switchasia

Funded by the European Union

PROMOTION OF THE GREEN ECONOMY STRATEGY IN UZBEKISTAN: THE TEXTILE AND GARMENT SECTOR

Acknowledgement

Promotion of the Green Economy Strategy in Uzbekistan: The Textile and Garment Sector was developed as part of the technical support provided to the Ministry of Economy and Poverty Reduction of the Republic of Uzbekistan through the SWITCH-Asia SCP Facility, which is funded by the European Commission.

Author: Davrug Inogamdjanov

Supervision and Coordination: Zinaida Fadeeva and Zulfira Zikrina, SWITCH-Asia SCP Facility

Funded by the European Union

The European Union, The SWITCH-Asia Programme

Table of Contents

Abbreviations and Acronyms

BREEAM	Building Research Establishment Environmental Assessment Method
BRP	Building Renovation Passport
CdTe	Cadmium Telluride
CDW	Construction and Demolition Waste
CIGS	Copper Indium Gallium Diselenide
c-Si	Crystaline Silicate
CEM	Cement
CO_2	Carbon Dioxide
CPR	Construction Product Regulation
COP	Coefficient of Performance
DALI	Digital Addressable Lighting Interface
DCF	Discounted Cash Flow
DBL	Digital Building Logbook
EBRD	European Bank for Reconstruction and Development
EDGE	Excellence in Design for Greater Efficiencies
EE	Energy Efficiency
EEEF	European Energy Efficiency Fund
EEFIG	Energy Efficiency Financial Institutions Group
EN	European Norms
EPBD	Energy Performance of Building
EPD	Environmental Product Declaration
ESA	Energy Service Agreement
ESCO	Energy Service Company
ESG	Environmental, social and governance
EU	European Union
EVC	European Voluntary Certification
GBC	Green Building Council
GBG	Green Building Guidelines, Through the Building Lifecycle and Value Chain [this publication]
GHG	Greenhouse Gas
GIFA	Gros Internal Floor Area
GPP	Green Public Procurement
ha	hectare
hEN	Harmonised European Standards
HLPF	High-level Political Forum
HVAC	Heating Ventilation and Air-Conditioning
IAQ	Indoor Air Quality
ICN	Interstate Construction Norms
IEA	International Energy Agency
IFC	International Financial Corporation
ILO	International Labour Organization
IPCC	Intergovernmental Panel for Climate Change
kWp	Kilo Watt Peak Power Capacity

kWth	Kilo Watt Thermal Capacity
LCA	Lifecycle Assessment
LCC	Lifecycle Cost
LED	Lighting Emitting Diodes
LEED	Leadership for Energy and Environmental Design
LEPB	Law on Energy Performance of Buildings
m^2	square metre
MDF	Medium Density Fibreboard
NGO	Non-governmental Organisation
NFRD	Non-Financial Reporting Directive
NZEB	Nearly Zero Energy Buildings
OSB	Oriented Strand Board
PCR	Product Category Rule
PEF	Product Environmental Footprint
PV	Photovoltaics
RE: FIT	UK National Energy Performance Contracting Framework
SCADA	Supervisory control and data acquisition
SCP	Sustainable Consumption and Production
SDGs	Sustainable Development Goals
SFDR	Sustainability-related Disclosures in the Financial Services Regulation
SME	Small and Medium Enterprises
SNiP	Building standards and technical rules
SPF	Seasonal Performance Factor
SWOT	Strengths Weaknesses Opportunities and Threads analyses
TCO	Total Cost of Ownership
TEG	Technical Expert Group
TF-Si	Thin Film Silicate
UK	United Kingdom
UN	United Nations
USA	United States of America
VAT	Value Added Tax
VNR	Voluntary National Review
VOC	Volatile Organic Compound
WBCSD	World Council for Sustainable Development
WGBC	World Green Building Council
WLC	Whole Life-cycle
µm	micrometre

Preface

This report is an overview of the current situation in the textile and clothing industry in the Republic of Uzbekistan and examines the possibilities of developing a Circular Economy, including the principles of Sustainable Production and consumption (SCP).

