LONGER TERM PROSPECTS FOR U.S. COTTON K. J. Collins

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This afternoon, I am pleased to be invited to discuss the prospects for U.S. cotton in the global economy. You have already heard much expert analysis today about the outlook for cotton from Billy Dunavant, Mark Lange and others. So, I want to focus less on what cotton might do in each country of the world and more on key global economic and policy developments that are likely to affect cotton, directly and indirectly, in the years to come.

Today, everyone knows something about, or has an opinion of, the word "globalization." The term was abstract for most people, until they started to see rising import competition in labor-intensive manufacturing during the 1980's, white collar layoffs in the 1990's, rising foreign investment in the U.S., and the NAFTA and GATT trade agreements of the early 1990's.

How important has the global connection become? World trade in all goods and services has increased 6 percent a year in the 1990's compared with less than 4 percent during the 1980's. In the United States, trade has become a key factor in our economic growth, with the value of exports plus imports now 24 percent of our Gross Domestic Product, compared with half that level at the start of the 1980's. And, I don't have to remind you that for agriculture, U.S. exports set record highs in 1995 and 1996.

This growth in trade has linked countries and markets for goods and services in increasingly complicated ways. Assessing cotton's future now means we have to assess the influence of other commodities in other markets. To navigate this complexity, we want answers to questions such as: How fast will U.S. and foreign economies and incomes grow, and on what will the growing incomes be spent--food, energy, housing, health care, cotton or manmade fiber?

Given demand growth, we want to know how profitable cotton will be compared with other commodities, such as wheat, corn and soybeans, and what will our competitive position be among suppliers?

The answers require evaluations of economic factors, such as income growth; scientific factors, such as technology developments in farm production and manmade fiber production; and policy factors, such as the new Farm Bill or trade agreements. Given this framework, let's first examine prospects for global demand for agriculture.

Demand Prospects for Global Agriculture and Cotton

In late spring, about when wheat prices hit a record \$7.46 per bushel in Kansas City, *Business Week* dedicated its cover to agriculture, that itself an unusual event. The headline blared, "The New Economics of Food." The story opened, "As global demand outpaces supply, both haves and have-nots are in for a shock." The shock, of course, was tight supplies and shortages. While this story may prove to be an overstatement, written at a time of price and short-supply frenzy, behind it are some very remarkable developments in the world farm economy.

These developments have pushed U.S. agricultural exports to all-time highs the past two years, breaking the previous 1981 record by large margins. These records reflected some foreign production problems and strong demand for food, which has grown sharply after the stagnation of the 1980's. Over the last decade, economic growth has been slow in developed countries that have been major markets, such as Japan and the European Union (EU). In the U.S., annual growth in the real GDP has averaged 2.6 percent since 1986. But over the past decade, economic growth was much stronger in Asia--averaging over 9 percent per year in China, nearly 8 percent per year in East Asia and 6-7 percent in South and Southeast Asia. This growth moved large numbers of people into middle class status; it led to a growing preference for western bread- and meat-based diets; dramatic improvements in port facilities, food storage and processing firms, fast food businesses, western style supermarkets; and migration of textile and apparel production.

These changes occurred while a large part of the earth's nations were mired in slow economic growth. Over the past 10 years, while Asia boomed, the Former Soviet Union's economy declined an average of 2 percent per year. But the FSU wasn't the only brake on the world economy. The economies of Central Europe grew less than 1 percent per year over the decade and the economies of Latin America averaged only about 2 percent annual growth, not much different than Africa.

We are now seeing more rapid growth in these slower growing regions, boosted by the stronger U.S. and Asian economies, new trade agreements, and internal policy changes that emphasize market orientation and freedom of enterprise, which take time to bear fruit.

Global economic growth for the next 10 years looks promising. At USDA, we are concerned that growth in Japan and the EU will remain slow, but China and many Asian nations will continue to grow at high, rapid rates, perhaps only a little more slowly than in the past decade. We also believe that a new dynamism will affect Mexico, South America, Central Europe, and North Africa and the Middle East where annual economic growth could at least double compared with the past decade. And the FSU

should finally begin positive growth. This sets the stage for a major increase in global consumer purchasing power.

