

TRACECA Project
Trade Facilitation (TNREG 9308)
**Transportation of
Uzbekistan Cotton**
- a Profile
December 1996

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Executive Summary of Conclusions and Recommendations

The Technical Assistance programme was commissioned in October 1996 to assist the Government of Uzbekistan in developing the movement of cotton along the TRACECA corridor. The initial programme consisted of two parallel market research programmes - one in Europe and the other in the TRACECA region. These were designed to provide a more comprehensive picture of the cotton market and the potential to use the corridor and introduce multi-modal transport systems. A Transport Commission has been formed in Uzbekistan to facilitate the development of cotton shipments along the TRACECA route.

Conclusions

- 1) World cotton production is approximately 19 million tonnes per annum. Uzbekistan with a production of around 1.1-1.2 million tonnes per annum is the 5th largest producer accounting for 6-7% of world production.
- 2) World consumption has fallen below expected levels and this has resulted in a significant increase in stocks to almost 10 million tonnes.
- 3) Uzbekistan with limited home consumption is the world's second largest exporter accounting for 16% of world exports. Prices are predicted to fall due to the high stock levels.
- 4) Europe is a significant consumer of cotton with 14% of consumption. It imports 36% of all exports but tonnage's are falling due to the closure of spinning mills, especially in the higher labour cost economies of northern Europe.
- 5) The main growth import markets for cotton in Europe are in the south - Italy, Portugal and Turkey - which are well located to be served from the TRACECA corridor.
- 6) Cotton is sold on FOB (Free-on-Board) terms. The seller is responsible for the primary distribution from the point of origin through to the port of shipment. The buyer is responsible for the movement from the port of shipment through to the end user. Most ports of shipment for Uzbek cotton are in Europe.
- 7) The price of cotton is mainly dependant on quality or grade but also on subjective factors such as image and market factors, such as increased stock levels. Cotton from Uzbekistan currently sells at lower prices than other cottons. Grading reliability is a significant factor in lower pricing.

8) Most Uzbek cotton is routed via Riga in Latvia. This is the preferred location of most buyers because of good facilities. Problems are being incurred due to lack of storage capacity and organised crime. Ilyechovsk is used mainly for shipments to the Mediterranean area as secondary distribution costs for such destinations are lower than using Riga. Bandar Abbas is perceived as the new opportunity with the rail link and good shipping services to the Far East.

9) There are significant problems in grading or classification. The current system based in localised classification at the ginnery does not meet buyers requirements. There are also problems relating to damaged and rotting bales which cannot be detected using exiting sampling methods.

10) Merchants use containers extensively for secondary distribution. The Central Asian bales are considered to be the most suitable for containerisation given their higher load factor. It will be necessary to consider changes in shipping terms if containerisation is to take place at source.

11) The cotton merchants do not consider Poti to be an attractive port of shipment. They have concerns relating to security, restrictive practices and lack of shipping services. Although some concerns may not be fully justified, it is clear that there is a credibility problem which will need to be addressed.

12) The selling of export cotton in Uzbekistan is controlled by the Ministry of Foreign and Economic Relations. Uzhlopkopromsbyt as part of the Ministry of Industry is responsible for the purchasing of the cotton and primary distribution up to the port of shipment. Uzneshtrans arrange for the movement of the cotton from the ginnery to the port of shipment.

13) There are problems of under-investment in local transport facilities, at the ginneries and in packaging equipment which all affect productivity and quality.

14) Storage facilities in Poti are inadequate to meet current demand and lack appropriate fire protection systems. The loading performance of the port is poor due to lack of equipment, power, dedicated facilities and limited control over the labour.

15) The existing terms of sale represent a compromise between the conflicting interests of the seller and the buyer and there is currently no demand for change by the merchants. Lower primary distribution costs using Poti would be advantageous to the seller.

16) Containerisation of cotton is only likely to be viable if it involves a marine leg on the journey. This means that if cotton is to be containerised in Uzbekistan it will have to be moved on a door-to-door basis.

17) There are major concerns regarding the viability of using containers for cotton due to the low load factor on the surface transport leg and the availability of empty containers in the growing areas.

Recommendations

- 1) The Technical Assistance programme should be re-focused to address the concerns identified within the research programme. This will place greater emphasis on improving existing transport systems and lower emphasis on containerisation.

- 2) All cotton shipments moving along the TRACECA route should be monitored. The results should be reviewed by the Transport Commission and remedial action proposed where problems are identified.

- 3) A specific investment appraisal should be made concentrating on the port of Poti and the need for specialised warehousing in Uzbekistan. The objective will be to propose where investment is required to make the TRACECA route more attractive to the buyers and where containerisation can be introduced.

- 4) A detailed examination should be made of the technical issues relating to containerising the cotton and how these can be resolved to consider the introduction of door-to-door container movements. Further study of the differing options on Terms of Sale relating to container movements should be evaluated.

- 5) A cost benefit study of containerisation should be undertaken to ensure that proposals to containerise cotton are economically realistic in view of Daewoo concerns on this aspect. The study should provide comparative costings using each of the main transport corridors.

- 6) The Transport Commission should be actively involved in the programme through regular meetings to review the findings of the Technical Assistance programme.

1. Introduction

Partner States from Central Asia and the Caucasus region requested the TRACECA programme management to provide specific technical assistance related, amongst other issues, to the shipment of cotton through the TRACECA corridor. At a meeting held in Brussels on March 25th 1996, the management of the TRACECA project specifically asked project managers to incorporate active assistance to the shipment of Uzbekistan cotton along the corridor.

The Governments of Uzbekistan, Turkmenistan, Azerbaijan and Georgia signed an agreement on the 14th May 1996 to increase their use of the Georgian ports of Poti and Batumi. This would be expected to significantly increase the overall traffic flows, particularly of cotton, both through the ports and along the TRACECA corridor. It is understood that these were agreements in principle, rather than contractual obligations, and therefore only a statement of intent to route traffic through the ports.

The Decree by President Karimov of Uzbekistan, Number 194 ratified on the 31st May 1996, stated in summary that a plan be worked out to define and establish specific places for loading cotton fibre into containers for the export of 10,000 tonnes in 1996, 30,000 tonnes in 1997 and up to 100,000 tonnes by the year 2000 through the Port of Poti. In addition, a consolidation warehouse with a capacity of 40,000 tonnes of cotton should be established in Bukara, with appropriate testing laboratories. A representative would be located in Poti to control the operation and the shipping of import and export loads, working on behalf of the Government of Uzbekistan.

In response to the request from the TRACECA management, the Multi-Modal Transport project conducted an initial survey of the cotton market in Uzbekistan in May/June 1996 with the specific remit to examine the potential to use multi-modal methodology in the export of cotton. This survey highlighted the problems involved in transporting cotton, the current routings used and identified possible opportunities to containerise shipments through the port of Poti.

Following an exchange of letters with the TRACECA management and a draft Terms of Reference published in the Multi-Modal project Progress Report, a technical assistance programme was agreed. The project was confirmed and commenced late October 1996. The initial programme consisted of two key elements:

- A Market Appraisal. Two surveys were to be conducted in parallel, one in Europe studying the European market and its perspectives and the other in Uzbekistan studying the current market situation from an Uzbek market perspective. The objective of the appraisal was to provide a clearer understanding of the current environment and to identify the specific needs of the technical assistance programme. This was considered essential to ensure that the project was relevant and focused towards recommendations which would initiate change. This report contains the results of these two surveys
- The establishment of a Transport Commission (or Shipment Task Force) to facilitate the development of cotton shipments along the TRACECA corridor. Following a formal approach through TACIS to the Government, the Commission to co-ordinate and develop this programme

was agreed to be formed by the Cabinet of Ministers on 1st November 1996 and the membership was confirmed at the end of November.

The appointed membership of the Commission is as follows:

Abdugaffar A Vakhabov, Chief of the Department, Uzgoshlopkopromsbyt

Fuod V Bakhadirov, General Director, Uzbekjeldorexpediciya

Murat A Khalisov, Assistant of General Manager, Shoshtrans

Sergey G Trikov, Head of Auto Transportation Department, MVES

Rustam Tashpulatov, Chief Expert, Firm "Export", Uzvneshtrans

Tulkum Rathmanor, Head of Main Customs Organisation of Customs Control of Trading Customs Department

Meetings have been held with all members and the inaugural Commission Meeting was held on 12th December 1996.

Implementation of Presidential Decree

With regard to the implementation of the Presidential Decree, although the representative of the Uzbek Government is not yet in place in Poti, the state transport company Uzvneshtrans (UZV) has appointed Gia Okruashvili, Executive Director of Georgian Trans Expedition Ltd (GTE), as their representative in Poti. It has been indicated that the Uzbek Government representative will also be establishing a "Marketing Institute" in Poti to help the sale of cotton through Poti port.

A potential building in Bukara for use as a consolidation warehouse has been identified. However, it will require substantial refurbishment to adapt it for use as a cotton store and as yet no funding has been obtained to enable work to commence.

Report Structure

The Terms of Reference indicated that an Interim Report would be produced by the Commission within two months. Due to delays in commencement of the programme and formation of the Commission, this Profile or Interim Report has been produced by the Consultants, rather than by the Commission. The profile will be used as an initial input to the Commission to identify existing problems and to confirm a future programme to resolve these issues. The structure of this Interim report is as follows:

Section 2: Profile of the Cotton Market

This provides information on the overall world and European markets indicating production, consumption export volumes and stock levels.

Section 3: European Market Survey

This details the results of the research undertaken in Europe. It represents the European perspective and it is recognised that this may differ from the perceptions in Uzbekistan. All the main cotton buyers were included in the survey.

Section 4: Uzbekistan Survey

This details the results of the research undertaken in Uzbekistan and is a more comprehensive survey to that undertaken last May/June. The results are based on interviews with the key organisations involved in the export of cotton and visits were made to key locations in Uzbekistan and along the TRACECA corridor.

These two market appraisals were specifically undertaken without contact between the two market research teams to ensure that the differing perspectives were obtained and to enable cross-referencing of data. It is recognised that there is duplication within these sections. This has been retained in order to demonstrate the similarity in conclusions, especially those relating to the use of the corridor and containerisation.

Section 5: Development Trends

This evaluates the results of the surveys and examines potential changes or opportunities in the market which could result in increased utilisation of the TRACECA corridor and use of multi-modal systems.

Section 6: Proposals for a Technical Assistance Programme

This identifies potential new Terms of Reference for the second part of the project based any re-definition or re-focusing of the programme as a result of the market appraisals. This section forms the basis for the technical assistance in 1997.

2. Profile of the Cotton Market

This section examines the world and European cotton markets to identify the existing and future consumption and import demand. It provides data on the trading environment in which cotton from Uzbekistan is sold and transported along the transport corridors from the producers to the cotton merchants.

2.1 World Market

Cotton is a product grown world wide and is traded in an international market. There are significant annual fluctuations in production in the various producing zones due to climatic variations and many hazards affecting the quality (parasite problems). This results in problems in obtaining accurate data. The production figures are reviewed and published on a constant basis by the International Cotton Agreement Industry (ICAC).

Table 1 provides an overview of the world cotton market, as estimated in April 1996.

Table 1: World Cotton Market

in millions of metric tons

Campaigns beg. Aug. 1st.	1994-95 (estimates)	1995-96 (projection)	1996-97 (projection)
Initial Stocks, August 1			
<i>World total</i>	7.03	7.56	8.01
China	2.12	2.97	3.39
USA	0.77	0.58	0.67
Total, net exporters	3.34	3.05	3.05
Net importers ¹	3.69	4.51	4.95
Production			
<i>World total</i>	18.69	19.23	19.77
China	4.34	4.5	4.1
United States	4.28	3.9	4.3
India	2.36	2.35	2.46
=>> <i>Uzbekistan</i>	1.25	1.27	1.22
Pakistan	1.48	1.73	1.76
Turkey	0.63	0.84	0.79
Others	4.34	4.63	5.15
Consumption			
World Total	18.48	18.78	19.24

¹ Brazil, China, Colombia, Mexico, Turkey and traditional importers except Greece

Table 1 Continued

Consumption by country or region	1994-95 (estimates)	1995-96 (projection)	1996-97 (projection)
China	4.34	4.60	4.50
United States	2.43	2.26	2.50
India	2.26	2.38	2.47
Pakistan	1.52	1.52	1.56
Former Comecon	1.05	1.01	1.04
Brazil	0.84	0.87	0.89
=>> <i>EU and Turkey</i>	2.06	2.07	2.10
Other South East Asia ²	2.19	2.19	2.18
Others	1.82	1.88	1.99
Exports			
<i>World total</i>	6.28	6.31	5.7
United States	2.05	1.65	1.65
=>> <i>Uzbekistan</i>	1.15	1.03	0.98
Franc Zone	0.59	0.61	0.67
Others			
Imports			
<i>World total</i>	6.63	6.31	5.7
South East Asia	2.15	2.22	2.15
=>> <i>EU and Turkey</i>	1.28	1.17	1.28
Former Comecon	0.93	0.93	0.93
South America	0.47	0.63	0.51
China	0.88	0.60	0.20
Closing stocks, August			
World total	7.56	8.01	8.54
China	2.92	3.39	3.14
USA	0.58	0.67	0.83
Total, net exporters	3.05	3.05	3.66
Net importers	4.52	4.95	4.87

Source: International Cotton Agreement Committee (ICAC), April 1996

² Indonesia, Malaysia, Philipines, Thailand, Vietnam

Comments on Table 1 - World Cotton Market

According to these 1996 estimates, the total cotton available on the world market (stock + production) is expanding from 25.7 million tonnes in 1994/95, to 26.8 million tonnes in 95/96 and up to 27.8 million tonnes in 1996/97. This is mainly due to an increase in production from 18.7 million tonnes in 1994/95 to 19.8 million tonnes estimated in 1996/97. The latest data available indicates a reduced estimate for production down to 19 million tonnes, partially due to the problems in Uzbekistan..

Forecasts for the 1995-96 Season

Production

China is the largest producer, followed by US, India and Pakistan. Uzbekistan is only the 5th largest producer accounting for 6-7 % of total world production. In July 1996, when the season crops were completed in the southern hemisphere, the production of the 1995-1996 season was increased to an estimated 19.35 m tonnes. This was an increase on the previous year and was projected to be the second largest on record (20.7 m tonnes in 1991/2).

The average yield has declined to 545 kg of fibre per hectare on a total surface of about 35.5 million hectares (ICAC). This was 4 percent less than that of the preceding season and well under the level of 600 kg per hectare which had been reached in 1991/92. This decline was mainly due to a drop of 24% (almost 200 kg of fibre per hectare) of the yield in the United States, as compared to the established record in 1994/95 of 744 kg fibre/ha. Although the surface increased by 20%, the American production declined by 9% (-370,000 tonnes), falling to 3.9 m tonnes, a deficit of 900,000 tonnes (19%) as compared to the forecasts. This decline is significant given that the US represents over 20% of world production.

In almost all the other countries, however, the production was higher than the forecasts, especially in Pakistan (at least 1.7 million tonnes against less than 1.5 million tonnes last year) and in India (2.5 million tonnes against 2.35 million tonnes). The production of Uzbekistan cotton was forecast to remain stable at around 1.25 million tonnes per annum.

Consumption

World consumption for the season 1995/96 is estimated around 18.8 million tonnes. Demand has remained stagnant since 1986-87 because of the fall in consumption of the countries of the ex Comecon (- 2 million tonnes) and decline of the cotton spinning industry. Consumption of cotton has been weak in the US, in the Far East, in South America and in Europe where spinning mills were being closed and subject to bankruptcy. For the first time, American consumption also decreased in 1995/96, falling from 2.43 million tonnes to 2.26 million tonnes. The combination of low growth in consumption (+1.6%) and the increase in production (+2.9%) has led to an overall increase in stocks (+5.9%).

Exports

For the season 1995-96, the volume of exports is expected to reach a record of 6.3 million tonnes equating to a third of the total world production. The contraction of American exports was compensated by increased exports from Pakistan, India, Turkey, Argentina and Australia. Uzbekistan, with limited domestic consumption, is the second largest cotton exporter accounting for 16% of total world exports.

Forecasts for the 1996-97 Season**Production**

At the end of May 1996, the world crop forecasts were estimated at 19.6-19.75 million tonnes (against 19.35 million tonnes in 1995/96 and 16.9 million in 1994/95). This would have made the 1996-97 crop the second best crop of all times, after the 91/92 crop. There was forecast to be an increase in the USA, decrease in China, stability in India and Pakistan and a slight decrease in Uzbekistan (1.22 million tonnes). This was all dependant on the climatic conditions and the problems of parasites. The most recent forecast (November) has subsequently reduced the harvest to 19 million tonnes, which is now less than last year.

Consumption

The ICAC, the USDA and Cotlook all predict that world consumption will increase by at least half a million tons in 1996/97, and for the first time be more than 19 million tonnes. In, particular, the decline of consumption in the countries of the ex-Comecon should stop, and consumption should start increasing again in these countries. Despite this, world stocks are predicted to increase by about 500,000 tonnes to reach around 8.5 million tonnes by August 1997. Stocks will therefore be over 40% on annual world consumption. China is estimated to hold almost 38% of world stocks of cotton.

Exports

For the season 1996-97, the ICAC forecasts that world exports will fall sharply to 5.7 million tonnes in 1996-97. This is less than 30% of the production and 650,000 tonnes less than in 1995/96. Uzbekistan exports are forecast to decline from 1.03 million tonnes to 980,000 tonnes. The most significant reduction in imports is to China. Turkey and the EU are foreseen as the only growth markets where cotton imports are expected to increase.

Market Trends

Production

The latest Cotlook Production Estimates based upon information received in Liverpool by November 1996³ forecasts a total world production for 1996/97 of 19 million tonnes, of which Northern Belt 16 million tonnes, Equatorial Belt 1.5 million tonnes and the Southern Belt 1.6 million tonnes. The production in Central Asia is forecast to be Uzbekistan 1.1 million tonnes (9% less than previous forecast), Turkmenistan 175,000 tonnes, Tadjikistan 105,000 tonnes, Azerbaijan 84,000 tonnes and Kazakhstan 65,000 tonnes. Uzbekistan is therefore the significantly largest producer in Central Asia

World Stocks

The latest ICAC's assessment of the cotton world stock were 7,716,000 tonnes on 1st August 1995, and 9,389,000 tonnes on 1st August 1996. This is forecast to further increase to 9,991,000 tonnes by 1st August 1, 1997. The basis of this forecast is as follows:

Stock August 1996 (9,389,000 tonnes) + Production 96/97 (19,005,000 tonnes) = Supply 1996/97 (28,393,000 tonnes) - Consumption 1996/97 (18,403,000) = Stock August 1997 at 9,991,000 tonnes.

These latest figures show a significant increase in stock levels during 1996 which will continue into 1997. This is mainly due to a significant lowering in the forecast world consumption.

