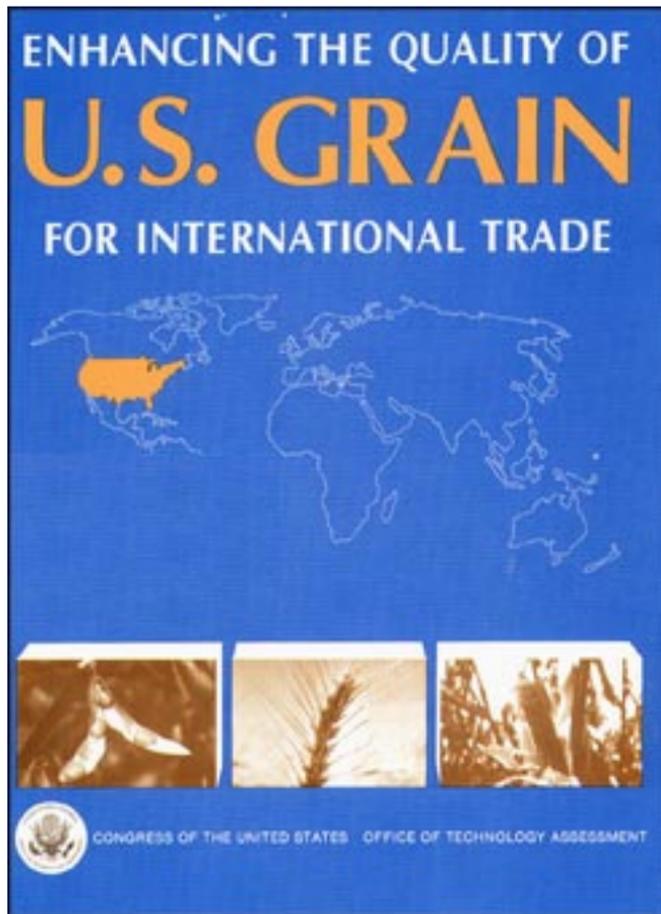


*Enhancing the Quality of U.S. Grain for
International Trade*

February 1989

NTIS order #PB89-187199



Recommended Citation:

U.S. Congress, Office of Technology Assessment, Enhancing the Quality *of U.S. Grain for International Trade*, OTA-F-399 (Washington, DC: U.S. Government Printing Office, February **1989**).

Library of Congress Catalog Card Number 88-600592

For sale by the Superintendent of Documents
U.S. Government Printing Office, Washington, DC **20402-9325**
(order form can be found in the back of this report)

Foreword

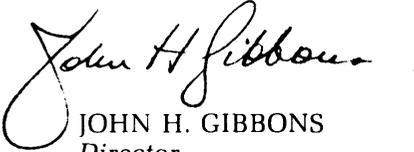
American agriculture, long the sector of the economy considered the most productive and competitive in the world, began to show signs of declining international competitiveness in the early 1980s. Many reasons have been given for this, including the problems of the quality of U.S. grain. The quality issue is receiving renewed attention in the current world buyers' market for grain. Some are concerned that as the influence of important economic variables such as the strength of the dollar and the extent of agricultural price support cause U.S. exports to become more price-competitive, opportunities to increase exports may be hampered by buyers' qualms about U.S. grain quality.

Complaints of overseas buyers about low-quality U.S. grain receive widespread attention. Buyers protest that they receive dirty, molded, or infested grain, or that characteristics contracted for, such as a certain protein level, were not met. Exporters argue that foreign buyers are using quality complaints to bargain for lower prices. Farmers and many Members of Congress point to loss of market share to prove the importance of quality. The problems—real or perceived—have persisted for many years, and neither industry response nor congressional actions to date provide a satisfactory answer or reassure U.S. customers.

During debate on the Food Security Act of 1985, the issue of the quality of U.S. grain was again raised. It became apparent that insufficient information was available to make wise decisions. Congress then amended the act and directed the Office of Technology Assessment to conduct a comprehensive study of the technologies, institutions, and policies that affect U.S. grain quality and to prepare a comparative analysis of the grain quality systems of major export competitors of the United States. The study was also requested by the House Committee on Agriculture and the Joint Economic Committee.

This report is one of two in that assessment. It focuses on the U.S. grain system and possible changes within that system to enhance grain quality. A second report, *Grain Quality in International Trade: A Comparison of Major U.S. Competitors*, provides OTA's analysis of the grain quality systems of other major exporters.

