The International Dimension of the American Society of Agronomy: Past and Future

Bill Payne and John Ryan, Editors
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PREFACE

The past century has been a period of enormous change for humanity. The fourfold increase in world population and higher economic income per person have given rise to unprecedented demands for food production and, along with it, stresses on the environment and natural resources that sustain the agricultural sector. Never before has the world witnessed such a period of profound social change, culminating in most of its populations living in cities. The 20th century also saw extraordinary technological and scientific development. In celebrating the Centenary of the founding of the American Society of Agronomy (ASA), we are recognizing an unheralded success story of the application of science to agricultural production. Such is the efficiency of the agricultural sector that with less than 3% of the U.S. population it provides the basic food needs of the remainder and exports massive amounts of grain and other products to the world, while food remains a lower proportion of the consumer’s income than in any country in the world.

While the early focus of agronomic research was mostly on the national front, the Society soon assumed an international character as well, which only increased with globalization of trade and the inevitable interaction with scientific and natural agricultural systems around the world. In the publication in 2007 of The American Society of Agronomy: 100 Years of History the various phases of the evolution of the Society were outlined along with developments in resident and extension education. The involvement of ASA in the international scene was highlighted by a brief chapter on “The International Dimension of the American Society of Agronomy: Historical Perspectives, Issues and Challenge” by W.A. Payne and J. Ryan, both of whom spent major parts of their careers with international agricultural centers, whose mission is to address global poverty, hunger, and environmental degradation. As the published article was an abbreviated version of an expanded submission, the suggestion was made to expand the article into a full book. Added momentum to the effort was given by the recent global concerns about food security and the increasing internationality of ASA, as reflected of the “ASA Global” concept. Indeed, the Tri-Society meetings now include “international” in the title to reflect their global scope.

Thus, the manuscript prepared for the centenary has been considerably expanded. While the early part looks back to international developments related to the Society, the historical perspective includes a range of contemporary international issues that are likely to dominate the concerns of agronomists and scientists for the foreseeable future. As such issues were outside the expertise of all authors, it was decided to request opinion pieces or brief subject area reviews from experts in their respective fields. These issues range from the drivers of world food production (wheat and rice) and technological response options to addressing tomorrow’s agriculture (chemical and organic fertilizers, biotechnology, biofuels), to the major externalities (world trade, nutritional and dietary changes, climate change) that influence society as a whole.

The book as represented deviates from traditional Society publications in that it contains parts written by the authors as an ASA history and parts that are edited contributions on future issues that will challenge tomorrow’s agronomists and crop scientists. A unique feature of this book, with both a historical and future perspective, is the inclusion of biographical sketches of several luminaries or outstanding personalities in the international agricultural arena. The selection of these scientists was admittedly arbitrary—there were many more who could have been selected—and had of necessity to be limited, but we believe that it reflects the broad geographical and subject areas that define international agriculture; all have had enduring links one way or another with the American Society of Agronomy. It is hoped that the book will serve to expand public interest in international agriculture and lead to enhanced funding for research in international agriculture. The brief look back at past achievements serves to illustrate how human ingenuity can be harnessed to address global problems on society in the years ahead.

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