



INTERNATIONAL COTTON ADVISORY COMMITTEE

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TRENDS IN NON-U.S. PRODUCTION AND CONSUMPTION: Increasing Globalization¹

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Retail Consolidation

The world cotton industry is extremely important to those of us who work in it, and cotton remains the most important textile fiber, serving as the basis for products that benefit every person in the world. And yet, for all the importance of cotton, the cotton industry is a very small component of the world economy. The value of world cotton production is approximately \$20 billion, and the value of annual trade in textiles and apparel is approximately \$360 billion. However, world retail sales of all products, everything from groceries to fishing equipment to automobiles, are valued at \$7 trillion per year, and developments in the structure of the world retail economy will affect the world cotton market in coming years.

The dominant characteristics of the contemporary world retail economy are consolidation driven by intense competition. Consolidation at retail is leading to increased globalization in the manufacture of textile and apparel products, leading to expanding market opportunities for cotton producers, but also to stronger demands from spinners for cotton of improved quality at competitive prices, delivered by merchants just in time. The practical consequence of increasing globalization for cotton producers in coming years is that exports are likely to account for an increasing share of U.S. cotton production.

The world's largest retailers are growing rapidly. The largest 200 retailers accounted for \$2.1 trillion of sales in 2000, equal to 30% of the world total retail sales of all products; the 10 largest retailers accounted for \$600 billion, or 8%, of world retail sales.² The growth in consumer spending is occurring primarily in discount stores. For example, sales at Wal-Mart rose 15% in 2001, Target was up 8% Kohl's was up 22%, but sales at upscale retailers, department stores, and other retail formats were down. Mass merchandisers include Sweden's H&M, Spain's Zara, Japan's Uniqlo; U.S. Wal-Mart, Penney, Federated, The Gap, Target, The Limited, May Dept. Stores, Sears, K-Mart and TJX. Analysts project that by 2010, the ten largest retail chains in the world will account for one-fourth of world retail sales.

¹ Paper presented to the Beltwide Cotton Economics and Marketing Conference, January 11, 2003, Nashville, TN.

The International Cotton Advisory Committee is an association of 42 governments of countries with an interest in cotton. The Secretariat of the Committee publishes information related to world cotton production, supply, demand and prices, and provides technical information on cotton production technology. Detailed statistics are found bimonthly in *COTTON: Review of the World Situation*, \$160 per year via email, \$190 per year in hard copy. A monthly outlook is available by email for \$200 per year and by fax for \$250. Access to the latest estimates of world cotton supply and use by the Secretariat is available on the Internet for \$500 per year. Access Secretariat reports at www.icac.org.

² Arvind Singhal, KSA Technopak India, Pvt. Ltd., paper presented to the meeting of the International Textile Manufacturers Federation, October 2002, New Delhi, India.

The largest retail chains are expanding in response to competitive pressures to reduce costs by capturing economies of scale. Retailers are being forced by competition with each other to restructure to reduce the costs of sourcing, logistics and inventory. Consequently, more retailers are emphasizing private label apparel with lower margins for manufacturers and designers. Retailers are forcing apparel manufacturers to deliver wider ranges of styles, to deliver them faster and to deliver at lower cost. Sears, Target, Bed Bath & Beyond and Linen and Things use web-based reverse auctions among chosen suppliers to force manufacturing margins lower.

Of greatest significance to the cotton industry, retailers are increasingly sourcing globally. Levi Straus, the largest brand-name apparel maker, has moved almost all production overseas; VF Corp, the largest jeans maker, has 80% of production in Latin America and Asia. Turkey, Vietnam, China (Mainland), Kenya, India, Sri Lanka, UAE and Mexico are popular sources of apparel supply offering lower labor costs, acceptable logistics and in most cases a stable political environment. The elimination of quotas on textile and apparel trade for all WTO members in January 2005 will facilitate expanded trade and will further the process of globalization of the textile and apparel pipeline.