In the U.S., economic optimism is high. In 1996, the misery index--unemployment and inflation--was the lowest in nearly 30 years. We have just completed the largest back-to-back yearly increases in the stock market since the mid-1950's. Yet, we should not get too carried away. Smart Money's quote of the month provides perspective. Economic forecaster Edward Yardeni observed, "There's nothing to worry about any more. That has me worried."

While economic prospects portend good things for cotton, competition for the consumer dollar will be great. Consider our own trends. In 1960, consumers spent 25 cents of each dollar on food and 8 cents on clothing and shoes. Last year food's share had fallen to 11 cents and clothing and shoes to just 5 cents. Spending on medical care and an array of new consumer items account for the change. While it is hard to achieve great increases in spending on farm products in developed countries, total consumption remains large, so we can not ignore the EU and Japan even while we focus on emerging markets in Asia and Latin America.

In assessing global spending on all farm commodities, one place spending appears to be lagging in the 1990's is on cotton. Between 1980 and 1990 world cotton mill use grew by 30 percent, or about 20 million bales. This drove world cotton trade up steadily, and U.S. exports grew nearly a third. But the story in the 1990's is one of stagnation. World cotton mill use has not grown and world cotton trade and U.S. exports have been flat, with the exception of 1994's exports boosted by China purchases. Part of the explanation lies in low stocks and high prices which curbed mill use as the world moved out of the early 1990's recession. And part of the explanation lies with the Former Soviet Union, where cotton mill use has fallen from nearly 9 million bales in 1990 to 2.8 million expected this year.

Cotton is not alone; the story is very similar for wheat, with strong global demand in the 1980's but fairly flat demand in the 1990's. For rice, demand growth was strong in the 1980's and continued up but at a slower rate in the 1990's. The feed complex, however, differs, driven by the demand for high-value and processed products. Although global feed grain demand flattened out in the 1990's, growth remained positive and U.S. exports trended up. Soybeans showed an even stronger positive change. Global demand grew in the 1980's by about 25 percent, and in only the 6 years since 1990, it has grown another 25 percent, and boosted U.S. exports.

U.S. exports of high-value food products show more of the amazing effects of global income growth and reduced trade barriers. In 1980, high-value exports accounted for about one-third of U.S. agricultural exports. But the share nearly doubled to 57 percent by 1996, led by horticultural products, livestock and poultry. Between 1990 and 1996,

U.S. beef exports rose 100 percent and now account for 8 percent of U.S. production. U.S. pork exports rose 500 percent and now account for 6 percent of production. And, U.S. poultry exports rose 400 percent and now account for 18 percent of production.

These patterns suggest tough competition ahead for cotton for the consumer dollar. Strong demand growth is expected for feed grains, oilseeds, livestock and poultry products, particularly in Asia where per capita consumption is low for high-value products compared with Western economies. Cotton also will face competition from manmade fibers. In most markets where per capita fiber consumption is low, manmade fiber use has been growing faster than cotton. In the 1990's, while global cotton use has been flat, manmade fiber use grew over 4 percent per year. Investment in manmade fiber production continues to grow the fastest in Asia, where per capita fiber use is low and potential consumer demand is enormous.

Despite these demand concerns, we do not expect the 1990's stagnation in global cotton demand to continue. We expect demand to resume its upward path over the next decade and pull up U.S. exports, although modestly. I'll give you five reasons for the modest optimism:

- First, the global economy looks quite promising, as I mentioned earlier.
- Second, income growth will be especially strong in Asia and Latin America where emerging middle classes will boost textile and apparel demand. This is where textile and apparel production will grow most rapidly, where raw cotton production is small and where U.S. cotton has historically been competitive.
- Third, the poor global cotton demand in recent years is a
 poor predictor of the future because it involved the
 highest cotton prices in 100 years and masked increases
 in many nations that were offset by a sharp decline in the
 Former Soviet Union and a decline in China. In the
 future, economic recovery in the FSU and East Europe
 may increase cotton mill use, not contract it further.
- Fourth, the GATT Agreement on Textiles will steadily open markets, making global textile trade more efficient, thereby increasing trade and consumption of textiles and apparel.
- Fifth, and last, there is likely to be sufficient cotton area to rebuild stocks and generally make cotton available to users at reasonable prices.

