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

(Draft)

# **CLUSTER** Nº1

**Khatlon Region** 

Districts: Hamadoni, Farkhor, Kulob, Vose



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#### **Summary:**

. 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 knowhow and modern technologies are applied in the cotton cultivation, the yield will increase significantly. Indicators of raw cotton harvesting is around 45-60 centners/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».



#### **CONDITION AND POSSIBILITIES 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

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.

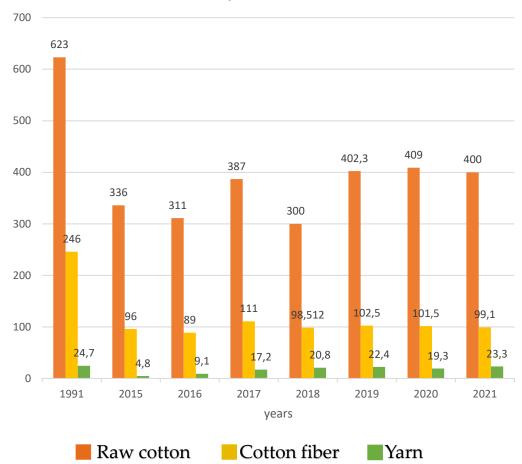
#### **Besides**:

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 (Danghara) 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



## CONDITION AND POSSIBILITIES OF COTTON PRODUCTION

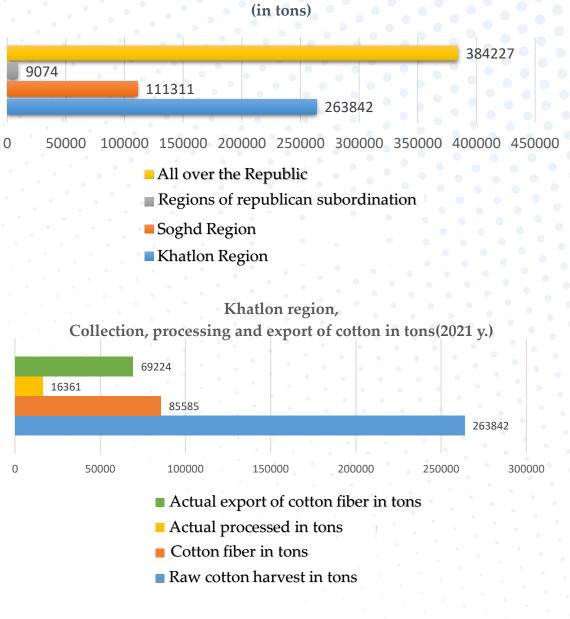
The annual raw cotton harvest in the Republic of Tajikistan varies from 380 thousand tons to 400 thousand tons of raw cotton and 85,585 tons of cotton fiber o production, taking into account Soviet technological equipment and traditional methods of growing and producing cotton

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

Only in Khatlon region were harvested 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 harvest, 2021

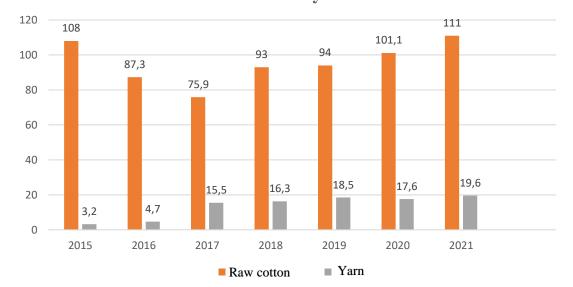
## CONDITION AND POSSIBILITIES OF COTTON PRODUCTION

# High share of cotton fiber and yarn exports

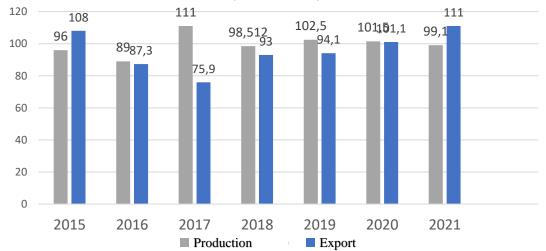
# High share of imports of finished textile products from abroad