The implications for cotton growers are that strong competitive pressures faced by apparel manufacturers will be reflected in increased globalization and stronger pressure on textile manufacturers, who will increasingly need better cotton at competitive prices in order to survive. With globalization of apparel manufacturing, mill use of cotton in developing countries is likely to grow faster than domestic production. Therefore, the gap between non-U.S. consumption and production is likely to expand, providing increased opportunities for exports of cotton but also implying that imports of textiles and apparel will rise. During the 1980s and 1990s, mill use accounted for an average of 58% of U.S. cotton production, but in 2000/01, 2001/02 and this season, mill use is forecast to account for 44% of production, and during the next five seasons, mill use is expected to account for less than 40% of U.S. production. During this decade, exports are likely to account for more than half of U.S. production almost every season, and under the influence of further globalization of the textile and apparel pipeline, with the growth in non-U.S. mill use rising faster than production, there will be demand for U.S. exports.

Tighter Non-USA Cotton Supply in 2003/04

Ending stocks outside the USA are falling from 40 million bales last season to an estimated 34 million bales in 2002/03, and a further significant decline is forecast for 2003/04. Non-USA consumption is rising from record to record, from 85 million bales last season to an estimated 87 million this season and toward 89 million bales next season. As a consequence, the ratio of ending stocks to use outside the USA is falling from 0.39 in 2001/02 to an estimated 0.29 by the end of 2003/04, one of the tightest non-USA stocks to use ratios since 1980/81.

In addition to tighter stocks outside the USA, net imports (imports minus exports) by China (Mainland), always in the past a harbinger of higher prices, are rising from 130,000 bales in 2001/02 to an estimated 1.1 million bales this season and are forecast at 2.3 million bales in 2003/04. The ICAC price model based on current estimates of world cotton supply and use and net trade by China (Mainland) indicates that the season average Cotlook A Index will be 53 cents per pound in 2002/03 and 54 cents per pound in 2003/04. As of end-December, the average A Index was at 51 cent per pound. The average Cotlook A Index during the last three decades was 71 cents per pound.

Production Stable in Major Exporters

Non-USA cotton production in 2002/03 is estimated at 71 million bales, 8 million bales less than the 2001/02 record. A reduction in planted area as a result of lower cotton prices, and lower



