BOOK REVIEWS


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Coming of age during the Vietnam War, I was a city boy with a tendency toward the counterculture. Staying focused in college was tough. After switching majors six times, I chose agriculture as my course of study, for a selfish reason—I thought the food industry was somewhat impervious to recession and depression cycles and I would perhaps always be employed if I learned about something related to food. I settled in as a student in an Agricultural Business Administration Program at the University of Minnesota, where from 1974 to 1978, Willard W. Cochrane and economist John Helmberger introduced me and other students to agricultural economics. Professors Cochrane and Helmberger would forever change my worldview from self-interest to a more global perspective.

It took three decades, but I now see that Professor Cochrane was trying to illustrate that there was plenty of job security if one endeavored to sustain agriculture in the presence of chronic overproduction and the resulting negative impact on prices. This current, fine collection of Professor Cochrane’s essays provides today’s student and food systems professional with a valuable historical perspective on farm policy and the perennial struggle to address overproduction and “the curse of agricultural abundance.” Together, the collection of articles presents a chronology, from the mid-1900s to the present, of the issues confronting agriculture today. The more recent material, written in 2002, offers the reader a rare glimpse of a future sure to be different from the past. While the first half of the book provides a retrospective that illustrates how earlier manifestations of the overproduction problem fostered policy responses that created staggering multi-billion-dollar subsidy programs, it is the latter half of the book that carefully articulates a solution sufficiently heterogeneous to accommodate small- and medium-sized farms as well as larger, more industrialized, producer operations. As a collection of essays, this book bears witness to the transformation of Professor Cochrane’s own perspective. Whereas economic factors and producer-level impacts were always a significant portion of his teaching and writing in the 1970s, this book reveals the extent to which environmental and social issues are better understood and accounted for in any discussion of “a sustainable solution” to the problem of overabundance.

Professor Cochrane taught several of my classes when I was an undergraduate at the University of Minnesota, but I was ignorant of how knowledge is created and had little understanding of the relationship among research, teaching, publishing, and policy advising. At my own peril, I did not pay as much attention as I should have when I was in Professor Cochrane’s classes. Thus, it is fortunate that much of what I failed to grasp from Professor Cochrane then can now be read in the book’s Part 1, “Policies of the Mid-1900s (1953–1966),” One concept, in particular, sounds as eloquent and appropriate today as it did to me in the 1970s: the General Theory of the Agricultural Treadmill, which describes the complex circumstances resulting in weak market positions for farmers, notably that “rapid and wide-spread farm technological advance drives the aggregate supply relation ahead of the expanding aggregate demand relation in peacetime; and given the highly inelastic demand for food, farm prices fall to low levels and stay there for long periods” (p. 143). Professor Cochrane would perhaps be heartened to know that now “I get it” and am putting this knowledge to work today.

In 1978, I arrived at the US Department of Agriculture headquarters for a temporary assignment with the Foreign Agricultural Service (FAS). Working under the tutelage of Dr. Turner Oyloe, a protégé of Professor Cochrane’s, I quickly learned how deeply respected Professor Cochrane was in the nation’s capital. Reading this present collection of essays, I can see the world he saw from 1953 to 1966 and how that period defined what I experienced at FAS in 1978 during the Tokyo Round of Multilateral Trade Negotiations. Professor Cochrane’s lessons on the importance of foreign trade to sustaining farm incomes in periods of chronic overproduction continue to resonate; however, the main premise of this collection of essays lies not in the history lesson, but in the recipe for a more sustainable agriculture that he derives from the lessons of history. While foreign trade remains critical to the nation’s balance of trade and local farm economies, Professor Cochrane now argues that emphasis needs to be placed on the transformation of government subsidy programs from intensive farming systems into highly diversified, sustainable agri-
culture. His recipe includes a redirecting of much of farm aid to small- and medium-sized family farmers rather than to the “relatively few very large, well-established farmers,” along with a shift to more sustainable systems. Demonstrating his mastery of the policy sphere, Professor Cochrane also offers a challenge to policy makers and agricultural professionals by charting a path for investment in education and technical assistance that endeavors to strengthen farm management’s ability to sustain farms economically and environmentally without crop subsidies.

