TRANSFORMING TRADITIONAL AGRICULTURE

Theodore W. Schultz

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3. Theodore W. Schultz, TRANSFORMING TRADITIONAL AGRICULTURE

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by Theodore W. Schultz

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FOREWORD

Modern economics has been bred chiefly in Western Europe and the United States, and despite its aspiration toward generality it bears the stamp of institutions and issues characteristic of these areas.

But the economic world no longer revolves about London and New York. Dozens of new nations are struggling toward economic independence and industrial growth under institutional arrangements quite unlike those of the West. Economies of a novel type also extend eastward from central Europe to the Bering Strait and have been busily developing their own principles as a by-product of administrative experience. It is asserted that "Western economics" has only limited analytical value in these other countries.

The problem of the content and relevance of economics thus arises inescapably. Are the economic principles taught in the West really susceptible of general application? Or are they culture-bound and relevant mainly to industrial capitalist countries? Is it possible to create a general economics which would be as useful in Poland or India as in Canada or France? Or must we be content with several species of economics which will remain distinct in intellectual content and applicability?

"Comparative economics" has been regarded as a separate area of the economics curriculum, consisting of a botanical classification of national economies into a few loosely labeled boxes. But surely any course in economics is potentially comparative. A concern with comparative experience can profitably be infused into any of the standard branches of economic study. This series is inspired by the hope that a rethinking of particular branches of economics in world perspective, combined with a bibliography of available material from many countries, may help teachers to give their courses a broader and more comparative orientation.

In pursuing this objective, we deliberately chose autonomy over standardization. Each author was left free to determine his own approach and method of treatment. The essays thus differ considerably in length, analytical as against descriptive emphasis, geographical coverage, and other respects. How far the original intent of the series has been accomplished is for the profession to judge.

We are grateful to the authors who have struggled with possibly insoluble problems, to the Ford Foundation for its support of the enterprise, and to the staff of the Yale University Press for their helpful cooperation.

The Inter-University Committee on Comparative Economics: Abram Bergson, Arthur R. Burns, Kermit Gordon, Richard Musgrave, William Nicholls, Lloyd Reynolds (Chairman)

PREFACE

When I see how little success most countries are having in increasing agricultural production, I can see why one might well believe that it is a rare and difficult art to master. If it is an art, a few countries are very adept at it though they seem unable to transmit this art to others. Those that are adept are increasing production while decreasing both labor and land devoted to farming. But as long as the economic basis of increasing production is thought to be an art, I do not wonder that economic policy to achieve it should be so largely in the realm of myth. Presently, in country after country, policy makers are about as sophisticated in this matter as farmers who once upon a time planted crops according to the face of the moon.

While agriculture is the oldest production activity of a settled community, surprisingly little is known about the incentives to save and invest where farmers are bound by traditional agriculture. Oddly enough, economics has retrogressed in analyzing the savings, investment, and production behavior of farmers in poor countries. The older economist had a better conception than economists now have of the particular type of economic equilibrium relevant under these circumstances.

Although it is obvious that traditional agriculture is niggardly, it is not obvious that this niggardliness is *not a function* of a unique set of preferences related to work and thrift.

Nor is it obvious that it is predominantly a consequence of farmers having exhausted the profitability of the "techniques of production" which are an integral part of the inputs and knowledge at their disposal, and that there is little or no incentive to save and invest in order to increase the stock of the forms of reproducible capital farmers are employing. The purpose of this study is to show that the crucial feature of traditional agriculture is the low rate of return to investment in agricultural factors of the type that farmers have been using for generations, and to go on to show that in order to transform this type of agriculture a more profitable set of factors will have to be developed and supplied. To develop and to supply such factors and to learn how to use them efficiently is a matter of investment—investment in both human and material capital.

Food and agriculture have served economists time and again as a testing ground for new concepts and analytical tools. Diminishing returns to labor and material capital against land and Ricardian rent are examples. So is the income elasticity of the demand beginning with Engel's statistics, followed by the monumental study of Henry Schultz and then studies by Girshick and Haavelmo, Stone, Tobin, Burk, Houthakker, Goreux, and others. Recently there has been the testing of the explanatory value of distributed lags by Nerlove, specification bias in production functions by Griliches, and research costs and social returns from a new input, hybrid corn, also by Griliches. In this study I attempt to test the usefulness of a supply and demand approach in determining the price of income streams from agricultural sources.

I intended when I started this study to include an extensive bibliography of the relevant literature. But it soon became clear to me that the available literature, although large with respect to many features of agriculture in poor countries, is in general not germane to the basic economic issues which are the core of this study. I therefore decided against a separate listing and in favor of additional footnotes for this purpose. It turns out that many of the published items to which I refer represent views and treatments that support doctrines and policy approaches which are inconsistent with my analysis.

Since I began this study late in 1959 I have incurred many obligations. I have learned much from the dialogue I had with my students when I presented the central ideas of this study to them. My colleagues, Zvi Griliches, D. Gale Johnson, and Dale W. Jorgenson, read key chapters and I benefited much from their criticism. Vernon W. Ruttan read all of an early draft, and I accepted nearly all of his suggestions. Abram Bergson, Richard A. Musgrave, and Lloyd Reynolds raised useful questions. My wife, Esther Werth Schultz, corrected manuscript, checked references, and convinced me time and again that what I had thought was clear still lacked clarity. Mrs. Marian Neal Ash of Yale University Press gave unstintingly of her editorial talents. Mrs. Virginia K. Thurner, my secretary, corrected proof with painstaking care. I also am indebted to the librarians at the University of Chicago for their help. A Ford Foundation fellowship freed me from my university duties during 1961–62. But more than any other obligation is what I owe to the oral tradition that is a part of the workshops in economics at the University of Chicago.

Theodore W. Schultz

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CONTENTS