"An overview of the Turkish cotton industry, with special emphasis on the available tools and techniques of price risk management"

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1. Introduction

The agricultural sector still occupies an important place in country's overall economy. The number of people actively engaged in agriculture (full and part time) is about 10 million (around 41% of total labour force). Approximately, 4 million farm units operate in agricultural sector and the average farm size is 5 ha. However, the share of agriculture in Turkish GDP is only about 14%. The most important agricultural products are cereals, cotton, oil seeds followed by various types of fruits and vegetables.

Considering its direct and indirect employment effect, cotton is the basic income source for millions of people in Turkey. Agroecological conditions and ages-old cotton production practices are the main advantages of Turkey, making cotton cultivation important for centuries. Cotton is also the main raw material source for industrial products manufactured in Turkey. Thus, contribution made by cotton to the fiber and food industries continues to grow in importance.

Presently, with an annual cotton production approaching to almost 1 million tonnes, Turkey ranks the fifth largest cotton producing country in the world. Cotton is grown in four different regions covering 25 provinces. According to present estimates, more than 300 000 farmers with their families are engaged in cotton farming, produce almost 2.5 million tonnes of seed cotton each year with an average yield of around 1300 kg per hectare.

Crop value of cotton is approximately 1.6 billion US dollars at current market prices. Direct revenue created by the cotton industry is estimated between 10-12 billion US dollars. Cotton based textile and clothing industry has been an important sub-sector, especially during the last two decades. In the year 2003, total annual export volume of textiles and clothing was around 16 billion US dollars if we also include what is called as "the luggage trade" with neighbouring countries. However, the share of imported cotton as well as imported yarn, fabric, etc., has also become significant.

2. Production and consumption of cotton in Turkey

2.1 Cotton Production

Cotton production figures since the 1990/91 season are given in *Table 1*. Fluctuations in total cotton area is mainly due to changes in domestic and world cotton prices, beside the climatic conditions. The main remarkable characteristics of this period was the continuous increase in average yield. National average yield has risen by almost 30% during the last ten years. The rise in yield compensated some of the decreases in area.

Depressed world and domestic cotton prices since 1998/99 season caused immediate and sharp decreases in area and production in consecutive seasons. Due to very low cotton prices, Government decided, as an emergency measure, to re-introduce the production premium system in 1998/99 season. This measure limited the dissatisfaction of cotton producers to some degree. Continuity to the premium payments in subsequent seasons affected farmers' decisions and partly discouraged them from switching to alternative crops. However, during this period, prices of alternative crops have also remained relatively low. Significant increases in cotton planted area have occured in the "GAP" region, as opposed to dramatic drops in Çukurova and Antalya regions, while drop in area in the Aegean Region has been less than 10 % over the recent years.

2.1.2 Cotton production estimates for the 2003/04 season:

For the current season, it is estimated that total cotton production area is 704 thousand ha, average yield 1 278 kg/ha and the total production 900 thousand tonnes (equivalent to about 2.5 million tonnes of seed cotton. Breakdown of this production according to regions is shown in *Table 2*. As can be seen from this table, the Southeastern Region, where there is a gradual expansion of irrigated land area, created by the "GAP", has become Turkey's largest cotton growing area. Production costs in this region are relatively lower than the other regions and thus, more and more farmers in this region take up cotton farming.

2.2 Cotton Consumption

Cotton consumption has also shown a gradual increase and has reached at about 1.3 millions tons level, which makes Turkey the fifth biggest cotton consumer country in the world. Domestic and financial crises experienced during the years 2000, 2001 and 2002 coupled with global economic slowdown during this period, limited the increase in cotton consumption. Since June 2003, Turkish Lira has steadily gained value against major foreign currencies, as a result of which the export sector in general and the textiles and clothing sub-sectors in particular, have been experiencing increased pressure in their export markets.