Pricing Trends

After two seasons which have been more favourable to the producers than to the consumers, it is predicted that prices are more likely to fall than to rise. The ICAC projects an average of 74 cents per pound for the index A for the average campaign, that is 1 cent below the average of the last 15 seasons. The overall increase in stock levels and lower demand levels as indicated in the latest statistics would be expected to result in a weakening of selling prices paid to the producers.

2.2 European Market

Production

Europe is not a significant producer of cotton. The latest production estimates for European countries are shown in Table 2.

³ Cotton Outlook is published weekly. We obtained from a trader the issue of November 8, 1996. Cotton Outlook may be consulted on world wide web [http:// www.cotlook.com](http://www.cotlook.com)

Table 2: Production Europe in 1000 Metric Tons

Country	1995/96	1996/97
Greece:	443	325
Spain:	32	85
Turkey:	837	789
Total 3 countries	1312	1199
World Total	19856	19005

These 3 countries (Greece, Spain, Turkey) are the only important cotton producers in Europe. Their total production of 1.2 million tonnes only equates to the Uzbek production and accounts for only 6 per cent of the world production.

Consumption

Europe is a significant consumer of cotton accounting for 14% of world consumption. The consumption by country is shown in Table 3.

Table 3: Consumption Europe in 1000 Metric Tons

Country	1995/96	1996/97
Turkey	820	853
Russia	368	386
Italy	372	385
Portugal	171	183
Germany	146	136
Greece	135	135
Spain	132	125
France	110	104
Poland	96	102
Czech/Slovakia	74	74
Romania	55	55
Switzerland	51	51
Belgium	42	40
Austria	40	38
Hungary	20	20
UK	17	16
Estonia	15	15
Total Europe	2686	2741
World Total	18979	19464

It can be seen that 60% of European consumption is in only three countries - Turkey (31%) Russia (14%) and Italy (14%). Approx. 42% of European consumption is in the EEC, mostly in the southern countries - Italy, Portugal, Greece and Spain. The only increases in consumption are in Italy and Portugal with a steady decline in other western European countries.

Imports

Europe is a significant importer of cotton accounting for 36% of world imports. This is because of its high consumption and low production. Imports to European countries are shown in Table 4.

Table 4: Imports in 1000 Metric Tons

Country	1995/96	1996/97
Russia	500	415
Italy	381	390
Portugal	174	184
Germany	168	156
Turkey	50	151
France	135	124
Other Europe	431	430
Total Europe	2176	2155
World Total	6222	5900

It can be seen that whilst the largest consumer in Europe is Turkey, it is almost self-sufficient and therefore only has a small import requirement. 20% of European imports are to Russia. This is a prime market for cotton from the southern CIS and would not use TRACECA. The main importers of cotton in Western Europe are Italy (390,000 t), followed by Portugal, Germany, France. Other significant European import markets are the Czech and Slovene Republics (104,000 t), Poland (120,000 t) and Spain (81,000 t).

Europe is a major consumer market with rising consumption but lower import demand. This is because the spinning mill industry is in decline in Europe. The main reason is that the labour costs in Europe are becoming too high for the spinning industry. The above tables show that the only growth in Western Europe is in the southern countries where wage levels are lower. In the higher cost economies to the north - Germany, France, Belgium, Switzerland etc. - the import demand is falling as mills gradually close.

This situation is not unique. The situation is similar in the Far East despite overall growth in consumption. At present the big new markets for cotton importation are the countries of the Far East. The imports of the 7 biggest Asian importers are shown in Table 5 (ICAC, October 1995).

Table 5: Imports in 1000 Metric Tonnes

Country	1995/96	1996/97
China	600	450
Indonesia	510	541
Japan	357	320
South Korea	399	376
Taiwan	262	235
Thailand	375	388
Hong Kong	196	183
Total 7 countries	2699	2493
World Total	6222	5900

These seven countries import around 2.5 - 2.7 million tonnes per annum, and they are seen as the emerging markets (including Philippines, Vietnam and Malaysia). These seven countries import 15% more than the whole of Europe. However, the overall imports are also in decline, especially to the higher cost countries such as Japan, Korea and Taiwan, but are rising to the lower labour cost economies of Indonesia and Taiwan.

The overall trend is for demand for the importation of cotton to become more concentrated in the lower cost economies of southern, and possibly eastern, Europe. The main markets are expected to be Italy, Portugal and Turkey, where consumption will increase beyond local production levels. These trends should theoretically benefit both Uzbekistan as a producer and the use of the TRACECA corridor.

3. European Market Survey

3.1 Introduction

The objective of the market research programme in Western Europe was to obtain a European perspective on the cotton market as a whole and specifically on the importation of Uzbekistan cotton. The following organisations were interviewed:

- AFCOT in Lille, France
- Compagnie Cotonnière (COPACO) in Paris, a subsidiary of Compagnie Française de Développement des Textiles (CFDT) in Paris, France
- Donavan in Geneva, Switzerland, a subsidiary of Donavan, Memphis, USA
- Glencore and Grains in Rotterdam, Netherlands
- Louis Dreyfus Cotton International in Antwerp, Belgium
- Meridith & Jones Ltd in Liverpool, England
- Ralli Brothers and Co, in Liverpool, England (a subsidiary of Cargill, USA)
- Reinhart in Winterthur, Switzerland
- SIC in Le Havre, France
- Stahel Hardmeyer Ag, in Zurich, Switzerland

Meetings were also held with CFDT in Paris and M&M (Militzer & Münch) in St Gallen, Switzerland.

The cotton traders indicated above are based in Europe but are international cotton traders whose activities are not limited to Europe. They are among the biggest cotton merchants in the world, and together they are estimated to purchase more than two thirds of the total cotton exported from Uzbekistan. Most of these organisations have permanent representatives based in Uzbekistan because it is the second largest exporter of cotton after the US. The companies interviewed have significant contracts with Uzbekistan consisting of large shipments cotton, usually in the form of a "master" contract. A contract is seldom for less than 10,000 tonnes and contracts for over 100,000 tonnes are not unusual. The Uzbekistan representatives of most of these organisations were also interviewed as part of the local research reported in Section 4.

3.2 Buying Terms and Transport Criteria

In Europe, the trade of cotton is carried out by "merchants of cotton" who buy and sell cotton world wide. These merchants or cotton buyers purchase the cotton, receive it from the sellers most often in ports, and then arrange shipment from those ports to the final delivery points, the spinning mills.

The role of the merchant is as follows:

- the merchant buys the cotton from the seller, at the place where the seller is located (in Uzbekistan, the seller is the Government). The “place of sale” is the origin, usually the ginnery
- the cotton is sent by the seller to the “place of collection”, generally a port in Europe referred to as the “port of shipment”. This transport movement is known as primary distribution
- the merchant receives the cotton at the European port in bulk form. He purchases it on FOB (Free-on-board) terms and despatches it forward in containers or in bulk from the “port of Shipment” to the destination port (nearest to the end-user) or occasionally sends it forward by truck. This activity is known as secondary distribution
- at the “ port of shipment”, the merchant retains stocks of cotton in special warehouses. He delivers it only when the client needs it, usually on a Just-in-Time basis
- the seller is responsible for the transportation up to FOB port of shipment - primary distribution
- the merchant is responsible for the transportation from FOB port to final delivery point (spinning mill) - secondary distribution.

The transport criteria on behalf of the merchant are the following:

Price

The merchant buys FOB European port and sells “franco domicile” or free delivered customer warehouse. He is responsible for arranging and paying for the transportation from FOB at the port of shipment through to the spinning mill. This includes the containerisation operation and all the secondary distribution transport operations up too the final delivery. The merchant attempt to maximise his profit on the sale which is the "price of selling to final client, minus his expenses all along the transport chain". He is therefore particularly interested in minimising the secondary distribution costs.

Port Facilities

Cotton merchants require certain facilities at the port of shipment where he receives the cotton from the seller. These are as follows:

- modern warehouses with sortation facilities and fire prevention systems
- shipping companies able to provide regular services with vessels equipped to receive containers
- container handling facilities (forks lift trucks, straddle carriers etc.)
- good access from home office to port (regular flights, short flight duration, telecommunications)
- suitable accommodation in vicinity of the port (hotels)

Shipping Services

The merchants require regular lines to as wide a range of European and world ports as possible. This is important so that they are able to ship direct to the customer destination, rather than having to tranship at another port. The more shipping services the better because competition results in rate flexibility and the ability to negotiate special contract prices. They are also interested in the quality of the carrier and capacity of their vessels.

Modal Flexibility

The merchant prefers to have some degree of modal flexibility. For example, to serve Western Europe from Riga, it is possible to use either sea and truck transport for secondary distribution, depending on the destination and the price conditions. Conversely from Ilyechovsk, it is only possible to use sea transport because Odessa is too far from Western Europe to be reached easily by truck.

Port of Shipment

The merchant has limited interest in the transportation to the port of shipment. The costs are paid by the seller up to this point. As long as he would be certain that quality and weight of the cotton he receives can be ascertained, he is prepared to consider any of the main routes. His main interest is in the facilities of the port and the service level that it can offer when the goods physically arrive.

3.3 Costs

The value that can be obtained for cotton fibre at a given time depends on:

a) Quality Criteria

- the quality or grade⁴ which depends on the cleanness (content in impurities), on the colour⁵ and on the preparation
- the length or "silk" expressed in English measures based on 1/32 of inch⁶
- technological characteristics (uniformity, thinness or micronaire, resistance, tenacity, stretching, maturity, etc.)

⁴ By order of decreasing quality or grade: GM (*Good Middling*), M (*Middling*), SLM (*Strict Low Middling*), LM (*Low Middling*), GO (*Good Ordinary*)

⁵ From *white* to *gray*, passing through *light-spotted*, *spotted*, *tinged*, *yellow stained*, and *light gray*.

⁶ Short silks: 3/4" to 31/32" - Average silks: 1 inch to 1"3/32 - Long silks 1"1/8 to 1"7/32 - Extra long silks: 1"1/4 and more.

b) Subjective Factors

- competency and professionalism in terms of classification and sales
- brand image and notoriety of the fibre
- nature of the trade relation between the seller and the buyer (faithfulness to one origin and one proven supply chain)

c) Market Factors

- the respective situation of the stocks of the producer and of the buyer,
- transactions of a speculative or compensatory nature (such as barter agreements)
- necessity to cover uncovered positions

d) Cotton Prices

There are large differences in prices according to the various types of cotton. An average price is 1,500 USD per tonne. The CIF North Europe Quotations for Principal Growths (quotations as at November 7, 1996) were the following, for some origins (in US cents per pound):

American - Type cottons: 77.50 - 86.75, depending on the quality

Mexican: 79.00

Argentine: 72.50 to 74.50

Turkish: 73.00

Central Asian *Midd 1-3/32: 71

Uzbekistan cotton does not command a premium price and, in reality, is selling below that of cotton sourced from other markets.

e) Transport costs - Uzbek Cotton

The estimated prices for transportation of Uzbek cotton indicated by the merchants was 75-100 USD per tonne for the primary distribution from the ginnery to the port of shipment, paid by the seller, and 100-120 USD per tonne for the secondary distribution to the end-user.

3.4 Logistics for moving cotton

The following main alternatives are available for shippers moving cotton from Central Asia to Europe:

- rail shipments via the Russian railroad system to St Petersburg, Riga or other Baltic ports
- rail shipments via the Russian railroad system to Ilyechovsk
- rail shipments via the Transasian Railroad to Mersin and Bandar Abbas
- truck shipments to Mersin or Bandar Abbas

- rail and truck shipments via the TRACECA route to the port of Poti in Georgia
- rail and truck shipments via ferry to Baku, and then routed northwards through Russia to Europe
- water transportation from the port of Turkmenbashi through the Volga-Don Canal to the Black Sea and the Mediterranean Sea

Baltic Ports

The largest volume of Uzbek cotton to be sold in Europe is bought FOB Riga in Latvia. Smaller shipments are also obtained FOB at other Baltic ports, mainly Ventpils in Latvia, St Petersburg in Russia and Klapeda in Lithuania. There are small shipments from Ilyechovsk, near Odessa in the Ukraine on the Black Sea.

The traders buy the cotton where the Uzbekistan seller delivers the shipment. These ports are the traditional ports which are perceived to be well organised with an adequate supply of regular shipping lines. Most traders on-forward the shipment from these ports of shipment in containers to the end-user. Riga is considered to be the best port because this is the most direct route to northern Europe (through Kazakhstan, Russia, Latvia). It is a traditional cotton port and therefore the merchants have established facilities with good warehouses manned by experienced controllers, classification personnel, hotels, good access and reliable employees. The traders indicated that there is good wagon control from the departure point in Uzbekistan through to Riga.

Access to shipping lines is critical. All the major shipping companies are calling at the port of Riga - P&O, Maersk, Sealand, Evergreen, etc. For shipments to the Far East, the trader books the shipping company and the company provides a Bill of Lading from the point of departure to the final destination port. Many of these services are feeder services with a transshipment in either Hamburg, Rotterdam or Antwerp but they are carried on through Bills of Lading and service level is not affected. From Riga it is possible to ship cotton to almost any of the main cotton destinations.

Riga Port

Despite the fact that Riga is the most used port, there are some problems. These are as follows:

- the specialised cotton warehouses are currently full. Alternative warehousing was available but Uvneshtans refused to approve delivery
- lack of storage is leading to delays and demurrage costs
- Riga is considered an efficient port when compared with either St Petersburg or Ilyechovsk but is not to the standard of western ports, although there is some gradual improvement
- “organised crime” control certain aspects of the activity leading to increased payments and lack of flexibility. This is a problem throughout the CIS and is more limited at Riga than at either St Petersburg or Ilyechovsk.

Ilyechovsk Port

Ilyechovsk is used as the main cotton port to the Mediterranean region. As indicated, Italy is the largest market in Europe and it is cheaper to ship from the Black Sea ports to Italy (40 USD per tonne to Trieste or Venice). Riga is served by “short sea” or feeder vessels which provide a “deep-sea” service capability with transshipment. It lacks services to the “middle distance” such as to the Mediterranean and therefore Ilyechovsk is better positioned. It should be noted that many of the Italian shipments are carried in specially chartered vessels and thus distance is a factor in costs. Ilyechovsk is also the export port for cotton to Turkey, where Mersin is an important cotton centre.

Bandar Abbas

Bandar Abbas is becoming more popular, since the new rail line of about 60 km between Sarakhs and Mashhad was opened between Turkmenistan and Iran. Bandar Abbas is considered by the merchants to be a convenient port, especially to send cotton to the Far East. Cotton from Turkmenistan is currently being sold ex-works and being carried by rail wagon from Ashgabat to Bandar Abbas. Cotton from Azerbaijan is usually routed through Astara to Bandar Abbas. Theoretically, the Uzbekistan cotton could also be routed via this corridor. Most shipments from Bandar Abbas transit Dubai from where there are regular services to almost all the main cotton destinations.

Merchants have noted some problems in moving the cotton by road to Bandar Abbas. Iranian transport law forbids trucks above 34 tonnes gross weight, whereas Uzbek trucks normally carry 41 to 42 t. The 6-7 tons has to be removed to comply with these regulations. Trucks over 16 meters are also not permitted and most Uzbek trucks are 16.5 meters long. The result is that the Uzbek road carriers demand a premium, thus making this method uncompetitive. Bandar Abbas had only received 20,000 tonnes of Uzbek cotton by the beginning of 1996.

Traditional cotton export routes

It is recognised that the existing system is partially based on historical logistics whereby it was the Soviet Union, with the Soviet system. Cotton was sent to Europe from the Baltic ports or from Ukraine. These were the designated ports and transportation costs were not a factor in a centrally planned economy. Another important route was by rail along the land corridors to Europe, via Cop at the Hungarian border or Brest Litovsk in Belarus. These routes are still in use to carry cotton towards Central Europe, though volumes to these markets have declined. The port of Nahodka, in Eastern Russia was also used for Far East cotton shipments and is still used today due to its proximity to both Japan and Korea who are significant importers.

Uzbek cotton destinations

Merchants indicated that, in general, there is no special allocation of Uzbek cotton to specific destinations. The destination depends on the quality required by the end user and not on the origin. They send Uzbek cotton to the same places as they would send cotton from any of their other sources. Depending on the trader, Uzbek cotton goes mainly to the Far East or to Europe. A small proportion goes to South America (Brazil). Certain traders specialise more in some markets than others as shown in Table 5.

Table 5: Merchants Sales by geographical area

	Far East	Europe
Copaco, Paris	60%	30%
Sic, Le Havre	25%	75%
Devcot, Lille	75%	25%
Louis Dreyfus, Antwerp	20%	80%
Donavan, Geneva	70%	30%
Ralli Brothers, Liverpool	60%	40%
Stahel Hardmeyer, Zürich	50%	50%
Reinhart, Winterthur	20%	80%

Cotton distribution

The traders indicated that they do not expect major changes in distribution in the near future. They note that the Uzbekistan Government intend to ship part of their cotton through Poti or Batumi and the strong development of the ports of Bandar Abbas and Mersin. They indicated that the Uzbeks are more willing to ship cotton ex-works from Uzbekistan rather than FOB, especially when the cotton is sent to Bandar Abbas, because of the difficulties of transport through Iran.

The normal secondary distribution time - from the port warehouse to the end-user - is one month minimum, with one and a half month as standard. It can take more time to the Far East if transshipment is involved. Most contracts to the Far East are CIF and not free delivered spinning mill as in Europe.

Several traders complain about abnormal delays in delivery of Uzbek cotton (wagon blocked or not unloaded for several months). They perceived a gradual deterioration in the quality of delivery of Uzbek cotton with average transit time tending to increase. They also complained about delays in port operations (unloading, quality grading, reloading, etc.).

3.5 Quality Issues

3.5.1 Grading

There are significant problems regarding grading or classification of Uzbekistan cotton. This is because the initial classification is undertaken in Uzbekistan according to Uzbek standards. This does not satisfy the requirements of the traders, who must check some important parameters, such as the micronaire (resistance) and the maturity (press lay) that the Uzbeks cannot measure accurately due to the lack of adequate instruments. These parameters are needed by the end-user (the spinning mills) who cannot buy qualities of cotton that do not fit their machines. Traders overcome this

problem by having to re-classify the cotton with independent classers, usually at the port of shipment.

3.5.2 Damage

Damage is another problem area. The bales are often damaged or rotten in the country of origin due to humidity, poor storage conditions and transportation in damaged wagons. Damage can often occur prior to leaving the ginnery but only become evident when it reaches the end user. This is due to the sampling method as the sample is only 200 grammes out of a bale of 200 kilos, and samples are taken from one bale out of ten, which means that the sampling is 1/10.000 of the original weight. There is therefore little chance to discover partially rotten bales before they are unbaled at the delivery point. The reason for such a limited sampling is the cost. It is considered to be less costly to pay for the possible damages at the point of arrival, if it occurs, than to introduce more controls at the collection point. When there is damage, the trader addresses his complaint to the seller in Uzbekistan.

