In this report...World trade in feed wheat fluctuates widely, but since 1985, trade has generally increased. Low relative wheat prices are the primary factor encouraging trade in feed wheat. However, the feed wheat market is relatively small, with policy impediments and other factors restricting increases in demand. Difficulties in defining feed wheat and in obtaining data on feed wheat consumption and trade hinder an empirical evaluation of trends, but a few major observations emerge from the available consumption and trade data. This paper examines the key factors affecting feed wheat trade and thus develops a framework for evaluating the conditions necessary for feed wheat trade.

Summary

Competitive prices and abundant wheat supplies generally increase trade in wheat for feeding. Certain types of market conditions increase the probability that large volumes of feed wheat will be traded. These market conditions include: damaged wheat in exporting countries that leads to heavy price discounts; abundant total wheat supplies that drive down export prices, often aggravated by fierce and subsidized competition among exporters; and a combination of the first two conditions that lowers relative wheat prices. This report examines the key factors affecting feed wheat trade and thus develops a framework for evaluating the necessary conditions.

While the annual volume of feed wheat trade fluctuates widely, it has been increasing since the mid-1980's. Although much wheat that is traded and fed is low quality, there is no standard definition of feed wheat; any wheat can be used for feeding. Trade accounts for only a small and irregular portion of world consumption of wheat for feed, but feed wheat trade critically affects the volume of total wheat and coarse grain trade.

The world market for feed wheat is relatively small, with very few countries importing wheat for feed, even in years when relative prices are attractive. Policy impediments and other factors, such as the irregular availability of low-priced wheat, restrict import demand. The world market is undergoing some structural change because of reduced demand by the former Soviet Union (FSU) and Eastern Europe, major importers in the past. Because of reforms and economic changes, the livestock sectors in these countries are contracting, and feeding of all grains is declining. In the short term, this will further increase the dominance of South Korea, which now has close to monopsony power in the world market. Other countries could import more feed wheat, but this would require more flexibility in imports or policy changes.

South Korea is currently the world's largest feed wheat importer, and is extremely price responsive and flexible in its purchases of grains for feed. This responsiveness and flexibility lead to considerable volatility in South Korea's annual import patterns. In South Korea, feed wheat imports mainly compete with corn.

Australia, Canada, and the European Community (EC) are the major exporters of feed wheat, although their annual export patterns are highly variable. Australia's and Canada's feed wheat exports are largely associated with weather-related damage to crops. Within the EC, there are large trade flows of feed wheat. The EC normally produces a large amount of low-quality wheat. In addition, bad weather occasionally damages EC wheat. EC feed wheat exports to other destinations are not always clear, because its trade data do not consistently distinguish exports of feed wheat from those of milling wheat. Some feed wheat is also sold by smaller exporters, such as Turkey and some East European countries. The United States does not generally export wheat for feed.

In the long term, trade liberalization and the reform of the EC's Common Agricultural Policy (CAP) are likely to reduce wheat for feed exports, especially from the
EC. World prices for wheat would tend to increase as subsidized exports shrink due to the General Agreement on Tariffs and Trade (GATT). And, more wheat would likely be fed within the EC because of CAP reform changes that lower internal grain prices. Weather, rather than policies that distort wheat export prices, will then consistently be the most important factor determining wheat for feed supplies in the world market.

Ongoing structural adjustments in Eastern Europe and the FSU will likely continue to constrain growth in future import demand for feed wheat. However, some countries that currently discourage wheat for feed imports might increase imports under trade liberalization, which could lead to reduced state trading and more flexibility in import decisions.

**Introduction**

Price and availability appear to be the major determining factors in selection of wheat for feeding. Feed manufacturers in most countries generally follow the least-cost approach to choosing feed ingredients, making the manufacturers highly responsive to relative prices. Wheat can generally replace coarse grains in many rations if minor adjustments are made. Most wheat is equivalent to corn or other coarse grains as a source of energy and is slightly higher in protein content. Wheat feeding thus generally becomes more attractive when protein meal prices are high. Even damaged wheat is palatable as a feed, allowing wheat unsuitable for milling to be used as animal feed. However, there is no standard feed wheat variety--any variety and any quality can be fed.

