OPPORTUNITIES AND PROSPECTS FOR ESTABLISHING OF "COTTON-TEXTILE CLUSTERS" IN THE REPUBLIC OF **TAJIKISTAN**

(Draft)

CLASTER Nº6

Soghd Region

Zafarobod, Spitamen, J. Rasulov districts



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Soghd region and districts

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SUMMARY:

- 1. The land fund of the republic for sowing cotton is more than 180 thousand hectares
- 2. Considering the technological heritage of the Soviet period, Tajikistan annually grows up to 430 thousand tons of raw cotton
- 3. Experience of the large modern cluster <u>"Zhongtai (Dangara) Sin Silu Textile"</u> shows that if know-how and modern technologies are applied in the cotton cultivation, the yield will increase significantly. Indicators of raw cotton ing is around <u>45-60 centner/ha</u> at this company.
- 4. Tajik Cotton is mainly exported in the form of cotton fiber without deep processing. In 2021, the export of cotton fiber was 111 thousand tons.
- 5. The following factors make the transition to cluster production attractive:
 - Introduction of the cotton fiber export ban
 - International demand for cotton apparel is constantly growing. Over the past few years it increased from 8% to 21%
 - Transfer of industrial production to developing countries, due to rising of living standards in developed countries
 - Favorable ecological environment and processing of raw cotton based on cheap green energy
 - Obtaining the GSP+ status of the European Union and UK by Tajikistan
 - Full Government support, low cost labor, geographical location, favorable climate and other factors make establishing of textile clusters attractive.
- 6. With the current scenario, it is possible to establish 6 textile clusters in the country
- 7. In addition, it is possible to build tactile clusters based on the existing capacities of the spinning enterprises of CJSC "Olim-Textile", LLC "Khima-Textile" and LLC "Evraz-Dangara"



SITUATION AND PERSPECTIVES OF COTTON PRODUCTION

Local prospects for the development of cluster industries

- Significant investment potential and a system of state support for investment activities
- New taxation rules encouraging investment in industry:

When investing, investors are exempt for a certain period Income tax

Land tax

Property tax if the investment amount is

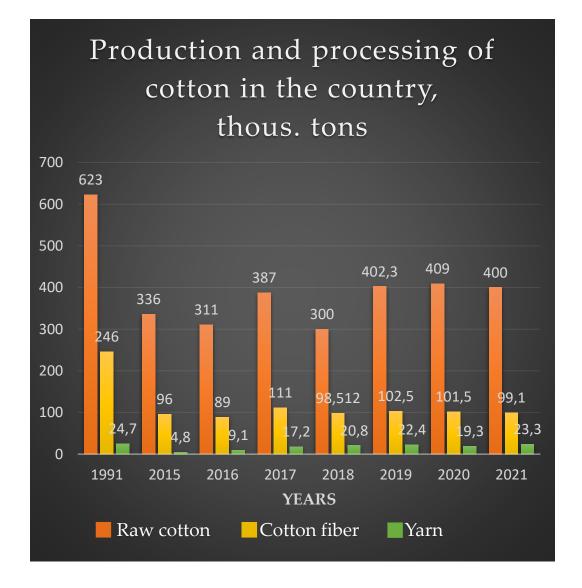
- \square 200-500 thous. USD, for 2 year term
- □500 thous. 2 million USD for 3 year term
- □2 -5 million USD for 4 year term
- ☐ More than 5 million USD for 5 years.

Besides:

VAT from 1 of January, 2022 y. reduced from 18% to 15% From 1 of January, 2023 y. will be reduced form 15% to 14% From 1 of January, 2027 y. will be reduced from 14% to 13%

There is a successful experience in the complete processing of raw cotton at the <u>Zhongtai (Dangara) Sin Silu Textile</u> cluster enterprise with an investment of \$ 200 million.