Not full use of existing production capacity

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







#### CONDITION AND POSSIBILITIES OF COTTON PRODUCTION

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

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

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

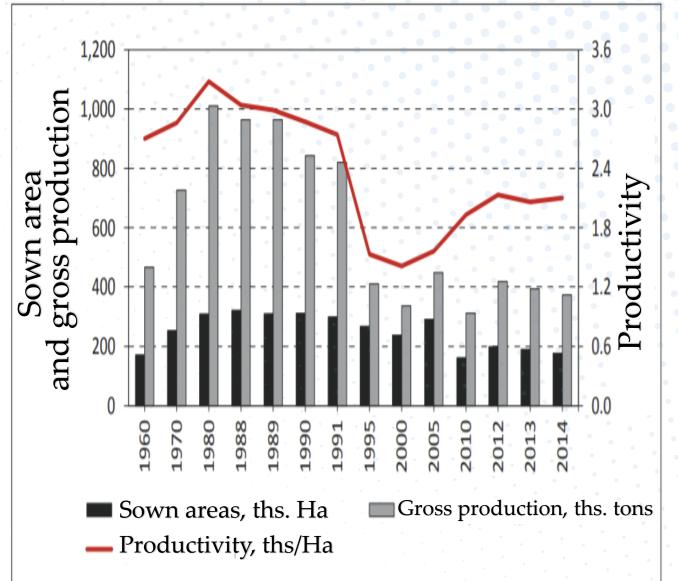
Then there was a sharp drop of all raw cotton production indicators, due to the followings:

(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 HARVESTING



#### **KHATLON REGION**

Administrative center: Bokhtar city (Former Qurgan-Tyube)

Population: 3123 000 people Including:

- Urban: 562 000

- Rural: 2 561 000

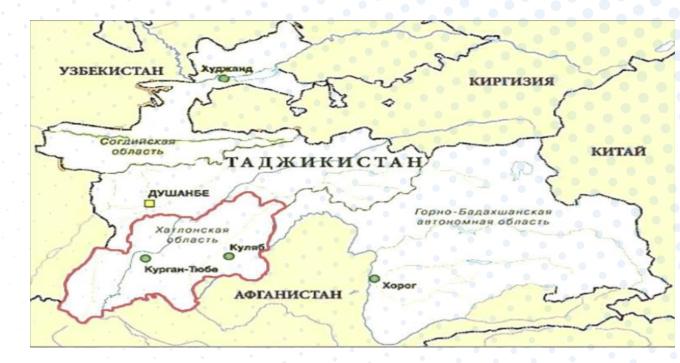
Transport infrastructure: Highways: 5347 km Rails: 423 km International airport in Bokhtar city

CLIMATE: Subtropical, continental

RIVERS: Vanj, Panj, Qizilsu, Yakhsu.

WATER RESERVOIR: Muminobod and Selbur (used as for irrigation, as for recreation areas).

Distance from the Capital: 100 km



- Khatlon region is one of the three regions of the Republic of Tajikistan.
- Region occupied 24,6 ths. sq.km (17% from all the Tajikistan area)
- Located in the southern hills of Hissar-Alay has 4 cities, 21 administrative districts, 133 villages and 21 urban settlements
- From the western southern part it borders with Afghanistan, from the North with regions of republican subordination, from the East with GBAR and from the West with Uzbekistan

### CONDITION AND POSSIBILITIES OF COTTON PRODUCTION IN 4 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):	
Farkhor	152	9674	1128	19100/22000	19,7	
Kulob	204,4	3074	0	6995	22,8	
Vose	196,8	7535	248	16890	22,4	
Hamadoni	136,8	5874	52	13523	23	
TOTAL	690	26157	1428	56508	21,9	

Raw cotton cultivation of sowing and perspective lands in 26 157 Ha for 4 regions makes it perspective construction of Textile Cluster

Climatic conditions and convenient geographical location can significantly reduce factory costs.

Logistics opportunities - international highways and Kulob and Qurghan-Teppa railway stations 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 link from North with Kyrgyzstan, from east with China and from South with Afghanistan.

