

PART I

Introduction

1 Introduction and Overview

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Why should there be a book about the commercialization of subsistence agriculture, economic development, and nutrition? There are two compelling reasons. First, concerns and suspicions about adverse effects on the poor of commercialization of subsistence agriculture persist and influence policy of developing countries and of donor agencies. Second, in rural areas of low-income countries, nutritional welfare is determined by many complex factors whose relationships to agricultural commercialization and economic development need to be traced in order to design optimal rural growth policies that benefit the poor. In view of the challenges of rapid urbanization and the chances of commercialization, the question is not *if* subsistence agriculture should be overcome, but *how*. Thus, the purpose of this book is to clarify concepts, add comprehensive factual information, and assist policy and program analysts in identifying potentials and risks of promoting commercialization of agriculture for poverty alleviation.

Specialization and the development of markets and trade that characterize commercialization are fundamental to economic growth.¹ The principal advantages of market-oriented policies and the powerful forces of trade for development are unquestionable. However, the risks of policy and market failures, deficiencies in knowledge and information of actors in production and markets at all levels, and household-level complexities and intrahousehold conflicts are real, too, and need to be recognized as determinants of inefficiencies and inequities. Therefore, it should not be taken for granted that the transformation of traditional agriculture progresses efficiently, not to mention equitably, even if the point of departure—subsistence agriculture—happens to be in a state of “poor but efficient” (Schultz 1983). Subsistence production for home

1. An overview on development of cash cropping and food crop growth in the context of economic development is given in von Braun and Kennedy (1986).

consumption is chosen by farmers because it is subjectively the best option, given all constraints. In a global sense, however, it is one of the largest enduring misallocations of human and natural resources, and, due to population pressure and natural resource constraints, it is becoming less and less viable. Today, about 440 million farmers in developing countries still practice subsistence production to a significant extent.² A large proportion of land resources in low-income countries is devoted to subsistence cropping (von Braun and Kennedy 1986), yet land constraints, ecological problems (especially in marginal areas), and rapid urbanization call for change.

One might expect that the process of commercialization, by raising incomes, actually improves welfare, food security, and nutritional status that could otherwise have been worse. But as commercialization takes place, how are higher average incomes distributed among various economic and social groups? Does higher household income necessarily lead to improved food consumption and better nutrition for all household members? Could a different approach to agricultural development—for instance, one of regional or village or household food self-sufficiency—more efficiently alleviate the particular problem of undernutrition and still meet the objectives of economic growth and higher incomes?

It is widely argued in a large body of literature that commercialization of agriculture mainly has negative effects on the welfare of the poor. The related widespread conclusion—commercialization of agriculture is bad for nutrition—probably emerged from a mix of historical, real, ideological, and methodological factors: (1) adverse effects that resulted from coerced cash crop production that constrained the capacity of smallholders to cope with risks under some colonial production schemes; (2) noted exploitation of smallholders under monopsonistic conditions of projects; (3) general suspicion that commercialization leads to adverse “capitalist” production and market relationships (whereas subsistence agriculture was idealized as providing food sufficiency); and (4) non-comprehensive studies and anecdotal evidence. A number of studies in the past have suggested that the introduction or expansion of cash crop production may adversely affect food security and nutritional status. A review of related research (von Braun and Kennedy 1986; Longhurst 1988) found that many of the studies from which these generalizations were extrapolated (for example, Lappé and Collins 1977) were conceptually flawed. Often, comparative studies disregarded potentially confounding factors but just compared nutrition with and without cash

2. This rough estimate (about 300 million in Asia, 110 million in Africa, and 30 million in Latin America and the Caribbean) is arrived at on the basis of subsistence crop production and total agricultural labor force estimates by country.

crops (Hernandez et al. 1974; Lambert 1979) or were based on very small, potentially biased samples (Gross and Underwood 1971).

It may be impossible to answer the above-mentioned questions definitively because there are so many possible policy variations within the competing paradigms of specialization and self-sufficiency, because of the considerable variation in economic and social conditions across countries and regions, and, finally, because inevitably there are winners and losers, at least relatively, in any process of change. However, it is possible to study the *process* of commercialization in specific contexts and to identify key factors that lead to either beneficial or detrimental outcomes in income, consumption, and nutrition. This will provide guidance for policy formulation in this area. In designing and implementing future projects and policies for commercialization, then, the goal would be for policymakers to find ways to enhance the beneficial outcomes, while minimizing the potentially harmful ones.

The objectives of the book are threefold:

1. identify the *driving forces* of increasing commercialization of subsistence agriculture and assess their *effects* on household real incomes, food consumption, expenditures on nonfood goods and services, and nutritional and health status in different settings;
2. describe the *process* by which increasing commercialization affects income, consumption, and nutritional status, in order to identify the most important elements of this process as well as to estimate how each of these elements is influenced by the transition in different settings;
3. evaluate *policies and programs* to cope with possible adverse impacts and to foster beneficial ones on income, consumption, and nutrition that arise during the commercialization transition.