Low production costs due to cheap labor, electricity, government support and tax preferences;



SITUATION AND PERSPECTIVES OF COTTON PRODUCTION

The annual raw cotton picking in the Republic of Tajikistan varies from 380 thousand tons to 400 thousand tons of raw cotton and 85,585 tons of cotton fiber production, taking into account Soviet technological equipment and traditional methods of growing and producing cotton

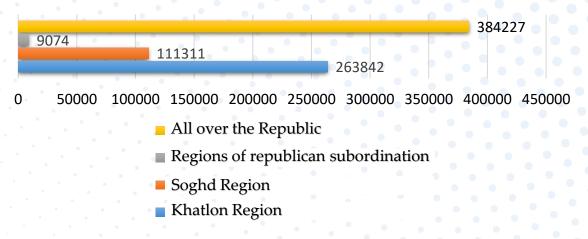
In 2021 year, 234,2 thousand tons of raw cotton were picked in the country

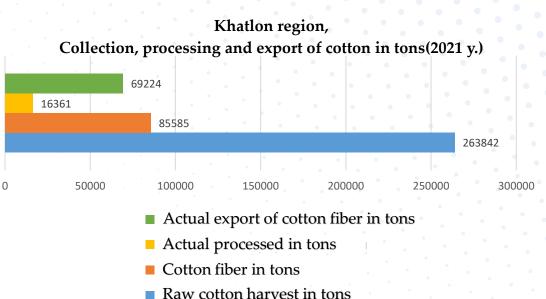
Only in Khatlon region were picked 263842 tons of raw cotton.

Exported 69224 tons of cotton fiber

The processed volume of cotton fiber in the country is 16361 tons.

Raw cotton picking, 2021 (in tons)





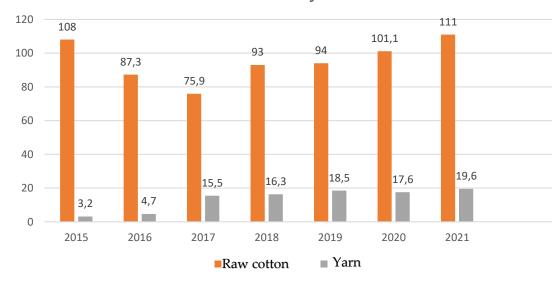
SITUATION AND PERSPECTIVES OF COTTON PRODUCTION

High share of cotton fiber and yarn exports

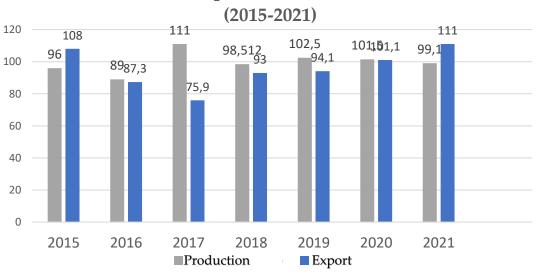
High share of imports of finished textile products from abroad

Not full use of existing production capacity

Export of raw cotton and yarn, thous. tons in the country



Production and export of cotton fiber, thous. tons



SITUATION AND PERSPECTIVES OF COTTON PRODUCTION

Fig. 1 shows that over the last 50 years there were dynamic changes in the production of raw cotton in Tajikistan.

By 1980, Tajikistan reached its peak of the gross collection and productivity of cotton - 1 million tons of raw cotton with 250 thousand hectares of sown area, which is 40 centners / ha

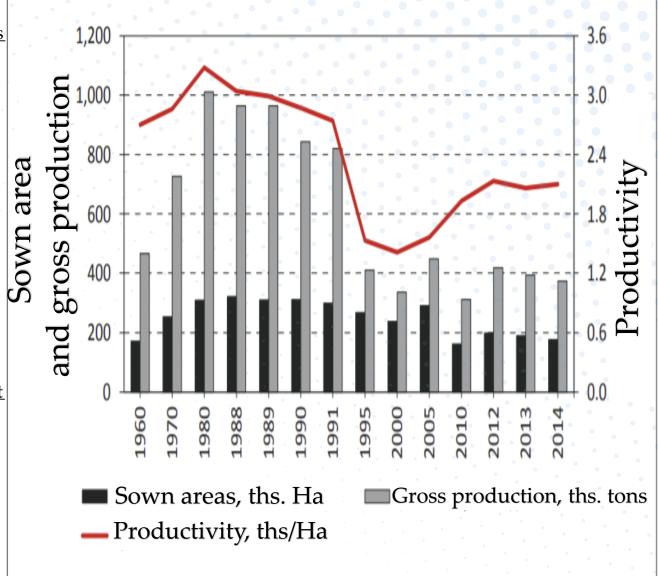
1980-1990 characterized by a slight decrease in the main indicators of the production of raw cotton

Then there was a sharp drop of all raw cotton production indicators, due to the followings:

- (i) In 1990s, the cultivation of cotton for rural producers lost all meaning due to the lack of incentives;
- (ii) Shortcomings of mineral fertilizers, agricultural machinery, that decreased the volume of organic fertilizers used for soil
- (iii) Outflow of highly qualified labour force from rural areas

TECHNOLOGICAL PROGRESS IN GROWING RAW COTTON BY
THE TAJIK-CHINESE JV "ZHONGTAI DANGARA SIN SILU
TEXTILE" ALLOWS UP TO 60 CENTNERA/HA OF RAW COTTON
PICKING

Fig. 1. Sown areas, gross production and productivity of raw cotton in Tajikistan



SOGHD REGION

ADMINISTRATIVE CENTRE: Khujand city

Population: 2 million 770 people

Including:

- Urban: 684190- Rural 2085810

Transport infrastructure:

Highways 1000 km Rail Roads: 250 km

International airport in Buston city

Climate:

Continental, Dry

RIVERS: Sirdarya, Zerafshan

Water reservoir: Bahri Tojik, (used as for irrigation, as for recreation areas).

DISTANCE FROM THE CAPITAL: 390 km



- Soghd Region is one of the three regions of the Republic of Tajikistan
- Region occupied 25,4 thous. square km (18% of all the area of Tajikistan)
- Located in the north of Tajikistan, in the Tien Shan and Hissar-Alai mountains, the northern part occupies the southwest of the Fergana Valley, has 8 cities, 10 administrative districts
- The region borders Uzbekistan from the south, Uzbekistan, Kyrgyzstan from the north, Kyrgyzstan and Uzbekistan from the east, and Uzbekistan from the west.

SITUATION AND PERSPECTIVES OF COTTON

PRODUCTION IN THREE DISTRICTS

Districts	Populaion (thous. people)	Actual sowing land, (Ha):	Available additional lands for cultivation of cotton (Ha):	ACTUAL SIZE OF RAW COTTON IN 2020y, (ton):	Medium Cotton yield, (cwt/Ha):
Zafarabad	79	14354	692	25681	18
Spitamen	145,6	6115	23	13441	22
J. Rasulov	142	5797	22	12337	21,3
Total	366,6	26266	737	51059	20,5

- Actual sown land in 3 districts is 26 266 Ha additionally 737 Ha perspective lands which makes perspective construction of Textile
- Climatic conditions and convenient geographical location can significantly reduce factory costs.
- Logistics opportunities international highways, international airport and Dushanbe railway station make the project perspective
- Both by car and by rail it's possible to get to Tajikistan through neighboring countries.
- The country also has road links with Kyrgyzstan, Uzbekistan in the north of the country, China in the east, and Afghanistan in the south.











TEXTILE CLUSTER DEVELOPMENT SCHEME



COTTON SOWING ON 26266 HA OF LAND



STORAGE AND
PRIMARY PROCESSING
OF RAW COTTON



PRODUCTION COMPLEX



SUBSIDIARY FARM

1

2

3

4

5

6

7

ACQUISITION OF AGROTECHNICS
(TRACTORS, COTTON-PICKING
MACHINES, ETC)



DEEP
PROCCESING OF
COTTON FIBER



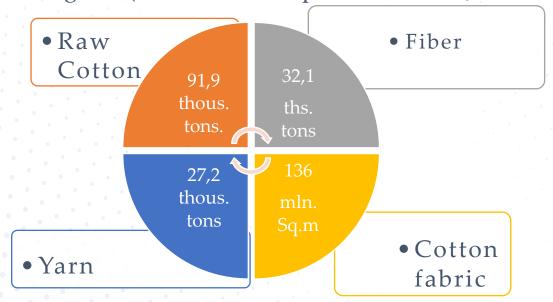
OIL
PRODUCTION
FACTORY



POSSIBLE VOLUME OF PRODUCTION of

Cluster 5 in 20,6 ths. Ha

Soghd region (Zafarabad> Spitamen and J. Rasulov)



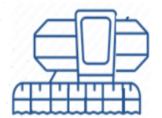


Planned sown areas and cotton production volumes (2022) (ths. tons)