2.2.1 Cotton consumption forecast for the 2003/04 season:

As can be seen from the cotton balance figures in *Table 3*, consumption figures for the 2003/04 season is estimated to be around 1.27 million tonnes. This figure might change upwards or downwards, depending on the competitiveness of the cotton yarn and fabrics manufactured in Turkey, as opposed to imported yarns and fabrics, which enter into the country on the inward processing regime, which operates in parallel to the EU's inward processing regime.

Development of the Turkish textile and clothing industry is largely based on skilled labour force, continuous modernization and renovation investments and on the advantage of proximity to Europe, which is the main outlet for exports. Besides, with the availabilty of high quality raw material, i.e cotton, Turkish cotton industry has been in the phase of continuous development for the last twenty years. During 1990's, and beginning of 2000's Turkey annually imported about 1.3 billion US \$ worth of textile and clothing machinery, mostly textile machinery, thus creating a modern spinning and weaving capacity. Presently, ring yarn production capacity is around 1 million tonnes, while the open-end yarn production capacity approaches to 550 thousands tonnes.

3. COTTON TRADE

Turkey has had a liberalised cotton trading market for almost two decades. There is no quantitative restrictions neither for exports nor for imports of cotton. No export and import duty is charged for the foreign trade of cotton. Furthermore, there is no government control over cotton prices. Cotton is freely traded in market and prices are determined by domestic demand and supply and by international prices.

Main players in the cotton trading market are the Agricultural Sales Cooperatives Unions (ASCU's), cotton ginners, mills, textile factories and foreign traders of cotton (*Figure 1*). Producers, who sell their seed cotton to ginners, generally do not engage themselves in lint cotton trading. ASCU's are still important market makers (both in the seed and lint cotton markets) with an overall share of between 15-20% in total crop volume.

As part of the restructuring program of the ASCUs, governments no longer provide finance for their crop procurements, other than the use of a so called "revolving fund" of a limited sum, which was allocated at the beginning of the transition period for restructuring. Thus, the ASCUs were expected to built up their own capital for their crop procurements, as well as maintain their working capital to meet their operating costs.

3.1. Trade in Seed Cotton

Table 4 shows the procurement prices of the ASCUs since 1990/91 season together with the Cotlook "A" and "B" indices, respectively.

The three cotton ASCUs have announced their purchase prices for the 2003/04 season in mid-September. Recent appreciation of the Turkish Lira against major currencies, and almost stagnated world cotton prices, did not provide much room to the ASCUs for significant increases in procurement prices in comparison to the previous year's price levels.

The initial (temporary) procurement prices, which were set for seed cotton at the start of the season, had to be revised upwards periodically, in order to keep up with the market developments, especially in October 2003. The prices with which these ASCUs closed their procurements at the end of 2003 were last revised in mid-November 2003 (*Table 5*).

In comparison to the previuos seasons' purchases, seed cotton procurements of the ASCUs have been much less owing to the accelerating price developments, which occured at the start of the season. The remaining crop was purchased by private ginners and merchants.

3.2 Trade in lint cotton

3.2.1 Domestic cotton market:

As mentioned previously, domestic lint cotton market can be described as a competitive market with no restriction on foreign trade and with no government intervention. Thus, prices are determined by the market forces. Domestic lint cotton market is integrated with international markets so that prices are open to signals from the other markets as well.

A graph, which shows the price developments since September 2003 until the beginning of April 2004 for Std 1 Aegean (Izmir) cotton, compared with the Cotlook A Index, is given in *Figure 2*. As can be seen from this graph, domestic market prices have been well above the Cotlook A Index especially after mid-November.