The vast majority of wheat that is fed is used on or near farms where the wheat is produced. This results from both sporadic weather damage and more chronic low-quality production of grain unsuitable for milling. In some countries, wheat feeding may occur regardless of the wheat's quality, because marketing and/or transportation constraints limit movement to mills, or because distortions in the pricing system undervalue the wheat. Most feed use takes place in the major producing areas of Europe, the former Soviet Union (FSU), and the United States, with very little wheat feeding occurring in developing countries (fig. 1).

**World Trade in Feed Wheat**

In the early 1980's, little feed wheat was traded. This reflected very high wheat export prices, both in...
absolute terms and relative to coarse grains. During the mid-1980's, as wheat prices softened, feed wheat trade began to increase. The pattern of world trade has since been quite erratic. The estimated annual volume of trade during the last decade has ranged from insignificant to more than 8 million tons (table 1).

Possible inconsistencies between the quality of wheat imported and its end use complicate analysis of feed wheat trade. Some wheat importers, especially those with foreign exchange constraints, may buy low-quality wheat for milling purposes. This low-quality wheat can then be blended with higher grades for flour. Conversely, higher quality imported wheat may enter feed channels if competitively priced.

**Market Conditions and Trade Flows**

The volume of feed wheat trade is closely related to low relative prices (fig. 2). The peak years of feed wheat trade are associated with abundant wheat supplies and average wheat prices equal to or below coarse grain prices, or with years of severe crop damage leading to price discounts for nonmillable wheat. Consistent wheat export prices, particularly for feed wheat, are not available from most exporting countries, however, hampering quantitative analysis. U.S. export prices are used here as a general indicator of world market conditions, but feed wheat is sold at prices lower than those used in this analysis. Furthermore, the relationship shown in figure 2 between prices prevailing at the time of shipment and actual imports may be misleading in certain years, because importers typically purchase far in advance of actual shipments. For example, in 1992/93, South Korea purchased feed wheat early in the marketing year for shipment towards the end of the year and even into 1993/94.

The following market conditions determine the volume of feed wheat traded in a given year:

- **Availability of Damaged Wheat at Discounted Prices.** The most direct factor stimulating trade is the availability of low-quality or damaged wheat due to adverse weather. Late or excessive rainfall, particularly at harvest, in a major exporting country is the typical cause of low-quality or damaged wheat. This grain cannot meet minimum standards for milling quality wheat and is thus heavily discounted. It is offered for export at prices well below those for higher grades of wheat and often below prices for corn. Most feed wheat trade in 1992/93 resulted from a high proportion of weather-damaged wheat in Canada and Australia.

**Table 1—World feed wheat trade, 1983-92**

<table>
<thead>
<tr>
<th>Year</th>
<th>Exports</th>
<th>Imports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Canada</td>
<td>Australia</td>
</tr>
<tr>
<td>1983/84</td>
<td>0.1</td>
<td>0.4</td>
</tr>
<tr>
<td>1984/85</td>
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<td>1.0</td>
</tr>
<tr>
<td>1985/86</td>
<td>1.4</td>
<td>0.7</td>
</tr>
<tr>
<td>1986/87</td>
<td>4.0</td>
<td>1.0</td>
</tr>
<tr>
<td>1987/88</td>
<td>1.5</td>
<td>0.2</td>
</tr>
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<td>1988/89</td>
<td>1.4</td>
<td>0.0</td>
</tr>
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<td>1989/90</td>
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<tr>
<td>1990/91</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>1991/92</td>
<td>0.7</td>
<td>0.1</td>
</tr>
<tr>
<td>1992/93</td>
<td>2.5</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Source: ERS estimates.
- Abundant Total Wheat Supplies and Bargain Prices. Trade stimulated by this type of market is less transparent and thus more difficult to evaluate. In recent years, aggressive price competition among exporters, accompanied by increased use of price subsidies, characterized the wheat market. In some years, large global supplies and limited import demand led to very low average wheat prices, regardless of quality. In these cases, the focus of trade shifted from the more traditional notion of exporters moving low-quality grain to the notion of disposing of larger surpluses at prices below those for corn.

