DISCUSSION PUBLISHERS
Research Center · Open Access Edition

# Agricultural Economics

George H. Peters

| | |
|---|---|
| Discussion Research ID | DPR-2026-1119 |
| Year | 2013 |
| Field | Social Sciences |
| DOI | 10.1037/e564672011-001 |
| Licence | CC-BY |
| Original source | Directory of Open access Books (OAPEN Foundation) |
| Permanent link | https://discussionpublishers.com/research/35a0a350-14ba-4787-b4e2-ae3e7040ba5f |
| Publisher | Discussion Publishers discussionpublishers.com |

## Abstract

Agricultural Economics - Current Issues is a review of topics related to the economics of agriculture in various parts of the world. It contains a total of seven chapters. These contributions are related to some of the significant current problems facing these regions. The book is divided into four parts. The first part is simply an introduction to the field of agricultural economics. It charts the development of the field from its origin of farm management economics to the current state of a variety of subjects in various parts of the world. In the second section, an issue related to marketing is discussed. This is followed in the third section by an issue related to water resource economics. In the last section the remaining three chapters are devoted to agricultural environment-related topics. All chapters present guidance for policymaking.

Republished by Discussion Publishers under the original CC-BY licence. Copyright remains with the original authors; please cite the original work.

Cite as: George H. Peters (2013). Agricultural Economics. Discussion Publishers, DPR-2026-1119.

Chapter

# Introductory Chapter: Agricultural Economics

*Surendra N. Kulshreshtha*

This book was planned to undertake an assessment of some recent developments in the area of agricultural economics. Although all aspects of this subject matter were welcome, only a selected few could be included in it. The book, therefore, describes only some of the areas in which agricultural economists are engaged. Nonetheless, it still begs the question "What is agricultural economics or what do agricultural economists do?"

As we know, agriculture is an important industry in most countries, because of its ability to provide the most basic necessity for human existence—food. On account of sheer growing masses of people, especially in developing countries, demand for food would increase. Associated with this would be a change in composition of diet resulting from higher income levels in most countries. As a result, even at present, in many developing countries, agricultural employment dominates, in spite of the fact that many farm workers are migrating to the non-farm locations in search of a better life. However, as a country develops economically, the relative importance of agriculture declines [1]. The primary reason for that is the Engel's Law (suggested in the nineteenth century), which is based on the fact that as consumers' purchasing power (incomes) increases, the proportion of income spent on food declines. This has been witnessed in many developed nations over the last few decades. However, one should keep in mind that although direct employment in agriculture in these countries is low, agriculture is still an important industry. This is because many of them had attained their development goals through moving labor and capital from agriculture, making it a source of economic growth. Furthermore, its importance is also indicative of current food and nutrition issues facing many of the countries.

## 1. Brief genesis of agricultural economics

As clear from the title—agricultural economics, the discipline grew out of two major parent disciplines—agriculture (or agronomy) and economics (study of scarcity leading to decision making by humans through use of resources). It arose in the late nineteenth century, combining the theory of the firm with marketing and organization theory, and developed throughout the twentieth century largely as an empirical branch of general economics [2]. Its popularity in the U.S.A. may also be credited to the establishment of the United States Department of Agriculture (USDA), which arose as a result of importance of agriculture as well as by rich data collected by the USDA, beginning in the mid-nineteenth century (based on [2], p. 2). The first professional note of agricultural economics was in 1907 where the American Economic Association (AEA), in its annual meeting, devoted a session to "What is agricultural economics?," which became a regular topic at these meetings [2]. This perhaps resulted in the creation of the American Farm Economics



IntechOpen

Discussion Publishers edition DPR-2026-1119 https://discussionpublishers.com/research/35a0a350-14ba-4787-b4e2-ae3e7040ba5f

Association in 1919, which retained its name until 1968 when it became the American Agricultural Economics Association (AAEA). Similar developments took place in other parts of the world, although details on them are either not available or very hard to collect.

