The Seed Industry in U.S. Agriculture: An Exploration of Data and Information on Crop Seed Markets, Regulation, Industry Structure, and Research and Development. By Jorge Fernandez-Cornejo, with contributions from Jonathan Keller, David Spielman, Mohinder Gill, John King, and Paul Heisey. Resource Economics Division, Economic Research Service, U.S. Department of Agriculture. Agriculture Information Bulletin Number 786.

Abstract

The unprecedented growth in crop yields and agricultural total factor productivity over the past 70 years owes much to a series of biological innovations embodied in seeds, beginning with the development of hybrid crops in the United States in the early part of the 20th century, continuing with the adoption of high-yielding varieties during the Green Revolution of the 1960s and 1970s, and more recently, modern biotechnology. Throughout this period, the seed industry evolved, as small businesses gave way to larger enterprises that integrated plant breeding, production, conditioning, and marketing functions. The industry was further shaped by widespread mergers and acquisitions in the latter part of the century, rapid growth in private research and development (R&D), shifting roles of public and private R&D, and a "coming of age" of agricultural biotechnology.

Keywords: Seed markets, seed costs and prices, regulation, plant breeding, field crops, research and development, industry concentration, biotechnology.

Note: The use of brands or firm names in this publication does not imply endorsement or approval by the U.S. Department of Agriculture.

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