Principles of agricultural economics

MARKETS AND PRICES IN
LESS DEVELOPED COUNTRIES

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Introduction

Economists emphasise the importance of the agricultural sector in the development process and there is wide agreement that a necessary condition for economic growth is an agricultural transformation which ensures a large and increasing domestic agricultural surplus. However, it has not always been the case that agriculture has been seen to play such a significant role. In the 1950s the emphasis in development policy was placed on urban industrial growth, with the agricultural sector being regarded as a residual source of inputs (mainly labour) for the manufacturing sector. There was a shift of emphasis in the 1960s when the importance of 'balanced growth' was stressed, which entailed recognition of the need for a certain pattern of agricultural growth to complement that of other sectors. It was also at this time that the contributions of agriculture to the development process were more sharply identified in the work of Kuznets (1961), Mellor (1966) and others, and the positive role of agriculture as an engine of development became accepted. Subsequent events in the 1970s and 1980s have reinforced the need for more attention to be paid to agricultural development policy. The series of 'oil shocks' which raised oil prices had serious consequences for the trade balances of non-oil exporting countries and caused them to focus attention on their trading accounts in agricultural products. This necessity was intensified by a growing tendency in some Less Developed Countries (LDCs) to increase food imports as demand growth outstripped that of supply. It has forced countries to take a positive view of the benefits of increased agricultural production for both export and domestic consumption, and to focus more attention upon the factors determining supply and demand growth. This has necessitated increasingly sophisticated analysis of the operation of agricultural markets, and of the impacts and effectiveness of government policies for the sector. Particular emphasis has been given to the economics of production and supply, an area in which agricultural economics has a major contribution to make.

It is our intention to equip the reader with the analytical tools which agricultural economists need for the study of supply, demand and agricultural markets in developing countries. The importance of an analytical framework is stressed since the main contribution of agricultural economists working on development issues lies in their ability to provide a consistent, logical basis for the study of complex policy problems. This framework provides the basis for the systematic quantitative analysis which is a major input into agricultural political decision-making.

Because agriculture is special (almost unique) in a number of ways a specialised branch of economics has developed to address the problems associated with it. In this agricultural economists make extensive use of 'micro-economics' or 'price theory', in which propositions on the functioning of markets, in terms of production, consumption and exchange, are developed from hypotheses about the behaviour of individual producers and consumers.[1] The central theme is that resources – land, labour, capital, time etc. – are limited, or too few to satisfy all human wants, and that as a consequence of this scarcity choices must be made. The problems which we will study are ones of 'constrained choice', that is of how limited quantities of inputs are allocated between alternative production uses and of how limited incomes are allocated between the many products consumers may buy.

In essence, our approach to the subject is neoclassical, mainstream or orthodox.[2] The distinguishing feature of this school of thought is the emphasis placed on market forces and on prices as signals to appropriate resource allocation. This approach is very topical in that the role of markets in developing countries' agriculture and the (possibly detrimental) impact of government policy on agricultural resource use are issues with which much of the current development literature has been concerned.[3] However, we would wish to make it clear that we are not arguing that all markets function well, adjusting instantaneously and fully to changing circumstances, or that government intervention is always undesirable. Rather we will be discussing at some length instances when inertia and lags in adjustment by both producers and consumers of agricultural products are to be expected and we will be outlining a framework for the analysis of activities (such as subsistence farming, home crafts, fuel gathering) for which no market exists. Moreover, it is evident that markets in the private sectors are not, and cannot be, organised for the adequate provision of physical infrastructure in roads and other communication channels, electricity supply, irrigation, etc., and of 'human capital' infrastructure in agricultural research and extension services. It is also to be expected that there will be cases in which the market works well but to the disadvantage of some group and where society views the outcome as intolerable. The adoption of a neoclassical approach in no way denies the importance of these considerations. As Little (1982, pp. 25, 26) has put it:

> 'Neoclassical economics can thus be described as a paradigm that tells one to investigate markets and prices, perhaps expecting them often to work well but also to be on the watch for aberrations and ways of correcting them. Perhaps the single best touchstone is a concern for prices and their role'.

The book proceeds by considering the three main strands in the theoretical analysis of agricultural product markets – production, consumption, and exchange which is the interaction of consumption and production. Production and consumption are each dealt with in blocks of three chapters. In the first chapter of each block the basic economic theory of the independent decision-making unit is presented; these are the firm in the case of production (Chapter 2) and the individual consumer in matters of consumption (Chapter 5). A second chapter in each block presents the economic theory at the market level; thus Chapter 3 deals with supply and Chapter 6 with demand. The third chapter in each triad deals with special and more advanced topics in supply and demand. Chapter 4 examines the economics of technological change and the concept of economic efficiency, as well as explaining the importance of the concept of 'duality' in the economic relationships of production. Chapter 7 likewise considers economic duality in demand relationships (which some readers may find overly technical, and wish to skip), and also outlines some new, recent approaches to demand analysis.

Chapter 8, on Equilibrium and Exchange, explores the way in which supply and demand interact to determine prices. The treatment goes beyond the scope of standard agricultural economics textbooks by examining market disequilibrium and the behaviour of prices through time. It also includes a body of analysis which recognises the special place of the semi-subsistence 'agricultural household' in developing countries, in which production and consumption activities are combined under one roof. The special functions and structure of agricultural markets are discussed in more detail in Chapter 9. It is our intention that Chapters 2 to 9 taken together should provide a solid foundation for an understanding of the workings of the agricultural sector within the economic system.

The remainder of the book is more concerned with assessing the merits of alternative economic situations. Chapter 10 provides the analytical tools for such an assessment, namely theoretical 'welfare economics', which Arrow and Scitovsky (1969) define as 'the theory of how and by what criteria economists and policy-makers make or ought to make their choice between alternative policies and between good and bad institutions'. A major policy issue for the developing countries is the distribution of the benefits from international trade in primary products. The theoretical underpinnings for this debate are presented in Chapter 11, 'Economics of Trade'. In the final chapter, many of the economic concepts introduced in earlier sections are applied to the evaluation of domestic food and agricultural policy. Through the careful analysis of these complex issues, which permits better informed judgements to be made by politicians, the agricultural economist can make a valuable contribution to policy debates.

The microeconomic principles of agricultural economics are universal, and to that extent it is hoped that this book will appeal to a wide audience. It is primarily written for postgraduate students in agricultural development, who although they may not be economics specialists are adopting economics as a major discipline in their studies. It is also intended to be suitable for economics and agricultural economics undergraduates with interests in the problems of developing countries.