3.6 Containerisation

All traders reported that the primary distribution of cotton up to the port of shipment was in bulk. No containerisation is currently taking place at the cotton source. They confirmed the use of containers in secondary distribution when they on-carry the cotton from the port of shipment to the end-user. They normally tend to use 40ft units because of the better loading characteristics. The standard load is 22-24 tonnes consisting of 110 bales depending on stowage. The 20 ft containers are less used and carry 11.5-12 tonnes. It should be noted that 40ft containers are more common in the Far East container services, whereas 20ft are more common on most other trades.

It was noted that the cotton bales from Central Asia are considered to be the best bales to go in containers because of their size and weight. The standard Central Asian bale size allows a loading of 105 to 120 bales to a 40ft unit which gives a average payload of 22 to 25 tonnes. The standard American bale size, for example, allows only 80 bales or 18 tonnes per 40ft container, which means that the freight from Central Asia is 25% cheaper than from the USA on comparative sea routes.

Some traders expected the proportion of containerised cotton shipments to increase. For example, they consider that there will be a change at Ilyechovsk from bulk shipments in charter vessels to containers when the port has the appropriate lifting equipment. Most merchants believe that organising containerisation from the origin will be very difficult and that in the end it will be more expensive to receive containers from the point of origin, rather than to receive the cotton in bulk in the port of shipment.

Merchants indicated that if the cotton were ever sent to Poti directly in containers from Uzbekistan, then there would be no grading in Poti, as the classification would have to be done at the place of origin. One basic principle is that a container should be sent from origin to final destination - door-to-door- without being opened during the trip. Unless this equipment could be met, they were not

interested in containerisation. This will require improvements in classification at the point of origin, as compared to the current situation. All merchants were concerned about the reliability of the quality control aspects.

A number of suggested conditions were proposed which would make them more attracted to the use of containers. These were as follows:

- The trader buys the cotton delivered in containers in the spinning mills - i.e.: free delivered terms. The trader would then not be responsible for primary or secondary transport. Most traders doubted whether the Uzbek seller would accept such a proposal given that the Uzbeks are seen as trying more to sell the cotton on an ex-works basis
- The trader buys the cotton on an FOB Poti basis even though it is a through door-to door shipment. The splitting of costs on door-to-door shipments based on different selling terms is undertaken in developed transport environments, but may be difficult in this case as one party would have to pay and recover from the other
- The trader buys the cotton in Uzbekistan on an ex-works basis as desired by the Uzbek seller. The traders are not enthusiastic about this solution, because they would then have the responsibility for moving the cotton from Uzbekistan to the port of shipment. They regard this primary distribution as a difficult and hazardous operation under present circumstances. To accept this solution, they would have to clarify their relationship with the seller. This requires the Uzbek seller to accept the real meaning of ex-works contracts, which implies that the trader has total freedom for the shipment of the cotton and the choice of the mode and conditions of transport. This is not the case now where Uzvneshttrans have a monopoly and are able to dictate conditions.

3.7 Use of Poti

All the organisations contacted were requested for their views on using the TRACECA corridor and the port of Poti.

The Government of Uzbekistan through their selling organisation proposed to major traders to purchase their cotton using Poti. Most of the merchants refused because they were not attracted by the conditions set for various reasons:

- Poti is not considered to have adequate security
- the route traverses through unstable countries. They believed that Georgia is almost in a state of war and that the inhabitants are armed
- there are problems of insurance making it difficult to obtain adequate cover for warehoused cotton
- Poti has a reputation for organised crime
- there is no serious controller located along the route

- during the war in Chechnya, there were a lot of restrictions on rail transport in the Caucasian Republics
- there are no regular shipping companies coming to Poti (liner vessels).
- they are unfamiliar with this route and they have established operations on other routes

One trader noted that the best proof that Poti is not attractive was that even Azeri cotton does not leave the country for shipment through Poti. This demonstrates problems in using Poti. Most merchants showed no interest in using Poti unless it were cheaper, in which case some of them would be ready to take risks.

Recent press articles have also mentioned that there are some infrastructure and capacity limitations affecting the TRACECA route. The capacity of the Turkmenbashi to Baku ferry service was reported as limited and an extra ferry, dedicated to rail car shipments, is a necessity. The ferry terminal at the port of Turkmenbashi was indicated as being in an unsatisfactory physical condition and requires reconstruction of loading ramps and berths to accommodate the increased rail car traffic. Moreover, the terminal has a limited rail car handling and storage capacity.

Whilst it is accepted that not all of these comments are correct, it is important to acknowledge that market perceptions, right or wrong, influence decisions. The merchants, as the buyer, have influence which could increase in an environment where stocks are increasing and consumption falling.

Specific interviews were conducted with the emphasis on what they considered would need to be done to make the TRACECA route and Poti more attractive. Some of the traders clearly indicated that they would not use Poti under any circumstances, whereas others took a more pragmatic approach. In order to make this route attractive, the traders make various suggestions :

- a reduced price for using Poti to allow for the extra risks and secondary distribution costs. 10% was indicated as a suggested level that might be attractive
- establishment of professional cotton controllers in Poti
- good warehousing
- insurance cover
- regular shipping lines
- good local facilities for staff based there and representatives visiting for inspection purposes (hotels, housing, human aspects).
- classification services

It is clear that the European cotton merchants are not currently attracted to using Poti and the TRACECA corridor. There are significant credibility problems which will need to be resolved if the Governments are to fulfil the agreements signed in May 1996 to increase the shipments via the Georgian ports.

4. Uzbekistan Survey

This section examines the environment in Uzbekistan and at selected points along the TRACECA corridor. The Consultant's project team has travelled along the whole corridor from Uzbekistan to the Georgian ports. The information is based on interviews with the main organisation concerned with the buying and transportation of cotton and site visits to loading points and Poti.

4.1 Market profile

Over 2 million tons of raw cotton is gathered in a good year from all 12 regions of Uzbekistan. This is ginned (processed) to produce 1.25 million tons of cotton lint, of which 1.15 million tonnes is then exported. In addition there are also linters (short fibres used in cotton wool and banknote production), seed (for oil) and cotton waste. All these are saleable but cotton lint is the most valuable.

This year due to adverse conditions the yield is expected to be low at an estimated 1.02 million tons of lint, of which 0.94 m will be exported. This local forecast is lower than that of the latest Cotlook Production Estimates. The income generated from the export of cotton is important to the economy of Uzbekistan. The current instability in the value of the Uzbek currency relative to the US dollar is, in part, related to concerns regarding lower income generated from cotton exports due to the poor harvest.

Following harvesting, the cotton is processed at the ginneries (cotton processing plants) and dispatched against purchasing orders. The cotton is normally sold on a FOB (Free-on-Board) basis and it is therefore the responsibility of the Uzbekistan seller to transport the cotton to the port of shipment. This is normally undertaken by despatching the cotton by rail wagon to the special storage facilities located at the Baltic and Russian Black Sea ports - mainly Riga, St Petersburg and Ilyechovsk.

The better quality grades sell more quickly than the lower grades, which are less in demand and incur longer storage times. Depending on the market price, it is possible that a crop is not sold in the year of harvest. It is reported, for example, that the storage in Ilyechovsk and Riga contains many thousands of tons of cotton purchased by traders but which has not yet been sold to the end-users as they are waiting for the price to rise. This is a common practice with cotton, which is a product trading on the international commodity market.

As indicated in Section 2, Uzbekistan is the second largest exporter of cotton after the USA. Unlike some of the other countries, they have no significant spinning or cloth making industry which would provide "added value" to the product. Japanese and Korean companies are appraising this situation for possible future investment in production units, supported by the Government, so that in future the crop will be even more valuable to the country. However, in the short term Uzbekistan will still be reliant on export of the cotton lint, linters, seed and waste which account for over 75% of national export earnings.

4.2 Identification of Sellers and Purchasers

Sellers

The sale of cotton in Uzbekistan is undertaken on behalf of the Government by the Ministry of Foreign and Economic Relations (MFER). Selling is controlled through a quota system for cotton exports. It is assumed that this methodology is used in connection with the price on the world market to maximise earnings and also as a mechanism for the control of foreign earnings. It is not used to protect the local cotton industry, as this only processes about 200-250,000 tonnes of fibre.

Within the MFER, there are 3 separate organisations with whom the cotton buyers are required to negotiate:

- Innovatsia (Innovation)
- Uz Prom Mash Imp Ex
- Uz Markaz Imp Ex (Uz Central Import/export), previously called Uz Agri Impex

Uzhlopkopromsbyt (UZH) is a state agency under the Ministry of Industry and has been given a monopoly on the purchase and ginning of cotton and the collection from the ginnery for export. The movement from the ginnery to a port of sale is also the responsibility of UZH.

Purchasers

There are seven major purchasers or cotton traders active in the Uzbekistan cotton market. These are as follows:

- Daewoo
- Donovan
- Ralli Brothers & Coney (A Division of Cargill PLC)
- Meridith Jones
- Glencore
- Reinhart
- Louis Dreyfus

It is estimated that Daewoo, Donovan and Ralli buy 60% of the total Uzbek cotton exports.

Daewoo Corporation bought up a local cotton trader 5 years ago and they now have their own cotton trading company. They have recently undertaken a 1,000 tonne test shipment via Druzhba using containers to the Chinese port of Lianyungang. The end customer was not revealed, although Korea are known to be large end-users. However, this movement may just be to the Chinese port, at which point the containers were unloaded and the cotton sold FOB the port.

Daewoo is not a standard cotton purchaser in that they are a large industrial conglomerate with a wide range of interests. They have established a major car manufacturing facility in Uzbekistan and are generally considered to be in a privileged position and able to obtain special arrangements. They have been promised by the Government 100,000 tonnes of cotton which will be supplied from up to 5 areas, including Bukhara. This purchase could help to return 3,500 TEU (20 & 40 ft containers which are currently held in Asaka (Fergana valley, 1,000 km from Bukhara) to Korea. They anticipate importing 8,600 TEU a year of car components to their factory in Asaka and this represents 103,200 tonnes of cotton as a backhaul at 12 tonnes per TEU(20ft Equivalent Unit).

Daewoo is known to be negotiating for an additional 200,000 tonnes of high grade cotton, if it is available. If confirmed the shipments would be expected to move via Druzhba, thus reducing the potential level of shipments westwards using the TRACECA route in the short term.

4.3 Terms of Sale

The normal method of purchase is that the cotton traders negotiate with the Ministry of Foreign and Economic Relations under the quota system and a purchase is agreed based on the various different classes of product. A Letter of Credit is raised and issued with payment to be made FOB the selected seaport.

The sale is initiated on the basis of the Certificate of Quality issued at each ginnery in Uzbekistan. However, as indicated later, this system is not considered to be sufficiently reliable and a recognised classification company is usually required to make independent checks prior to confirmation of sale. If the quality is not found to be the same as sold when checked, a different (often lower) price is negotiated for the grade/class and only the tonnage loaded onto the ship is paid for on the Letter of Credit. This independent check can be undertaken in Uzbekistan, but is normally undertaken at the seaport or, on occasions, in both places. The “drawdown” on the Letter of Credit is not effected - i.e.: money transferred from the buyer to the seller - until the classification has been agreed between the parties.

4.4 Classification and Pricing

There are 5 Uzbek cotton standards, each subdivided into 5 “qualities” that also relate to fibre staple length. These standards have been accepted by the most of the key European markets. However, many other countries have their own standards or prefer the American USDA standards that have 7 grades from Good Middling through Middling and Strict Good Ordinary to Below Grade. These are then further divided by colour from White through Spotted to Grey. The equivalent grade to “Middling” now sells for about 1,400 USD per tonne on the world market. Due to inconsistent quality, Uzbek cotton sells for 10-12% less than the equivalent grades on the world market. The lowest grades sell for about 1,000 USD per tonne.

There is a Decree from the Government of Uzbekistan which states that “there will be no rejections of grade once the deal has been struck”. This is not agreed by the buyers because they, rather than the Government, have to pay any compensation to their customers for incorrect classification or supply of sub-standard cotton.

As indicated, the original classification undertaken at each ginnery in Uzbekistan is not always to international standards. As a result the buyer usually re-checks the consignment at the port. There is significant re-classification of product, usually downwards, from the original classification made by the ginnery. The disputed classification is usually settled using the International Liverpool Cotton Exchange rules. The Buyers tend to purchase from specific regions in specific classes. It can be seen that the final agreement on class, and therefore sale price, is usually far from Uzbekistan and that the Government therefore has limited direct control over the classification or final price obtained.

Wakefield (UK) and SGS (Switzerland) are the main independent classification organisations who provide a service to buyers throughout the world and are established at the key cotton ports. If there is any doubt about a classification, they even check work done by others to ensure that quality is maintained on behalf of the cotton end-users. They normally have their own laboratories for testing. Some of the buyers have their own classification personnel who visit the ports to inspect the cotton prior to confirmation of a sale.

Some training of classification staff in Uzbekistan has been undertaken, particularly by Wakefield who have trained 40 “classers”. However, there are 135 ginneries in Uzbekistan and therefore there are insufficient trained personnel. Additional problems are that even those trained lack long-term international experience and may not always be considered to be totally independent, given that classification affects the agreed price.

4.5 CIS Logistics

As indicated in Section 3.2, the cotton is sold FOB and therefore the responsibility for the movement of the cotton from the ginneries to the seaport lies with the seller. This is undertaken on behalf of the MFER by Uzhlopromsbyt (UZH).

All local transport costs are paid in local currency sum by UZH. This is creating some problems as the spare parts for trucks, diesel powered front loaders and machinery have to be paid for in hard currency. The handling systems are deteriorating with local loading equipment being cannibalised to keep at least some units working and attempts being made to make some spare parts locally.

The ginneries require massive investment to bring them up to modern international standards. There are currently 135 ginneries located in the 12 regions. Although they are worked all year to provide full employment, they are operating well below capacity. For example, in Australia 8 ginneries that each employ 10 people bale 1 million tonnes in 5 months. In Uzbekistan there are 400 people per

ginners and they operate all year to produce 1.5 million tonnes in a good year. This low productivity will present increasing logistical problems of not having the product in the key locations in a timely manner for onward shipment.

There is a significant packaging problem. Investment is required in modern packing facilities so that the bales remain intact, are less prone to moisture ingress and are kept cleaner. The variation in quality between bales also remains unacceptable due to poor classing, the volume of bales that are physically classed (said to be as low as 50% before despatch) and poor ginning.

The Uzbek seller is responsible for the packing, delivery to seaport and any charges for loading on ship, plus export customs clearance and documentation charges. These costs are dealt with through UZVtrans (UZV). UZV are also responsible for any damage in transit, insurance and disposal of unacceptable bales (through dirt or damage, often caused by the bales falling apart in transit).

The cotton is normally loaded in covered rail wagons with a capacity of approximately 50 tonnes per wagon. Due to the poor condition of the wagon and the dangers of spontaneous combustion when cotton becomes damp, it is necessary to line the wagon with kraft paper and seal the openings. These costs are in addition to the rail charges. The packing of the wagons is undertaken by experienced local labour who maximise the load by manually handling the bales to ensure a compact stow. Unfortunately, the labour at the receiving port is less experienced and, with settlement during transit, the wagon is difficult to discharge without damage to the bales. Poor packaging adds to the problems and there can therefore be significant cargo damage on receipt at the port warehouse. It is estimated that damage in transit is 5-10% by weight (UZV). Damaged bales and loss is the responsibility of UZV and their insurers.

In the main ports, such as Ilyechovsk and Riga, there are specialised secure warehouses which are rail connected and are fitted with alarm systems and water sprinklers to prevent fire. This is important because fire is a constant hazard in the storage of cotton because, as indicated, when damp, cotton can generate an exothermic reaction and self ignite.

From these ports cotton can be finally "classed" (graded), or the class checked to ensure conformity, using the laboratory services provided. It is then purchased FOB by the buyer who despatches the cotton by either chartering a vessel or using a "liner" (scheduled) shipping service. In the latter case there is a probability that the goods will be containerised for delivery through to the end-user.

Although most cotton is forwarded to the seaport by rail, some shipments are sent by road. There is a trade imbalance between Iran and the Central Asian Republics. This results in significant numbers of trucks travelling southbound in empty condition. The road hauliers are sometimes using cotton as a backhaul to Bandar Abbas. This is uneconomic in terms of the use of available space but is better than returning empty trailers as there are limited alternative traffics. The problems of moving cotton by road to Iran were described in Section 3.4.

4.6 Shipments via Poti

The initial purchase order for the trial tonnages through Poti (as a result of the meeting in May 1996 between the Presidents of Uzbekistan, Azerbaijan, Turkmenistan and Georgia) was made in Tashkent and the terms of payment were by Letter of Credit (L/C), FOB the port. To date the main shipments via Port have been to Trieste in Italy and to Brazil.

UZV are responsible for all the movements from Uzbekistan to Poti by rail wagon. A certificate is issued at each ginnery for each bale and the bales are moved to a loading site. At Kutcluk (see photo) 5 ginneries, within 40 km, deliver their cotton for loading onto rail wagons by truck or tractor. The rail wagons are very old (30-40 years) and in poor condition and have often been patched on the inside to seal them against drafts, sparks and water ingress when used for cotton. They use Kraft paper and glue to seal the offside doors and all ventilators (see photos). No dunnage is used to provide separation between bales and the cotton is tightly packed (see photo).

After loading, the rail wagons loaded with cotton are ready for movement and the Uzbekistan Railways notify Rustam Tashbulatov, and his team, in Tashkent (UZV). They then notify Gia Okraushvili of GTE in Poti the wagon numbers, departure date and bale code details. Details of what is received in good condition are faxed back. On the shipments checked there were no lost wagons.

Transit times vary between loading in Uzbekistan and arrival in Poti from 10 to 20 days depending mainly on transit across the Caspian Sea. The first shipment of 2,000 tonnes in May 1996, that followed the meeting of the four Presidents took 8 days. However, this was a trial shipment where all the parties were pre-advised of the shipment and to expedite the transit. There were no reported delays due to documentation problems. In general, 20 days is acceptable as the buyers are in no hurry at this stage. Cotton will normally be stored for between 20 and 45 days in the warehouse in Poti waiting for a vessel and for a good price for the cotton.

GTE in Poti can theoretically store up to 10,000 tonnes of cotton in an old tea warehouse complex. There are 4 warehouses but these are in poor condition and they have no fire protection system. There is an additional capacity for a further 5,000 tonne inside the port under similar poor conditions. GTE consider they need at least 30,000 tonnes of warehouse storage and are considering how best to obtain suitable storage facilities. None of these facilities is comparable to those at Ilyechovsk or Riga.