Much to my surprise, the historical and forward-looking perspectives evident in the collection of essays are remarkably relevant to my current work on ISO 14001 environmental management systems with CAFO (Concentrated Animal Feeding Operations) dairy farmers. In Part 2, Professor Cochrane asserts that the economic and environmental consequences of overproduction warrant a reexamination of crop support, subsidy programs, and other policy mechanisms contributing to overproduction and perennial low margins for producers of agricultural commodities. Always a visionary among contemporaries, Professor Cochrane’s long view, offered by many decades of service, now embraces ecological and agricultural diversity, animal welfare, and a more sustainable agriculture achieved through a conversion of “High Plains cropland back to grass and grazing operations and by transforming intensive cropping areas like the Corn Belt to diversified farming areas [that also make less use of chemical fertilizers and pesticides] . . . producing differentiated products for niche markets both domestically and abroad” (p. 132). The advent of agriculture’s use of international standards for environmental management holds the potential to catalyze a simultaneous transformation in farm practices and the public’s perception of agriculture by yielding credible, verifiable environmental results often derived from greater ecoefficiency. The increasing use of eco-labels for food and agriculture products appears to substantiate the viability of Professor Cochrane’s prescription for “a sustainable solution.”

This book holds remarkable value for members of the agricultural community, environmental professionals, members of the regulatory community, and politicians seeking insights into how agricultural economics influence the evolution of the conservation agenda and the transformation underway from production subsidies to conservation incentives. These essays of Willard Cochrane hold lessons for us all.


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*Global Positioning System: A Field Guide for the Social Sciences* is divided into two parts. The first part deals with the decisions that must be considered prior to fieldwork. The authors discuss locating hospitals or the closest locations of doctors for their social science studies. The decisions for fieldwork are applicable across many disciplines, whether the fieldwork locates wetlands or underground storage tanks. The book forces the determination of the mapping accuracy needed for a project and thus the correct Global Positioning System (GPS) unit. The book explains the multitude of GPS receivers and provides enough information for one to select the appropriate unit. It discusses the many coordinate systems and datums without bogging the reader down.

The second part, “Utilizing GPS,” provides practicable information from pre-field planning, work assignments, data collection, and post-field data processing for Geographic Information System (GIS) applications. Of particular interest to this reviewer was the discussion of staff organization and responsibilities (Chapter 9). The pre-field planning discussed each of the responsibilities, from the data collection team to the project manager to the field technician. Clearly-defined responsibilities minimize overlap and increase efficiency. The post-processing recommendations relating to file naming and management may be particularly important to many readers.

Data quality is stressed throughout the book. The authors suggest that the data collected be reviewed before returning to the office, to ensure there are no obvious data gaps between the stored data and what one actually meant to collect. The book does an exceptional job explaining the sources of GPS errors. More importantly, it discusses how to minimize them, including creating a base station.

The book would be an ultimate guide if it described in more detail how to create and manipulate data dictionaries. A data dictionary is a list of features and their associated attributes to be collected. The authors were interested in collecting the type of facility (private hospital, public
hospital, outpatient, HMO, or other), level of care (primary, secondary, emergency, or other), intensive care unit (yes or no), and other types of information. The structure of the database and the method used to create point, line, or area attributes are as important as the mapping accuracy and most readers would be interested in the methods used to create a data dictionary.

The examples presented in the book demonstrate social science uses for GPS. The book is a valuable reference for natural scientists, physical scientists, or anyone wanting to accurately locate points of interest on a map. Researchers will save time and money by following the planning, field, and post-processing discussions presented in *Global Positioning System*. 