# OPPORTUNITIES AND PERSPECTIVES OF CONSTRUCTION OF COTTON-TEXTILE CLUSTERS IN THE REPUBLIC OF TAJIKISTAN (Draft)

# Cluster Nº5

**Soghd Region** 

Konibodom, Asht, B. Ghafurov districts



#### Content

Summary

Cotton production's condition and possibilities

Soghd region and districts

Textile cluster development scheme

**Products** 

Economic effect

Investment size



#### 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 harvesting is around 45-60 centner/ha 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. It is also possible to establish textile clusters based on the existing capacities of the spinning enterprises of «Olim-Textile» company, LLC «Khima-Textile» and LLC «Evraz-Danghara».



#### Cotton production's condition and possibilities

#### 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.

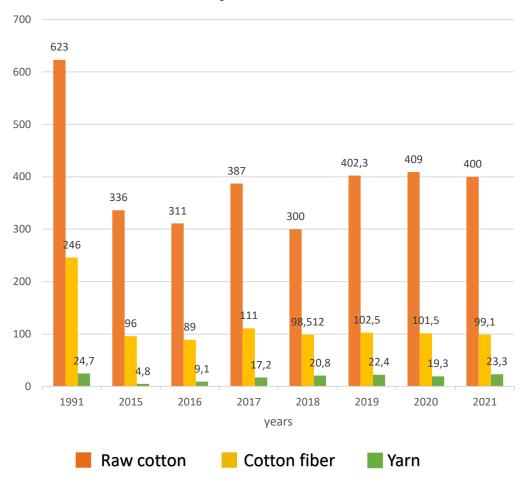
#### Besides:

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 USD.

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

# Production and processing of cotton in country, thousand tons



#### Situation and perspectives of cotton production

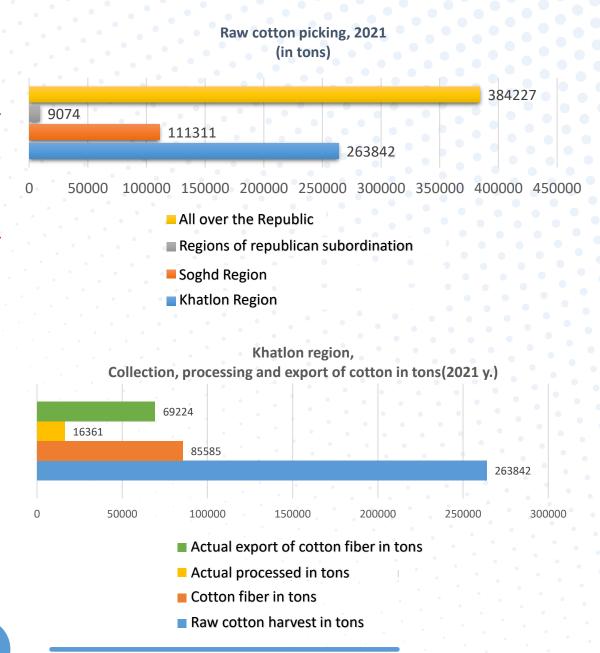
The annual raw cotton picking in the Republic of Tajikistan varies from 380 thousand tons to 400 thousand tons of raw cotton and 85,585 tons of cotton fiber production, taking into account Soviet technological equipment and traditional methods of growing and producing cotton

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.



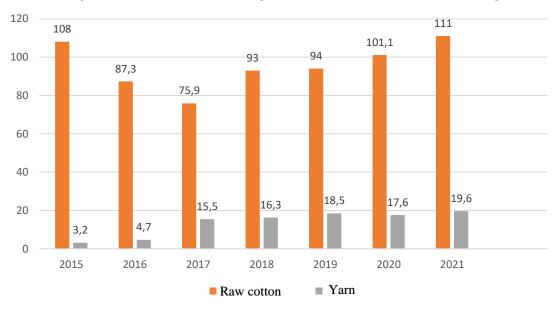
# <u>Situation and perspectives of cotton</u> <a href="mailto:production">production</a>

High share of cotton fiber and yarn exports

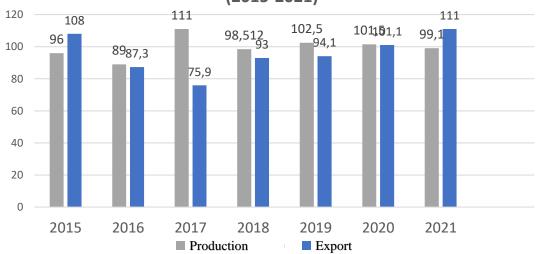
High share of imports of finished textile products from abroad

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 (2015-2021)