The rail wagons go direct to each warehouse and are unloaded by small diesel powered front loaders that take one bale at a time (see photo). Railways allow 24 hours to unload, then require the wagons to be returned to them. Cargo for Uzbekistan is sought but at least 50% of the wagons will return empty. It is understood that to date none of the wagons has been returned to Uzbekistan. The current logistical system is not planned in that Uzbekistan is sending too much cotton at one time and therefore exceeding the storage capacity of 15,000 tonnes. The result is that significant demurrage on rail wagons is being incurred.

Each wagon was sealed on departure from Uzbekistan and these seals are checked by the Chamber of Trade in Poti, who act as independent assessors. They tally the documents with the cargo manifest (often this is incorrect), spot check the weight of some bales and the bale numbers and record damage in transit. Sometimes the damage is so great that they consider the damage was incurred prior to or during loading but this is not verified by the loading records.

Each wagon load is placed in the warehouse on a separate stack as each wagon will have come from a different ginnery and therefore contain cotton from a specific area. These stacks are checked by the buyers at the port and from here the bales to be loaded are selected. When sufficient cotton is in stock, Ralli (who are now buying 20,000 tonnes) or Glencore (17,000 tonnes) charter a vessel when they consider the time/world price is right to move the cotton to Francesco Parisi in Trieste for classing, storage or movement to their customers in Europe on a JIT (Just-in-Time) basis.

One vessel in Poti 15 Nov. was the bulk carrier Nadezhda (“Hope”) with a capacity of 1,800 tonnes being loaded with 6 or 8 200 kg bales per lift (approx. 1.4 tonne) by a 10 tonne capacity crane that loads a maximum of 500 tonnes per day. The bales are packed in the bulk hold of the vessel and kept off the sides of the hold with wooden dunnage to prevent the bales rubbing together (see photo). It takes a minimum of 4 days to load the vessel but the ship’s loadmaster indicated that it can take up to a week. The overall performance of the port is considered to be poor and on the day prior to the visit only managed 70 tonnes. Comparative performance at Ilyechovsk was indicated at minimum 500 tonnes per day up to 800 tonnes per day.

The port is a multi-purpose port and is perceived as having a poor reputation for service and management control. Two berths are known to be used for cotton but without dedicated and managed loaders their productivity is low. The following were the key constraints indicated by the buyers and the Uzbek representative:

- The control over port labour is poor. There is a plan to provide a dedicated team of workers for the loading of cotton but this is dependent on prospects of additional cargo
- There is no dedicated cotton berth. Operators want to lease Berth No 9 so that equipment can be made ready for a faster turnaround of the vessel. Under their control, GTE consider they could increase capacity from a maximum of 135,000 tonnes per year to 400,000 tonnes, mainly by gaining management control of the work force and improved operational planning.
- There are regular power failures in Poti. This is a problem throughout Georgia and no early resolution can be expected. The power cuts come without warning and can last several days. There is a standby generator that produces 1.2 MW to enable the cranes to continue to operate. However it consumes 1 tonne of diesel per hour and fuel is not available. The port has insufficient resources to purchase fuel owing to debts on past services.
- The 24 hour operation in the port rarely exceeds 16 hours in practice due to poor management control and working practices.
- Surveyors from insurance companies are not satisfied with the quality of the cotton warehouses, the general cleanliness and the lack of fire prevention measures in Poti thus creating insurance problems. The 56 ton of loose cotton, damaged in transit and lost in the fire at Poti in October 1996 was worth over \$67,000 and its loss is likely to result in increased insurance premiums.

- There are insufficient numbers of front loaders available for operation in the warehouse (GTE are expecting 8 more in Dec. 96). There is also a general shortage of fuel for the handling equipment.

No arrangements for dealing with damaged bales at Poti has yet been formulated. Damaged bales at the loading points is sold at a low price to local spinners. There is a plan to let Georgia have 2,000 tonnes per year of cotton under favourable terms for its own spinning mills and it is thought that damaged bales at Poti could be involved in this arrangement. GTE have indicated that they are interested in setting up yarn and cloth production in Georgia.

The German company, Cargo Control, along with Wakefield and Glencore, plan to open a joint office in Poti by the end of December 1996. This will enable classification to be undertaken in Poti, whereas it is now undertaken in Trieste for European shipments. Trieste is a "free port" skilled in classing that offers "free" storage for three months to buyers. Only after this classification is payment against the Letter of Credit made.

The detailed research undertaken in Poti confirms many of the concerns expressed by the merchants in Europe outlined in section 3.7. Discussions at the Ministry of Transport in Georgia suggested that conditions were satisfactory. This appears contrary to the views of those organisations involved in the movement of cotton through the port.

5. Development Trends

Sections 3 and 4 described the current market situation in both Europe and Uzbekistan. The trading environment in the CIS is expected to undergo significant change within the next few years and this will require new logistic approaches to be implemented. Two important issues in the future transportation of cotton in Uzbekistan will be the development of a low cost transportation route to the nearest port - Poti - and also the introduction of containerisation.

5.1 Advantages of TRACECA

5.1.1 Existing export routes

The traditional export route for Uzbekistan cotton has been through Russia, mainly through to the ports of Ilyechovsk, Riga and Leningrad and even by rail through to Europe. Cotton is sold Free-on-Board terms which requires the seller to arrange and pay for all costs up to “passing ship’s rail” (loading on the vessel). This means that these costs are paid directly or indirectly by the Government of Uzbekistan.

The normal method of transport is to use the rail system. Cotton is a standard agricultural product which has a relatively low value and does not deteriorate rapidly. In transport terms, this indicates that the cost of transport is more likely to be critical than the speed of movement (service level). Given the landlocked position of Uzbekistan and the need to transfer the cargo long distances to the point of sale, rail represents the only economic transport mode for such large volume movements.

Rail tariff systems in the CIS are mainly based on sector charges. This means that, in general, the greater the distance the traffic is conveyed the higher the unit costs. Certain traffics such as coal from Siberia and grain movements attract preferential or subsidised charges but cotton is unlikely to be able to attract such special terms on the Russian rail system. There have been substantial increases in Russian rail sector charges and also higher transit costs in Kazakhstan. It is therefore necessary to examine whether a lower cost alternative exists. The TRACECA route to Poti is substantially shorter than Riga and also shorter than Ilyechovsk and therefore should, theoretically, be cheaper.

There have also been increases in charges at the Ukraine and Latvian ports. Poti has spare capacity and has been able to offer a 50% reduction in the standard tariff in order to attract new traffics, such as cotton.

The benefits of reducing the transport costs are significant in that the sale price of the cotton does not alter significantly with regard to the port used. The extra costs of transporting cotton to Riga as opposed to Poti cannot be recovered by obtaining a premium in the FOB price. It is advantageous on behalf of the seller to be able to sell at the closest port. The Presidential Degree to route traffic via Poti is therefore commercially attractive to Uzbekistan.

5.1.2 Responsibilities in distribution chain

The Buyer is responsible for the second part of the distribution chain - from “ship’s rail” to the end-user. He has two main methods of achieving this - by chartering a whole or part of a vessel or using a liner shipping service. Chartering is generally used for larger shipments and is dependent on the distance involved. For example the 4,000 tonne shipment to Brazil and 1,800 tonne shipment to Trieste were charters. The more common system is to on-forward cotton to the end-user in small parcels using a scheduled liner service. Such services are usually containerised and the cotton is loaded in the shipping line’s container at the port warehouse. The availability of these liner services is critical to the buyer to be able service his customers over a wide range of destinations.

Poti port is poorly supplied with liner shipping services. This is mainly due to the limited demand for such services given the difficult economic conditions in the Caucasus and lack of export goods. There are feeder vessels calling on a regular basis but no regular deep-sea container lines. The few shipping lines that do call have a limited geographical coverage. The port, therefore, presents a secondary distribution problem to the buyers and is not so attractive to buyers as the competing ports.

On FOB shipments the buyer is responsible for the loading costs when chartering a vessel. Any delays in cargo handling are therefore to his account. He is therefore more attracted to higher performance ports where the risks of delay are less. Poti currently has a poor performance record relative to the alternative FOB ports and is therefore also less desirable to the buyer.

It can be seen that there is a conflict of interests between the parties when using any of the ports but the routing by Poti could appear to favour the seller when compared to the alternatives. However, there are several developments which could make Poti more attractive:

- Offer a premium to take delivery of cotton at Poti - this option negates the sellers benefit in using Poti and results in loss of income
- Up-grade the facilities and performance at Poti such that is comparative to the competing Black Sea port of Ilyechovsk
- Alter the terms of sale such that the port was less of a determining factor.

5.1.3 TRACECA Corridor

The TRACECA programme is specifically designed to transform the existing non-integrated underdeveloped route into a modern integrated transport corridor. This includes specific programmes covering development of the rail infrastructure, improved rolling stock maintenance, introduction of modern rail wagon tracking systems, reconstruction of the ferry terminals at Turkmenbashi and Baku and development of the port of Poti. The programme represents a commitment to provide a viable corridor to compete with other routings used for the movement of cotton. As indicated earlier, cotton is not time sensitive and reliability is seen as the key factor. It should be possible to develop an adequate level of reliability which can be gradually improved as the TRACECA developments are implemented.

There is a shortage of liner shipping services at Poti. However, it does have shipping services to the Mediterranean, Eastern Europe and North America. As indicated in Section 2, the European market is becoming concentrated in southern and eastern Europe where the cost of labour is relatively low. Poti is in a good position to service these markets and does have liner connections to some of these areas.

5.1.4 Future market opportunities

The main markets of the future are expected to be in the developing low labour cost economies of south east Asia and the Indian sub-continent. Poti is better positioned than the Baltic ports and if increased traffic could be obtained a direct call at Poti by ships servicing the Black Sea and eastern Mediterranean is possible. The major threat is expected to come from Iran as Bandar Abbas is better placed to service the Far East and India/Pakistan via Dubai. The opening of the Sarakhs-Mashhad rail link could make this routing more attractive. The main deterrent is the high cost and restrictions placed on using this route. The more attractive route via Karachi is expected to remain closed due to the problems in Afghanistan. The development of Gwardar in eastern Pakistan is partly based on attracting Central Asian cotton traffic.

The cotton industry is very conservative and has developed to the present operational standard over many years. Good quality cotton is grown in many countries at competitive prices so the margin of profit for the buyers is determined by controlling the secondary distribution costs. The buyers are experts in logistics and spend much of their time deciding on the most cost effective route from the port of shipment to the final point of sale and the timing of that movement relative to the timing of their purchase.

Currently there appears limited interest in changing the selling terms. There is a growing tendency internationally to export using CIF terms. Under these terms the seller is responsible for the delivery at the overseas port and pays all the FOB costs and the seafreight. This is generally considered to generate additional profits due to the additional selling price of the goods, though is by no means guaranteed. It is considered that a significant change to CIF selling would present problems to the seller, the Uzbekistan Government. They would be responsible for the onward distribution to customers to whom that they do not sell directly. This could contain considerable risks of extra storage and carriage costs.

An alternative would be for the buyer to purchase ex-works, as favoured by the Uzbekistan Government, thus relieving the seller of the transport costs and risks. The buyer would normally only be expected to take on this extra responsibility in a region with a relatively developed transport infrastructure and service level where the risks are low and he can obtain a pricing advantage. Uzbekistan is far from the nearest port and the transport systems are not yet sufficiently developed and therefore contains considerable risks of extra charges. Given current conditions, buyers have indicated that they are unlikely to accept ex-works terms until the transport corridor is more developed.

It can be seen that the current terms of sale represent a compromise and to some extent meet the requirements of both parties. The successful development of the TRACECA corridor could result in reduced transport risks on the distribution of cotton from the ginnery to the port and therefore provide an environment when alternative terms of sale could be considered. The development of containerisation, in part could be used to promote the use on new selling and buying systems with advantages to both parties.

5.2 Containerisation

There are several reasons why containerisation of cotton has not taken place in Uzbekistan:

- Terms of Sale
- Load factors
- Access to containers

Terms of Sale

As indicated in Sections 2 and 3, the terms of sale are FOB port. In practice, this means that the movement from Uzbekistan is a stock transfer from the point of origin (the ginnery) to the point of sale (port warehouse) as the goods are still not technically sold. Although some classification has been undertaken and the wagons are partly loaded on the basis of that classification, the rail movement is a bulk shipment with sortation taking place at the port warehouse. When the goods leave the ginnery, the end-user is normally not known because the buyer is selling ex-the port based on the world price at that time.

The original concept of containerisation was to reduce port handling costs by enabling the loading and discharging of the ship to be undertaken with consolidated loads, thus reducing the unit cost of handling and speeding up the ship turnaround times. This has since developed into a through transport system in which the goods are packed at the point of origin through to the final destination on a door-to-door basis. The use of the container reduces the amount of damage to the cargo, which occurs through multiple handling of loose goods, and gives lower unit transport costs because of this reduced handling.

It can be seen that the current method of selling cotton does not conform with these concepts in that the movement is currently only to the port and is all surface transportation. The goods are only moving to a port where the container is destuffed into the port warehouse. The benefits of containerisation can only normally be achieved with a marine section of transport in the transport logistics. (Shippers occasionally use containers on some rail transport movements without a marine leg but this is mainly for security reasons which do not apply to cotton). Most cotton, other than on charter shipments, is containerised for the door-to-door movement from the point of sale by the buyer (port warehouse) to the end-user.

Containerisation of Uzbekistan cotton is unlikely to be attractive to any of the parties unless it involves a marine movement - i.e.: a door-to-door shipment direct from Uzbekistan, either from the ginnery or a consolidation warehouse direct to the end-user. This is currently not possible because at the time the cargo leaves Uzbekistan the end-user and therefore the destination is not known and usually the cotton has not been adequately classified to allow payment to be made. The Buyer uses the time between the loading in Uzbekistan and the loading onto the vessel, including the port storage, to "play" the market to obtain the best price.

Despite these difficulties, an opportunity may exist whereby part of the shipments could be containerised at source. It is estimated that in approximately 10-20% of shipments that the end-user and his location is known in advance. Subject to the development of a more reliable classification system and availability of containers, it may be possible to despatch such traffic on a door-to-door basis. This would contain benefits in that the handling costs would be lower, less damage would be incurred and storage costs would be negated. In such situations, it would be possible to negotiate different selling terms so that it could be transported as a single through movement from the seller to the buyer's customer.

If the transport corridors can be developed to produce a more reliable service with limitation of risks, it may be possible to increase this percentage by developing Just-in-Time logistical systems. This would result in stock storage of cotton being undertaken in Uzbekistan, rather than having to pay other countries in hard currency for such storage. Such a strategy would align with western practices which seek to minimise the logistical activities between the point of origin and point of use.

Load Factors

The second deterrent to containerisation is the reduced load. The average amount of cotton lint that can be loaded in a 20ft container is 11-12 tonnes and in a 40ft container is 23-25 tonnes. By comparison a standard covered rail wagon will take over 50 tonnes. This is a standard problem with many basic agricultural materials requiring a long distance surface transit.

With 50 wagons to a train, the train cargo capacity would be 2,500 ton. A container block train with 2 x 20ft to a flat wagon (sometimes 3) would have a cargo weight of about 1,200- 1,500 tonnes. It can be seen that the unit cost of movement is higher in containers than conventional means. The link across the Caspian Sea is limited to 28 wagons per sailing, thus reducing the main deck loading to around 1,000 tonnes, which is 50% is less than current full crossing tonnages.

The Daewoo shipments using containers routed by Druzha have been re-assessed and there is indicative evidence that the containerised shipping method is proving uneconomic compared to conventional means. This is because of the low load factor per wagon and the placing costs(see next section). A final decision on whether to continue with using containers is expected in December 1996.

An additional problem is the lifting the containers, as they need to be loaded either off a semi-trailer or off the ground at the loading point in Uzbekistan. There is a scarcity of adequate lifting

equipment on the TRACECA route capable of lifting the 40ft units which are the most favoured size for the shipment of cotton. There are few specialised terminals such as those in Tashkent with overhead gantries and spreaders and none in the main cotton growing areas.

Despite these problems, it should be economic to use containers on a door-to-door basis, even allowing for the lower payload on the rail movement. It is said that the high cost of loading rail wagons, unloading into store, moving to class and reloading to ship, equates to the cost of movement by container of a smaller quantity direct from Tashkent. However, that calculation has not been verified (UZV). It is clear that further financial evaluations are required to confirm that viability of using containers door-to-door on all the key routes to ensure that the necessary investment in handling facilities can be justified.

Availability of Containers

An evaluation of the proposal of using the empty Daewoo containers for conveying cotton to Europe and then being re-routed with new cargo back to Korea as proposed by the Multi-Modal project was evaluated by the Consultants logistical specialists. It was their view that the proposal was too complex and contained significant liabilities which would have required a major investment in control systems to operate. Their view has subsequently been confirmed by Daewoo.

Subsequent negotiations with Daewoo regarding purchases of cotton and shipment via Druzhba mean that the containers are no available for shipment along the TRACECA corridor even if the logistical difficulties could have been resolved. However, it would appear that they are re-assessing the overall use of containers in the light of the trial shipments. Whilst the low load factor (see above) was identified, another important problem is that their inbound containers end up only in one location, Asaka, but the cotton comes from many areas up to 500 km to 1,000 km from their factory. It is believed that it is cheaper to move the containers to the cotton than the cotton to the containers, but such repositioning containers is always expensive. Daewoo are attempting to negotiate special rates with Uzbekistan Railways to combat this problem.

Assuming that the Daewoo shipments proceed, there should still be sufficient containers in Uzbekistan to handle the small proportion of cotton which could move on a door-to-door basis where the end-user is known in advance. It is acknowledged that empty containers are likely to be concentrated in the Tashkent area, because of the import demand, rather than in the cotton growing areas. However, if the containerisation of the cotton were to be concentrated at a particular point, a major consolidation warehouse, the cost of placing the empty units could be reduced with careful planning. The majority of import traffics are in 20ft units and initial indications are that there may be a shortage of 40ft units.

Most containers are owner by the shipping lines, either in their own right or on long term leases. It is therefore necessary to link the final destination with the owner of the container. Shipping lines will only normally allow their containers to be used on their vessels to destinations served by them. In the case of Poti, Sealand is the major container operator and is developing a new \$15m container

terminal in Poti which is next to the existing cotton warehouse complex. They have been approached and would be interested in carry cotton to return their containers to either Poti or to one of their world-wide destinations. However, it is not known at this stage whether they have sufficient units in Central Asia or whether the shipments that could move on a door-to-door basis are to destinations served by them. Sealand containers are sent back empty via Moscow as they inflate the inbound rate but they would prefer to load return consignment to European destinations. Sealand quoted for the Daewoo traffic but were uncompetitive.

With regard to the proposals for consolidation warehousing, there is a Government plan to build a 40,000 tonne consolidation warehouse in Bukara. Although this is on the main rail route much of the cotton would have to be moved there by truck or rail wagon, adding to the handling damage. This proposal was developed some time ago but no funds to refurbish the building that have been identified, nor for a laboratory for testing and a fire prevention system which would be needed.