3.2.1 Foreign trade in lint cotton:

i) Cotton exports: Turkey is no longer a major cotton exporting country. According to the figures registered at the exporters' unions, the export figure between during 2002/03 season was 49 thousand tonnes, major export destinations being, the EU countries (Germany, Italy, Portugal, etc.,) and the Far East countries (Thailand, Bangladesh, Indonesia, etc.,). The export figures for the 2003/04 season (as of the end of March 2004) have already surpassed the 50 000 tonnes level. It is expected that the exports until the end of the 20003/04 season will be around 70 thousand tonnes.

ii)Cotton imports: Due to the fact that it lost ground to excessively subsidized imports, cotton production side has not been able to keep in pace with the demand side, which has now reached at roughly 1.3 million tonnes level per year. Continuous increase in cotton consumption exceeded the domestic cotton production level, making Turkey a net cotton importer since 1992.

It is evident that substantial reduction and/or ultimate elimination of all sorts of subsidies in world cotton economy, will make domestic cotton much more competitive. Also, the completion of the GAP, the Southeastern Anatolian Project, will significantly reduce the dependency of Turkish textile and clothing industry on imported cotton.

Present forecast for the cotton imports for the 2003/04 season is between 350-400 thousand tonnes.

4. Foreign Trade In Textiles And Clothing

Development of the Turkish textile and clothing industry is largely based on skilled labour force, continuous modernization and renovation investments and on the advantage of proximity to Europe, which is the main outlet for exports. Besides, with the availabilty of high quality raw material, i.e cotton, Turkish cotton industry has been in the phase of continuous development for the last twenty years. During 1990's, and beginning of 2000's Turkey annually imported about 1.3 billion US \$ worth of textile and clothing machinery, mostly textile machinery, thus creating a modern spinning and weaving capacity. Presently, ring yarn production capacity is around 1 million tonnes, while the open-end yarn production capacity approaches to 550 thousands tonnes.

As a result of continous investments, in 1990's, both production and export capacities of the industry have increased. Presently, the Turkish textile and clothing sectors represent approximately 10 % of the GDP, while earning approximately one third of the total exports revenues and providing about 2 million jobs. The export revenue of the Turkish cotton industry is estimated at around 10 billion US dollars, which is roughly two thirds of the total textile and clothing exports.

Because of the Customs Union with the European Union, Turkey has been applying the same customs regime as that of the EU since 1996. This means that not only the tariff rates against imports of industrial goods, including the textiles and clothing, from third

countries are identical, but also the systems of inward or outward processing operate in the same manner as that of the EU.

- i) Textiles and clothing exports The significance of exports of textiles and clothing products with respect to the overall exports is best illustrated in *Table 6*. From this table it can be seen that the share of textile and clothing exports (excluding the export figures of leather products) is roughly one third.
- **ii)** Textiles and clothing imports: Turkey has also become a very important market for textile products, especially for cotton yarn, raw and finished fabric in addition to raw cotton. Table 7 shows the value of imports of textile products during the last three years.

It should also be mentioned here that in the foreign trade figures of textiles, the export values and the import values of cotton are also included.

5. Recent Policy Changes in the Agricultural Sector

Turkey has a tremendeous potential for rural growth, but this potential has not yet been fully exploited. While the average annual GNP growth since 1980 has been about 3.4%, growth in agriculture has been only about one third of this rate. The share of the sector in the economy shrank from 36% to 15%. Governments have maintained an important role in agricultural development in Turkey by incorporating different policies and tools to increase production and income of producers in different periods. State owned enterprises and agricultural sales cooperative unions were important instruments to implement the agricultural policies through direct intervention into production and marketing activities in the past.

However, price support policies utilizing primarily the Agricultural Sales Cooperatives Unions, ASCUs, and the State Economic Enterprises have not produced satisfactory results since most of these organisations have gradually turned into inefficient and in most cases unprofitable commercial entities.

A policy change was needed to increase productivity and efficiency in the agricultural sector. As part of an economic program which has started to be implemented since the beginning of 2000, remarkable policy changes have been introduced into the agricultural sector. The primary development objective of the so called "the Agricultural Reform Implementation Project" (ARIP), which is also supported by the World Bank, is to assist the government in the implementation of several agricultural reforms. The ARIP includes the structural reforms of the agricultural sales cooperatives and their unions, which have always had a direct impact and a critical role on cotton marketing and trade.

