Mellor, John W., *Agricultural Development and Economic Transformation: Promoting Growth with Poverty Reduction*, Palgrave Studies in Agricultural Economics and Food Policy, Cornell University, Palgrave Macmillan, 2017, 230 pages

Review by C. Stuart Callison, April 2018

Summary: An underlying premise of John's new book is that poverty and lack of food security is due to lack of income, and <u>not</u> lack of food supply. He again notes that traditional agriculture cannot achieve high growth rates without technological modernization. But in traditional agriculture, his new book distinguishes between small commercial farmers and rural non-farm households, with poverty concentrated in the latter. Research has identified **the main engine of economic growth and poverty reduction**, where it has successfully occurred, **as the dynamic process between increasing the productivity and income of small commercial farmers and their propensity to spend half their incremental income on locally available goods and services produced by rural non-farm households. But for small commercial farmers to achieve sufficient technological modernization, substantial support from the government is required—for rural infrastructure like roads, education, electrification, agricultural research and extension. The quantity and quality of foreign aid, and local government expenditures, in this area have declined since the 1980s, as has the rate of poverty reduction.**

This book is a sequel/follow-up to Prof. Mellor's classic, *The Economics of Agricultural Development*, Cornell University Press, Ithaca, NY, 1966, (394 pages) published 51 years after the original. It redefines the key actors in agricultural development to distinguish between "small commercial farmers" and "rural non-farm households," in countries where agricultural production is dominated by the former. The small commercial farmers harvest more than enough produce from farming for their own family needs and sell the surplus. They are above the poverty line. The rural non-farm households are defined as those that are net purchasers of food from non-farm income, even if they farm small plots of land, and they are mostly below the poverty line.

The new book closely follows the organization of the original: Part I, "The Role of Agriculture in Economic Development," has become "Agriculture and the Economic Transformation." Part II is "Traditional Agriculture: The Base for Modernization" instead of "The Nature of Traditional Agriculture." But Part III is "Modernization of the Small Commercial Farm" instead of the more general "The Modernization of Agriculture."

In his earlier book Mellor outlined the need for greater productivity in un-differentiated "traditional" agriculture in order to support the food requirements of a growing labor force in non-agricultural activities and to generate capital transfers from agriculture for industrial investment as the essence of economic transformation. He seemed to equate non-agriculture activities with mostly urban industry. This was consistent with the general theories of development at the time, from W. Arthur Lewis to Ranis and Fei and others about economic development in a "labor surplus" economy.

In this new book, which is backed by extensive references to research in every chapter, he argues that the most dynamic process lies between increasing the productivity and income of the small commercial farmer and his propensity to spend half of his incremental income on non-farm products and services from nearby market towns, rather than from the large urban centers with a high import content as larger commercial farmers are more likely to do. This is the main engine of economic growth and poverty reduction, where they have been successfully achieved in countries with large traditional agricultural sectors, through the income multiplier and local employment effects of small farmer expenditures. He also argues, as he did before, that to be successful this requires substantial support from governments in key areas that small farmers cannot undertake by themselves.

Part I has been collapsed from 6 chapters to 4, providing a more succinct and updated discussion of "The Economic Transformation," "Measuring the Impact of Agricultural Growth on Economic Transformation," "Poverty, Food Security, and Nutrition," and "Capital Formation and the Exchange Rate." I note the three figures in this section are exact reproductions of the first three figures in Mellor's original book, illustrating the typical demographic transition and hypothetical labor production functions. The subsequent figures and the long list of statistical tables throughout the book are all new, however.

Mellor challenges the conventional assumptions that lump all low-income farmers together and that uses their average income levels to show that they are all poor, subsistence level households, concluding that their way out of poverty is for more of them to migrate to the big cities for higher paying jobs. By separating the small commercial farmers from the rural non-farm households, as defined above, recent analysis has uncovered a dynamic process in those countries that have more successfully managed the economic transformation and more rapidly reduced poverty which had previously gone unnoticed. Where the rural non-farm sector is large (and this is where the bulk of the poor households are), the conventional view is that the main market for the product of these households is in the large urban areas. But more recent analysis has shown that this is wrong, and that it is rather the nearby small commercial farmers who spend half of their incremental income from modernization on the goods and services produced locally by the rural non-farm sector. "That sector produces labor-intensive, largely non-tradable, income elastic goods and services, largely consumption goods, for the small commercial farmer. They remain competitive with other goods and services because of low wage rates and the labor intensity of the goods and services they provide."