One of the main buyers considers a 20,000 tonne warehouse with a throughput of 80-100,000 tonnes per year (turnover 4 times per year is a normal European standard) to be commercially viable. Here cotton would be "classed" to a standard acceptable to the final buyer (and the bank funding the deal) and loaded to the block train.

6. Proposals for Technical Assistance Programme

The key issues concerning the use of the TRACECA corridor and containerisation resulting from the two market appraisals are as follows:

- The Government of Uzbekistan would like to have increased volumes routed via Poti. This is because TRACECA is the shortest distance to the sea and it does not involve transits through Russia. The transit costs would therefore be expected to be lower, as current rail pricing is distance related. With FOB terms of sale, the Government is responsible for all transit costs and does not obtain a higher sale price when using other ports. Theoretically, therefore, the use of Poti should result in increased profitability on cotton exports.
- The Cotton Buyers are very conservative and work to narrow margins. The cotton market can be volatile and is changing with the gradual decline of demand in Europe and growth in the developing countries of south east Asia and the Indian sub-continent. They have adapted to these changes using the current selling system and logistics. They are therefore not demanding change and would be opposed to any alterations which increased their risk exposure.
- Although Uzbekistan is the second largest supplier of export cotton, alternative sources are available and Uzbek cotton does not command a premium. Concerns over quality result in a price 10-12% below world price. This would suggest that the Government of Uzbekistan cannot dictate terms to the market and therefore a co-ordinated approach with the major buyers is required.
- The Cotton Buyers are not favourably disposed to use of the TRACECA corridor. This is because of the variable service level, lack of facilities and poor performance at Poti, shortages of onward liner shipping services and adverse perceptions of stability in the Caucasus region. Their current attitude is that they will only use Poti if forced to do so, rather than viewing it as a potentially beneficial new route.
- The main constraint to containerisation is the current selling terms. Cotton is a commodity and when it is transported to the point of sale at the port for FOB sale the end-user is normally not known. The benefits of containerisation are unlikely to be realised unless traffic moves on a door-to-door basis over significant distances. Less than 20% of the traffic could be containerised at source to the end-user. Unitisation would require changes in the classification system to meet purchasers quality concerns.
- The costs of using multi-modal logistics on base agricultural products have not been adequately calculated at this stage to confirm that the use of containers can produce lower logistics chain costs than by using existing conventional means. The re-evaluation by Daewoo of their containerisation programme tends to suggest that there are costing concerns which act against unitisation with its lower load factors.
- The cotton market has changed in that the primary demand is to the east, rather than Western Europe. This favours use of the Chinese, Pakistani or Iranian ports if the correct price/service conditions were present. In the short term, availability of good shipping connections from the CIS port to the Far East is very important.

Any Technical Assistance programme should be focused on addressing these concerns. It is clear that there are other major issues such as selling terms, classification systems, investment in the industry and the economic situation in Uzbekistan which have a significant impact on the Uzbekistan cotton market. However, this Technical Assistance programme should be confined to resolution of the transportation issues, whilst having due regard to these other issues.

It is recommended that the future programme should concentrate on the following issues:

- Monitoring of Logistics
- Investment in Facilities
- Containerisation
- Costs Benefits of Containerisation via TRACECA

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This will involve a change of programme from that originally proposed in August 1996. The main emphasis is now towards how the TRACECA corridor and the Port of Poti could be developed to make it attractive to the Buyers, as well as to the Government of Uzbekistan. The research indicates more fundamental problems in containerising cotton and that therefore the initial emphasis should be on enhancing conventional logistical systems prior to introducing the multi-modal concept. The use of containerisation is still seen as an important objective and additional work in this respect is still required.

6.1 Monitoring of Logistics

It is clear that the existing corridor is perceived by the market to be unreliable, relative to alternative routings. This is confirmed by the variations in delivery time between the ginnery and storage in the warehouse in Poti. It is therefore necessary to establish a level of reliability such that buyers can depend on the service level and plan accordingly. This is particularly important when cotton is being on-forwarded in bulk in charter vessels and therefore it is critical that the total shipment is in place in Poti when the vessel arrives. The profile of the cotton logistics indicates that reliability is more important than speed.

An initial monitoring system has been established by Uzvneshtrans (UZN) with personnel being appointed in key locations along the corridor to provide logistical data, though this has not been activated in terms to providing results. For the Commission to achieve its objectives it is necessary to review the proposed monitoring system, analyse the data and its format, identify the constraints revealed and to recommend remedial actions to resolve the problems.

This work was contained in the original proposal but now requires increased emphasis, given that the multi-modal options are likely to be more difficult to implement and the urgent need to persuade buyers of the benefits of using TRACECA in the interests of the recipient.

It is recommended that a more in-depth study of the port operational aspects at Poti are included as this is considered by both the buyers and the representative of the Uzbekistan state transport organisation to be a major problem area which detracts from the TRACECA route as a whole. These problems initially appear to be of greater concern than those regarding the rail or trans-Caspian services.

6.2 Investment in Facilities

A major concern is the lack of adequate facilities for handling cotton along the TRACECA corridor. These include;

- Consolidation warehouses in Uzbekistan
- Availability of good rail wagons
- Terminal facilities at Turkmenbashi and Baku
- Rail infrastructure
- Cargo handling equipment at Poti
- Warehousing in Poti

Many of these issues are being addressed by other TRACECA projects. However, it is considered that the warehousing situation in both Uzbekistan and Poti should be specifically reviewed and investment proposals identified. The Consultant should liaise with the TRACECA project team in Poti to confirm the port requirements from the perspective of increase cotton movements through the port. Inspection of the competing facilities at Ilyechosk, and possibly Riga, should also be undertaken to indicate what is required to enable Poti to offer similar services/resources. This review should also address the controversial institutional issue of which organisation should manage the specialised cotton facilities in Poti in the interests of all of the key parties involved. The facilities appraisal in Poti will need to include availability of offices, communication, power and accommodation to attract buyers and classification organisations.

The study would include recommendations on new specialised equipment. Examples already noted are that an inexpensive device is available that links 6 bales together in the warehouse, so that at the port 36 bales (7.5 ton) could be lifted at once, cutting the loading time dramatically. With such a device the throughput of Poti could increase from a maximum 135,000 tonnes per year now to 400,000 tonnes, provided there was enough storage. Another suggestion is that to recover damaged bales a repackaging system is available at a cost of 75,000 USD second hand. Such a device could reduce the transit losses to a minimum. Even though the recovered cotton would be damaged and worth less than undamaged bales, it would still have some export value.

This facilities review was not included in the original Terms of Reference but has been shown to be a major issue affecting perceptions of using the corridor. This will require the services of a port operations and warehousing specialist.

6.3 Containerisation

The market appraisal highlights the difficulties in containerising cotton cargoes, given the current environment. However, such situations are not unique and there is little doubt that some traffics will be sent in containers in the short term and that this will increase gradually. The surplus of containers within the region suggest that a potential for unitisation exists if it could be realised.

It is recommended that the Consultant provides a more detailed appraisal of the technical and marketing problems of containerising cotton at the ginneries or at a selected consolidation point. This should include examination of the packing and classification issues with a view to reduced damage in transit and acceptance of classification and sealing at point of loading. The potential to change the terms of sale of such shipments to ex-works, CIF or free delivered should also be examined.

The routing of these containers is not important, at this stage, and therefore the Daewoo shipment represent an ideal test case for evaluation of containerisation, despite the special circumstances. An alternative would be the use of containers being returned to Europe on the northern route. It is considered that increased penetration of containers in the cotton market is necessary, irrespective of routing and that therefore the containerisation evaluation should not be confined solely to TRACECA. Growth of containerisation on other routes can be used to enable shipments to be transferred at a later stage when enhanced handling facilities and services are available in Poti.

6.4 Cost Benefit of Containerisation via TRACECA

It is significant that Daewoo are re-evaluating their proposal in the light of their experience indicating cost concerns. For containerisation to be feasible it has to be able to achieve comparable or lower unit costs than using the current conventional system. A particular difficulty is the extra costs involved in container placement at the point of loading relative to the Daewoo factory.

It is recommended that a cost benefit study is undertaken to confirm that containerisation is cost effective and that TRACECA is a competitive transport corridor for Uzbekistan cotton, both in conventional and containerised form. The comparative routes should include:

- Bukara -Poti
- Bukara - Ilyechovsk
- Bukara - Riga
- Bukara - St Petersburg
- Buchara - Bandar Abbas

These comparative costings should be based on shipment in standard covered wagons and in 20ft or 40 ft containers on rail wagons. Information of special rating agreements will need to be supplied by members of the Commission.

6.5 Transport Commission

The Transport Commission remains the organisation with the longer term objective of development of Uzbek cotton shipments and includes representation of the different organisations involved in the movement of cotton exports. The delays in forming the Commission has meant that the Consultants have had to develop this Interim Report. It is intended that the Consultants will report their findings to the Commission at the meeting programmed for January 1997 and will ensure that they are actively involved in the agreed Technical Assistance programme. This will be undertaken through status reports from the Consultant and an agreed programme of meetings throughout the technical assistance period.

7. Photographic Record



December 1996 Tashkent Station Kutshluk

5 Ginns Consolidate & load here onto rail

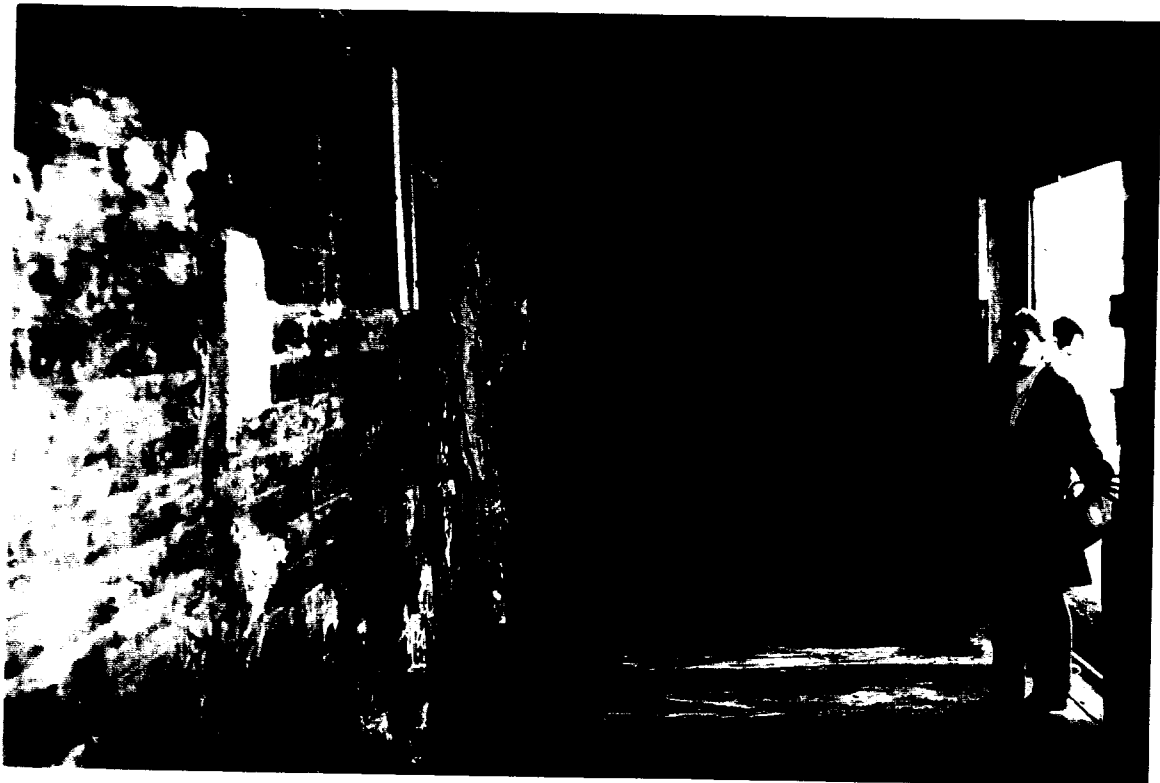
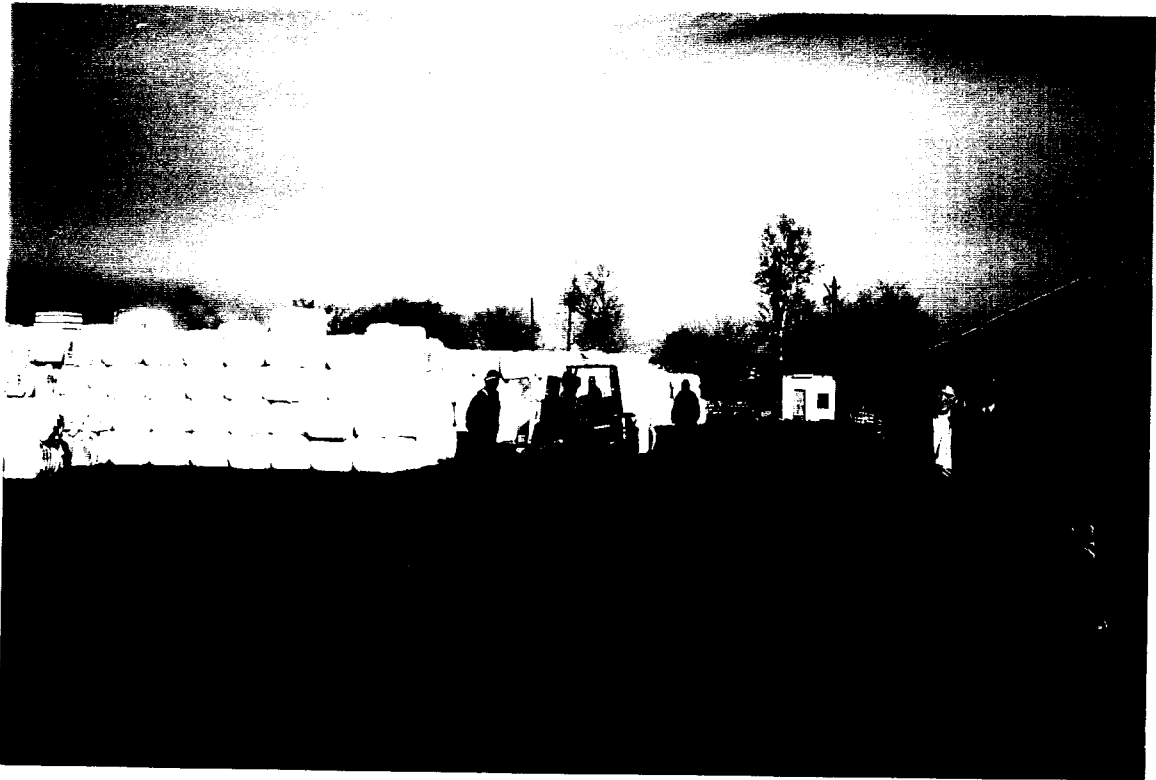




Some covered storage



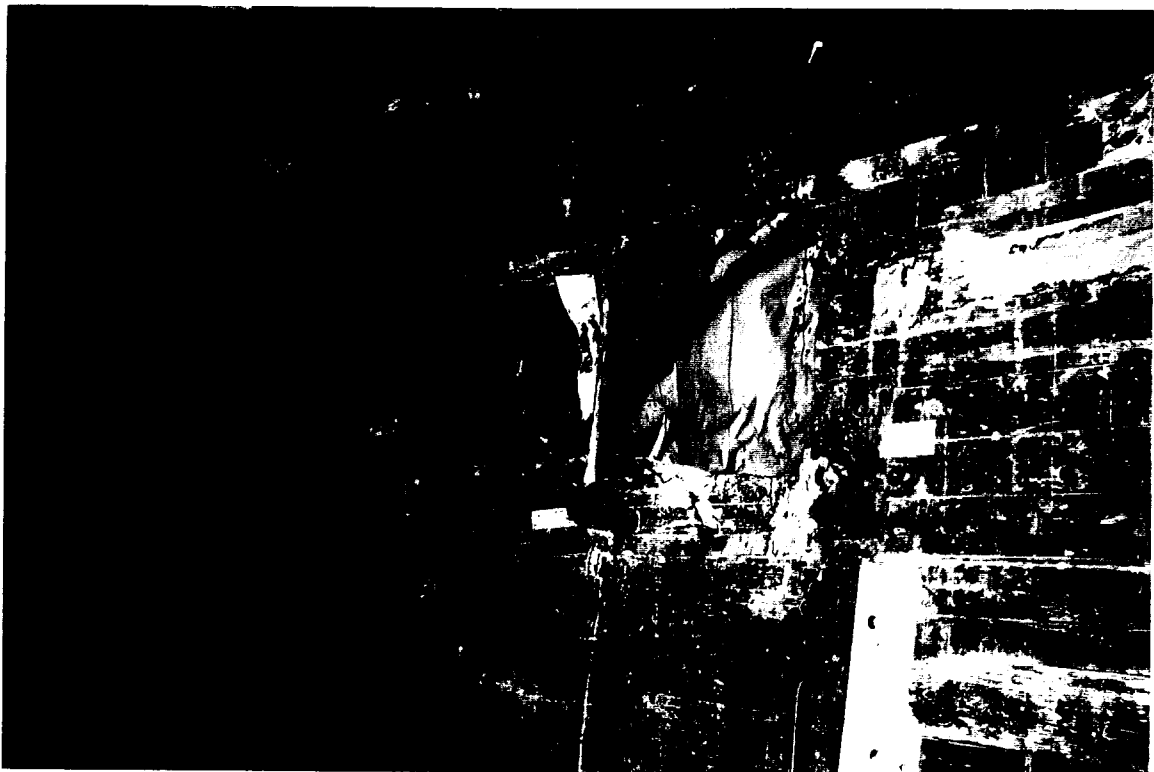
Forklifts load quickly but many out of service waiting for spare parts