	Area (Ha)	version 1		version 2		version 3	
Districts		Raw cotton picking 25 C/Ha		Raw cotton picking 35 C/Ha		Raw cotton picking 40 C/Ha	
		raw cotton	Cotton fiber	raw cotton	Cotton fiber	Raw cotton	Cotton fiber
Zafarobod	14382	35,9	12,6	50,3	17,6	57,5	20,1
Spitamen	6115	15,3	5,3	21,4	7,5	24,4	8,5
J. Rasulov	5797	14,5	5,1	20,2	7,0	23,2	8,1
Total	26294	65,7	23	91,9	32,1	105,1	36,7

AGROTECHNICAL SERVICES





Tractors

Harvesters

JOHN DEERE (США) CASE IH (США) NEW HOLLAND JOHN DEERE (США) CASE IH (США)



Sowing equipment

ORTHMAN (Германия) SFOGGIA (Италия) NARDI (Италия)



Sprayers

NARDI (Италия) CASE IH (США)



Tillers



oo oo Trailers



Storage containers Car park

JOHN DEERE (США) ORTHMAN (Германия) SURE FIRE (Германия)

TINAZ (Турция) DOGUMAK (Турция) IVECO (Китай) AGROS (Турция) According to preliminary estimates, the number of agricultural machinery is 498 tractors, 2340 units, 68 cotton pickers, and the total purchase amount is about 39.47 million USD.



*final number of vehicles and prices will be specified after the approval of the feasibility study report of the project

TECHNOLOGICAL EQUIPMENT



Ginning production

LUMMUS (USA) CONTINENTAL EAGLE (USA)



Spinning production

RIETER (Switzerland)

MURATA MACHINERY (Japan) SIEGER (India) SAVIO SIRIUS (Italy)



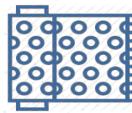
Weaving production

KARL MAYER
(Germany) STAUBLI
(Switzerland) PICANOL
(Belgium) DEMSAN
(Turkey)



Circular knitting production

TERROT GmbH (Germany) GÜVEN CELIK (Turkey) Pailung Machinery Mill Co., Ltd. (Taiwan)



Dyeing and finishing production

OSTHOFF (Germany) ERBATECH (Belgium) HAS GROUP (Turkey) ELTEKSMAK (Turkey)

ZIMMER (Austria) KUSTERS (Germany) DEMSAN (Turkey)



Sewing production

SERKON (Turkey)
BROTHER (China)
JUKI (Taiwan)
KANSAY (Japan)
OZER MAKINA TEKSTIL
MALKAN (Turkey)
TEXPA (Germany)



RAW COTTON POINTS OF RECEPTION (7 PCS.)











Stationary scales (2 units for each item)

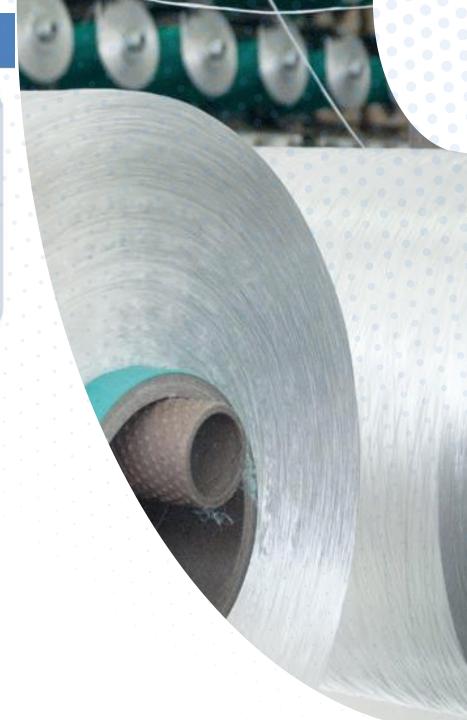
"NAIS" Plant of weighing equipment "NAIS" (Russia)

> Vesy Rostov LLC (Russia)

Conveyer belt (8 units for each item)

FLIESSBAND GmbH (Germany)

Company group
"Baltresino-technics"
(Russia)



COTTON GINNING PRODUCTION

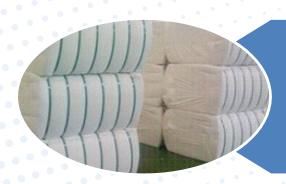


Productive capacity

– 88 tons of cotton fiber per day



Energy consumption: electricity – 750 000 kW natural gas – 60 000 мз



New workplaces 25 units with employment of 124 people

Cotton fiber - 32100 tons

Cotton yarn
- 85%
- 2785 tons

Waste – 8% - 2568 tons

Loss of moisture – 7% - 2247 tons



TEXTILE PRODUCTION





Production capacity of factory • 76302 kg/day (24 hours), 2785000 kg/year



Creating jobs 1016 units with employment about 700 people.