OTA greatly appreciates the contribution of the advisory panel, authors of technical background papers, the many industry associations, and other advisors and reviewers who assisted OTA from the public and private sector. Their guidance and comments helped develop a comprehensive study. As with all OTA studies, however, the content of this report is the sole responsibility of OTA.


JOHN H. GIBBONS
Director

Advisory Panel

Enhancing the Quality of U.S. Grain for International Trade

Donald E. Anderson
General Partner
The Andersons
Maumee, OH

Roger Asendorf
American Soybean Association
St. James, MN

G. (Jerry) W. Becker
Vice President and General Manager
Caldwell Manufacturing Co.
Kearney, NE

James B. Buchanan
Vice President and Manager of
Grain & Feed
Illinois Cereal Mills, Inc.
Paris, IL

William J. Cotter
Director of Operations
Port of Corpus Christi Authority
Corpus Christi, TX

James F. Frahm
Director of Planning
U.S. Wheat Associates
Washington, DC

Maurice A. Gordon
U.S. Feed Grains Council
Rantoul, IL

William W. Hay
Millers National Federation
Minneapolis, MN

Jerry P. Krueger
National Association of Wheat Growers
Warren, MN

Roald H. Lund
Dean, College of Agriculture
North Dakota State University
Fargo, ND

Richard L. McConnell
Director of Corn Research
Pioneer I-II-Bred International, Inc.
Johnston, IA

Paul B. Mulhollem
Group President
World Oilseeds Group
Continental Grain Co.
New York, NY

Seiichi Nagao
General Manager
Cereal and Food Research Laboratory
Nisshin Flour Milling Co., Ltd.
Tokyo, Japan

Grayce "Susie" Pepper
purchasing and Office Manager
Zip Feed Mills, Inc.
Sioux Falls, SD

Harold E. Reese
Vice President and Assistant
Division Manager
Bunge Corp.
Destrehan, LA

Thomas C. Roberts
Executive Vice President
Wheat Quality Council
Manhattan, KS

Ronald E. Swanson
National Corn Growers Association
Gait, IA

D. Leslie Tindal
Commissioner
South Carolina Department of Agriculture
Columbia, SC

NOTE: OTA appreciates and is grateful for the valuable assistance and thoughtful critiques provided by the advisory panel members. The panel does not, however, necessarily approve, disapprove, or endorse this report. OTA assumes full responsibility for the report and the accuracy of its contents.

OTA Project Staff
Enhancing the Quality of U.S. Grain for International Trade

Roger C. Herdman, *Assistant Director, OTA
Health and Life Sciences Division*

Walter E. Parham, *Food and Renewable Resources Program Manager*

Michael J. Phillips, *Project Director*

David M. Orr, *Senior Analyst*

Lowell D. Hill, *Contractor*

William W. Wilson, *Contractor*

Julie A. King,¹ *Analyst*

Linda Starke, *Editor*

Administrative and Support Staff

Sally Shafroth² and Nathaniel Lewis,³ *Administrative Assistants*

Nellie Hammond, *Secretary*

Carolyn Swarm, *Secretary*

¹Through March 1987.

²Through April 1987.

³From May 1987.

Major Contractors
Enhancing the Quality of U.S. Grain for **International Trade**

Stephen P. Baenziger
University of Nebraska

Fred W. Bakker-Arkema
Michigan State University

C. Phillip Baumel
Iowa State University

Joe W. Burton
U.S. Department of Agriculture
Raleigh, NC

Roy G. Cantrell
North Dakota State University

Jack F. Carter
North Dakota State University

Harry H. Converse
U.S. Department of Agriculture
Manhattan, KS

Bert L. D'Appolonia
North Dakota State University

Robert Davis
U.S. Department of Agriculture
Savannah, GA

Joel W. Dick
North Dakota State University

Patrick L. Finney
U.S. Department of Agriculture
Wooster, OH

Richard C. Frohberg
North Dakota State University

Paul Gallagher
Kansas State University

Hagen B. Gillenwater
U.S. Department of Agriculture
Savannah, GA

Charles R. Hurburgh
Iowa State University

Howard L. Lafever
Ohio State University

Karl A. Lucken
North Dakota State University

Paul J. Mattern
University of Nebraska

Marvin R. Paulsen
University of Illinois

Tilden W. Perry
Purdue University

David B. Sauer
U.S. Department of Agriculture
Manhattan, KS

Mark D. Schrock
Kansas State University

Rollin G. Sears
Kansas State University

Thomas L. Sporleder
Texas A&M University

A. Forrest Troyer
DeKalb-Pfizer Genetics