According to the new law, adopted in June 2000, the ASCUs are no longer expected to implement any support measures, including the price support mechanisms on behalf of the government. In contrast, they are required to become independent, financially autonomous and self-managed organizations, dedicated to serving their farmer members by selling and processing crops on their behalf and making their decisions according to market signals.

Another project, worth to mention, is also related to the cotton industry. The Commodities

Market Development Project (CMDP), which started in 1999, has the overall objective of increasing the marketing efficiency of two major agricultural commodities, namely wheat and cotton. The main components of this project can be enumerated as follows:

- * modernization of seven selected commodity (spot) exchanges for cotton and grains,
- * introduction of a warehouse receipt system, thus enabling the trading of the warehouse receipts instead of the physical commodity,
- * introducing and establishing new standards for these commodities so that trading on warehouse receipts can be extensively practised. According to the information received from the Ministry of Industry and Trade, draft proposals for making the changes in the current laws, regulations etc., have been prepared and will be forwarded to the relevant bodies in the very near future.

Growing complaints from the textile and clothing sectors on the detrimental effects of contaminated cotton, lead the government to prepare, together with the industry representatives, as well as growers' representatives a draft regulation to combat contamination in order to minimize its adverse effects. A governmental decree was passed on 15 October 2003, prohibiting the use of any material (such as collecting sacks, strings, etc.,) made from fibres other than cotton during harvesting. This decree also calls for utmost care to prevent contamination before, during and after ginning and holds responsible those who are involved in these operations.

The establishment of a cotton futures and options exchange in Izmir has been has been on the agenda for the last 10 years. This work has again been intensified. The legal framework necessary for such a trading activity has also been established. The authorities have recently announced that futures trading activities are planned to commence in June 2004. It is expected that the successful operation of such a market will provide a very useful and effective risk management tool to many players in the cotton industry.

6. Price Risk Management Tools Available to the Cotton Industry

At the outset, it would not be wrong to state that the price risk management tools for the commodities in general and for cotton industry in particular have not yet been fully developed in Turkey. It can also be argued that the presently available tools and techniques are not adequate and not widely used.

In the following section attempt will be made to briefly explain the type risk management tools available to cotton growers, ginners, traders, textile mills, etc.who are exposed to such price risks. At this stage, it would be appropriate to briefly explain how the price formation in cotton (both in seed cotton and lint cotton) occurs. For this purpose, the cotton market in the Aegean Region will be used as an example.

6.1. Price formation in seed and lint cotton in Turkey

The reader is referred to Figure 1, where the marketing channels for seed and lint cotton are shown. Cotton seed is bought by private ginners, who normally account two-thirds to three quarters of the market, and by Cotton Cooperative Unions (Tariş in the Aegean Region). A small part is ginned on a contract basis for the growers themselves, who then

stock the lint in anticipation of higher prices. Before 1993/94 season the cooperatives bought the seed cotton mostly on the government account, in which case the Treasury would carry any losses arising from cooperative purchases. However, after 1994/95 season and especially following the new ASCU Law (Law No 4572) the ASCUs could no longer be assigned with the duty of implementing the support price system as explained before. After the absence of such a support price mechanism, cotton growers have become totally exposed to price risks.

Because the domestic and foreign trade in cotton has been fully liberalised since late 1980s, world market prices became more and more the dictating factor in the formation of cotton prices domestically. The elimination of government intervention through the ASCUs, especially after the New ASCU Law also significantly contributed to the well functioning of a domestic market in cotton.

6.2. The Izmir Cotton Exchange and developments towards establishing a futures market for cotton

Most of the lint cotton is traded through the Izmir Cotton Exchange, which is an integral part of the Izmir Commodity Exchange. This commodity exchange, with a history and experience of more than a hundred years, is the focal point for cotton trade. Although it also acts as a marketplace for other commodities, cotton accounts for more than half of its trading volume.