Rail wagons sealed using Kraft paper & glue to prevent water ingress



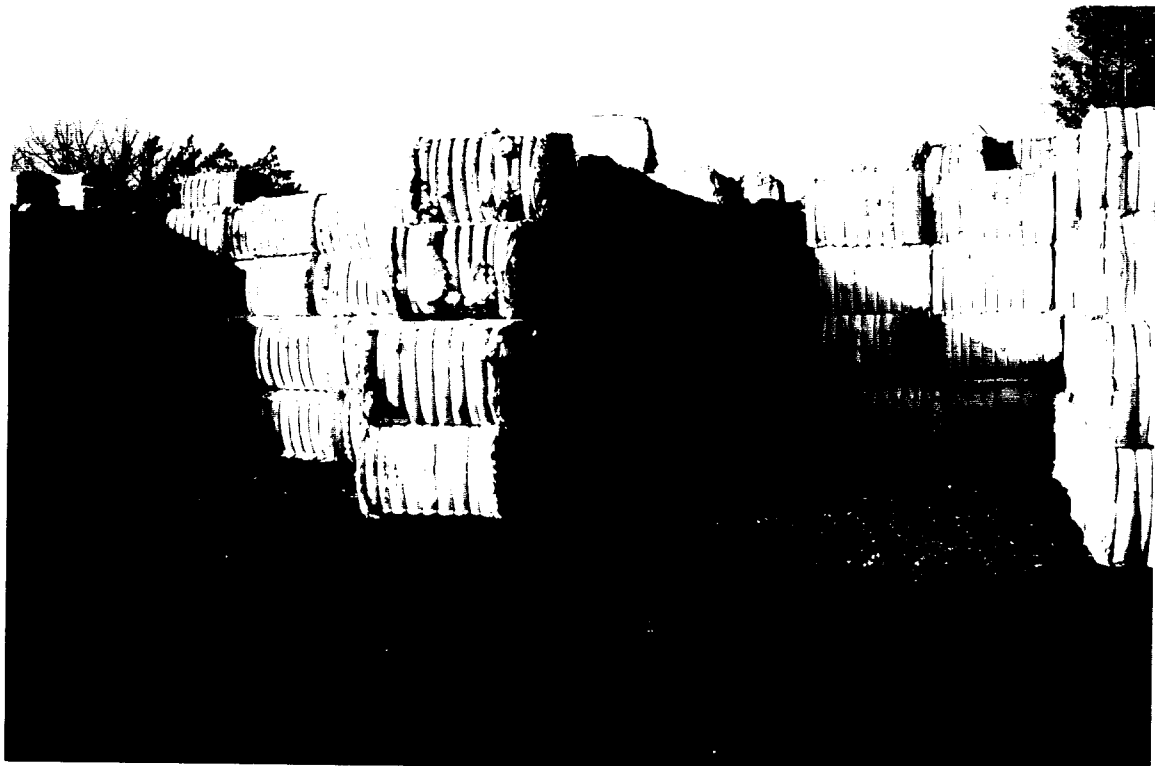
Roof vents sealed



Side vents sealed

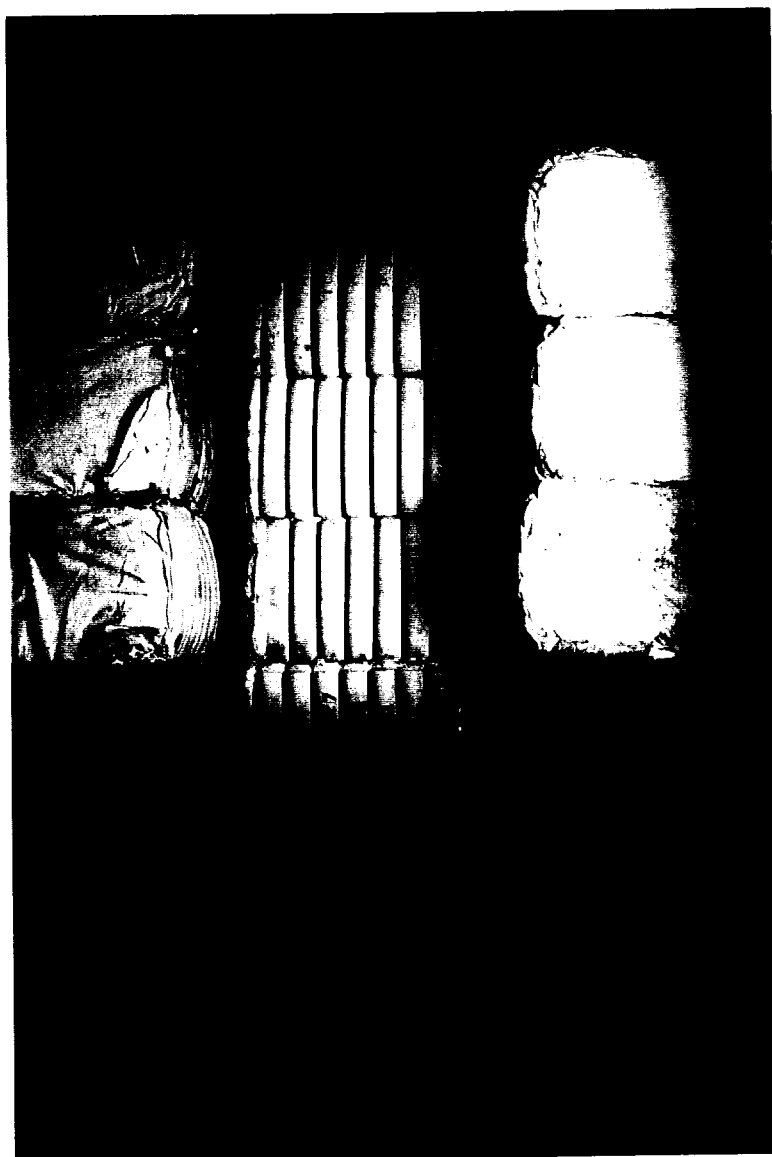


Good stacking can achieve 52 Tonne

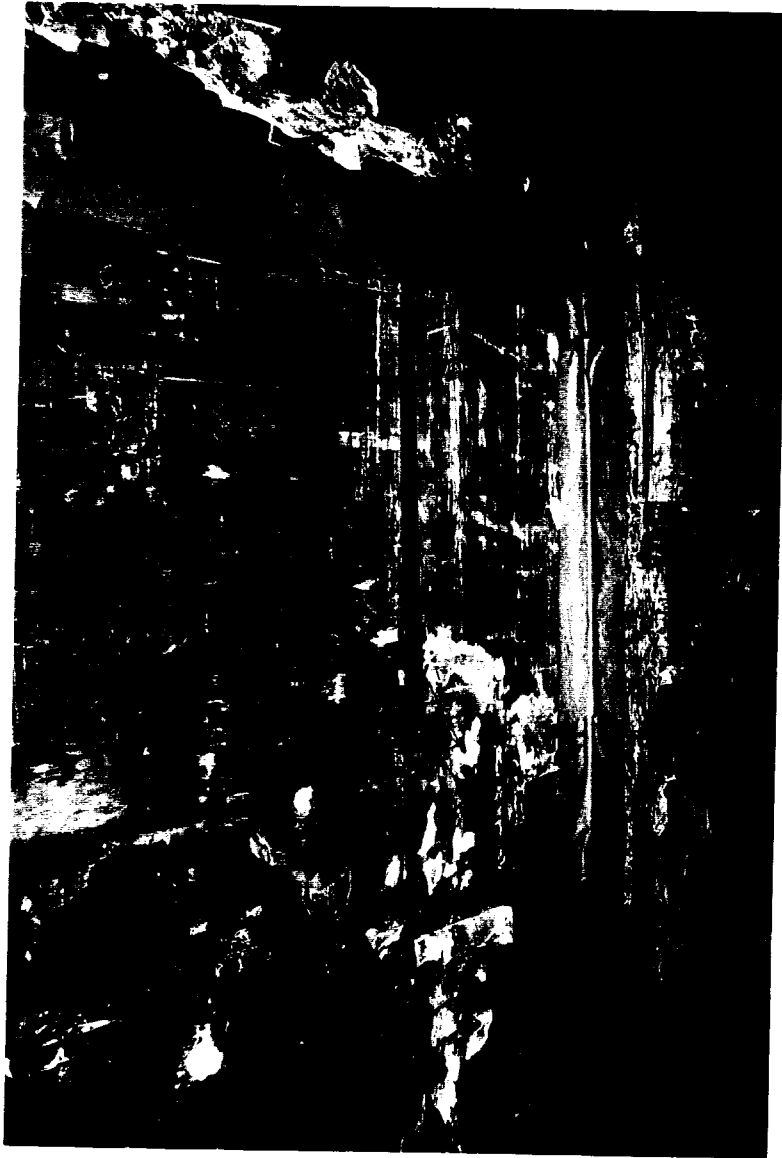


A mix of this year and last year crop

Damaged not loaded



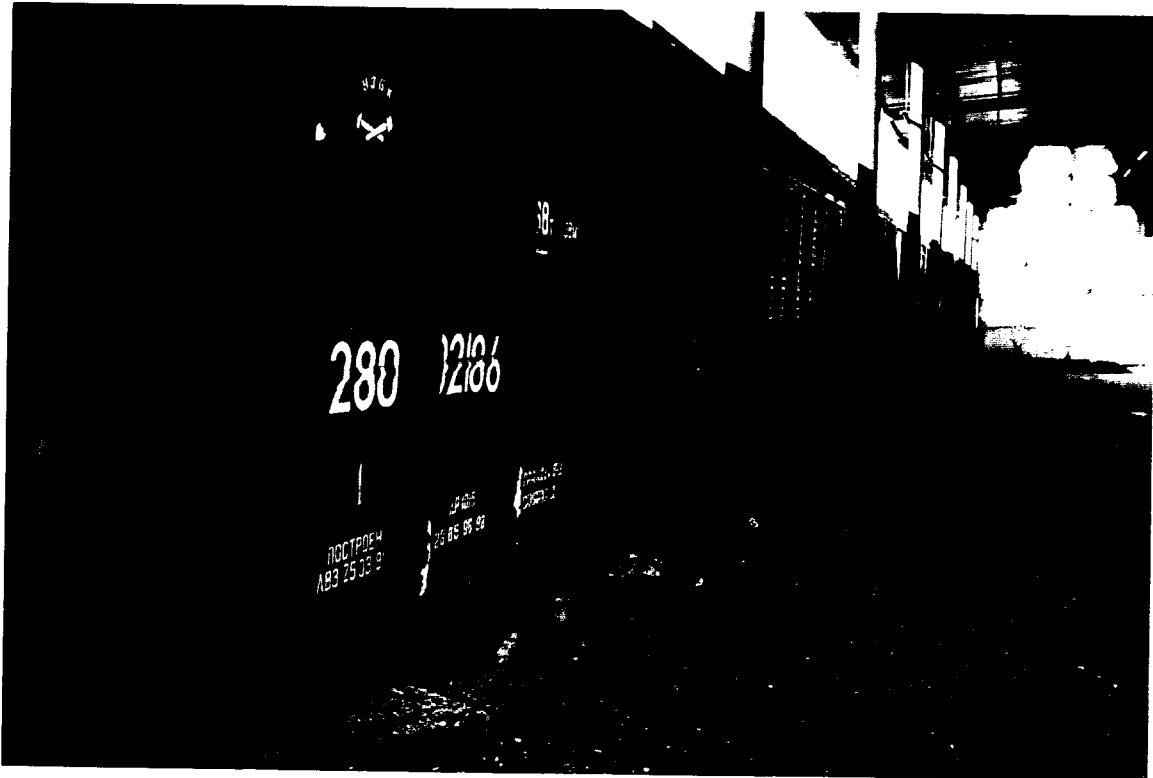
Latest crop



A sealed door

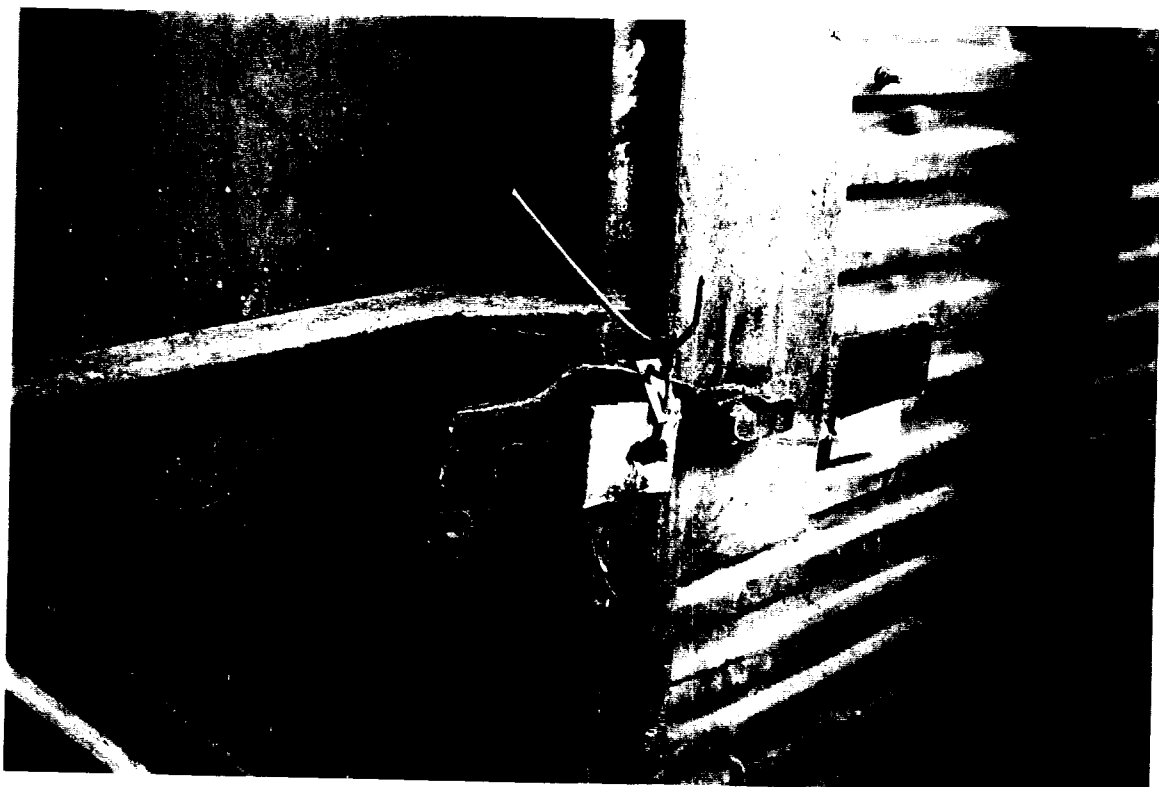


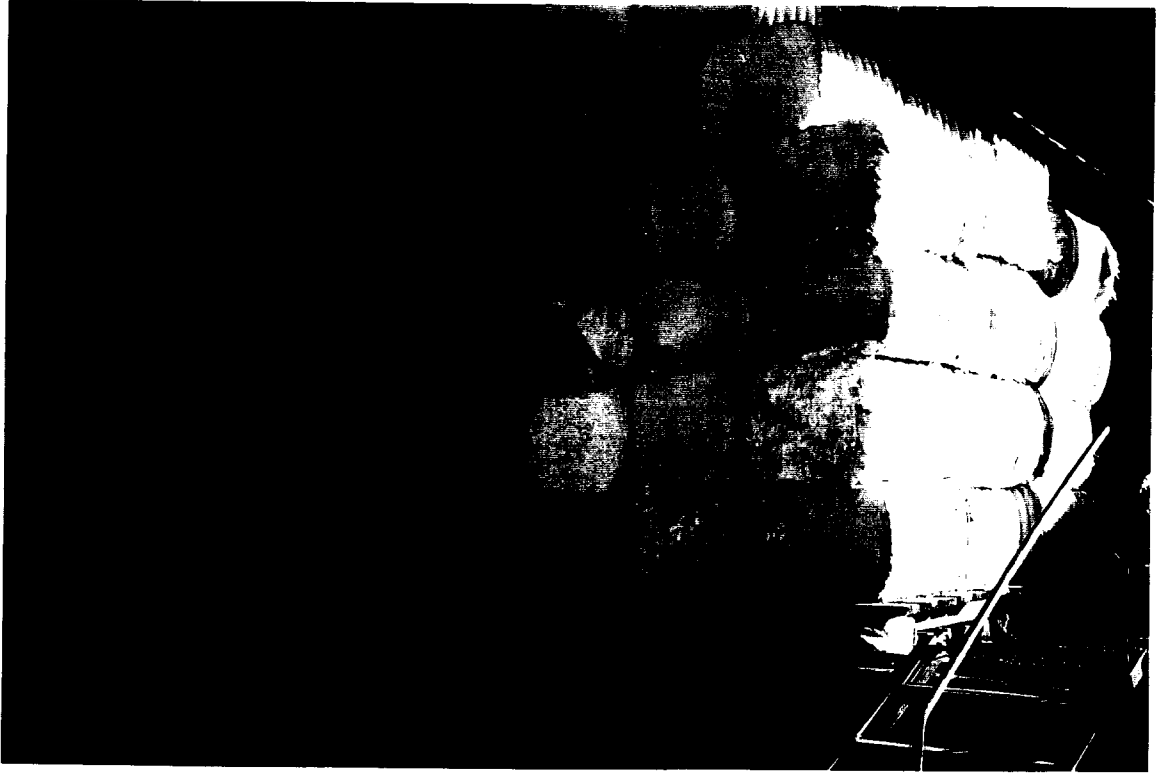
Poti - Tea warehouse just outside the port
10,000 from storage in 4 sheds
Also under the eaves



