



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

378.786
T73
E36



Montana State University
Bozeman

The Economics of World Wheat Markets: Implications for North America

May 29–June 1, 1997

Waite Library
Dept. of Applied Economics
University of Minnesota
1994 Buford Ave - 232 ClaOff
St. Paul MN 55108-6040 USA

Objective Analysis
for Informed
Decision Making

Conference Proceedings

October 1997

Russian Agriculture and World Grain Trade: Lessons from the Past and Implications for the Future

Barry K. Goodwin and Thomas J. Grennes

Profound changes in the structure of the agricultural economies of the republic of the former Soviet Union have occurred in recent years. The collapse of the Soviet system and the reforms which followed in the early 1990s brought about a transitional movement toward a market-oriented economy. Reforms have been slow to occur, however, and many sectors of the Russian economy, including agriculture, have experienced substantial structural shocks that have resulted in large reductions in production, consumption, and trade. Of principal importance to the North American grain sector is the virtual collapse of Russian grain imports. In the last two years, the Russian Federation has reached an import level consistent with self-sufficiency in grain.

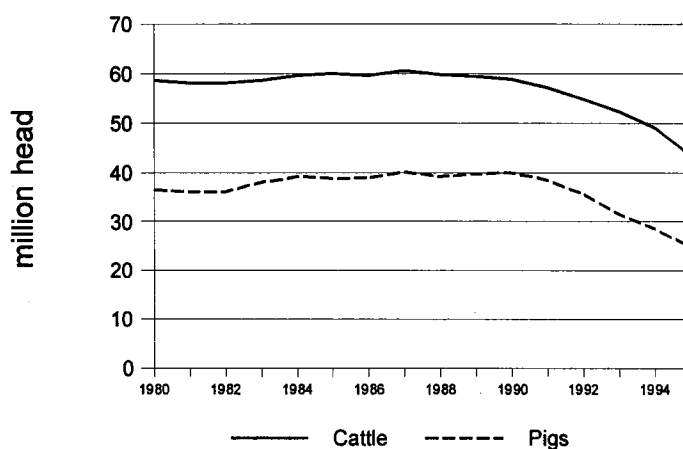
The paper reviews the food and agricultural situation in the republics of the former Soviet Union. The agricultural situation under central planning is discussed, and the dramatic changes that occurred as reforms were initiated in the early 1990s are addressed. Several points relevant to the current agricultural situation are emphasized. First, central planners of the former Soviet Union placed a strong emphasis on consumption of livestock products. High subsidies were used to promote both the production and consumption of livestock products. Production of livestock products was heavily dependent upon imported feed grains, which in turn were heavily subsidized. Following the collapse and the subsequent reforms, livestock inventories were drastically reduced which, in turn, greatly diminished the demand for imported grains (Fig. 8).

A second important point in understanding the nature of post-reform Russian agriculture is recognition of the impact of widespread inflation and the significant decreases in per capita income levels. Although the extent to which real food prices have increased is unclear, it is certainly true that per capita income levels fell dramatically in the 1990s. Decreases in income brought about significant shifts in food consumption patterns. In particular, per capita consumption of almost all food commodities decreased significantly between 1990 and 1995. The hardships imposed by the extreme inflation upon pensioners and others dependent upon fixed government payments were substantial.

**The Russian Federation
is currently almost
self-sufficient in grain,
and is likely to remain a
small importer or
exporter.**

Finally, a key to understanding the nature and extent of reforms in the former Soviet Union is comprehension of the collective and state farm system and the limited provisions for private ownership and transfer of agricultural land. Despite several decrees mandating formation of a land market, agricultural land markets remain absent for the most part. This prohibits an efficient agricultural credit market since provisions for collateral are vague. In addition, although a large percentage of former collective and state farms have been "privatized," this privatization has mainly involved conversion to joint-stock companies with the end result being that resources remain in the control of former state farm managers. Thus, there is considerable reason to question the overall extent of reforms. Although modest expansion in truly private farms has been realized, the majority of large collective and state farms function much as before the reform. Even though a significant proportion of production of some food commodities, such as potatoes and poultry products, is now accomplished on private plots, grain production remains largely in the hands of large collective and state farms.

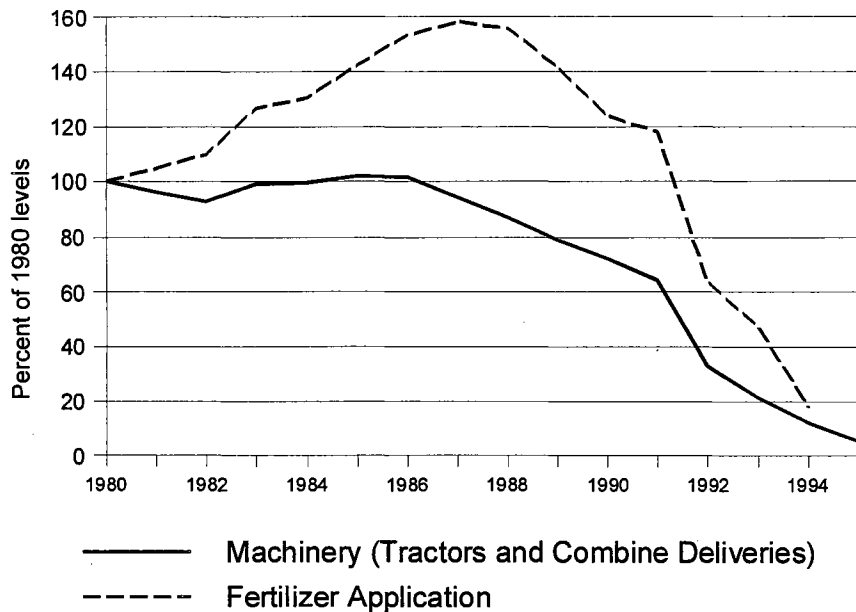
Figure 8. Russian Cattle and Pig Inventories



Another substantial change that followed reforms and significantly impacted agricultural production is the cost of farm inputs. Reforms brought about the significant reduction or elimination of input subsidies. Fertilizer and farm machinery prices rose significantly, and as a result, purchases and application of farm inputs fell dramatically as shown in Figure 9. The drop in output has been substantial and is due, at least in part, to the sharp reduction in input utilization.

The paper also considers an empirical analysis of the determinants of Russian grain trade. This effort is frustrated by the general dearth of available data. However, the results imply that yield and income improvements would bring about only modest increases in Russian grain

Figure 9. Russian Input Usage in Agriculture as a Percentage of 1980 Levels



imports and thus suggest that Russia is likely to remain a small importer or exporter of grain products. Finally, it is pointed out that during the last free market period, the Tsarist period, Russia was the largest exporter of wheat in the world. A simple empirical examination of evidence from this period suggests that Tsarist Russia was indeed a large commercial player in international wheat markets and thus suggests that the potential exists for significant exports of wheat to once again flow from this region. However, substantial reform and institutional change far beyond what has been realized to this point must be undertaken before output can be expected to expand to the level necessary to restore Russia's prominence as a world wheat exporter.

About the Authors

Barry Goodwin is Associate Professor of Agricultural and Resource Economics at North Carolina State University. He received his Ph.D. from the same institution. His research interests include international trade, applied econometrics, policy and price analysis, and the analysis of transition economies.

Thomas J. Grennes is a Research Associate at North Carolina State University. He received his undergraduate degree from the University of Indiana. His research focuses on economic reform in the former Soviet Union and Eastern Europe, integration of international product and factor markets, and international trade in agricultural products.