SUPPLY AND DISTRIBUTION OF COTTON

Years Beginning August 1

	1998	1999	2000	2001 Est.	2002 Proj.	2003 Proj.
Million 480-Lb. Bales						
BEGINNING STOCKS						
WORLD TOTAL	46.77	47.27	43.71	42.41	47.5	41.2
CHINA (MAINLAND)	21.55	21.69	15.67	12.57	11.9	8.4
USA	3.89	3.94	3.92	6.00	7.4	7.2
NET EXPORTERS	13.17	12.62	12.33	13.98	17.5	15.8
NET IMPORTERS 1/	33.59	34.64	31.38	28.44	30.0	25.4
PRODUCTION						
WORLD TOTAL	85.93	87.64	89.32	98.83	88.1	93.0
CHINA (MAINLAND)	20.67	17.59	20.30	24.43	21.6	23.1
USA	13.92	16.97	17.19	20.30	17.4	16.9
INDIA	12.88	12.18	10.93	12.34	11.7	12.3
PAKISTAN	6.86	8.78	8.34	8.28	7.9	8.5
UZBEKISTAN	4.59	5.18	4.48	4.85	4.7	4.8
TURKEY	4.05	3.63	4.04	4.23	4.1	4.2
OTHERS	22.95	23.31	24.05	24.40	20.8	23.3
CONSUMPTION						
WORLD TOTAL	85.77	90.74	90.70	92.49	94.4	95.9
CHINA (MAINLAND)	20.21	22.05	23.19	25.26	26.2	26.7
INDIA	12.78	13.50	13.43	13.31	13.7	13.9
EU, C. EUR. & TURKEY	10.39	11.17	10.85	11.30	11.5	11.5
USA	10.40	10.24	8.86	7.72	7.3	7.1
EAST ASIA & AUSTRALIA	9.20	9.62	9.53	9.44	9.5	9.5
PAKISTAN	7.46	7.81	8.08	8.73	9.2	9.4
BRAZIL	3.66	3.91	4.00	3.95	4.0	4.1
CIS	1.98	2.58	3.03	3.14	3.3	3.5
OTHERS	9.69	9.87	9.72	9.65	9.8	10.0
EXPORTS						
WORLD TOTAL	25.27	28.33	26.68	29.58	29.3	29.6
USA	4.34	6.75	6.76	11.00	10.4	10.0
UZBEKISTAN	4.13	4.10	3.67	3.72	3.7	3.6
CFA ZONE	3.76	3.86	3.30	3.29	4.4	4.5
AUSTRALIA	3.03	3.20	3.90	3.04	2.3	2.5
GREECE	1.31	1.42	1.12	1.33	1.1	1.0
ARGENTINA	1.12	0.36	0.42	0.22	0.1	0.1
CHINA (MAINLAND)	0.68	1.70	0.45	0.34	0.7	0.5
IMPORTS						
WORLD TOTAL	24.86	27.82	26.51	28.53	29.3	29.6
EAST ASIA & AUSTRALIA	9.12	9.43	9.26	9.63	8.9	9.2
EU, C. EUR. & TURKEY	6.28	7.58	6.68	7.41	6.7	6.5
SOUTH AMERICA	2.13	2.42	1.45	1.26	2.0	2.0
CIS	1.12	1.45	1.90	1.90	1.9	1.9
CHINA (MAINLAND)	0.36	0.14	0.24	0.47	1.8	2.8
TRADE IMBALANCE 2/						
	-0.40	-0.51	-0.17	-1.04	0.0	0.0
STOCKS ADJUSTMENT 3/						
	0.74	0.05	0.25	-0.20	0.0	0.0
ENDING STOCKS						
WORLD TOTAL	47.27	43.71	42.41	47.51	41.2	38.4
CHINA (MAINLAND)	21.69	15.67	12.57	11.87	8.4	7.1
USA	3.94	3.92	6.00	7.43	7.2	7.0
NET EXPORTERS	12.62	12.33	13.98	17.47	15.8	15.2
NET IMPORTERS 1/	34.64	31.38	28.44	30.04	25.4	23.2
ENDING STOCKS/USE 4/						
	0.39	0.39	0.44	0.53	0.50	0.49
COTLOOK A INDEX 5/						
	58.90	52.80	57.20	41.80	53*	54*

1/ Includes Brazil, China (Mainland), Colombia, India, Mexico, Pakistan, Turkey and traditional importers.

2/ The inclusion of linters and waste, changes in weight during transit, differences in reporting periods and measurement error account for differences between world imports and exports.

3/ Difference between calculated stocks and actual; amounts for forward seasons are anticipated.

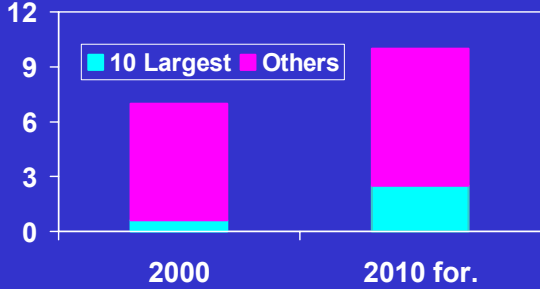
4/ World-less-China (Mainland) ending stocks minus China net exports, quantity divided by world-less-China consumption.

5/ U.S. Cents per pound. The projections for 2002/03 and 2003/04 are based on net China (Mainland) trade and world-less-China (Mainland) ending stocks-to-use ratio.

*/ 95% confidence interval extends 12 cents above and below the point estimate.