All these factors combine to argue for a return to the longrun trend in global cotton consumption which has been favorable. Winston Churchill said, "The further you look back into the past, the further you can see into the future." Looking back over the past 4 decades, global cotton consumption rose 1.8 percent per year. We expect a return to near that growth, which would increase global cotton consumption from 85 million bales this season to 101 million by 2005.

Supply Prospects for Global Agriculture and Cotton

Given this demand picture, what about the supply picture: with rising food demand, can 101 million bales of cotton be produced over the next decade, and who will produce it? I think it would be a mistake to use the record-high grain prices and the 60-year lows in grain stocks of the past year as an indicator of future grain and food markets. The increase in global trade in all products, the increase in U.S. farm exports, the global increase in demand for livestock, poultry, feed grains and oilseeds will continue in the future. However, I believe the production capacity of the world, particularly over the next decade, can readily satisfy these growing food demands *and* meet the increase in demand for cotton.

For many decades, global cotton area has been in a narrow range of 30 to 35 million hectares. The long-term annual trend increase in yield has been about the same as that for consumption, 2 percent. So by maintaining the trend growth in yield, world cotton demand could be met with no increase in global acreage. However, in any one year, relative profitability of alternative crops will affect cotton acreage. The 1994/95 season provides a good example. The "A" index averaged 92 cents per pound, an increase of 30 percent over the previous year. Grain prices were weak, so cotton clearly looked far more attractive for 1995, and world cotton acreage rose 10 percent in 1995.

In 1996, grain and oilseed prices were very high relative to cotton, and if that had persisted, we would have expected land to be pulled from cotton in the future. Even though global grain and oilseed plantings will likely rise over the next decade to meet growing demand, their area increases, on average, are likely to have only a modest impact on cotton area and prices.

Unlike cotton area, which has been fairly stable, world wheat and feed grain harvested area peaked at 588 million hectares in 1981 and steadily declined to 520 million in 1995. Where did the 68 million hectares go and can it come back to grain? About half the decline was offset by a 35million-hectare increase in oilseeds area which rose from 127 million hectares in 1981 to 162 million in 1995. That land is likely to remain in oilseeds, given continued demand for animal feed. Some marginal grain land went out of production, but much of the rest of the area decline went into the U.S. Conservation Reserve Program and into the EU's set-aside program. Some of this retired area is likely to return to production to meet the pressure of grain and oilseed demand and limit their expansion into cotton areas. For the CRP, tougher environmental selection criteria and maximum rental rates that are below the rates paid on many

maturing contracts will curb enrollment. In the EU, any tightening of world grain markets will likely lead to a policy decision to reduce set-aside requirements, freeing more area for grains and oilseeds, just as the EU is doing in 1997.

In 1996, the first year of the new farm bill, high grain and oilseed prices pulled in area and reduced U.S. cotton area by nearly 3 million acres to 14.2 million. Foreign area also declined, by 2 million acres. In the U.S., feed grains and oilseeds expanded into the eastern wheat area and into the south. In the 16 southern states, corn area alone rose by 3 million acres in 1996. For 1997 crops, wheat futures prices are low but corn and soybeans remain attractive so U.S. cotton area may drop again, but only slightly. However, over the next several years, grain and oilseed prices are likely to return to more typical levels and U.S. planted area of cotton may remain in the range of 13.5-14.5 million acres.