Trade on the exchange is through brokers, who act on behalf of ginners, merchants, exporters, importers, textile mills and cooperatives; in the cotton market, there are 60 such brokers. Most of the trade is in spot contracts. Open outcry tading takes place every working day in a 20 minutes session. Subsequent trading among brokers is based on the prices established at the end of each trading session. Although most transactions on the exchange are directly related to physical trade needs, some 10-15% of transactions are speculative, indicating the presence of a group important for the eventual introduction of trade in futures contracts.

The Izmir Cotton Exchange forms an efficiently operating and well established spot market for lint cotton. Trade on the exchange is well regulated. The exchange has the capacity to ensure quality control. It should be reminded that the price formation for the seed cotton is very much correlated to the price developments on lint cotton. Thus, both at the Izmir cotton exchange and also in local exchanges in the cotton growing regions, prices for seed cotton are also established and closely followed.

Ever since the adoption of export oriented development strategy and free market economy in 1980, the cotton industry vitnessed a process of growing involvement of the private sector in production, processing and marketing of cotton. Risks which previously were borne by the Treasury would now totally rest on the shoulders of private sector as well as on the recently "privatised" ASCUs.

Linked to this and the constant complaints from the textile industry about the burden placed on them as a result of relatively higher cotton prices, serious consideration had been given to the possibility of establishing a futures market. Initial evaluations had shown that such a market would be useful for spreading the risks and had a good potential. Neither the New York No 2 futures nor the Cotlook "A" values had showed a

good correlation with Izmir cotton spot prices. These assessments had also highlighted the need for the use of the US\$ (or another major foreign currency) as the underlying currency for futures contracts rather than the Turkish Lira (TL), which used to show a gradual and continuous tendency of depreciation. Since the year 2003, the US\$/TL parity has displayed an opposite trend, following the austerity measures taken to curb the chronic inflation, with which the country has been living for the last three decades.

As can be understood from above, preparations for the establishment of a futures trading environment for Izmir cotton dates bact to late 1980s. However, a number of factors, including high inflation, absence of a physical and legal infrastructural environment for futures trading had so far prevented its realisation. According to the authorities and the recently formed exchange management most of the legal and institutional preparations have already been completed and that the futures trading may commence in June 2004.

Additionally, the following preparatory work has been instrumental in the improvement of price risk management tools, which may also contribute to the development of a better cotton trading mechanisms, which is vital for the successful operation of a futures market.

- Possibility of forward trading of currencies against TL. (This provision has been available through the commercial banks and it has been extensively used by the tobacco exporters)
- Establishment of a warehouse receipt system for spot trading (and later on futures trading) for cotton. (The project has not yet finished).
- Improving the warehousing systems, and establishment of bonded warehouses for cotton. (The project has not yet finished).
- Improvement on the standardisation of cotton and the measurement of cotton quality parameters.

From the above explanations it can be concluded that apart from a well functioning price discovery mechanism offered by the Izmir Cotton Exchange(mainly for lint cotton) and the small local exchanges (for seed cotton), there are not yet many effective tools which can be extensively used by the growers, ginners, traders and textile mills.

7. Conclusions

Turkey, being a traditional cotton growing country, has been successful in keeping up its production base despite various difficulties experienced during the recent decades. The cotton production side has been adversely affected by the government measures, especially during the last decades. Despite all these difficulties, Turkey has managed to stay sixth in the world in cotton production.

The investments in textile manufacturing, which started off as cotton yarn and cotton fabric production 1970s, gained momentum in 1980s and 1900s with significant expansion into other textiles as weel as to clothing sectors. This developments put Turkey on the fifth place in the highest cotton consuming countries and sixth place in the clothing exporting countries.

Although there exist a well functioning spot exchange market for cotton, dating back to more than 100 years, the establishment of a cotton futures market has not yet been

possible. According to the respective authorities the preparations for starting up futures trading have almost been completed and we may see such trading commencing in a few months' time.