In 1990/91, these conditions raised feed wheat trade by about 3 million tons. World wheat output reached a record high, with bumper crops in many major importing countries as well as among most major exporters, and global stocks jumped. The relative price of wheat in the world market fell dramatically. For example, the average export price of U.S. wheat in 1990/91 (adjusted for the Export Enhancement Program bonus) plunged nearly 45 percent below that of the previous year, while export prices for corn fell only slightly.

- Tightening Supplies, Little Damaged Wheat, and Rising Prices. Under these conditions, wheat prices increase compared with those of coarse grains, preventing or limiting trade in feed wheat. This type of market could reflect tighter exporter supplies due to a crop shortfall or reduced stocks, a steep increase in supplies of coarse grains, and/or a sharp increase in wheat import demand.

An example of the last case occurred in 1991/92. There was some trade in feed wheat early in the year. However, during the year, total wheat import demand rose sharply, led by the FSU, which faced a severe shortage of milling wheat. World trade in feed wheat stopped in mid-year, while the volume of total trade soared. Although export prices for corn rose moderately through the year, wheat prices rose dramatically.
**Major Feed Wheat Exporters**

Australia, Canada, and the EC are the major exporters of feed wheat, although there is little annual consistency in export patterns. Smaller exporters such as Turkey, Eastern Europe, South Africa, and Sweden occasionally sell some feed wheat, generally reflecting production surpluses in these countries. Turkey frequently imports higher quality wheat for milling while exporting lower grades. The United States and Argentina do not generally export feed wheat. In 1992/93, however, the United States donated some feed-quality wheat to other countries after rotating damaged wheat out of the Food Security Wheat Reserve.

**Canada**

Canada exports a variable amount of feed-grade wheat each year, based on the quantity of damaged or low-quality wheat produced. In the 1980’s, officially reported exports of feed wheat averaged about 5 percent of Canada’s total wheat exports, reaching a high of 19 percent in 1986/87. It is not clear whether Canada exports any additional wheat at large discounts (equivalent to feed wheat prices), because the Canadian Wheat Board (CWB) does not report export prices.

Canada’s feed grade exports are competitively priced because its acquisition costs are low, with the CWB buying feed-grade wheat from farmers at a substantial discount to milling-quality grades. This, along with increased domestic feeding, helps Canada to dispose of most of this wheat instead of holding stocks. In 1992/93, crop quality declined dramatically because of adverse weather. While this increased feed wheat exports, some of the low-grade wheat was blended with higher quality stocks to maintain traditional markets for milling wheat and to improve export returns. Exports of this blended wheat, and of wheat that was not high-enough quality to meet standard Canadian classifications but was still suitable for milling, were apparently reported as feed wheat exports by the Canadian Wheat Board.

**Australia**

The share of low-quality wheat officially reported in Australia as general purpose (which includes feed wheat) varies, but is generally small. Australia’s feed wheat exports during the 1980’s were mostly a result of low-quality crops, such as those damaged by rains at harvest. Like Canada, the Australian Wheat Board (AWB) does not report prices of export sales, so it is unclear whether higher quality wheat has been sold at feed wheat prices.

Australia can also use poor-quality wheat in domestic feed channels, probably relieving some pressure to export in years of crop damage. Even in normal years when no weather damage occurs, wheat is frequently the chief domestic grain fed in Australia, with large amounts fed onfarm. In 1992/93, rain damaged a large share of Australia’s wheat crop at harvest. Much of this wheat was sold but not delivered until the following year, and possibly some was blended with higher grades for export into milling markets.