# 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

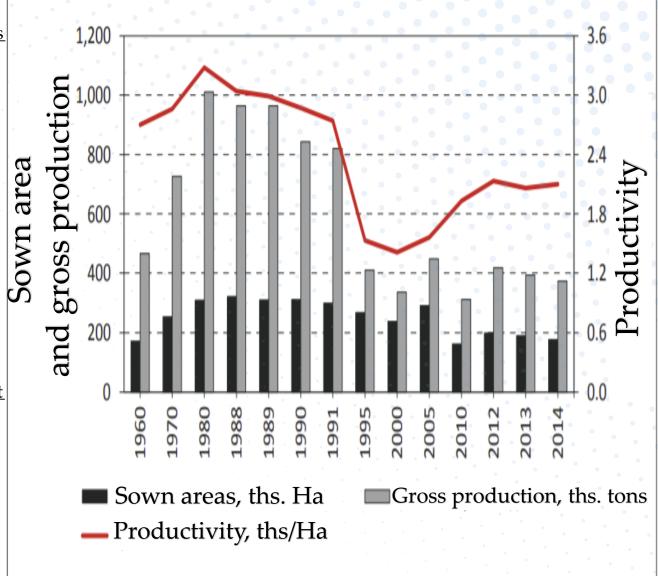
1980-1990 characterized by a slight decrease in the main indicators of the production of raw cotton

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 mln 770 people

*Including:* 

- Urban: 684190- Rural 2085810

Transport infrastructure:

Highways: 1000 km

Rails: 250 km

International airport in Buston city

Climate:

Continental, Dry

RIVERS: Sirdaryo, Zarafshon

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 ths. sq. km. (18% of all the Tajikistan area)
- Located in the northern part of Tajikistan, in Tyan-Shan and Hissar-Alay hills, northern part occupies south-west of Ferghana Valley. Has 8 cities, 10 administrative districts.
- From the southern part borders with Uzbekistan, from north with Uzbekistan, Kyrgyzstan, from the east Kyrgyzstan and Uzbekistan, from west with Kyrgyzstan and Uzbekistan and from the west with Uzbekistan.

#### CONDITION AND POSSIBILITIES OF COTTON PRODUCTION IN 3 DISTRICTS

DISTRICTS	Population (thous. people)	Actual sowing land, (Ha)	Available additional lands for cultivation of cotton (Ha):	Actual size of raw cotton in 2020 y, (tons)	Medium cotton yield, (cwt/Ha):
Konibodom	220	6091	2000	13776	22,6
Asht	172	6102	1635	13458	22,1
B. Ghafurov	305	8401	322	18761	22,3
Total	697	20594	3957	45995	22,4

- Actual sowing lands in 3 districts is 20594 Ha and additionally 3957 Ha of perspective land makes Textile cluster's construction perspective.
- Climatic conditions and convenient geographical location can significantly reduce factory costs.
- Logistics opportunities international highways, international airport of Buston city and Konibodom and B. Ghafurov's railway stations make the project perspective.
- Both by car and by rail it's possible to get to Tajikistan through neighboring countries.
- The country has automobile connections with Kyrgyzstan, Uzbekistan on the northern part, with China in the east and with Afghanistan in the south.











#### TEXTILE CLUSTER DEVELOPMENT SCHEME



COTTON SOWING ON 20 594 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



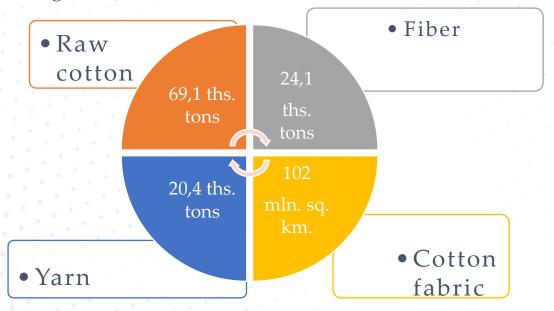
OIL
PRODUCTION
FACTORY



#### POSSIBLE VOLUME OF PRODUCTION of

Cluster 5 in 20,6 ths., Ha

Soghd region (Konibodom> Asht, B.Ghafurov)



Planned sown areas and cotton production volumes (2022)

Version 1



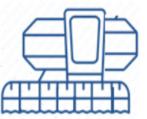
Districts	Area (Ha)	Raw cotton harvest 25 C/Ha		Raw cotton harvest 35 C/Ha		Raw cotton Harvest 40 C/Ha	
		Raw cotton	Cotton fiber	Raw cotton	Cotton fiber	Raw cotton	Cotton fiber
Konibodom	6091	15,2	5,3	21,3	7,4	24,3	8,5
Asht	6231	15,6	5,5	21,8	7,6	24,9	8,7
B. Ghafurov	7 424	21	7,3	26,0	9,1	29,7	10,3
TOTAL	19749	51,8	18,1	69,1	24,1	78,9	27,5