WORLD RETAIL SALES

\$ Trillions

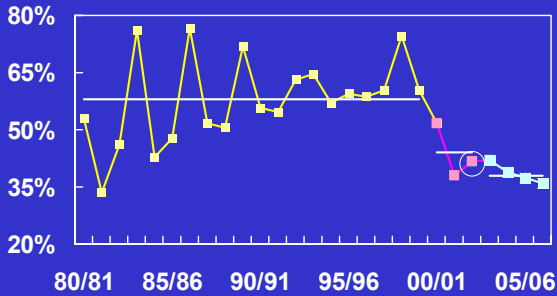


Popular Apparel Sources

- | | |
|-----------|-----------|
| Turkey | India |
| Sri Lanka | Vietnam |
| UAE | China (M) |
| Mexico | Kenya |

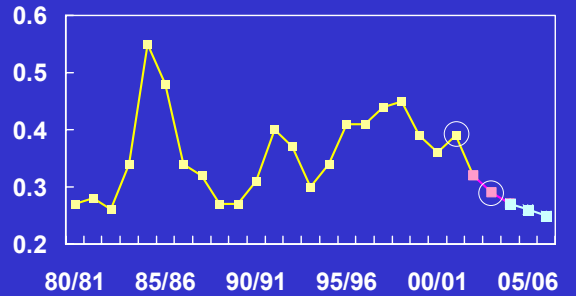
USA MILL USE

% of Production



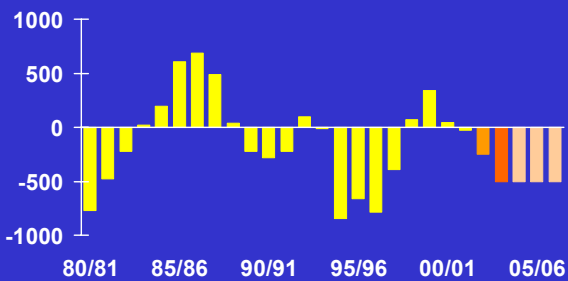
NON-USA STOCKS/USE

Ratio



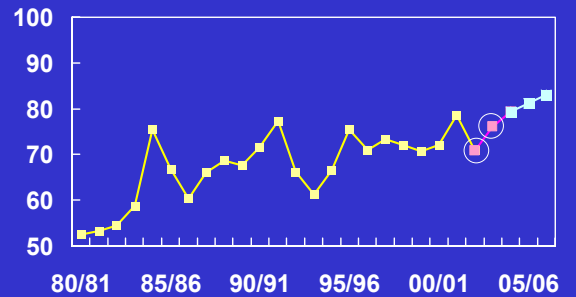
CHINA (M) NET EXPORTS

Net Exports, 000 Tons

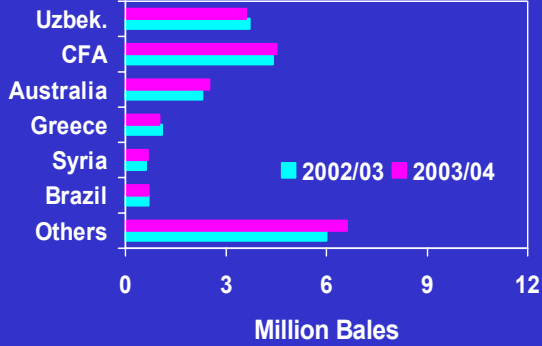


NON-USA PRODUCTION

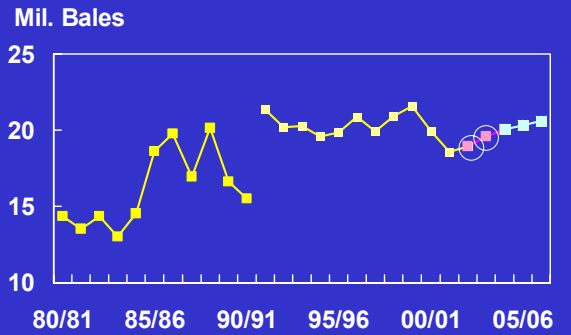
Mil. Bales



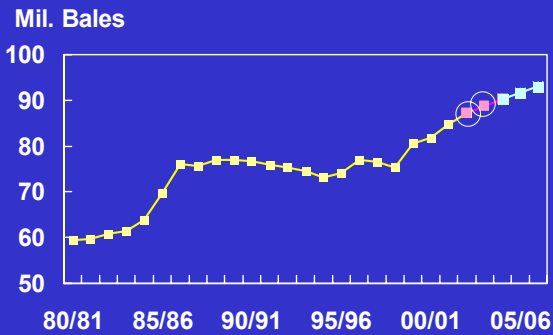
NON-USA EXPORTS



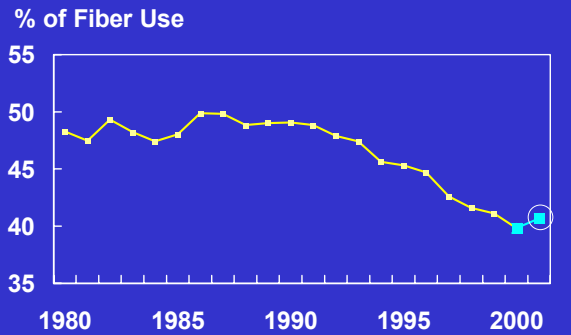
NON-USA EXPORTS



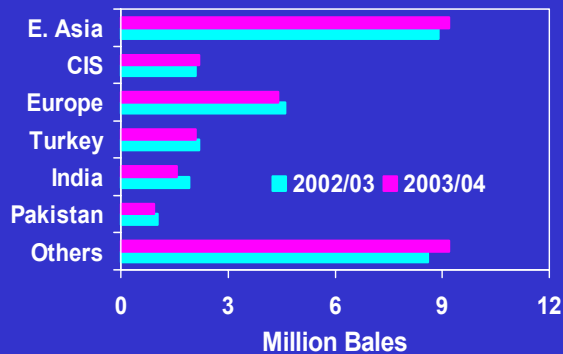
NON-USA MILL USE



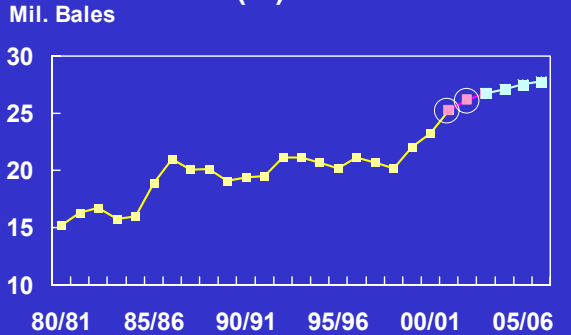
