Main Issues for Sustainable Agricultural Development in Asia

George H. L. Rothschild*

Abstract

Agriculture remains the key sector for the economic development of most developing countries. It is critically important for ensuring food security, alleviating poverty, and conserving the vital natural resources that the world's present and future generations will be entirely dependent upon for their survival and well-being. The world's population will inevitably double by the middle of the 21st century, that we are soon to enter—that is in the space of just two generations. Over 90% of this increase will be of the poor and will occur in the developing nations, especially in Asia, and, to an ever greater extent, will be in the urban areas. This awesome increase in population will place immense pressures on agriculture, and thus also on land, water, and the biological resources of the globe. This means that the vast increase in agricultural production that must take place in the second green revolution must also ensure that while these resources have to be fully utilized, they must at the same time be enhanced and conserved. This is the challenge of sustainability, which was not a central feature of agricultural development over the past decades. Addressing these issues that are of such overriding importance for the future of the world's population, has now to be done in the context of a rapidly changing external environment, that does not just involve the natural resource base mentioned earlier. It also involves world trade liberalization as an outcome of the GATT negotiations, as well as the decline in public sector support for agricultural research and development, and increasing privatization of such activities. For the successful development of strategies to address these immense global challenges, research will be of major importance, and international agricultural research partnerships between institutions in the developed and developing world will play a vital role in this endeavor. The research agenda for sustainable agricultural development will require greatly enhanced investment in the fields of biotechnology, information technology, and other modern approaches, as well as in "conventional" science and technology. This effort has to be linked to an appropriate policy framework in Asian developing nations, so that the products of research and development on sustainable agriculture can be adopted through effective technology transfer by both the public and private sectors. It can be seen that there is an immense task ahead, but it is extremely encouraging to see the efforts already being made to address these challenges, as will be highlighted in this International Symposium.

* International Rice Research Institute (IRRI), The Philippines