References:

Gazanfer, S.: "Assessing the establishment of a cotton futures market in Turkey" Paper presented at the Technical seminar at the 51st Plenary Meeting of the ICAC, Liverpool, United Kingdom

Gazanfer, S.; "Guideliness for facilitating access to risk management markets through the stimulation of local and regionbal exchanges: the case of cotton in the Near East/CIS/Pakistan" UNCTAD/Com/65, 19 September, 1995.

ANNEX: TABLES

	T	ABLE 1		
COTTON PRODUCTION AND YIELDS				
	Area	Production	Yield	
Crop Year	(000) ha	(000) tonnes	(Kg/ha)	
1990/91	641	654	1020	
1991/92	599	561	937	
1992/93	637	574	901	
1993/94	568	602	1 060	
1994/95	581	628	1 080	
1995/96	757	851	1 124	
1996/97	744	784	1 054	
1997/98	719	838	1 165	
1998/99	756	871	1 152	
1999/00	719	791	1 100	
2000/01	654	880	1345	
2001/02	693	922	1330	
2002/03(*)	720	900	1248	
2003/04(*)	704	900	1278	

^(*) estimate

	TAI	BLE 2	
PRODUC	CTION ESTIMA	TES ACCORDING	TO REGIONS
	(2003	/04 SEASON)*	
	Area	Production	Yield
Regions	(000) ha	(000) tonnes	(Kg/ha)
Aegean	204	256	1254
Antalya	11	14	1273
Çukurova	135	170	1262
Southeast	354	460	1300
TOTAL	704	900	1278

^{*}estimates

TABLE 3						
C	OTTON SUPI	PLY ANI	USE IN T	TURKEY	(000 TONN	IES)
Seasons	Production	Beg. Stocks	Import	Cons.	Export	Ending Stocks
2000/01	879	217	416	1150	28	334
2001/02	922	334	468	1250	30	444
2002/03	900	444	440	1260	49	475
2003/04(*)	900	475	375	1270	70	410

^(*) estimates

TABLE 4 PURCHASE PRICES OF THE COOPERATIVE UNIONS

(For Std.1 Seed Cotton)

ASCUs	Tariş/Ant	birlik	Çukobirli	ik
SEASONS	TL/KG	USCent/Kg	TL/KG.	USCent/KG.
1990/91	2 150	80.2	2 050	76.5
1991/92	3 800	85.4	3 650	82.0
1992/93	5 900	73.6	5 650	82.0
1993/94	5 750	48.5	5 350	45.1
1994/95	25 000	73.5	10 000	55.8
1995/96	40 000	86.0	36 000	78.2
1996/97	70 000	78.0	60 000	67.0
1997/98	140 000	82.9	120 000	71.0
1998/99	195 000	71.4	160 000	58.5
1999/00	230 000	51.5	205 000	45.8
2000/01	380 000	59.2	305 000	47.5
2001/02	680 000	48,5	550 000	39,3
2002/03	800 000	48.8	650 000	39.7
2003/04*	900 000	64.8	650 000	46.8

^{*}Initial purchase prices for the 2003/04 as announced in mid Sep 2003

TABLE 5
Seed Cotton Prices in ASCUs (2003/04 Season)

ASCUs	In mid-Sep'03	In mid-Nov'03	Amount procured
Tariş (*)	900 000 TL/kg,	1 000 000 TL/kg	249 thousand tons
Antbirlik(*)	900 000 TL/kg,	1 000 000 TL/kg	26 thousand tons
Cukobirlik(**)	650 000 TL/kg	850 000 TL/kg	65 thousand tons

^(*) For Std 1 "A" index

^(*) For Std 1 "B" index

TABLE 6
TURKEY'S TOTAL EXPORTS AND EXPORTS OF
TEXTILES AND CLOTHING SECTORS (*)
(Billion US \$)