In the longer term, the cotton supply/demand balance will depend on how important manmade fiber becomes in Asia, how fast cotton yields grow in foreign countries and how countries respond to growing world food demand. China, with grain imports expected to account for 5 to 10 percent of grain needs, some cotton area will slowly shift to food production. But with manmade fiber use growing, cotton use and imports may grow only slowly. India and the Central Asian Republics may also shift more to food production to meet population needs, but in India, cotton production may grow as yields rise. Southeast Asian nations have the greatest potential for cotton demand growth, but will also greatly expand manmade fiber use. The expected shift in textile production from Japan, Hong Kong, Taiwan and South Korea to emerging Southeast Asian economies will not change the level of world cotton trade much. Increasing cotton production and use will also come in countries that will produce, consume and export textiles, such as India, Pakistan, Turkey, and Africa. Consequently, world cotton trade may grow only slowly and the U.S. share is likely to be stable, with U.S. exports rising in the range of 6.5 to 7.5 million bales over the next decade.

The well-respected economist D. Gale Johnson once said, "The single most important factor determining the level of farm income is the level of nonfarm income." For U.S. cotton producers, the implication is that future cotton income will depend critically on the strength of grain and oilseed markets. When strong, they will attract acreage out of cotton and tighten the cotton supply/demand balance. Despite the absence of the FSU in grain and oilseed markets, longer term prospects for grain and oilseed demand look good in China, East Asia, North Africa and Latin America, so that by the end of the coming decade, we may see more pressure on cotton area coming from higher grain prices.

With the 1996 Farm Bill's elimination of base acreage and acreage reduction programs and the advent of full planting

flexibility, U.S. farmers will be more likely to shift from crop to crop each year as the relative profitability picture changes. This will benefit producers most in areas where the crop mix is diverse. These shifts will tend to stabilize farm prices and cash incomes and may benefit both yield and the environment. However, there are two policy changes that may lead to more variability in prices and farm incomes. One change is the elimination of government stockholding programs which may leave commodity stocks lower on average. The second is the decoupled, or fixed, and declining government payments. Cotton producers will have to be vigilant to take advantage of price changes among crops in their planting decisions and utilize risk management tools, particularly crop insurance, to deal with very variable cotton yields.

Conclusion

In conclusion, globalization of markets through trade liberalization and less government intervention in domestic markets will mean faster economic growth and stronger demand and trade than otherwise for both food and fiber. Growing cotton yields in some countries and increasing manmade fiber use will likely mean U.S. cotton exports will grow only slowly and lag export growth in feed grains, oilseeds and livestock and poultry products. Price competition will be important in gaining trade share against competitors and against manmade fibers. Our competitive position will be helped by the farm bill by causing cotton production to migrate to the most efficient areas and by U.S. technology and producer knowledge which will mean better varieties and production practices. Markets are likely to be more variable from year to year, which will encourage

producers to be more flexible in annual crop planting decisions and to seek risk management.

The "China factor" will play a major role. I have concluded that China will raise cotton imports only slowly as they use more manmade fibers, shift slowly to food production and import sizeable quantities of grain and oilseeds. If they do not import the grain, global grain prices will be weaker and that will cause more global cotton plantings but lower prices.

Lastly, the global cotton market will be affected by trade agreements. The NAFTA agreement and the Caribbean Basin Initiative have caused a major shift in U.S. textile imports away from Asia and from Latin America. The GATT Textile Agreement will open U.S. borders to more textile imports and that could slow domestic mill use, but probably only modestly. New trade agreements are on the horizon. There is the miniround of the WTO to be held in 1999; there is the Western Hemisphere Free Trade Agreement that is supposed to be completed by 2005; and there is the Asian Pacific Economic Coordination (APEC) free trade agreement that is supposed to be completed by 2020. These agreements are all important to U.S. cotton, primarily because they will expand economic growth in signatory countries thereby expanding fiber demand and trade. All we have to do is figure out how to remain a competitive producer and marketer. That is the 21st century challenge that cotton's marketing, promotion and, especially, research programs face.





