reliance on flow augmentation and conventional waste effluent treatment. The general range of costs and ordering of systems by costs, while modified, is not drastically affected by changing from the earlier to the more recent model of dissolved oxygen levels. As would be expected, the marginal costs of successively higher oxygen levels are found to be much lower for the more economical control systems. Frequencies of system failures were reported for alternative reservoir capacities. The results (in addition to showing that the Corps plan held up quite well on this score, despite the use of a new dissolved oxygen model) give some insight into the costs of alternative goals when these are stated in frequencies of failure to achieve them.

This part of the book is buttressed by four well written and very candid appendices: one on water quality models, by Leo J. Hetling; the second on waste control processes, by Robert K. Davis; the third on reservoir system simulation, by Robert M. Steinberg; and the fourth on synthetic hydrology, by Nicholas C. Matalas. These are fine introductions for the technical student of the field. In both supporting materials and main text, a quality of freshness and excitement comes through to the reader. It is said in their praise rather than in their condemnation that these materials underscore how little we really know about this business and how vulnerable are the best assumptions. Despite this, it is this reviewer's judgment that the general orientation of the main conclusions hold up. There are promising new methods of water quality management and of systems analysis that deserve serious consideration.

Part III of the book summarizes the implications of the technical analysis. In the author's words, this comes to the problem of "widening the range of choice." It is suggested that a planning agency, rather than coming up with a complete plan as its first and final product, should first reconnoiter the costs of achieving alternative (and usually monetarily non-quantifiable) goals through a broad range of alternatives. Before the planning becomes committed to any approach, the more promising courses of action and kinds of authorities needed would be presented to public bodies. The choices would be narrowed and refined through successive iterations of interplay between the planners, the public, the researchers, and the operators of water systems. The final plea is for politicians in the best sense of the word—policy makers who will grasp the choices before them and make the decisions needed for rational planning.

Both books indicate how much further science has progressed in other fields related to water than in this area of policy and institutions.

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True to its title, this book is about the land reform experience of Taiwan and the role of that reform in Taiwan's economic development. After a brief review
of the Japanese influence on Taiwan's development from 1895–1945, the author outlines the major steps in the land reform carried out during the period 1949–1953: farmland rent reduction, sale of public land, and land to the tiller. The relative income positions of operating farmers pre- and post-reform and the changes in agricultural productivity are analyzed. The author then attempts to measure (not too successfully in my view) intersectoral capital transfers and devotes one chapter to a discussion of unemployment in the farm sector and labor transfers from agriculture. In the final analytical chapter, the author looks in a general way at the direct costs and the opportunity costs of land reform.

The author concludes that the impact of land reform on Taiwan's economy was "both immediate and far reaching" (p. 123). Especially significant were increases in agricultural productivity which accompanied the reform. The author finds no evidence that land reform in the late 1940's competed significantly with industrial development. It "exerted little strain on the balance of payments. In short, the opportunity cost of land reform and agricultural development was minimal" (p. 124). In fact, "land reform contributed to the industrial development of Taiwan" (p. 124) through supply-demand interrelations, and especially through the "utilization of incremental income on the part of farmers to educate their children" (p. 124).

This is an informative book, but not an exciting one; it breaks no new ground. For the reader unacquainted with other literature on Taiwan's development and land reform, this work provides a useful overview of the process and an attempted economic evaluation of this experience. Yet, for my money, I'll take Raymond Christensen's 90-page USDA bulletin in preference to this $12.50 Praeger edition [1].

There are several troublesome, though minor, aspects. Readability would be much improved by a thorough editing. On page one, in the very first paragraph, the author states: "For example, in Thailand, India, and the Philippines, the agricultural population is 82.74, and 61 percent, respectively, of the economically active total in the 1960's." How shall we interpret such a statement? Careless wording (and/or omissions) of this kind and errors (e.g., p. 17, 67.2 percent should be 672 percent; pp. 78-79, the text refers to years 1914–19 but Table 20 refers to 1914–17; p. 103, the number 189 in Table 27 should be 191; etc.) detract from the analysis. One expects a more careful job in a book selling for $12.50.

But these are, after all, petty annoyances. The book has one major analytical problem, however. In Chapter 6, the author estimates the intersectoral flow of savings and concludes that "there was a flow of savings from the nonagricultural to the agricultural sector in the 1950's in Taiwan" (p. 87). "Direct contribution of agriculture to financing the growth of products of the nonagricultural sector was nil, if not negative, immediately following the land reform... The net flow of surplus from the agricultural to the nonagricultural sector did not come about until in the late 1950's and early 1960's" (p. 90).

These statements contradict the findings reported by Christensen [1] based on work by T. H. Lee [2], and also the more recent work by Lee on these issues [3]. Since intersectoral transfer of capital is such a critical question in
the theory of economic development, Lee's major conclusions are summarized here.

Lee's review covers the period 1895–1960. He distinguishes between financial, or visible, flows and invisible flows—the latter resulting from changes in the terms of trade. Financially, transfers through land rent payments and government taxation were most important in the pre-World War II period, while transfers in the form of farmers' savings became increasingly important in the post-war period. Conversely, invisible real net capital outflows brought about by terms of trade unfavorable to agriculture were less important in the pre-war period but accounted for more than 50 percent of the total outflow in the post-war years. Throughout the entire period, there was a net capital outflow from Taiwan's agricultural sector. The magnitude of this outflow showed a roughly increasing trend until near the end of the period [3, p. 40].

Why such contradictory conclusions? The major factor seems to be the exclusion or inclusion of transfers resulting from changes in the terms of trade between agricultural products and other products. Koo shows (p. 80) that the price index of agricultural products, relative to all commodities, dropped sharply in the decade 1951–60. "The fact suggests that the agricultural sector's contribution to the nonagricultural sector is more than that indicated by the amount of transfers estimated in the following sections of the present chapter" (p. 80). Yet he later ignores this caveat in drawing conclusions about net intersectoral capital transfers. Lee, on the other hand, points out that "In the post-war period . . . the contribution of real visible capital flow from agriculture to total capital formation was not large, but the real invisible capital outflow was large. The squeeze on agriculture through the low agricultural price policy was obviously great" [3, p. 37].

Koo's more restricted measure of capital flow is roughly consistent with the data on the same measure presented by Lee. But his failure to incorporate the terms of trade component leads to an erroneous conclusion with respect to total transfers.

Yet, in fairness to Mr. Koo, it must be noted that the analysis of intersectoral transfers is an extremely complicated undertaking—both conceptually and empirically. Thus, our judgment of his book should not hinge on this one question alone. I chose to highlight this issue because it seems to be central to the formulation of agricultural development policies.

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References