Rail road map of Khatlon region





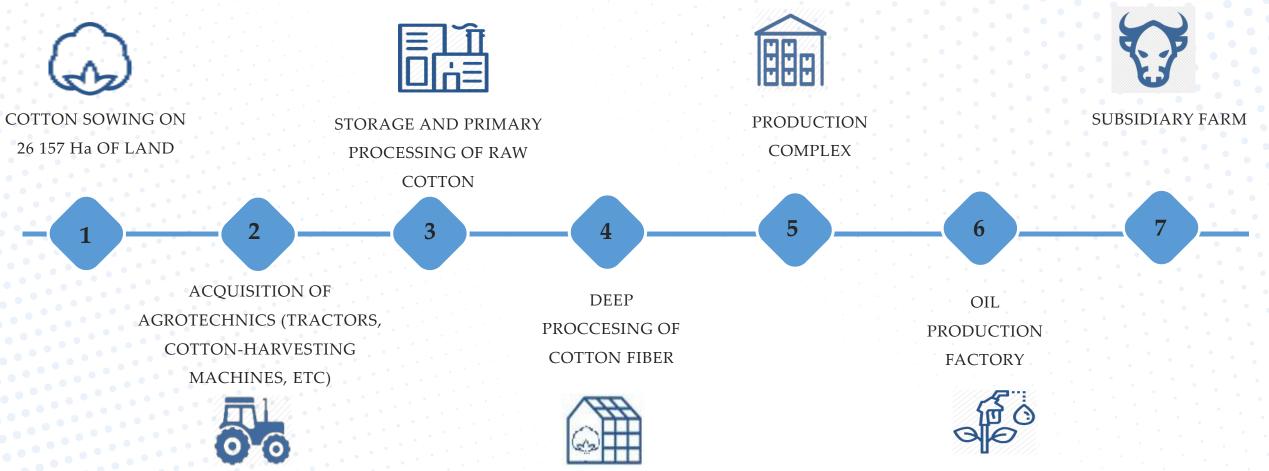




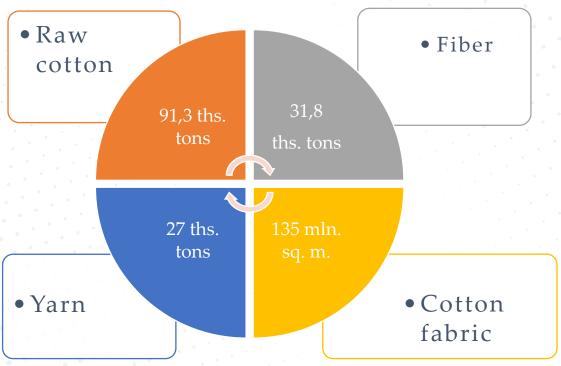




#### **TEXTILE CLUSTER DEVELOPMENT SCHEME**



**POSSIBLE VOLUME OF PRODUCTION** of **Cluster 1 in 26 ths. Ha** Khatlon Region (Kulob> Hamadoni, Farkhor, Vose)





Planned sown areas and cotton production volumes (2022)

(ths. tons)

	Area (Ha)	Version 1		Version 2		Version 3	
Districts		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
Farkhor	9 674,0	24,1	8,4	33,8	11,8	38,7	13,5
Kulob	3074,0	7,8	2,7	10,7	3,7	12,3	4,3
Vose	7535	18,8	6,5	26,3	9,2	30,1	10,5
Hamadoni	5874	14,7	5,1	20,5	7,1	23,5	8,2
Total	26157	65,4	22,7	91,3	31,8	104,6	36,5

## **AGROTECHNICAL SERVICES**



**Sprayers** 

NARDI (Италия) CASE IH (США)

According to preliminary estimates, the number of agricultural machinery is 498 tractors, 2340 units, 68 cotton harvesters, 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)



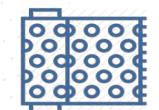
Circular knitting production

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



Spinning production

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



**Dyeing and finishing production** OSTHOFF (Germany) ERBATECH (Belgium) HAS GROUP (Turkey) ELTEKSMAK (Turkey) ZIMMER (Austria) KUSTERS (Germany) DEMSAN (Turkey)



Weaving production KARL MAYER (Germany) STAUBLI (Switzerland) PICANOL

(Belgium) DEMSAN

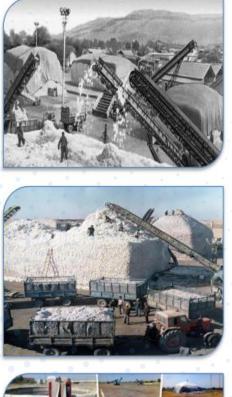
(Turkey)



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)

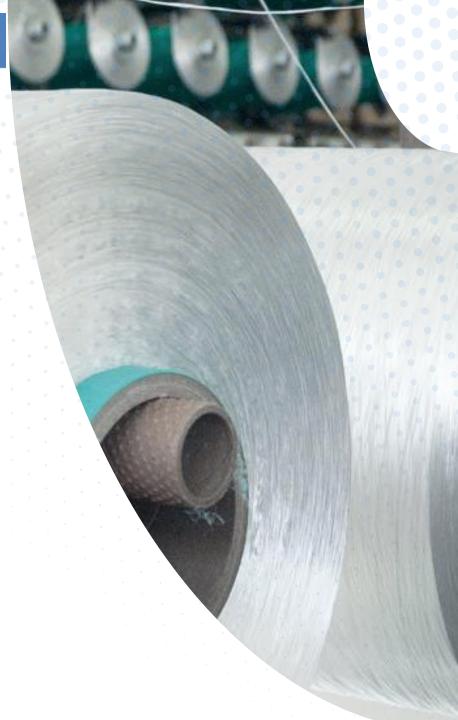
"NAIS" Plant of weighing equipment "NAIS" (Russia)

> Vesy Rostov LLC (Russia)

Conveyer belt (8 units for each item)

FLIESSBAND GmbH (Germany)

Company group "Baltresino-technics" (Russia)



# **COTTON CLEANER PRODUCTION**



Productive capacity - 87,4 tons of cotton fiber per day



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



New workspaces – 25 units with employment – 100 people

## **TEXTILE PRODUCTION**





Production capacity of factory – 74 246,5 kg/day, 27 100 000 kg/year



Creating workplaces 820 units with employment about 550 people



Required total area – 4,0 Ha of land with total production area 4 000 sq. m.