Wagons arrive and are offloaded

After seal is checked



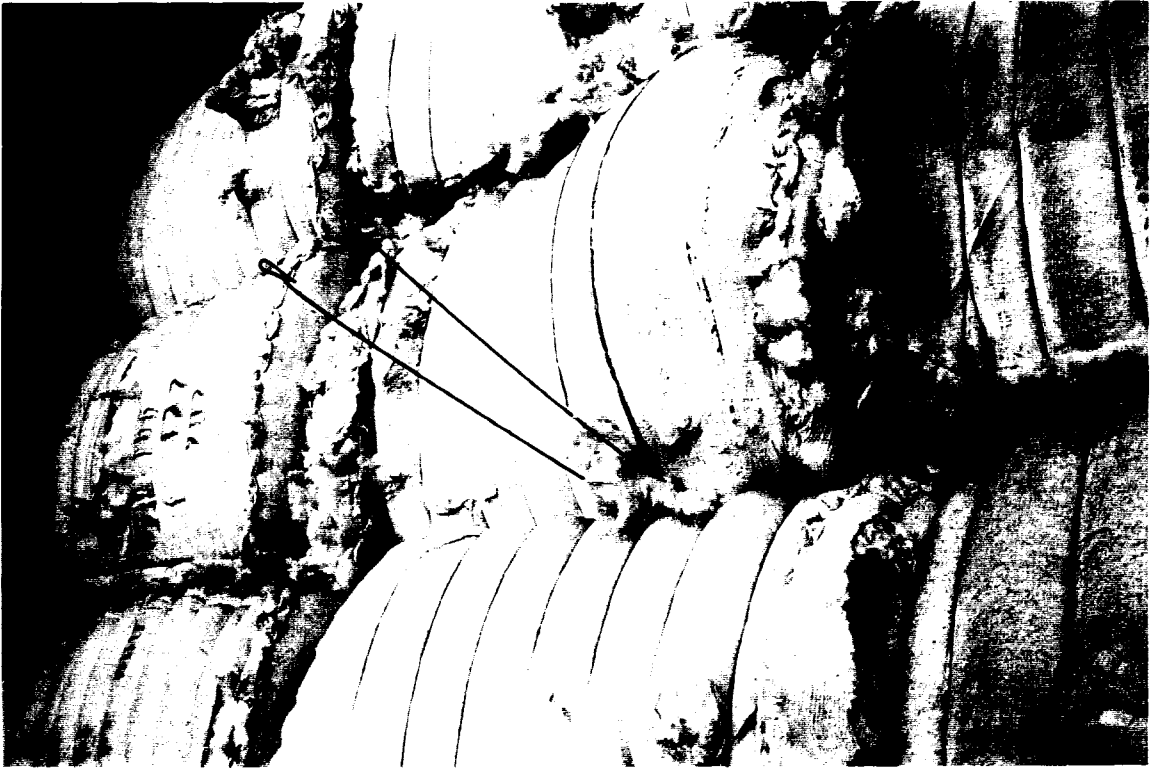


Cotton under the eaves of warehouses



Last year's crop
Wire bands do not hold well

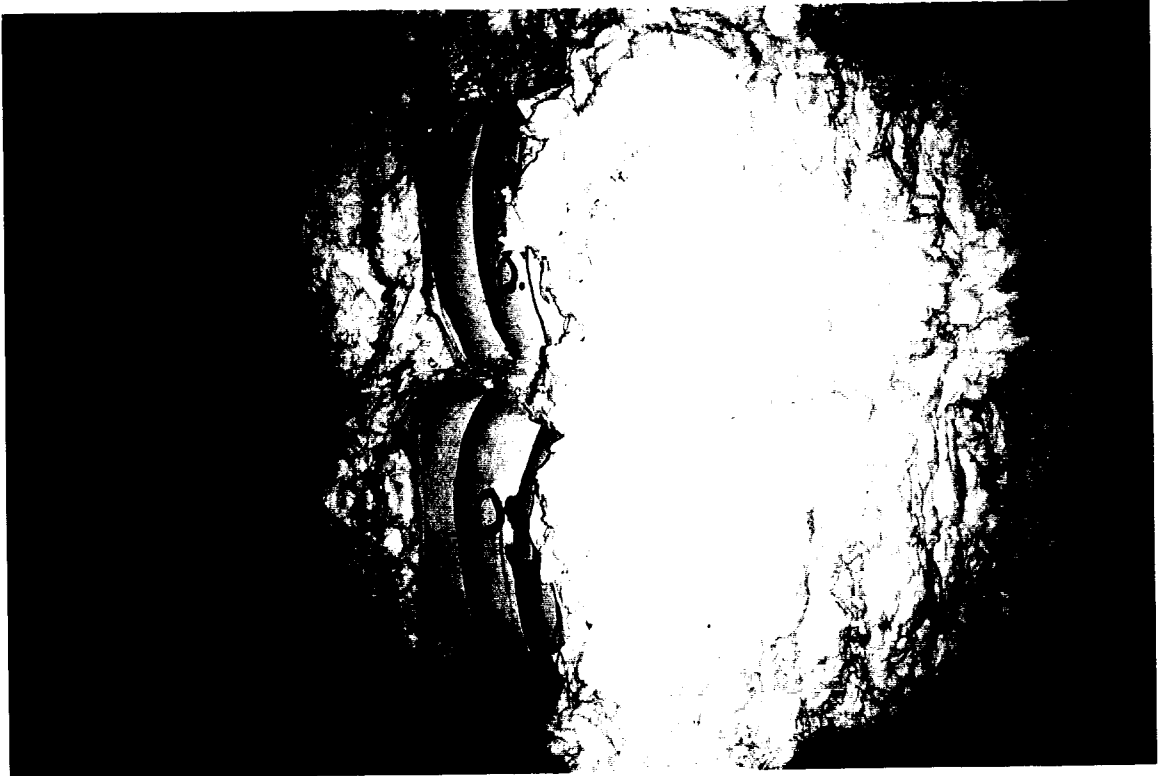
Buyers will not pay for this, they buy FOB the ship



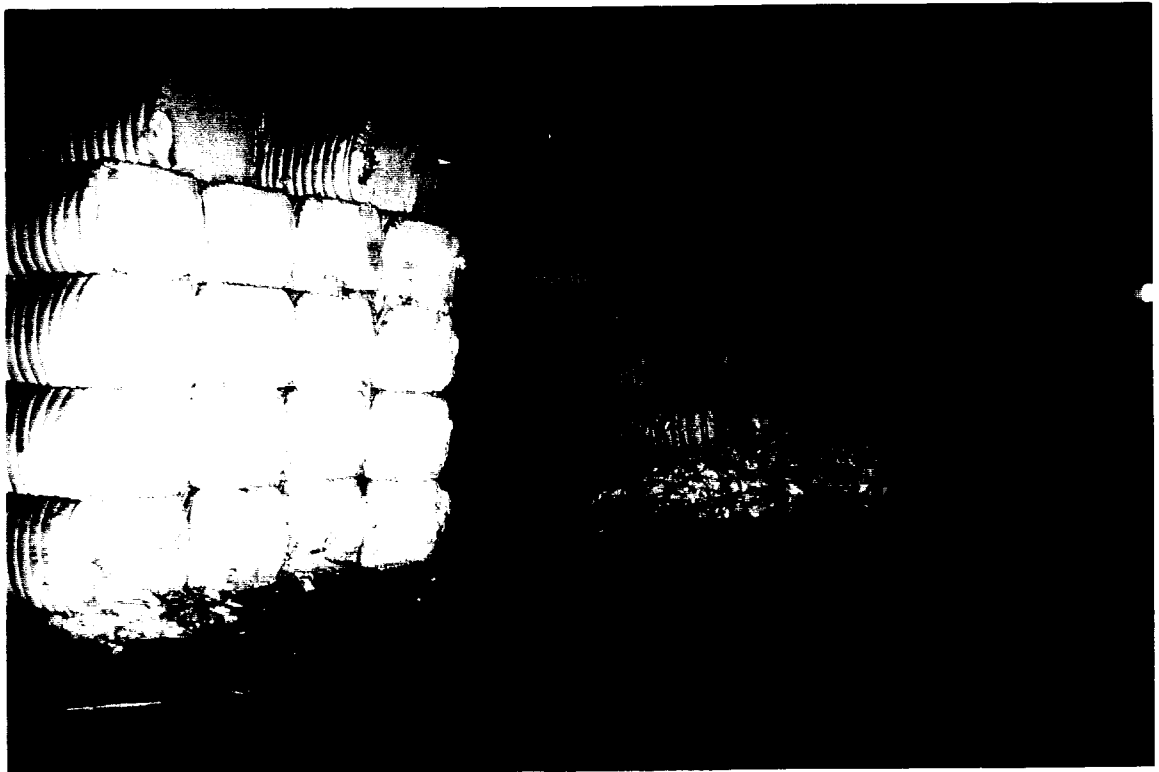
Representatives of the buyers select bales from these piles