Years	<i>2001</i>	2002	2003
Total Exports	31.3	36.2	47.1
Clothing Exports	7.5	9.2	11.5
Textiles Exports	2.9	3.0	3.7
Total (Textiles+Clothing)	10.4	12.2	15.2
Share in Total	% 33.3	% 33.7	% 32.3

(*) Leather products not included

TABLE 7
TEXTILES AND CLOTHING IMPORTS (Billion US\$)

			· ,
Years			
	2001	2002	2003(*)
TEXTILES IMPORTS(**)	2.78	3.84	4.00
CLOTHING IMPORTS	0.20	0.24	0.30
TOTAL	2.97	4.08	4.30

Source: Undersecretariat of Foreign Trade

(*) Estimate

(**) includes cotton imports

ICAC RESEARCH ASSOCIATE PROGRAM

An overview of the Turkish cotton industry, with special emphasis on the available tools and techniques of price risk management

Presented by:

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Washington, D.C.

Review of the economical developments since 1980's

1980-Present

- Export oriented development strategies,
- Free convertibility of Turkish Lira / foreign currencies
- Establishment of Free Trade Zones
- Incorporation of State Aids compatible with WTO Rules
- Customs Union with the European Union (1.1.1996)
 - Adoption of EU's customs regime (excluding agriculture)
 - Inward Processing Regime
 - Outward Processing Regime
 - Free Trade Agreements

-Increased Activities to Promote Trade and Investment

-Increased Use of the Free Trade Zones

Despite some of the adverse factors, Turkey has managed to maintain a strong manufacturing and export potential in many sectors

	(MILLION US\$)				
EARS	EXPORTS	<u>IMPORTS</u>	TOTAL		
1923	51	87	138		
1945	168	97	265		
1950	263	286	549		
1960	321	468	789		
1970	588	948	1 536		
1980	2 910	7 909	10 819		
1990	13 959	22 302	35 261		
2000	27 800	54 500	82 300		
2001	31 300	41 400	72 700		
2002	35 800	51 300	87 100		
2003	47 068	68 808	115 876		

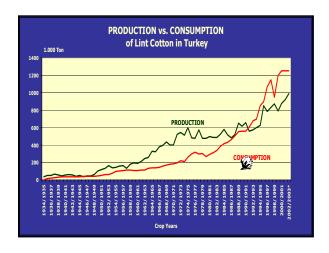
Total exports vs textiles and apparel exports (billion US\$) 2001 2002 2003 **Total Exports** 31.3 36.2 47.1 **Apparel Exports** 7.5 9.2 11.5 **Textiles Exports** 2.9 3.0 3.7

Agriculture and Cotton in TURKEY AGRICULTURE STILL VERY IMPORTANT

40 % of population in agriculture 15 % of GDP from agriculture

COTTON VERY IMPORTANT

Major producer (6th in the world)
10 % of GDP (textiles and clothing)
35-38% of total export value
Major exporter of apparel (6th in the world)



TYPES OF AVAILABLE RISK MANAGEMENT TOOLS FOR LINT COTTON

- 1. Price discovery
- Physical "spot" trading of cotton at the Izmir Cotton
 Exchange
- 3. Forward trading of cotton at the Izmir Cotton Exchange
- 4. Trading of physical cotton based on warehouse receipts
- 5. Trading futures contracts and options

ALTERNATIVE WAYS BY WHICH SEED COTTON CAN BE TRADED

 Simple "spot" trading of seed cotton between grower and ginner: Growers deliver their seed cotton according to the prevalent procurement price of the ginner.

Since the price is fixed, grower is not affected from subsequent price falls or rises

- 2. Trading of seed cotton "on call": grower delivers the seed cotton, its price to be determined on any day in future, on which the seller (grower)
- 3. Delivery of seed cotton to the cooperative of which the grower is a member: Cooperative members are entitled to receive such price increases as they occur during the procurement period (procurement prices cannot be lowered, hence the growers, who trade with their cooperatives, are protected from any possible price falls, which is absorbed by the cooperative)