The processes of globalisation have entailed the adoption of new forms of activity and adjustments in people's lifestyles. At the same time, the preservation of the planet and its resources has become a priority objective. The United Nation's Sustainable Development Goals (SDGs) have focused on integrating the principles of sustainable development into national policies and government programmes to prevent the depletion of natural resources for future generations. Understanding the importance of existing problems in the area of sustainable use of natural resources, the European Commission 2007 launched the SWITCH-Asia programme 'Promotion of Sustainable Consumption and Production' (SCP) to support the green economy strategy in Uzbekistan through the development of the SCP action plan, enhancing SCP tools and a circular economy (CE) approach in the textile and garment sector. This project's terms of reference were to develop a national action plan on responsible consumption and sustainable lifestyles to support the implementation of a CE with a focus on cotton textiles and the garment/clothing sector.

Note that the current report is the second policy document on this topic. The first was approved by the President's decree No. PP-3012 dated May 26, 2017, On the program of measures for the further development of renewable energy, energy efficiency in the sectors of the economy and the social sphere for 2017–2021. The decree approved the Comprehensive Program for further improving the energy efficiency of economic and social sectors, the introduction of energy-saving technologies and the development of renewable energy sources in the Republic of Uzbekistan in 2019-2022 (hereinafter referred to as the **Comprehensive Program**).

The five chapters in this Report review the existing policies and standards in Uzbekistan, explain the preparation of a textile processing scoping study to examine best practice in the textile industry, provide proposals to help enable SCP in the Uzbek textile sector, give a roadmap for more resource-efficient industrial practices in this sector, and conclude with a summary of the workshop. Five annexes complete the report.

1. Revision of existing policies, regulations, standards related to SCP and circular economy (CE) in the textile sector

1.1. Legislation of the Republic of Uzbekistan

This report is an overview of the current situation in the textile and clothing industry in the Republic of Uzbekistan and examines the possibilities of developing a Circular Economy, including the principles of sustainable production and consumption (SCP).

By the Decree of the President of the Republic of Uzbekistan dated 04.10. PP-4477 (Resolution), a strategy for the transition of the Republic of Uzbekistan to a green economy for the period 2019–2030 was approved. This 'Strategy for the Transition of the Republic of Uzbekistan to a green economy for the period 2019-2030', adopted in October 2019, provides for reducing greenhouse gas emissions (GHGs) in the country by increasing energy efficiency, expanding the use of renewable energy sources, increasing resource efficiency and crop yields, and reducing land degradation. In 2020, the implementation of the Strategy was slowed down due to the outbreak of the COVID-19 pandemic. The global health crisis has strengthened the link between public health, climate and nature. The current circumstances give a strong impetus to building a green economy, just as happened with the global transition to a green and circular economy in response to climate change.

The Resolution adopted by the President of the country, in order to ensure the country's fulfilment of the obligations of the Paris Agreement on Climate Change, which was signed by Uzbekistan on April 19, 2017, as well as to implement the tasks identified by the Action Strategy for five priority areas of development of the Republic of Uzbekistan in 2017–2021, is the basis for this review. Policies and strategies for the development of the textile industry, the institutional framework, regulations, government projects, personal experiences, and shared knowledge are also taken into account, and the main indicators for the volumes and types of products produced in the Republic of Uzbekistan are provided.

Targets for the implementation of the Strategy by 2030 are as follows:

- reducing specific greenhouse gas emissions per unit of GDP by 10% from the 2010 level
- doubling energy efficiency indicators and reducing the carbon intensity of GDP
- bringing the share of renewable energy sources to more than 25% of the total volume of electricity generation
- increasing the energy efficiency of industrial enterprises by at least 20%
- developing electric transportation
- introducing drip irrigation technology for an area of up to 1 million hectares (ha) and increasing crop yields to up to 20-40%
- achieving a neutral balance in terms of land degradation
- increasing to 20-25% the average productivity for basic types of food agricultural products

These priority directions in the strategy of Uzbekistan's transition to the green economy have been approved:

- improving the energy efficiency of the basic sectors of the economy
- diversifying energy consumption and developing the use of renewable energy sources

- adapting and mitigating the effects of climate change, improving the efficiency of natural resources and preserving natural ecosystems
- developing financial and non-financial mechanisms to support the green economy

The Resolution also notes that the main tasks of the transition of the Republic of Uzbekistan to a green economy include increasing the energy efficiency of the economy and the rational consumption of natural resources, including green criteria in priority areas of public investment and spending, as well as assistance in the implementation of pilot projects for the transition towards a green economy.

