Food Safety and Food Quality:* Referring to non-tariff barriers related to food quality and hygiene—sanitary and phyto-sanitary (SPS) specifications-, the book stresses the importance of developing capacity to adjust to these norms and standards by “developing appropriate testing facilities at export promotion zones, providing subsidies to smaller units to acquire equipment, creating better equipped laboratories and setting-up institutions for training and capacity building”.

Investments:

“It is important that investment climate must be favourable for active participation of the private sector and multi-national companies... the government should provide for public goods such as roads, particularly rural roads, electrification, information network and rural finance”.

The book needs to be complimented for presenting its development perspective on agriculture and economy in a transparent manner without leaving any doubts about the roles it perceives for the government and the private sector. The latter is in the driver’s seat. The onus for keeping the vehicle in sound road-worthy condition is placed on the government. One may agree with this perspective or not, but the book, happily, takes a clear stand without resorting to ambiguities and doublespeak.

Though standing somewhat apart from the road map, there are two chapters which need more than cursory attention as they report on two corporate interventions to ‘empower’ the smallholder. It is only fair to caution the reader that they are written by insiders with a salesman’s pen. Chapter 18 describes Indian Tobacco Company’s (ITC) Rs. 12,000 crore e-choupal programme billed as “corporate India’s most ambitious rural initiative ever” covering 3.1 million farmers in 30,000 villages in six states. The programme “installs a computer with solar-charged batteries for power and a vast Internet connection” providing the farmers with five distinct services: “Information: daily weather forecast, prices of crops, e-mails to farmers and ITC officials—all free of cost; Knowledge: Crop and region-specific farming methods, soil testing, expert advice –mostly sourced from agriculture universities—all free of cost; Purchase: Farmers can buy seeds, fertilisers, pesticides and a whole host of other products and services from cycles to tractors to insurance policies. More than 35 companies have become partners in the e- choupal; Sales: Farmers can sell their crops to ITC centres or local markets after checking the daily prices on the net; Development Initiatives: Cattle improvement, water harvesting, formation of women self-help groups, access to land records are also being delivered through e-choupal to villagers. Coming shortly are the education and health services”. The programme is run by the farmers for the farmers. The chapter describes a few typical cases of farmers who have “transited from the world of low-knowledge, low-productivity and low-income farming to one of information-based , high-productivity, high-income agriculture”. The Editors’ footnote to Chapter 18 observes: “This chapter was written as a journal article and published in *India Today*, December 13, 2004. However, the information is so new and exciting that we have decided to include this in this publication with other research papers”.

Chapter 19 describes the End-to-End Integration model of ICICI Bank. This programme integrates the four principal players in the supply chain, viz., input companies, producers, consumers and financiers. The programme is designed to serve as “a means to deliver low cost, yet robust financing solutions to the agricultural sector”.

Some Kinks in the Road

The realisation of the road map presented in the book depends on a few critical conditions—fair markets, corporates responsive to social concerns and developed countries wedded to fair trade practices. Briefly enumerated below are the comments and observations from the book itself indicating serious weaknesses in these conditions. It is not that these problems cannot be overcome, but the success of the road map would depend on the speed and the extent to which improvement occurs. The problems are long-standing and chronic and have defied the policy assaults so far.

Markets:

Markets are characterised by “monopoly of local Mandis (wholesale markets) which are controlled by trader cartels. Price fixing, underweighing and delayed payments, farmers are cheated by these traders at each stage. In Uttar Pradesh, farmers reportedly lose between 10 and 30 per cent of their sale income to malpractices rampant in mandis” (Chapter 18). It is quite likely that all these markets are covered by laws for regulation of markets and illustrate the very limited reach and power of laws in helping the farmers.

Developed Countries’ Record on Trade Practices:

Chapter 15 contains revealing comments on Sanitary and Phyto-sanitary (SPS) requirements:

“The fears of developing countries on SPS becoming increasingly important and developing into significant barriers to trade have come true”. The difficulties identified by the developing countries are “high cost of adaptation, irrelevance of foreign standards to local conditions, perceived lack of scientific data for the specific threshold, uncertainty that arises from the rapidly changing stringent requirements in the overseas markets.... The new residue limits being introduced by the developed countries should be monitored carefully along with new issues being added every time India fulfills the old obligations (In a delightful sarcastic stroke, the chapter calls SPS the “Shifting (goal) Post Syndrome!)... HACCP creates virtually insurmountable costs for the small and medium scale sector”.