Required total area 20 Ha of land with total production area 20 000 sq.m.

WEAVING PRODUCTION

Textile technology

Discover textile technologies designed to promote innovative solutions





68 mln. r.m finished fabric; 13,6 ths. tons ready knitted fabrics



Creation of workspaces 40 units with employment of more than 145 people.



Required total area - 2,7 Ha of land area with total production area 1800 sq. m.

ROUND KNITTING PRODUCTION

Created for embody creative ideas

Knitel

Round knitting machines



Production capacity 30 mln. r.m austere knitted cloth



Creation of 35 units with employment more than 120 people.



Required total area 2 Ha of land area with total production area 1100 sq. m.

DYEING AND FINISHING PRODUCTION





Production capacity 13,6 ths. Tons dyed knitted cloth/fabric



Creation workplaces - 36 units with employment of more than 110 people.



Required total area is 2,4 Ha of land area with total production area of 1300 sq. m.

RPODUCTION OF TERRY TOWELS





Production capacity - 6,5 mln. Pieces of ready products.



Created workplaces - 30 units with employments of over 80 people.



Required total area - 1,8 Ha of land area with total production area 950 sq. m.

SEWING PRODUCTION

Quality step forward

Sewing Machines
швейные машины





Production capacity 20,2 mln. units of ready products



Created workplaces – 720 units: with employment of more than 1 450 people



Required total area 3,0 Ha land area with total production area 2 100 sq. m.

BED LINEN PRODUCTION



Bed Linen



Production capacity 3,4 mln. Units of ready product



Created workplaces 122 units with employment of more than 380 people



Required total area 2.1 Ha of land area with total production area 1,600 sq. m

OIL EXTRACTION PRODUCTION







Production capacity 7,0 mln. units of ready products



Created workplaces of 32 units with employment of more than 158 people



Required total area is 2,5 Ha of land area with total production area 1 780 sq. m

SUBSIDIARY FARM





Number of cattle 2000 units



Created workplaces 152 units with employment more than 344 people

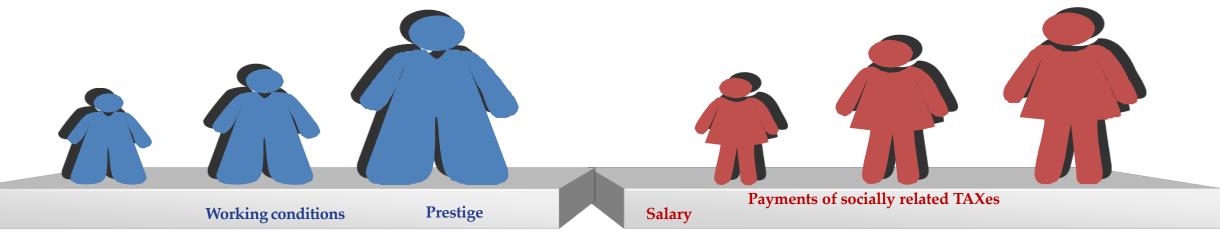


Required total area is 30 Ha with total construction area 5 780 sq. m. and pastures 800 Ha

The most part of feed for cattle will be provided from its own production

SOCIAL EFFECT

- > Personnel training and retraining system
- > New workplaces
- > Increased employment in the region;



Social effect

Economic effect

VOLUME OF INVESTMENT (MLN. \$)

Nº	ACTIVITY	Created workplaces	Equipment cost	and installation works' cost
1	Set of activities on sewing of cotton	2648	24,9	0
2	Agro-service	1132	41,5	0
*	Seasonal work force	20000	3,4	
3	Raw cotton harvest points (3 units)	65	1,0	0,5
	Cotton ginning	124	2,0	1,0
5	Spinning production	1016	38	9,4
6	Weaving production	145	4,3	1,5

120

110

400

80

158

344

26 342

1,8

2,67

1,6

1,8

3,5

7,8

134,3

153

0,7

0,7

0,5

0,6

1,2

2,6

18,7

Circular – knitting production

9 Sewing production

12 Subsidiary farm

Total:

10 Terry towels production

11 Oil extraction production

Dyeing and finishing production