**European Community**

Export activity by the EC is the most difficult to categorize for a number of reasons. Total wheat exports by the EC are very large and receive heavy subsidies, but their trade data do not consistently distinguish feed wheat exports. Other factors include the generally poorer quality of all wheat produced in the EC compared with Canada and Australia, much higher domestic feeding of wheat both in absolute terms and as a share of supply, a tradition of holding large stocks of feed-quality wheat, and large flows of feed wheat trade within the EC.

The EC is the second largest user of wheat for feed in the world. Although large volumes of wheat have always been fed there, EC feeding of wheat picked up significantly in the first half of the 1980’s. Much of this rise in EC feeding--and in EC exports of feed wheat--was associated with increased EC wheat production, particularly in the United Kingdom where new, higher-yielding but lower quality wheat varieties were developed. Annual fluctuations in quality stemming from different growing conditions affect all EC countries. Very wet years frequently lead to a large output of feed-quality wheat.

In the mid-1980’s, a large share of EC feed wheat exports came from sales of intervention stocks. During 1984/85 to 1987/88, feed wheat accounted for about 50 percent of total wheat in intervention stocks. Feed wheat stocks have since been reduced to very low levels, probably reflecting higher minimum standards for intervention purchases and the disappearance of feed wheat into EC feed markets.

**Feed Wheat Importers**

Feed wheat importers can generally be classified into three major groups: those that are price-responsive and buy when feed wheat is competitively priced, consistent importers of small quantities whose demand is inelastic with respect to price, and sporadic
importers who display an inconsistent response to price signals. However, the majority of countries in the world never import wheat for feed, although many do import other feed grains.

Regardless of how low wheat prices have fallen in recent years, and how attractive they have been compared with prices of coarse grains, most countries have not imported wheat for feeding. For many developing countries, wheat for food is generally in tight supply and may still be a luxury good. Many countries prohibit the import or use of wheat for feed. In some cases, highly administered import decisionmaking may prevent the flexibility to switch from traditional feed grain imports, even if relative wheat prices become very attractive. Related to this is the fact that wheat is not a traditional grain or feedstuff in many developing countries. Many potential importing countries may be unfamiliar with wheat as a feed grain. Lastly, competitively priced wheat is not always available, and the erratic nature of supplies reduces some countries’ interest in imports. Despite interest in least-cost feeds, consistency of rations and stability of supplies may be more important than the potential cost savings.

Price-Responsive Importers

South Korea, the Former Soviet Union, and Eastern Europe have been the major importers of wheat for feed. Recent economic and political changes are likely to reduce the ability of the former Soviet Union and Eastern Europe to respond to favorable prices, however, as these countries increase reliance on credit, barter, and aid for grain imports.

South Korea

At present, South Korea is the largest feed wheat importer. South Korea is extremely price-responsive and flexible in its purchases of grains for feed, leading to considerable volatility in its annual import patterns (table 2). South Korea has bought feed wheat from all the major suppliers in recent years, such as Canada, the EC, and Australia, as well as significant amounts from Turkey. Reported prices paid for the feed wheat have included discounts as high as $30 per ton below corn prices in some years, but importers will occasionally pay a premium for wheat if it is already in the ration. South Korea’s dominance of world imports provides it near-monopsony power in achieving price discounts from feed wheat exporters.

Because South Korea’s demand for imported feed grains grew so rapidly during the 1980’s, feed wheat appeared to displace only small amounts of corn or other coarse grains (fig. 3). Coarse grain imports, mainly corn, increased strongly during the decade, but would have increased more without feed wheat imports. More recently, growth in feed wheat trade has had a more obvious effect. In 1990/91, coarse grain imports dropped 10 percent (fig. 4). In 1991/92, although coarse grain imports rose, wheat’s share of total grain feeding actually increased.

The Former Soviet Union

The FSU often ranked as the world’s second largest importer of feed wheat, and was the world’s largest in both 1985/86 and 1986/87, the year of peak world feed wheat trade (table 3). In that year, Soviet feed wheat imports were close to 4 million tons, representing about a quarter of total Soviet imports of wheat.