Corporate Sector:

Many would agree that the SPS barrier is a joint achievement of the governments of developed countries and multi national corporations. The book does not mention the unscrupulous practices and political pressures used by this clever duo to unload their commodity surpluses in the markets of hapless developing countries. The domestic corporates are no less unscrupulous though there are happy exceptions. These exceptions could increase in number and scale if the developed countries and

the corporates face recurring political hostility and unrest as seen in the recent instances in West Bengal. It needs to be remembered, however, that political unrest imposes heavy costs in terms of dislocation, loss of life and property and the sudden drop in business confidence. On the whole, the road designed by the book could turn out to be bumpy, in a state of serious disrepair, with misleading signposts and, most important, with considerable uncertainty about where it will ultimately land Indian agriculture and the smallholder! It is no use blaming the book as the problem lies in the terrain through which the road has to pass.

III

THE MISSING GRASSROOTS

A curious feature of the book is that while the smallholder is prominently placed in the title of the book, he puts in only a few cameo appearances in the data and analytical findings in the book (in the chapters on India to which this review is confined). Before we turn to these appearances, it is useful to give the context in which these appearances need to be placed. The book regards agricultural diversification as a revolution which will bring about sweeping changes in agriculture, economy and poverty: "In countries like India where the existing infrastructure for agro-processing is increasing, multiplier effects of institutional and infrastructure development in terms of income and employment generation in the primary, secondary and tertiary sectors are enormous" (p. 433). One would expect these sweeping changes to get reflected in the economy and lifestyle of the smallholder. All that we get in the book is a page in Chapter 18 describing five cases with about 3 to 4 lines for each case! These cannot be regarded even as an appetiser but only a prelude to that! Enumerated below are the cameo appearances of the smallholder leaving it to the reader to decide whether they bring any revolutionary tidings:

*Table 2.10 in Chapter 2 shows that in 1995-96 the smallholders (holding 2 hectares or less) were 81 per cent of total holdings and they cultivated 36 per cent of total farm area. A decade later, today, both these percentages are likely to have increased to nearly 90 per cent and 50 per cent respectively. The implication is that the revolution promised in the book is even more urgently needed now than before. As the agricultural diversification is slow in pace but is already over a decade old, it would not be unreasonable to expect the book to provide substantive findings on the coverage of the smallholders by the revolution and its impact on his earnings and economic status.

*A multiple regression exercise based on pooled cross-section and time-series data for 19 major states (Table 7.6 on page 232) indicates that the gross value of horticultural commodities at 1980-81 prices increases with the proportion of small holdings in total holdings; the regression coefficient of the latter is positive and significant at one per cent level in all the three alternative specifications of the

equation. Regression coefficients are notoriously ambiguous and when the smallholder hides behind them we cannot infer any definitive finding on the advantages derived by him from agricultural diversification. For example, the author interprets the positive coefficient of proportion of small holders thus: “This indicates that diversification in favour of horticultural commodities was more confined with the small holders” (p. 234). The author could be right but need not be. Considering the specification of the dependent variable, the positive coefficient of proportion of smallholders could equally plausibly be interpreted as reflecting increased inequality in distribution of land and more dynamism on the part of the largeholders! Unless the underlying process is known, regression coefficients are no more than opaque and dumb numbers!

*Another multiple regression exercise using district level data with the share of high-value commodities (HVC) in the total value of agricultural production as dependent variable (Tables 8.7, 8.8 and 8.9 on pp. 264 to 267) also gives a positive and significant coefficient for proportion of smallholders. Again the interpretation is “the smallholders tended to diversify their production portfolio to mitigate risk, and have additional income”. Here the handicap of ambiguity of regression coefficients is even more severe as the share of HVC in total value of agricultural production can increase both when these two variables increase or decrease provided HVC value increases more than proportionately when the value of agricultural produce increases and decreases less than proportionately when the value of agricultural produce decreases! In a word, increasing share of HVC does not necessarily mean increase in HVC value!