COTTON'S MARKET SHARE



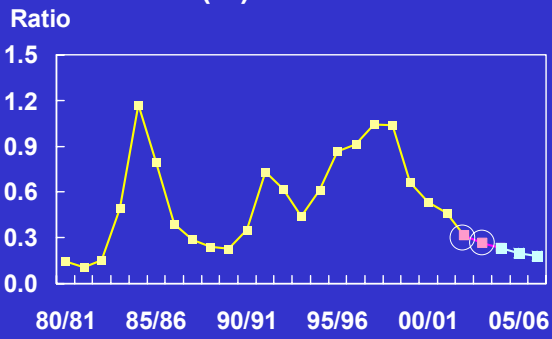
NON-USA IMPORTS



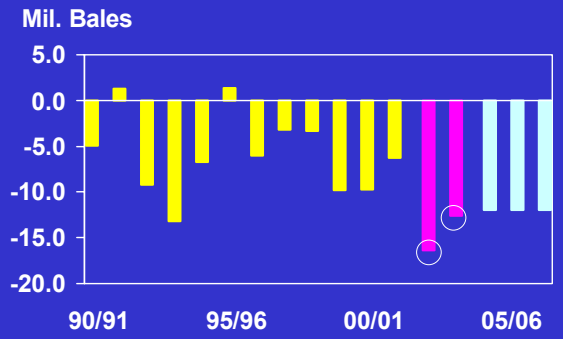
CHINA (M) MILL USE



CHINA (M) STOCKS/USE



NON-USA SUPPLY GAP



yields, are resulting in the decline in production. Cotton production is falling in most of the major producing countries, with the largest reductions expected in China (Mainland) (-12%) and Australia (-56%). The two countries account for approximately 5 million bales of the expected 8-million bale decline in non-USA production this season. Higher prices in 2002/03 are expected to lead to increased cotton production in 2003/04 to an estimated 76 million bales outside the USA. The largest increases are projected for China (Mainland), Australia, Pakistan and India.