The FSU remains the world’s largest feeder of wheat based on its own large wheat production. Much of the domestic crop is low quality. Inefficiencies and problems in harvesting, marketing, and storage further reduce quality. However, some of the wheat fed has been bread-quality, reflecting distortions in the price system that undervalued the grain as well as deficiencies in marketing and transportation. In previous years, bread was also priced so low that a substantial amount was fed to livestock.

Recent structural changes point to a reduction in both feed wheat imports and wheat feeding. First, grain feeding in general is dropping because of reduced livestock inventories and lower meat production, as reduced subsidies and falling incomes decrease the demand for meat. Second, wheat feeding, compared with feeding of other feedstuffs, is likely to decline due to

<table>
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<th>Year</th>
<th>Feed wheat</th>
<th>Total wheat</th>
<th>Feed as share of total</th>
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<tr>
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<td>0.5</td>
<td>2.4</td>
<td>20.8</td>
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<tr>
<td>1984/85</td>
<td>1.1</td>
<td>3.1</td>
<td>35.5</td>
</tr>
<tr>
<td>1985/86</td>
<td>1.0</td>
<td>3.0</td>
<td>33.3</td>
</tr>
<tr>
<td>1986/87</td>
<td>1.9</td>
<td>3.9</td>
<td>48.7</td>
</tr>
<tr>
<td>1987/88</td>
<td>2.1</td>
<td>4.5</td>
<td>46.7</td>
</tr>
<tr>
<td>1988/89</td>
<td>0.7</td>
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</tr>
<tr>
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<td>2.4</td>
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<td>54.5</td>
</tr>
<tr>
<td>1992/93</td>
<td>1.7</td>
<td>3.9</td>
<td>43.6</td>
</tr>
</tbody>
</table>
Figure 3
South Korea's corn and feed wheat monthly imports

1,000 metric tons

Wheat/corn price ratio

1/ Prices based on U.S. Gulf f.o.b. (wheat price less EEP bonus).

Figure 4
South Korea's imports of grains for feeding, 1985/86-1992/93 1/

1/ Oct.-Sept. marketing year.
Table 3—World feed wheat imports, 1983-92 1/

<table>
<thead>
<tr>
<th>Year</th>
<th>South Korea</th>
<th>FSU</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1983/84</td>
<td>83.3</td>
<td>0.0</td>
<td>16.7</td>
</tr>
<tr>
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<td>73.3</td>
<td>20.0</td>
<td>6.7</td>
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<tr>
<td>1985/86</td>
<td>38.5</td>
<td>38.5</td>
<td>23.1</td>
</tr>
<tr>
<td>1986/87</td>
<td>22.9</td>
<td>48.2</td>
<td>28.9</td>
</tr>
<tr>
<td>1987/88</td>
<td>52.5</td>
<td>25.0</td>
<td>22.5</td>
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<td>1988/89</td>
<td>25.9</td>
<td>11.1</td>
<td>63.0</td>
</tr>
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<td>57.1</td>
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</tr>
<tr>
<td>1992/93</td>
<td>34.0</td>
<td>48.0</td>
<td>18.0</td>
</tr>
</tbody>
</table>

1/ South Korea and the FSU were the major feed wheat importers in 1983-92.

do less distorted prices, increased reliance on bread for food, and gradual improvements in the marketing system.

In 1991/92, wheat imports by the FSU soared 40 percent to 22 million tons, the highest in 4 years. Apparently, only a small amount of imported wheat was fed in the face of severe shortfalls of wheat for milling. The region's financial crisis and dependence on credit, barter, or other arrangements will mute the FSU's future response to relative prices.