I particularly like the following paragraph: "There is broad acceptance of the point by Professor Amartya Sen that *poverty and hence lack of food security is due to lack of income not lack of food supply*. This book fully demonstrates how the income of the rural poor is to be increased. It differs radically from influential views of many of Sen's followers in showing that *increased agricultural production is the means by which incomes of the rural poor are to be increased. Agricultural growth is central to both sides of poverty reduction: the supply of food and the incomes of the poor creating the effective demand for that food.*" (Emphasis added)

Part II contains condensed discussions of "The Farm, the Farmer, and Labor Supply" and "Land and Land Tenure," including environmental issues and the effects of climate change. As in his first book, Mellor

concludes that traditional agriculture, left to itself, even with substantial investments in infrastructure like roads and irrigation, is unable to achieve growth rates much higher than the population growth rate, and that the only way to do so is through its technological modernization. But his new book places the emphasis on the small commercial farmer for such modernization, resulting in a more rapid reduction in poverty, rather than on an undifferentiated traditional agriculture. It also notes the greater dynamism in this process of small farmers as opposed to the large-scale feudal holdings that were prevalent in Latin American and Asia, an argument favoring expropriation of large holdings and converting them into small commercial farms, as has been accomplished in many of the Asian countries.

Part III is a summary of recent research into the process of technological change among small farmers and what is required for it to be successful. **Contrary to current conventional wisdom, government intervention is essential to success:**

Chapter 8. Government and the Institutions of Modernization, discusses the "overarching role of national government" in providing 1) a national vision and strategy that embodies the role of agriculture, 2) rural infrastructure of education, roads, electricity and computerization, 3) agricultural research and extension, and 4) services such as these that small farmers cannot provide by themselves. The chapter also notes that for maximum positive effect government expenditures such as these should be concentrated in geographic areas of higher population density and greater potential for higher productivity.

Chapter 9. Physical Infrastructure, especially rural roads and electrification, although very costly, is essential in enhancing returns to the other components of modernization. Rural infrastructure expenditures are often neglected in favor of those in urban areas and need to be promoted by strong political vision and leadership at the national level.

Chapter 10. Rural Education and Health programs increase returns to innovation and incentives to work and prepare young workers for more lucrative jobs in non-farm employment, both rural and urban.

Chapter 11. Prices and Price Policy can promote higher production with higher prices but will reduce real incomes of poor households and reduce public resources available for other priorities. Subsidies for either inputs or outputs can be costly and divert scarce resources from more productive investments. Promoting technological change to reduce the cost of production and increase output is a better alternative.

Chapter 12. Research and Extension is required to produce a constant stream of technological innovations that increase output and lower costs. Mellor endorses the African Union target of 10 percent of government expenditures on agricultural research and extension, over and above the "dominant public expenditure" requirements for rural roads, electrification and education. He notes that this target is seldom met and, together with insufficient expenditure in rural infrastructure and education, largely accounts for failure to achieve agriculture modernization. In middle income countries the public research and extension institutions need to be expanded from basic cereals to include higher value horticulture crops and livestock commodities, including those for export.

Chapter 13. Purchased Inputs such as improved seed varieties and fertilizer embody the technological changes required for modernization. They must eventually be provided by the private sector to achieve the necessary scale and timely availability, but the public sector can provide the initial impetus.

Chapter 14. Finance for the Small Commercial Farmer may come later in the process but is necessary for long-run success, to allow farmers to purchase the optimal level of inputs. To be successful, it requires a quasi-government rural finance system that caters to the small commercial farmers and the seasonality of their needs for credit.

Chapter 15. Cities, Consumption, and Marketing Dynamics require specialized assistance to small farmers if they are to keep up with radical changes in marketing systems such as the rise of supermarkets and requirements for uniformly high quality, traceability and changing consumer tastes. Failure in this regard will result in a shift from local produce to imports.

Chapter 16. The Role of Foreign Aid. In the 1960s, 1970s and into the 1980s foreign aid provided strong leadership in promoting agricultural growth, "primarily in the areas of agricultural university development and agricultural research and extension," building technical capacity abroad by using technical assistance from successful systems at home. Then the quantity and quality of aid to agriculture, and its relevance to overall agricultural growth, declined, resulting in lower rates of poverty reduction. Renewed foreign technical assistance of this kind could be very valuable in helping poor countries catch up with the advanced agricultural technology of the high-income countries.

In Conclusion, Mellor calls "for a clear vision and strategy for the agricultural sector in order to rally not only farmers to the cause but the larger public as well. That motivation is important to the incentive structures for agricultural growth. Further, the expenditure on vital rural infrastructure and education, and building large critical institutions for research and extension, require broad support that comes from vision, strategy, and detailed planning."