Uzbekistan is the second largest exporter, behind the USA, and Uzbek production is not rising. However, the Government of Uzbekistan is providing incentives for expanded mill use and has a goal of building its textile industry to account for half of cotton production by 2005. During the 1990s, mill use accounted for between 10% and 15% of Uzbek cotton production, but domestic use rose to more than 20% of production in 2000/01 and gains to more than one-third of production are expected in the coming years. Mill use in Uzbekistan is estimated at one million bales this season, rising to 1.1 million bales in 2003/04, while production is estimated at about 4.8 million bales both years. Consequently, exports are estimated at less than 4 million bales and are not likely to expand over the next five years.

The twelve countries in West and Central Africa that use the Currency of Francophone Africa (CFA Zone) constitute the third largest source of world cotton exports. The CFA zone produced a record 4.8 million bales in 2001/02. Production this season is forecast at 4.1 million bales and next season at 4.4 million bales. The decline this season is primarily because of lower area in two of the twelve countries. The long-term trend is for further growth in production in the region, with exports continuing to account for almost everything that is produced. Mill use in the twelve countries amounts to only 200,000 bales, and there is little prospect that domestic use will grow faster than production. A current concern is the civil war in Cote d'Ivoire that is disrupting cotton shipments through the port of Abidjan from Mali, Burkina Faso and Cote d'Ivoire. The longer the civil war continues the worse the impact on the regional cotton market will be.

Australia is the fourth largest exporter, and production in Australia is suffering from the worst drought in a century. Exports are expected to fall from 3 million bales in 2001/02 to 2.3 million this season and to 2.5 million next season. Over the longer term, increased production will result in exports of more than 3 million bales again. Mill use in Australia is only 125,000 bales and more likely to fall than rise.

Greece is the fifth largest exporter and shipped 1.3 million bales last season, out of 2 million bales of domestic production. However, exports from Greece are likely to decline. The EU is reducing subsidies to agriculture, and after 2006 subsidies will be decoupled from current production. Consequently cotton area is falling, and production this season and in 2003/04 is estimated at 1.6 million bales. Mill use has been stable at 600,000 bales from the mid-1990s and is expected to hold at that level; no new textile industry investment is occurring, but neither are any firms going out of business.

Syria was the sixth largest exporter last season, shipping 900,000 bales, but production is down substantially this year because of lower prices, and exports are estimated at 600,000 bales. Syrian mill use is rising under government encouragement, and exports are likely to remain below 700,000 bales in the future.

Brazil exported 700,000 bales last season and also imported 250,000, but mill use is rising and production is falling with lower prices. Brazil is expected to be a net importer of about 240,000 bales in 2002/03 and 2003/04. Brazil has great agronomic potential for expanded production and increased exports, but fulfilling that potential seems always to be difficult. Brazil is expected to remain a net importer over the next five years.

Consumption Rising Among Importers

Below-average cotton prices are stimulating increases in world cotton use after almost no growth during most of the 1990s. Mill use outside the USA rose by 3.6% in 2001/02, an increase of nearly 3% is expected this season, and an increase of 2% to 89 million bales is expected in 2003/04. Rising exports of textiles and apparel are leading to increases in mill use in China (Mainland), Turkey, India and Pakistan. The increase in mill use in the four countries is equal to the rise in world mill use in 2002/03, and the same four countries are expected to account for about three-fourths of the rise in non-USA cotton use projected for 2003/04.

East Asia, including China (Taiwan) and Hong Kong accounted for 9.6 million bales of imports in 2001/02, but many countries are allowing stocks to decline this season and imports are falling to less than 9 million bales. Nevertheless, mill use for the region as a whole is steady at about 9.4 million bales, and imports are expected to average 9.2 million bales over the next several years. Mill use is falling in Japan, but rising or stable in other East Asian countries. Spinners in Korea, Hong Kong and China (Taiwan) benefit from the current system of textile and apparel quotas, and increased competition from China (Mainland) is expected after 2004. But the elimination of quotas will benefit textile producers in Thailand, Indonesia and Vietnam.