Eastern Europe

Country trade statistics do not distinguish imports of feed wheat from other categories of wheat. The only readily available official reports of feed wheat trade with the region in the 1980's were Canada's exports to East Germany, Poland, and Bulgaria. The volume of this trade was fairly small and erratic, often made in response to poor domestic crops. However, East Germany had a trade agreement with Canada calling for imports of barley and/or feed wheat, and appeared quite responsive to relative import prices of corn, barley, and feed wheat, often substituting among feed grains. In addition to low prices, the availability of credit from suppliers, such as the EC, influenced import decisions, and there was some intraregional trade.

Eastern Europe is likely to reduce imports of feed wheat, partly due to the merger of East Germany into the EC. As in the FSU, fewer subsidies and higher prices are cutting livestock production and feed demand, while domestic grain production has changed little, easing feed grain supply shortages and sometimes leading to surpluses. Eastern Europe will probably emerge as an important, although intermittent, feed wheat exporter.

Consistent Importers

Japan and Indonesia are consistent importers of feed wheat for reasons that have little to do with relative prices and feed demand. Indonesia buys small amounts of feed wheat for industrial purposes—as a component of glue for its plywood industry—not for feeding livestock. Japan is a small and stable importer of feed wheat, with a long tradition of imports (about 150,000 tons per year). Import quantities are based on policy considerations, with no marked reaction to fluctuating world prices. These imports have no bearing on purchases of coarse grains by Japan, the world's largest importer. Under Japan's Food Control Law, only the Government can import feed wheat and barley.

Japan also has a long tradition of feeding wheat flour and bran. About 1 million tons of imported wheat, sometimes called feed wheat but actually not inferior to other food wheat imported, goes into the special bran milling program. This wheat is ground at fairly low extraction rates to make byproducts, basically bran, useful for feeding. The flour produced enters normal channels for bread- and noodle-making.

A number of countries, primarily in Southeast Asia, such as Thailand, import a small amount of feed wheat for aquaculture. Wheat is preferred to other grains for fish feed due to its binding qualities, not due to relative prices. Imports for this purpose will probably continue to increase.

Sporadic Importers

A number of countries have imported small amounts of wheat for feeding in a largely irregular fashion. Few generalizations can be made about feed wheat imports by these countries, which include Cuba, Egypt, Israel, Malaysia, Norway, the Philippines, and South Africa.

Two of these importers, Malaysia and Israel, have exhibited some response to favorable feed wheat prices and could emerge as more consistent importers. Both produce negligible amounts of feed grains domestically and rely on the world market. Malaysia imported significant amounts of feed wheat—around 100,000 to 120,000 tons—in 1990/91 for the first time, displacing some corn. Feed wheat imports continued in 1991/92, but at lower levels. Similarly, with no
important tradition of wheat feeding, Israel began to import feed wheat in the late 1980's. In 1990/91, Israel purchased at least 250,000 tons, up from 30,000 tons the year before, mainly substituting for sorghum.

Some countries have occasionally imported feed wheat after temporary waivers of policy restrictions. Mexico imported feed wheat in the mid-1980's, and purchases reached nearly 400,000 tons at their peak. However, in recent years, the Mexican Government has not issued import licenses for feed wheat despite interest by some feeders, and has indicated that it is unlikely to do so in the future. Egypt has officially banned wheat feeding in recent years, but in 1991/92, experimented on a very small scale with feed wheat imports from Turkey. Egypt's wheat feeding greatly increased in the last few years, stemming from sharp gains in domestic wheat production. Prospects for future feed wheat imports are uncertain because of Egypt's recent movements toward a free market and liberalization of wheat imports.

The Philippines imports wheat for feed due to restrictions on corn imports, rather than in response to international market price signals. The Philippines is frequently short of corn for feed, but tends to restrict or ban corn imports to protect local farmers. For example, in 1992/93, the Philippines purchased close to 100,000 tons of feed wheat, and had similar imports in 1986 before the Government closed a policy loophole that permitted these imports. A much smaller quantity of feed wheat for aquaculture is normally allowed.