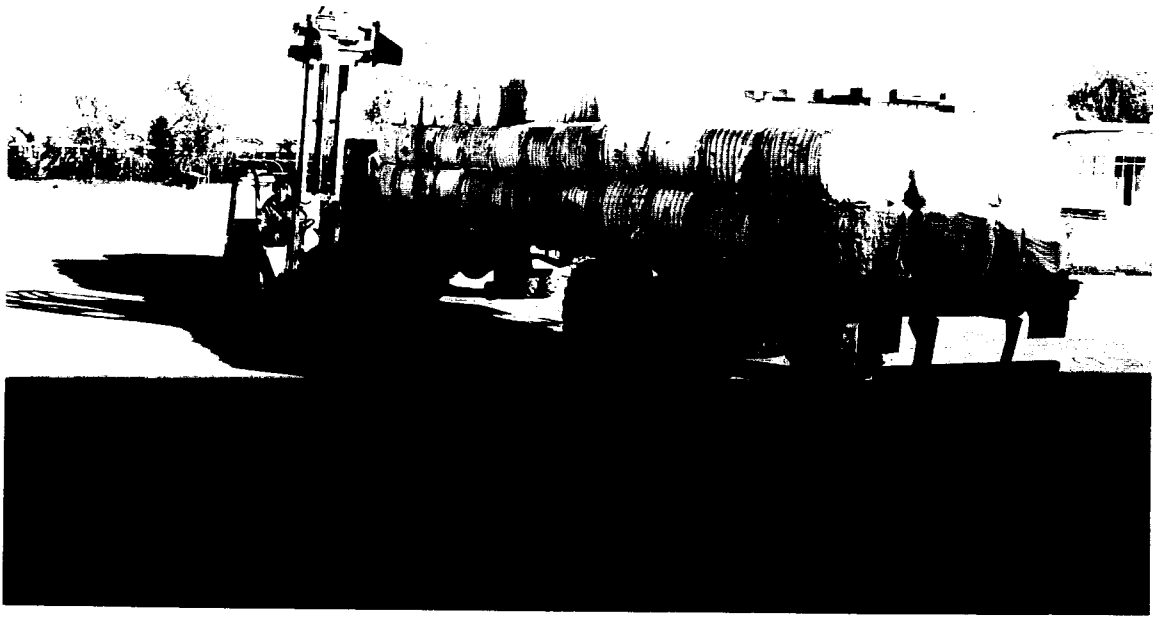


Poti warehouse
Damage in store said to have come out of the wagons

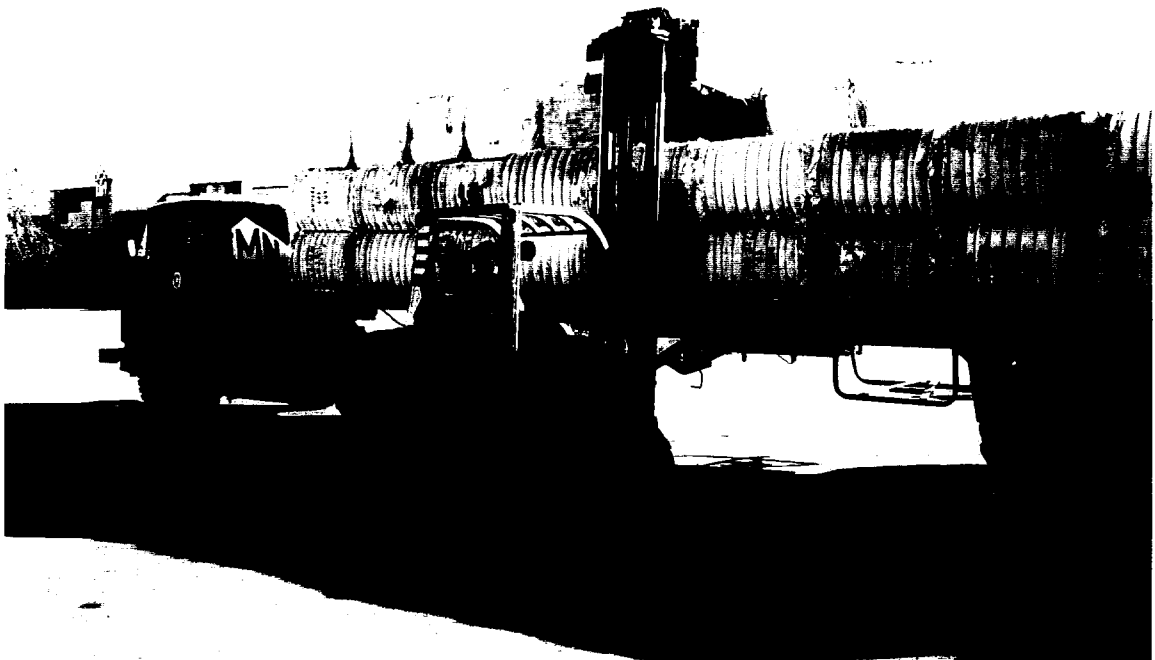


Burst bales

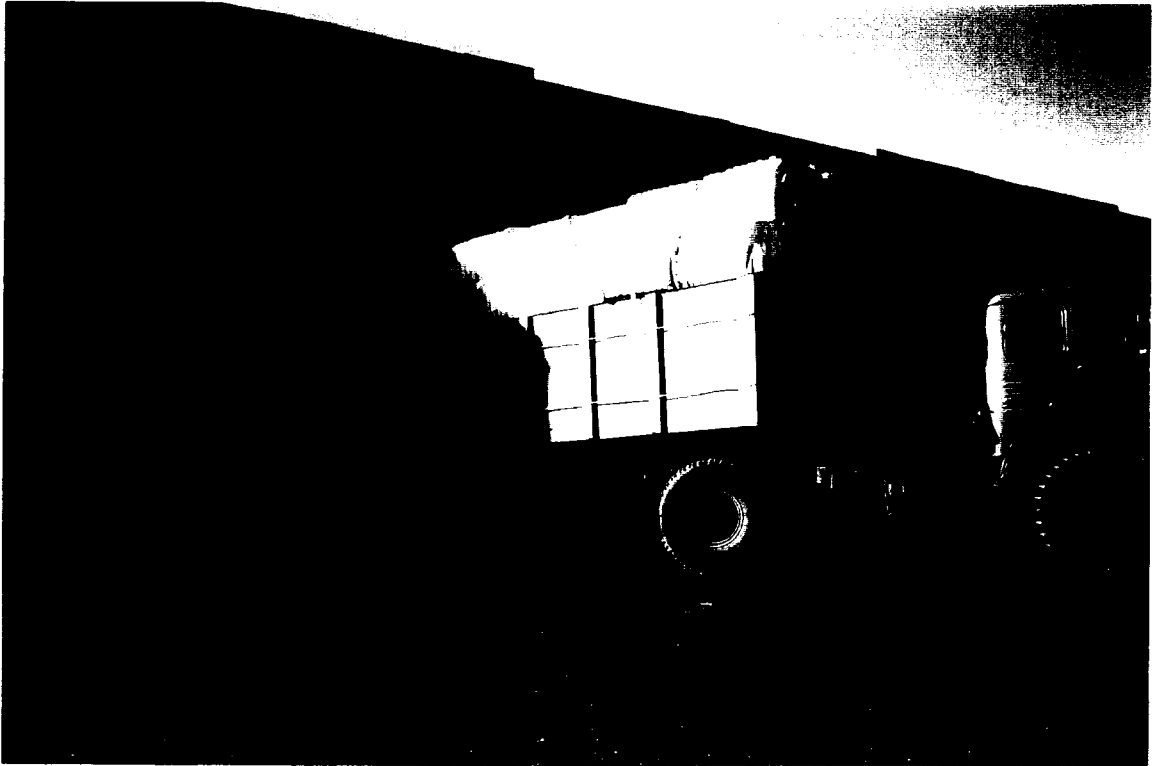




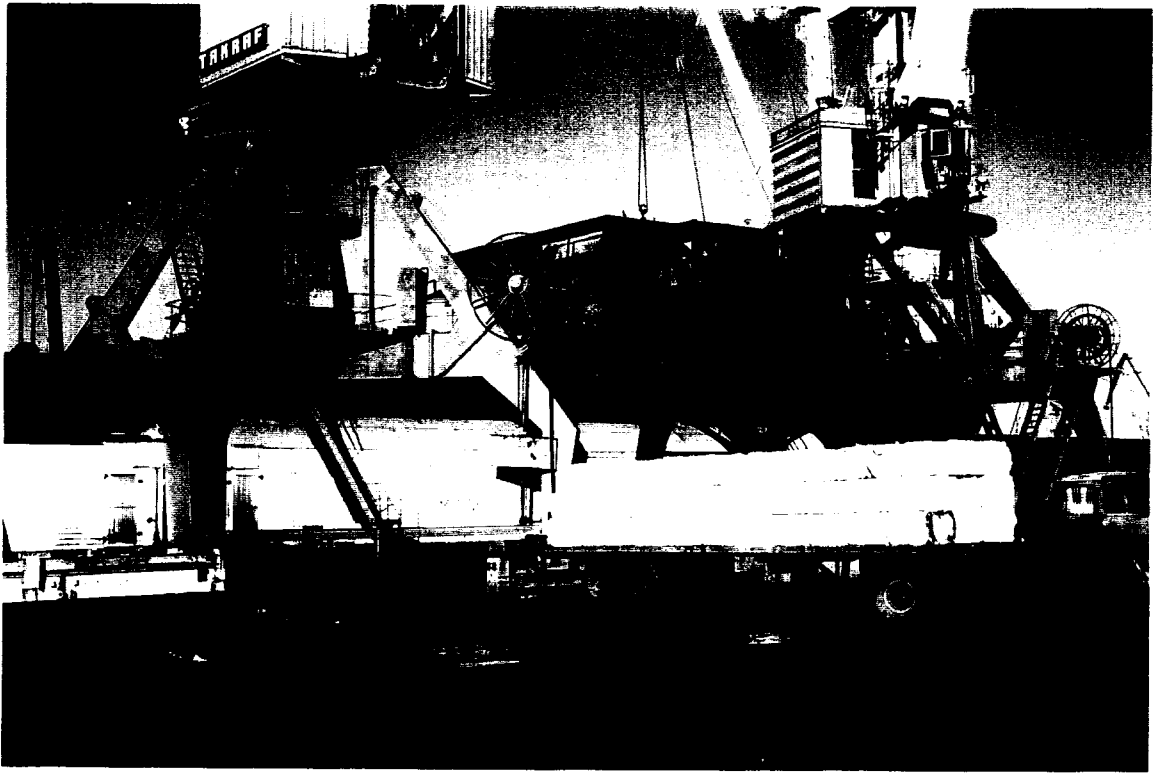
Selected bales being loaded



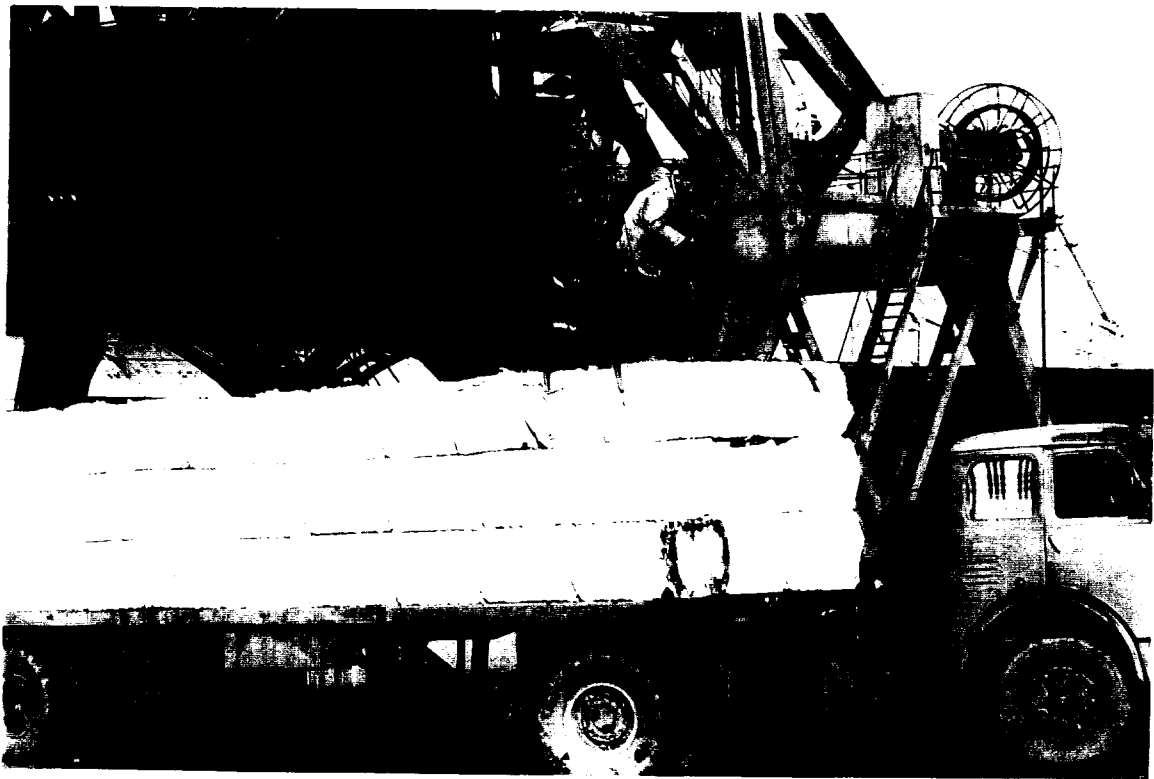
Side loading



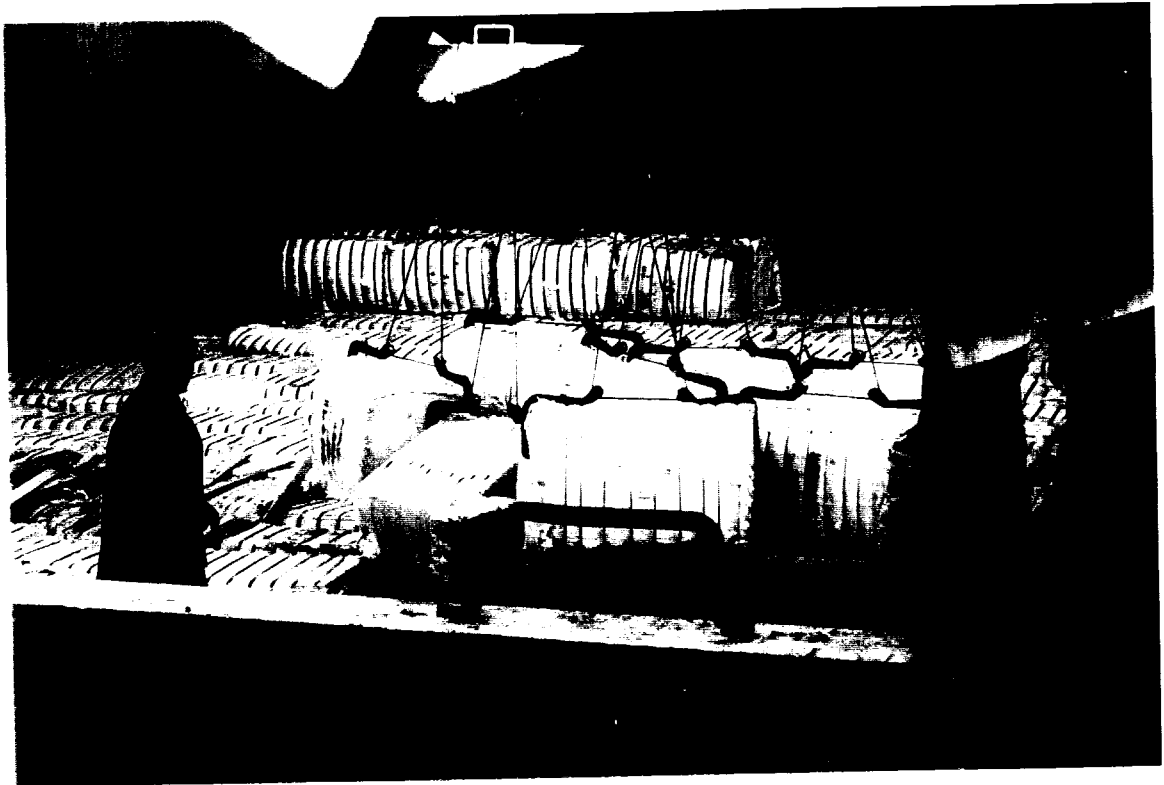
End loading



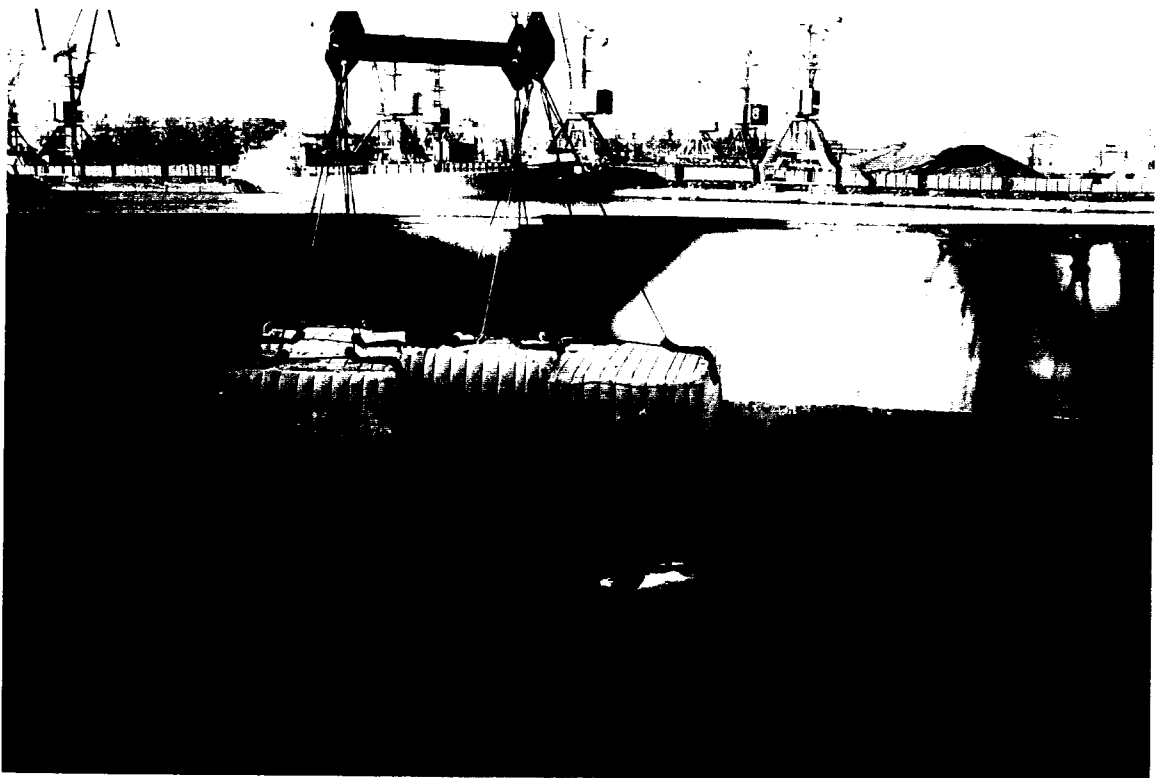
Poti - To dockside 4 km from store



Grapples used to pick 6 bales at a time only



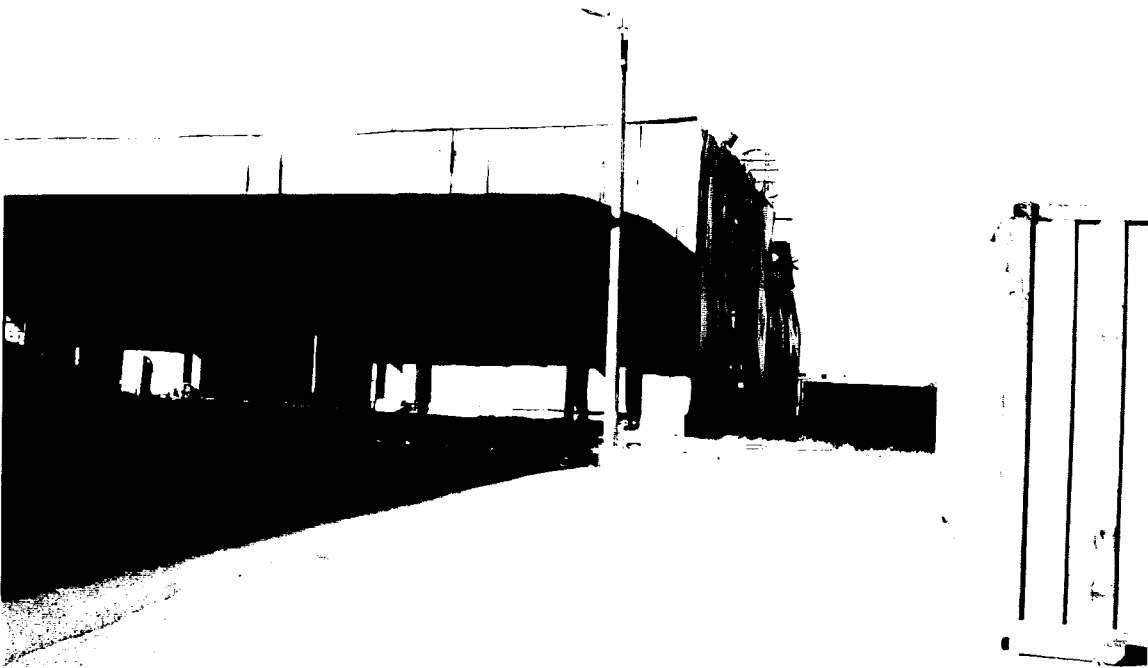
Poti - Loading onto 1800 Tonne bulk ship, 6 bales at a time



Then moved 4 to new location on ship

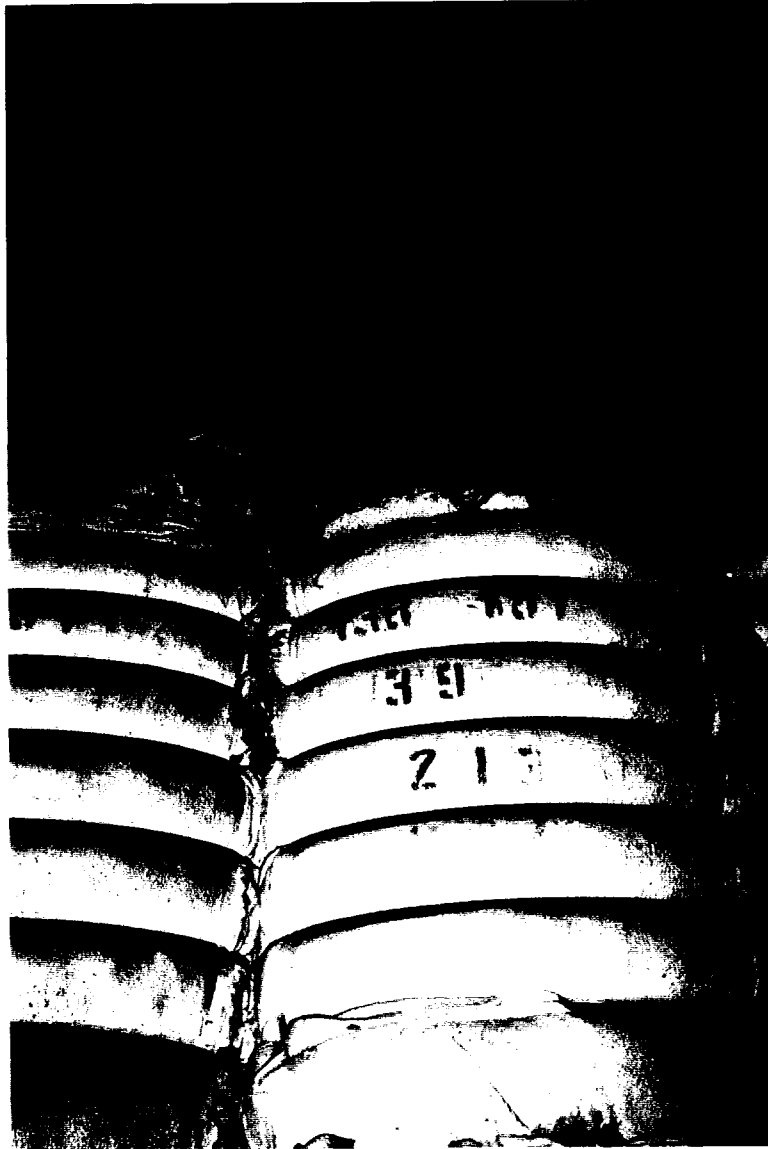


Note wood dunnage



Poti - 56 tonne of damaged cotton caught fire October 1996

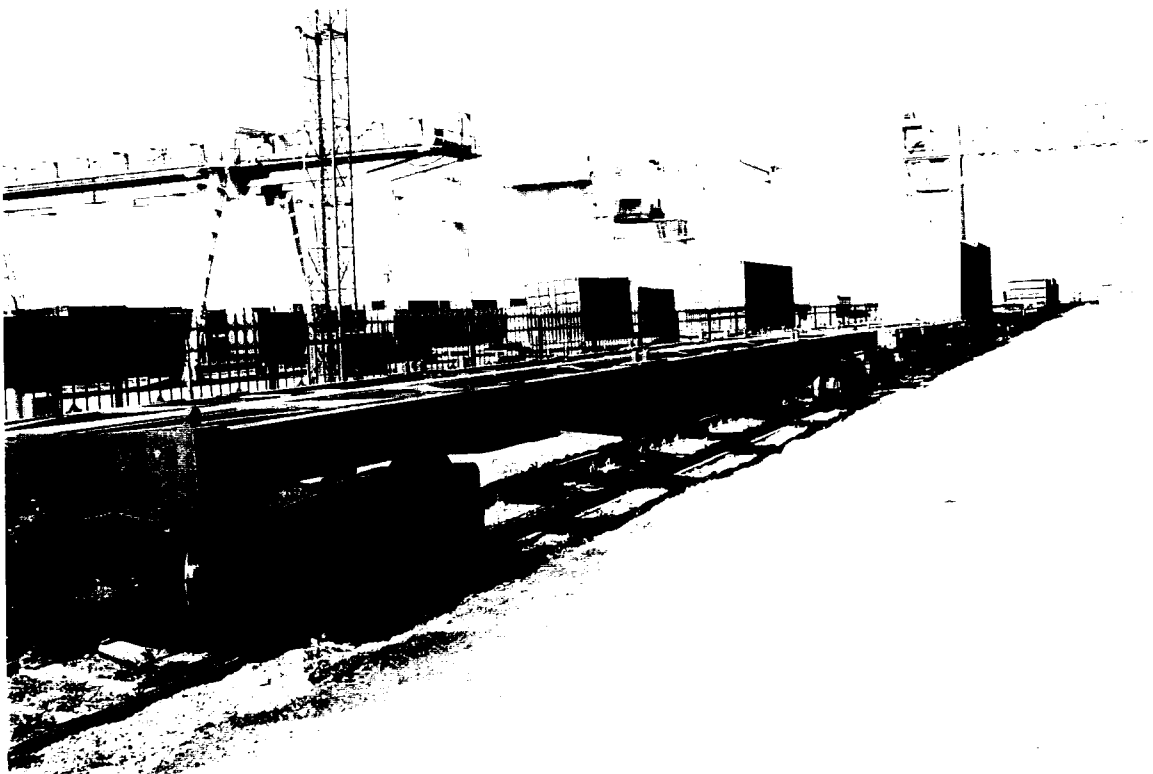




This year's cotton but external very dirty
Some buyers do not mind



Shoshtrans, Tashkent. Shumilovo Station. Modern 'heavy' front loader for containers



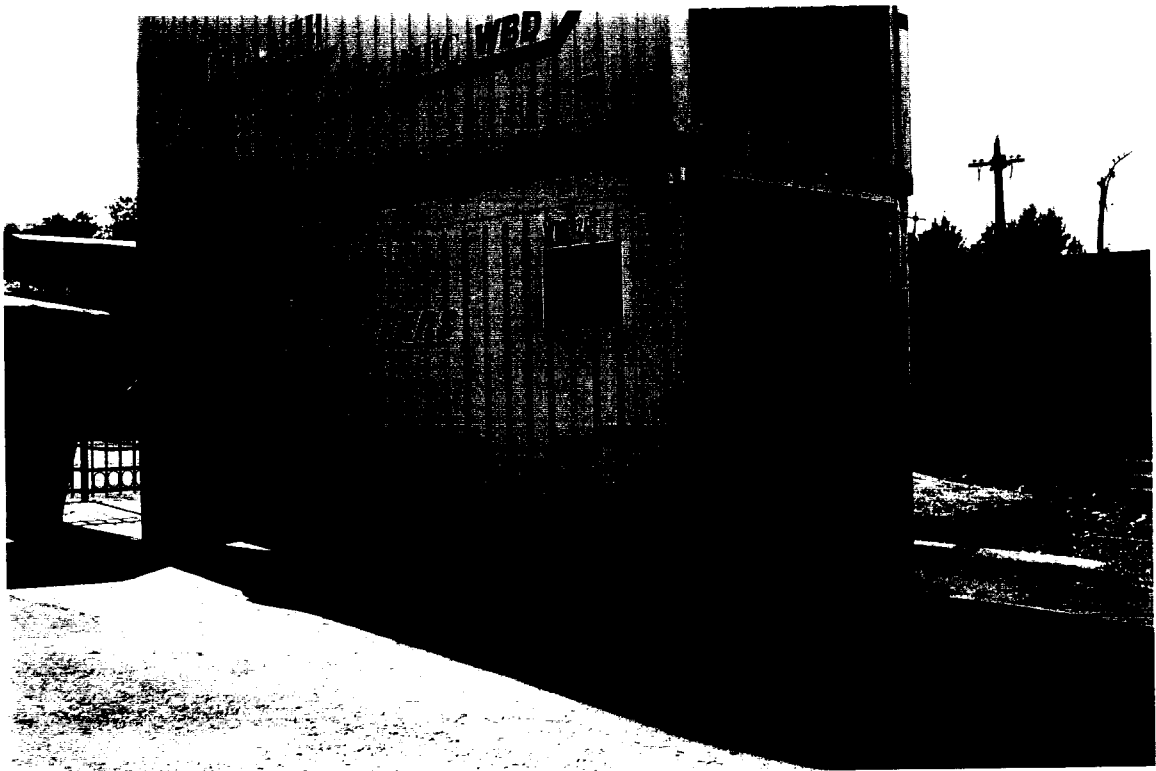
Container rail flats



Semi-trailers waiting to be deployed in moving containers by road to the railways



10 new stacker trucks at Shoshtrans for loading cotton bales into containers



Reefer containers for meat and frozen foods