* In Chapter 12, which compares unorganised agro-industry units with organised units, the smallholder could fall in the category of OAME (Own Account Manufacturing Enterprises which do not employ any labourer). The finding for the unorganised enterprises as a whole is that the labour productivity is low and “the forward linkages are still very weak and most of the employment and earning benefits that could accrue to the farming community are not yet forthcoming” (p. 351).

*Chapter 13 on food retail chains emphasises the need for more research to find out their impact on marketing efficiency and the benefits obtained by the smallholder.

*Unlike the regression exercises reported above, Chapter 14 is based on household data collected in three field investigations. The focus of the chapter is on the benefits to smallholders from vertical co-ordination in HVCs. Two of the three field investigations looked at contract farming—Nestle’s links with commercial milk producers in Moga area of Punjab and contract farming system of vegetable producers around Delhi with Mother Dairy Fruits and Vegetables Limited. The third study was located in Andhra Pradesh and related to arrangements between Venkateshwara Hatcheries and Broiler Producers’ Associations. The sample sizes were small—152 households in Moga, 100 households in the vegetable study and 50 households in Broiler study. Boxes 2.1 for vegetable farmers (p. 69), 2.2 milk producers (p. 70) and 2.3 for broiler producer (p. 71) contain brief comments on the

findings. The samples included both small and large holders and, in the case of vegetable and milk producers, there is an explicit statement that the smallholders gained in percentage terms more than the large holders. In the case of broiler, the farmers gained substantially but no mention is made about the relative benefits obtained by the small as compared to the large holders. Chapter 14 is the only chapter where one can get at least some tables containing comparisons across holding size groups in net profits and transaction costs.

This may seem an exercise in nit-picking but that is not our intention. The contributors to the book are reputed academics with excellent credentials. Our attempt is to point out the cursory way in which the issues connected with the smallholders located at the grassroots in agriculture are dealt within our policy studies. This is of a piece with the pervasive indifference among academics and policy makers with grassroots in general and the rural poor and the disadvantaged in particular. Consider the following:

*Recently a minister in the central cabinet described our land records as garbage! It is common knowledge that these data miss encroachments, concealed tenancies; do not record correctly the land transactions and crops grown.

*Observers abroad seem to be much better informed and far more concerned than the insiders about degradation in land, water and forest resources!

*India have had employment programmes for over half a century. There are no records of assets created and their contribution to growth and employment. The employment programmes are treated as dole-giving instruments with no need to pay any attention to assets created.

*The mounting food subsidy is counted as a benefit going to the poor though it is common knowledge that PDS misses hardcore poor and BIMARU states. Researches on PDS have done little to reach its benefits to the neglected sections and areas.

*India has a wide range of programmes to remove deprivations suffered by the poor. They are supposed to converge on the poor households and have synergistic impact on their status and welfare. After several decades of such well-meaning schemes, we have hardly any data base or time-line studies on the convergence of the schemes at the household and village levels.

Missing the grassroots has become a deep-rooted habit among academics and policy makers. Our purpose here is to point out this mental block which leads to colossal wastages in India's investments in poverty elimination, human development and inclusive growth. The book under review provides one more instance of this block prevailing even in our institutions of excellence. As the book stands now, its road map is no more than an expression of good wishes for the smallholder. This is a pity since if the book had taken a probing look at the status and prospects of smallholders, it would have been in a position to offer a road map more tuned to the needs and potentialities of the smallholder. Its present road map is likely to give a strong thrust to agricultural diversification but not necessarily to the fortunes of the small holder. It is possible to suspect that the real intention of the book is to plead for

agricultural diversification per se with the smallholder brought in to present a human face. It is quite legitimate to make out a strong case for agricultural diversification but to expect it to solve the problems of smallholders in Indian agriculture is misleading to say the least. As we argue in the next section, there would certainly be some impact of agricultural diversification on the smallholder but it would be naïve to expect it to stem the agricultural crisis which is knocking on the door and could break in and cause havoc much sooner than we may realise.