An earlier precursor of agricultural economics was farm management, which is a science of organizing and combining people, natural and material resources for the purpose of crop and livestock production in order to maximize profit while optimizing input use. It grew out of the discipline of agronomy, which is concerned about physical management in agriculture—mechanization, cultural practices, land use, and labor utilization [3]. However, there was a lack of financial considerations in management decision, which was filled through the application of economic laws and theorems. Inclusion of financial management resulted in the creation of the American Farm Management Association in 1910 [4]. However, most preoccupation of the farm management professionals was undertaking farm surveys to determine production costs among groups of similar farms to gain an appreciation of what type of farm was most successful. Heady [5] criticized this discipline as having a methodology that was rooted in descriptive positivism, empiricism, and inductive procedures. This led to the development of farm economics discipline that later on was known as the discipline of agricultural economics.

## 2. Changing scope of agricultural economics

Agricultural economics is an applied area as well as a hybrid discipline. The field of agricultural economics includes application of economic science tools to the agricultural sector [6]. In fact, it is a branch of applied economics that takes the tools of both micro and macroeconomics and uses them to solve problems in a specific area [7]. Manning [3] suggests that agricultural economics grew out of a merger between rural economy and farm management in the early part of the twentieth century.

Application of economic principles to agricultural pursuits is not new. In fact, before the study of farm management was very old, it began to employ principles, theory, and information from economics [8]. Some of these included neoclassical political economy and the theory of the firm applied to the farm production, credited to Marshall [9]. Agricultural economics discipline included many of these applications and further evolved over a period of time. The importance of agriculture in economic development has led to pressing demands on the role in which agricultural economists are required to play [10]. In fact, Gardner and Rausser [11] suggest that the subject matter of agricultural economics has both broadened and deepened in recent years. For example, since the agricultural sector has undergone constant changes under the impact of new technology, shifting demands, and evolving institutions, one of the major areas of activity in agricultural economics is the study of policy issues. Assessment of impact of a given policy on the welfare of various members of the society is a major preoccupation of agricultural economists. In addition to the development of policy analysis, other areas were also added to the scope of agricultural economics. Included in this context was the study of rural economies. Agriculture was credited for supporting the rural economy directly or indirectly, which brought the study of rural development within the purview of agricultural economics.

In addition to the above two areas (over a period of time), one has witnessed several other additions to the discipline. Among these are areas related to natural resources and economic development (particularly in the developing countries). Studies related to natural resources tend to look at the role of such resources in the



Discussion Publishers edition DPR-2026-1119 https://discussionpublishers.com/research/35a0a350-14ba-4787-b4e2-ae3e7040ba5f

production of economic goods, including food. Environmental issues facing the society led agricultural economists to engage in environmental policies related to agricultural production. In the field of economic development, evaluation of new projects for economic development, using tools such as economic impact analysis or benefit-cost analysis, is now included in the discipline. Thus, agricultural economists study the sometimes conflicting needs of farmers, wildlife species, foresters, and outdoor recreationalists [12].

Though the term "agribusiness" had not been used until more recently, agricultural economists had been making significant contributions on issues related to agribusiness for many years [13]. This area emphasizes an integrated view of the food system that extends from research and input supply though production, processing, and distribution to retail outlets and the consumer. This research evolved along two parallel levels of analysis: (1) the study of coordination between vertical and horizontal participants within the food chain, known as agribusiness economics, and (2) the study of decision-making within the alternative food chain governance structures, known as agribusiness management [14]. Related to these are the issues dealing with trade and development. In fact, trade and development have dominated agricultural economics research particularly after the 1980s, with a more recent addition of food consumption and supply chain analysis in the food industry using an industrial organizational approach [2].

There are many other areas that have been brought within the scope of agricultural economics, as evidenced by planning of several parallel sessions in a typical agricultural economics conference. As an example, the 2018 Annual Conference of the AAEA included: finance, risk analysis, environmental and resource economics, behavioral and experimental economics, rural development and regional economics, price analysis and econometrics, food and agriculture marketing and policy analysis, supply chain management, institutional economics, international trade and international development, natural resource economics (including land and water economics), production economics, plus many others, as sessions for presentation of current research. Many more areas can be listed in addition to these listed above to do full justice to what agricultural economists do.