# **WEAVING PRODUCTION** TEXTILE TECHNOLOGY

Discover textile technologies designed to promote innovative solutions



67,6 mln. r.m finished fabric; 13,5 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.

## **DYEING AND FINISHING PRODUCTION**





Readiness for any application

dyeing and finishing equipment
Dyeing and Finishing



Production capacity 13,5 ths. Tons dyed knitted cloth/fabric



Creation workplaces - 20 units with employment of more than 35 people.



Required total area is 1,0 Ha of land area with total production area of 350 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.

# SEWING PRODUCTION Quality step forward

#### Sewing Machines швейные машины



## Production capacity 20 mln. units of ready products

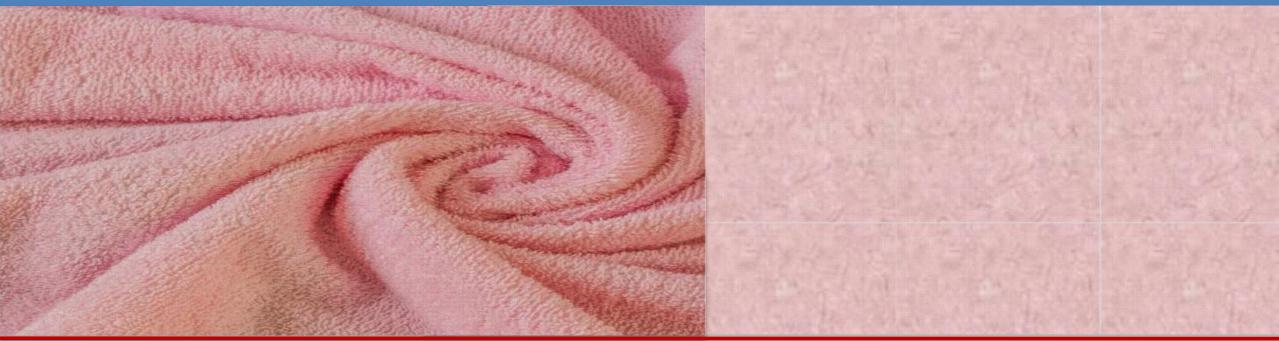


Created workplaces – 720 units; with employment of more than 1 450 people



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

## **PRODUCTION 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.

# **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**

# SIMMENTAL

Beste Fleischqualität



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

PUR

aus der Region

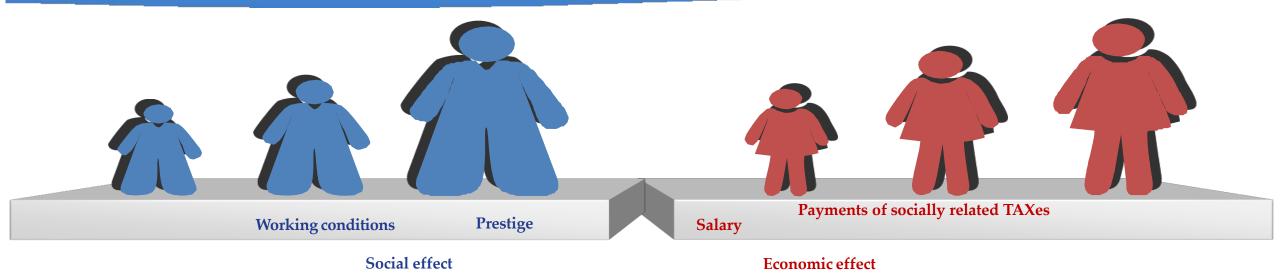
The most part of feed for cattle will be provided from its own production



>Personnel training and retraining system

>New workplaces

>Increased employment in the region;



#### VOLUME OF INVESTMENT (MLN. \$)

Nº	ACTIVITY	Created workplaces	Equipment cost	Construction and installation works' cost
1	Set of activities on sewing of cotton	2648	25	0
2	Agro-service	1000	41,5	0
*	Seasonal work force	20000	3,4	0
3	Raw cotton harvest points (3 units)	196	6,7	1,8
4	Cotton ginning	100	3,5	1,2
5	Spinning production	820	40	9,5
6	Weaving production	145	4,5	1,8
7	Circular – knitting production	144	2,8	1,1
8	Dyeing and finishing production	110	4,4	0,7
9	Sewing production	720	1,6	0,5
10	Terry towels production	80	1,8	0,6
11	Oil extraction production	52	3,4	1,2
12	Subsidiary farm	152	7,8	2,6
			138,6	18,4

TOTAL:

26167

157