South Africa occasionally imports feed wheat in response to crop shortfalls. Usually South Africa is self-sufficient in feed grains and is a major corn exporter, and sometimes even exports feed wheat. For example, in 1990/91, South Africa imported nearly 90,000 tons of feed wheat due to favorable prices, but also imported corn. Cuba imported feed-quality wheat from Canada during much of 1980's. These imports peaked at around 400,000 tons. It is not known if this wheat was fed or used for milling.

Longer Term Issues

The overriding determinant of future feed wheat trade flows will be the availability of low-quality wheat in the world market. This will continue to be largely a result of weather, and thus highly variable from year to year. However, change in both the structure of the market and the volume of trade are likely over the longer run because of policy developments in a number of countries. In addition, multilateral trade reforms under the GATT will mean substantial changes in market conditions that could contribute to reducing trade in feed wheat.

Policy reforms are currently underway in many of the key countries involved in feed wheat trade, portending changes in the structure of the market for feed wheat. On the import side, structural adjustments in the FSU and Eastern Europe are already beginning to curb demand for imported feed grains, including feed wheat, because domestic demand for grain is falling as consumption and production subsidies are eliminated and livestock herds are cut. Future import demand in these countries will continue to shrink with increases in grain self-sufficiency, whether due to gains in domestic productivity or stagnant consumption, or both.

Potential policy changes associated with market liberalization in other countries could expand the number of feed wheat importers. To the extent that reforms introduce more flexibility in import decisions, such as reducing state trading and allowing more of a role for the private sector, then more countries will consider feed wheat imports when prices are attractive.

On the export side, EC reform of the Common Agricultural Policy (CAP) may lead to reduced exports of feed wheat over time because of a likely increase in domestic consumption of feed wheat. CAP reform, which began in 1993/94 and will be phased in over 3 years, will lower support prices for most grains, but will eliminate support for feed wheat. In addition, some expansion in the EC livestock and poultry sectors is likely, raising domestic demand for feed grain. However, CAP reform does not address the issue of export subsidies; therefore, wheat--regardless of quality--could still be made available for export at prices competitive with corn.

Finally, the GATT agreement would tend to eliminate some of the market conditions conducive to feed wheat trade. This would reduce the use of subsidies that artificially lower world wheat prices and would likely raise the price of wheat compared with the price of coarse grains. For the EC, in addition to prospects for lower exportable supplies stemming from CAP reform, a GATT agreement could limit the EC's ability to sell wheat for feed at competitive prices because the EC will not be able to sell as much subsidized wheat as in the past.
Conclusions

Most wheat consumed for feed in the world originates from domestic sources, with only a small and highly irregular portion imported from other countries. Most wheat feeding occurs on or near farms where it is produced. Onfarm feeding can take place regardless of quality, due to marketing or transportation constraints.

Trade in feed wheat exhibits considerable annual fluctuations. The availability of competitively priced wheat is associated with the following types of market conditions: damaged wheat in exporting countries leading to heavy price discounts; abundant total wheat supplies driving down export prices, often aggravated by fierce and subsidized competition among exporters; and a combination of the first two conditions that results in low relative wheat prices.

The world market for feed wheat is relatively small, with policy impediments and other factors restricting import demand. Because of reforms and economic changes, imports of feed wheat by the FSU and Eastern Europe are expected to decline. In the short term, this will further increase the dominance of South Korea, which has close to monopsony power. There is potential for more imports of feed wheat by other countries, but this would require more flexibility in imports or policy changes.

In the long term, trade liberalization and CAP reform are likely to reduce wheat for feed exports, especially from the EC. Weather will then be the most important factor determining wheat for feed supplies, not policies that distort wheat export prices. Some countries that currently discourage wheat for feed imports might increase imports under trade liberalization. Ongoing structural adjustments in Eastern Europe and the FSU are likely to continue to constrain growth in import demand for feed wheat.
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720-5881 (voice) or (202) 720-7808 (TDD).

To file a complaint, write the Secretary of Agriculture, U.S. Department
of Agriculture, Washington, DC 20250, or call (202) 720-7327 (voice)
or (202) 720-1127 (TDD). USDA is an equal employment opportunity
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