## 3. Proposed objective of the book

The major objective of this book was to explore the current and future issues in agriculture from an economic point of view. In addition, as a guidance to policy-makers, it was hoped that this book can also provide information on the future shape of agriculture in the world. In many parts of the world, food production is not able to meet the demand for the growing population. In addition, increased income in many regions has changed the composition of the food basket demanded by today's consumers. In many nations, rural areas are losing people toward urban areas—a process called urbanization. This has created an additional stress on the economic health of agriculture. In the future, land degradation, climate change, air and water pollution, depletion of freshwater resources, loss of forested areas, and other similar trends would add further stress on the economics of the agriculture industry, and on the people associated with it. This book was intended to provide readers (policy-makers as well as academics) with a comprehensive overview of the current and future state of the art in assessing economics of agriculture and how it is going to change over time in various parts of the world. Although this was the initial intent of the book, its present contents are not totally reflective of all these areas. In fact, contents of this book relate to just a few of them that are of interest to agricultural economists currently.



Discussion Publishers edition DPR-2026-1119 https://discussionpublishers.com/research/35a0a350-14ba-4787-b4e2-ae3e7040ba5f

## Author details

Surendra N. Kulshreshtha
Department of Agricultural and Resource Economics, University of Saskatchewan, Saskatoon, SK, Canada

*Address all correspondence to: suren.kulshreshtha@usask.ca

IntechOpen

© 2019 The Author(s). Licensee IntechOpen. This chapter is distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/3.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. CC BY



Discussion Publishers edition DPR-2026-1119 https://discussionpublishers.com/research/35a0a350-14ba-4787-b4e2-ae3e7040ba5f

## References

[1] Johnson DG. Agricultural Economics. 2019. Available from: https://www.britannica.com/topic/agricultural-economics [Accessed: April 2, 2019]

[2] Runge CF. Agricultural Economics: A Brief Intellectual History. Working Paper WP06-1. St. Paul, MN: Center for International Food and Agricultural Policy, University of Minnesota; 2006

[3] Manning T. The roles of agricultural economics. Canadian Journal of Agricultural Economics. 1980;**28**(3):1-5

[4] Taylor HC. The history of the development of the farm economic association. Journal of Farm Economics. 1922;**4**(2):92-100

[5] Heady EO. Elementary models in farm production economics methodology. Journal of Farm Economics. 1948;**30**:201-225

[6] Seyla T. Agricultural Economics. 2019. Available from: https://studylib.net/doc/8888806/agricultural-economics [Accessed: April 2, 2019]

[7] Morgan W. Agricultural Economics. 2019. Available from: https://www.google.co.uk/search?ie=ISO-8859-1&oe=ISO-8859-1&q=Agricultural+Economics&btnG=Search&domains=www.studyingeconomics.ac.uk&sitesearch=studyingeconomics.ac.uk&gws_rd=ssl [Accessed: March 27, 2019]

[8] Jensen HR. Farm management and production economics, 1946-70. In: Martin LR, editor. A Survey of Agricultural Economics Literature. Vol. 1. Minneapolis: University of Minnesota Press; 1977. pp. 3-92

[9] Marshall A. Principles of Economics. 1st ed. London: MacMillan and Co; 1890

[10] Fenyes TI, van Rooyen CJ. The contribution of agricultural economists to development. Journal of Development South Africa. 1985;**2**(2):271-286

[11] Gardner BL, Rausser GC. Handbook of Agricultural Economics. Vol. 1A, B, 2A, B. Amsterdam: Elsevier; 2002

[12] Moncrieff PM. Agricultural Economics. 2012. Available from: https://www.thecanadianencyclopedia.ca/en/article/agricultural-economics [Accessed: April 1, 2019]

[13] King RP, Boehlje M, Cook ML, Sonka ST. Agribusiness economics and management. American Journal of Agricultural Economics. 2010;**92**(2):554-570

[14] Cook ML, Chaddad FR. Agroindustrialization of the global agrifood economy: Bridging development economics and agribusiness research. Agricultural Economics. 2000;**23**:207-218



Discussion Publishers edition DPR-2026-1119 https://discussionpublishers.com/research/35a0a350-14ba-4787-b4e2-ae3e7040ba5f