It is not just short-term policies aimed at making the best of situations with deficient markets that are essential to agricultural commercialization, but also long-term policies for creating and developing agricultural markets where they are thin and particularly risky. Macroeconomic policies, including trade and exchange rate policies, play a fundamental role in commercialization of agriculture. The critical role of incentives is now well understood (Krueger, Schiff, and Valdés 1988; Mellor and Ahmed 1988). A synergistic relationship exists between agricultural commercialization and technological change (Binswanger and von Braun 1991). The potential lead role of technological change in food crops for agricultural and rural growth is also now well understood (Hazell and Ramasamy 1991; Mellor 1986). What is less well known, it seems, is the potential for agricultural commercialization to take a lead position in agricultural growth stimulation too. The speed at which

commercialization of agriculture is occurring in some countries while in others there is stagnation or even a reversal to subsistence agriculture on a large scale, combined with the challenge of economic restructuring and shift from planned to market-oriented economies in many low-income countries, urgently demands enhanced knowledge to stimulate and supplement the process of agricultural commercialization, and, where needed, to guide it in the interests of the poor.

This book does not provide a blueprint on how to commercialize and diversify agriculture. Instead, it attempts to let real-world experience with agricultural commercialization and the analysis of experience speak for itself. Nevertheless, as will be shown, policy has a key role to play in shaping the successes and failures of commercialization from a growth and poverty perspective. The reader most interested in lessons for policies and programs may find the studies on the driving forces of commercialization (Part IV) as well as the case studies (Part V) of greater relevance.

To address the above issues, the International Food Policy Research Institute (IFPRI) in collaboration with other institutions conducted comprehensive microlevel studies in five countries — The Gambia, Guatemala, Kenya, the Philippines, and Rwanda — at carefully selected program or project sites where farm households had recently switched from semisubsistence staple food production with low levels of external inputs to production of more crops for sale in the market or to production with new inputs and technology. The study sites were selected especially for their recent experiences with the transition to commercialization, in order to capture potential adjustment problems and to identify appropriate corrective measures. Comparable studies undertaken by IFPRI and other research institutions in India, Kenya, Malawi, Papua New Guinea, Sierra Leone, and Zambia that to some extent followed a similar research protocol are also included in this synthesis. These case descriptions, based on original data collections, are telling examples of diverse experiences. They may prove useful to policy analysts and planners concerned with choices and design of commercialization policies and programs, as well as to advanced students in applied development economics, agriculture, and nutrition.

Commercialization of agriculture may evolve in the context of dual structures. For instance, large-scale plantation agriculture, with wage labor derived from subsistence-oriented smallholder farms, can coexist with smallholder farms. While the role of agribusinesses and large-scale farms in commercialization has been much debated (Dinham and Hines 1984), this book concentrates on smallholder commercialization, which is much more widespread. Yet, smallholder commercialization is frequently tied through contract farming with large business operations (see

chapter 10), as, for instance, in the cases of the sugarcane outgrowers' schemes in Kenya and the Philippines, the tea schemes in Rwanda, and export vegetable production in Guatemala.

At first glance, this book appears to overemphasize household and microlevel features of the commercialization process. Yet, most of the contentious issues and valid concerns regarding poverty alleviation and nutrition effects are at those levels, which are also where the biggest gaps in knowledge have to be filled. Thus, the book begins with a conceptual chapter (Part II) and follows it with syntheses of the production, employment, income, consumption, nutrition, and health effects of commercialization (Part III). While providing a general overview, these syntheses in no way capture the unique features of the case studies in Part V, each of which traces crop-, country-, and organization-specific commercialization experiences through the production-nutrition chain.

As outlined in more detail in the conceptual framework (Part II), commercialization of agriculture is viewed as the result of a set of interacting driving forces composed of demographic change, technological change and market creation, infrastructure development, and macroeconomic and trade policy.

Part IV addresses these driving forces. First, the key roles of development strategy and trade policy for commercialization are discussed in a global context (chapter 6) and in the context of the largest commercialization experiment of the 1980s, China's domestic trade and agricultural market reform (chapter 7).

Second, the role of infrastructure for agricultural commercialization is analyzed for the case of Bangladesh (chapter 8). Third, it is clarified that the nature of the backward linkages from agricultural processing to farms is very much a function of project design and legal arrangements in the more integrated modernizing agriculture. There is a lot of scope for project policy and legal arrangements to foster success and prevent adverse effects of commercialization in the smallholder sector (chapters 9 and 10). However, in a rapid rural growth environment, such as Indonesia in the 1980s, the broad-based agricultural commercialization process—in contrast to a narrow, isolated “project approach” to commercialization—reveals impressive employment and welfare effects for the poor (chapter 11). This Indonesian case can be viewed as a more mesolevel analysis and complement to the China case. Both Indonesia and China represent cases where agricultural commercialization plays a critical role for growth, employment expansion, and social welfare, including dramatic improvements in rural nutrition. We point at these here in order to stress that the major improvement in nutrition observed in the fast-growing Southeast Asian economies in the 1970s and 1980s is closely related to the developmental effects of commercialization of

agriculture—an insight that may not be gained fully from the case study material in Part V, which has a household and project focus.

The findings of this book lend ample support to an approach that aims to capture the employment and income gains from commercialization that are so beneficial for the poor, and to combine this approach with policy awareness to prevent market failures in factor and insurance markets as well as with complementary public action to provide the public goods for nutritional improvement, that is, in the health and sanitation area.

If this book has contributed to clarifying and correcting what has for a long time prevailed as conventional wisdom regarding commercialization-poverty-nutrition linkages and, more important, if it has contributed to assisting policy analysts and their policymaker clientele in their considerations for related policies, then it was worth the valuable time spent by so many rural households in building the empirical base of the studies assembled here.