IV

THE SMALLHOLDER-- THE HARBINGER OF THE APPROACHING CRISIS IN INDIAN AGRICULTURE

There are now clear signs of an agricultural crisis in India which is gathering momentum leaving the policy maker in a state of bewilderment with no advance planning or a well-formulated strategy. The Prime Minister sounded helpless and alarmed in the 53rd meeting of the National Development Council held on May 29, 2007. He observed: “small and marginal farming has become an unviable proposition...until farming was made viable at this scale, it would be virtually impossible to reduce rural poverty and distress...subsidies have been increasing and investments declining... (there has been) lack of any breakthrough in agricultural production in recent years. There is a technology fatigue”. The Prime Minister argued in favour of a food security mission for raising production of wheat, pulses and edible oil to contain the rising prices. He made a pointed reference to “yield increase potentials of 40 to 100 per cent in various states and regions.... Bridging these gaps requires localised and state-specific strategies based on local agro-climatic conditions and constraints”. It is instructive to compare this serious concern about food security with the easy optimism with which the book blames the Government of India for being “obsessed” with the need for self-sufficiency in cereals! (p. 40). India cannot pretend that the agricultural crisis is a sudden and unforeseen development. Through the very years which the book describes as a period of revolution in agriculture in the form of diversification, there has been persistent stagnation in agricultural production which is now being viewed with alarm by the Prime Minister. Even more regrettably, the marginalisation of farmers, growing landlessness in rural areas and proliferation of casual labourers have been part of Indian agricultural scene for the last several decades. Neither the green revolution of 1970s and 1980s nor the later revolution documented in detail in the book have had any impact on these trends. This is not to deny the fact of these revolutions but only to point out that they have been too modest in thrust and spread to unleash a tiger in agriculture. The farmers who tried their luck in traditional crops like cotton and oilseeds have been in acute distress leading to a large number of suicides during the last over a decade. A couple of years back, a NSS survey highlighted the finding that over 60 per cent of farmers were eager to move out of agriculture if they had an alternative. Thus, if only the conditions of the smallholders were monitored carefully, the crisis which is now developing in

agriculture could have been easily foreseen. Not only this did not occur but even the moves towards decentralisation through activation of PRIs and adoption of Agro-Climatic Regional Planning made little progress. Sadly, the Prime Minister's plea for localised strategies based on local agro-climatic conditions and constraints is likely to remain a cry in wilderness in the absence of the required grassroots level institutions for this purpose. The book is not alone in missing the grassroots. They were also missed by the policy maker and the policy making processes. The research establishments either missed them too or did not manage to catch the eyes and ears of the policy maker.

The very first step in understanding the grass roots is to take a careful look at the heterogeneity among the smallholders. They range from those on the verge of getting pushed out into the wage market to those who may be categorised as smallholders because of their holding size but who are really substantial operators as milk producers or poultry farmers. Those with potential for diversification would be somewhere in between these extremes but not easy to identify with secondary data or even with quick field surveys. The revolution which the book speaks of is likely to click only with small parts of this wide spectrum. Those who view the smallholders from their distant urban niche would certainly find it difficult to incorporate this heterogeneity in their strategies and policy prescriptions.

Sensitivity to markets and prices and marketing skills are crucial for a diversifying farmer. Those who dream of Indian agriculture getting revolutionised through diversification may be persuaded to have second thoughts by the following observation from a recent study on farmers in Haryana who are easily among those having the most favourable conditions for diversification. The study describes agriculture in Haryana as "prosperous with suitable climate and sufficient irrigation (and) moving towards maturity with diversification towards high value cash crops". The findings of the study on the farmers' marketing performance are far from encouraging: "the farmers hardly bothered about the price prevailing in other markets... among the households surveyed there was a complete lack of market intelligence (and) lack of consciousness about the prevailing prices in different markets....There was a possibility of the farmers getting a higher net price either by delaying their sale after harvest or by selling more carefully in a mandi which could fetch them a higher net price, even if this was located at a far off distant place"(Kumar, 2007). If this is the situation in Haryana, it must indeed be much worse in the agricultural backwaters. The moral of this review is that if the grassroots are neglected, agriculture loses its very will to develop and even the state-of-the-art technologies fail to stimulate it. The result, in the Prime Minister's picturesque words, is "technology fatigue"!

REFERENCE

Kumar, Parmod (2007), *Farm Size and Marketing Efficiency—Pre and Post-Liberalisation*, Concept Publishing Company, New Delhi, 2007.