#### AGROTECHNICAL SERVICES



#### **Tractors**

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



Combineharvesters

JOHN DEERE (США) CASE IH (США)



Sowing equipment

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



#### Sprayers

NARDI (Италия) CASE IH (США)



#### **Tillers**



**Trailers** 

Storage containers Car park

DOGUMAK (Турция)

TINAZ (Турция)

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

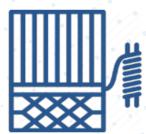
LUMMUS (USA) CONTINENTAL EAGLE (USA)



#### Spinning production

RIETER (Switzerland)

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



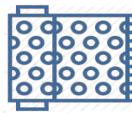
#### Weaving production

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)

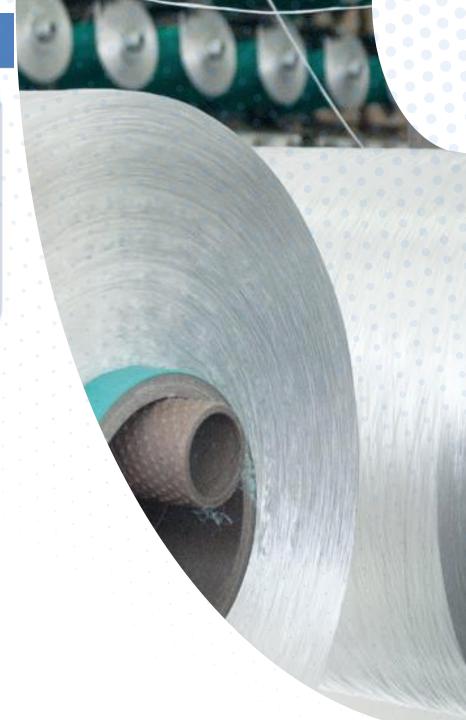
"NAIS" Plant of weighing equipment "NAIS" (Russia)

> Vesy Rostov LLC (Russia)

Conveyer belt (8 units for each item)

FLIESSBAND GmbH (Germany)

Company group
"Baltresino-technics"
(Russia)



# COTTON CLEANER PRODUCTION



**Productive capacity** 

- 75 tons of cotton fiber per day



Energy consumption: Electricity – 750 000 kW Natural gas – 60 000 m3



New workspaces – 31 units with employment – 124 people

Cotton fiber - 24 100 tons

Cotton Yarn - 85%
- 20 400 tons

Waste – 8% - 1 928 tons

Moisture loss – 7% - 1 687 tons



### TEXTILE PRODUCTION





Production capacity of factory – 55 890 kg/day, 20 400 000 kg/year



Creating workplaces 790 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





51 mln. r.m finished fabric; 10,2 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 1 800 sq. m.

#### ROUND KNITTING PRODUCTION

Created for embody creative ideas

#### **Knitel**

Round knitting machines



Production capacity 25 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.

# PRODUCTION OF TERRY TOWELS





Production capacity – 6 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.

#### DYEING AND FINISHING PRODUCTION





Production capacity 10,2 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 1 300 sq. m.

#### SEWING PRODUCTION

Quality step forward

# Sewing Machines швейные машины





Production capacity 20 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







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 52 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

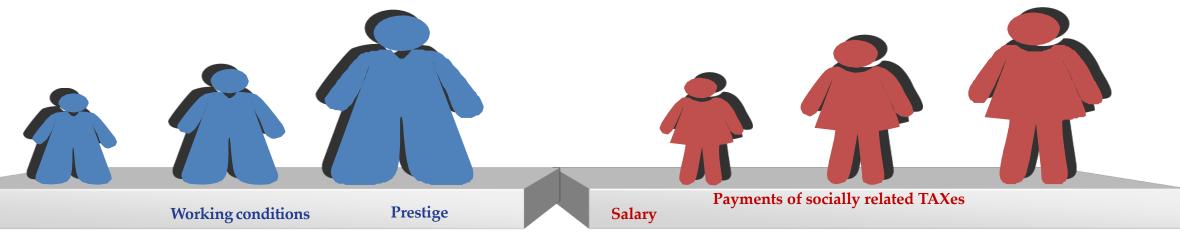


Required total area is 30 Ha with total construction area 5 780 sq. m. and pastures 800 Ha

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	Construction 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
4	Cotton ginning	124	2,0	1,0
5	Spinning production	1016	38	2,3
6	Weaving production	145	4,3	1,5
7	Circular – knitting production	120	1,8	0,7
8	Dyeing and finishing production	110	2,67	0,7
9	Sewing production	400	1,6	0,5
10	Terry towels production	80	1,8	0,6
11	Oil extraction production	158	3,5	1,2
12	Subsidiary farm	344	7,8	2,6
		26 342	134,3	11,6
	TOTAL:		145,9	