Imports by the EU are gradually diminishing to less than 3.5 million bales currently, and imports by Central Europe and Norway are about 1.1 million bales. Imports by Russia are rising to nearly 1.7 bales this season, and further modest growth is expected.

Imports by Turkey are expected to grow during the next several years. Turkey built stocks last year when prices were low, and imports are falling by 700,000 bales to 2.2 million bales this season and an estimated 2.1 million bales next season. However, imports by Turkey are projected at 2.5 million bales by 2005/06. Production in Turkey is rising with the development of an irrigation system in the Southeast, but consumption is rising faster, and quota free access to WTO countries will accelerate apparel exports after 2004.

Indian imports reached 1.8 million bales last season and are estimated at 1.9 million bales this season. Mill use in India is rising to a record of nearly 14 million bales this season, and further growth is expected. However, the use of genetically engineered cotton varieties has the potential to facilitate increased production, and imports are expected to fall to 1 million bales over the next four years.

Like Turkey, spinners in Pakistan built stocks last season and imports rose to a record of 1.3 million bales. Imports are estimated at 1 million bales this season. Mill use in Pakistan is rising to records of 9.2 million bales this season and 9.4 million estimated for 2003/04, and the lifting of MFA quotas after 2004 will lead to additional growth. Imports by Pakistan are expected to remain above 1 million bales over the next several years.

And, then there is the largest country of all. Exports of textiles and apparel from China (Mainland) to the USA rose by 161% during the first ten months of 2002, making China (Mainland) the largest supplier of textiles and apparel to the U.S. market. Cotton use in China (Mainland) is estimated at 26.2 million bales in 2002/03, 900,000 bales more than in 2001/02. Consumption in China (Mainland) is projected at 26.7 million bales in 2003/04.

Production in China (Mainland) is estimated at 21.6 million bales in 2002/03, five million bales less than consumption. Most of the difference between domestic production and consumption in China (Mainland) is being filled from domestic stocks, estimated at 12 million bales at the start of 2002/03. However, at least part of the difference between production and consumption will be filled by imports, and as of mid-December import commitments by China (Mainland) were estimated at 900,000 bales, three-fourths from the U.S. The tight domestic cotton situation is pushing prices in China (Mainland) upward, and prices for grade 328 rose to more than 61 cents

per pound during December. This level of prices is considered attractive by producers and is likely to cause production to increase to 23 million bales in 2003/04. Nevertheless, a gap between production and consumption is likely to persist, and net imports are expected to rise. Imports in 2003/04 are projected at approximately three million bales. Even with an increase in imports, 2003/04 China (Mainland) ending stocks are projected to decline to 7 million bales and will be essentially equal to ending stocks in the USA.

Conclusion

Cotton production is falling in most of the major producing countries, and China (Mainland) and Australia account for approximately 5 million bales of the expected 8-million bale decline in non-USA production this season. Higher prices in 2002/03 are expected to lead to increased cotton production in 2003/04 to an estimated 76 million bales outside the USA. The largest increases are projected for China (Mainland), Australia, Pakistan and India.

Below-average cotton prices are stimulating increases in world cotton use after almost no growth during most of the 1990s. Mill use outside the USA is rising from 85 million bales last season to 87 million bales this season and to a projected 89 million bales in 2003/04. Competitive pressures among retailers are squeezing profit margins throughout the textile and apparel pipeline, and with the end of MFA quotas after 2004, the process of globalization of cotton mill use will continue.

The gap between cotton production and consumption outside the USA is rising from 6 million bales last season (buyers outside the USA took advantage of low prices to build stocks by four million bales in 2001/02) to 16 million bales this season, and even with increased production next year, rising mill use in developing countries means that the potential for U.S. exports will remain large. The difference between production and consumption outside the USA is estimated at 13 million bales in 2003/04.