Due to its geographical location, more than 300 days a year are sunny in Uzbekistan. According to calculations, the potential of solar energy in the country exceeds the equivalent of 51 billion tonnes of oil, indicating the possibility of using solar energy for domestic and industrial purposes. By Presidential Decree No. 4422 of August 22, 2019, the target parameters of the ongoing reforms in the field of renewable energy sources were determined. It was noted that the share of renewable energy sources is expected to increase by 2030 to more than 25% of total electricity generation. Measures were moreover identified to improve the energy efficiency of economic sectors and the development of renewable energy sources.

It is foreseen that foreign investments, loans and grants from international financial institutions, foreign government financial organisations and other foreign donors will be attracted to the implementation of the measures planned in the Resolution.

The authorised body for the promotion and implementation of the green economy in the Republic of Uzbekistan is the Ministry of Economy and Poverty Reduction of the Republic of Uzbekistan, and the organisation of work on the implementation of the Strategy is entrusted to a special interdepartmental council.

1.2. The Comprehensive Programme

Individuals are provided compensation in the amount of 30% of the cost of purchasing solar photovoltaic plants, solar water heaters, energy-efficient gas heating devices, but not more than certain limits, as well as compensation to cover interest costs on bank loans for the purchase of renewable energy sources, energy-efficient gas burners, boilers, and other energy efficient equipment

Due to the ongoing reforms, the share of renewable energy sources is expected to increase by 2030 to more than 25% of the total electricity generation. Now this figure is 10% and is mainly accounted for by hydroelectric power plants. In particular, it is expected to achieve the following production indicators: wind energy - 1,600 MW (5%), solar energy - 4,300 MW (8.8%) and hydropower - 1,500 MW (11.2%).

1.3. The infrastructure of the textile and garment sectors of the Republic of Uzbekistan

The authorised body for the promotion and implementation of the green economy in the Republic of Uzbekistan is the Ministry of Economy and Poverty Reduction of the Republic of Uzbekistan, and the organisation of work on the implementation of the Strategy is entrusted to a special interdepartmental council.

In Uzbekistan, the national ministries covering SCP related issues are: Ministry of Economy and Poverty Reduction, Ministry of Innovative Development, Ministry of Foreign Economic Relations and Trade, Ministry of Energy, Ministry of Agriculture, Ministry of Water Resources, Association Uztextileprom, Association of Cotton-textile Clusters, as well as the Commission on Energy Efficiency and Renewable Energy and the Committee for Nature Protection.

Existing governmental measures related to SCP include:

- national programs on alternative energy and energy efficiency
- modernisation and diversification of production systems (2015–2019)
- promotion of clean technology
- ecological certification (10 eco-standards developed, with another 9 underway, primarily in the food sector)
- industrial and municipal solid waste management (new sorting technologies)
- fisheries and ecotourism, as well as energy efficiency of social housing

Existing initiatives within the business sector include:

- roadmaps for mass introduction of resource and energy saving technologies in production processes
- implementation of large-scale renewable energy projects.
- for SMEs, establishment of an open on-line platform for information sharing

Civil society has a framework on how to build partnerships with different organisations for specific initiatives.

1.3.1. Challenges

The low cost of energy resources (gas, electricity) and a lack of awareness among both businesses and consumers on the added value of SCP and energy-saving measures presents a serious impediment to ta ransformation towards more sustainable practices. There is also a need to improve access to international best practices and improve the national legal framework for the promotion of SCP.

1.3.2. Priorities

Developing incentives to adopt clean technologies, eco-certification/ abelling and water efficiency are needed. Textiles and garment manufacturing along with cotton agriculture are growing sectors in the country, and increased production will require greater attention to mitigate their socio-environmental impact.

1.3.3. Recent developments

The Coordinating Committee for the implementation of Sustainable Development Goals (SDGs) has been created, and Uzbekistan has also ratified the Paris Agreement. The list of normative acts that Uzbekistan has adopted is given in Annex A.

Priority areas involve the adoption of measures in various economic sectors including the electrical power industry, heat-power engineering, the oil and gas industry, renewable energy sources, construction, transport and many others. For renewable energy sources a measure has been indicated for the formation of modern and transparent methods of competitive selection of potential investors through the introduction of auctions, as well as the localisation of the production of equipment for obtaining energy from renewable energy sources.

New building garment companies, such as Uztex, BCT Denim Division, Art Soft Textile, Khantex Group, Fergana Global Textile and others are using water recycling systems and recuperating up to 90% of the water used in dyehouses. It is estimated that losses of natural gas during the production, processing, transportation and distribution of textiles and garments could be reduced by modernising compressor stations along with the gas transmission systems through the introduction of effective technologies to control the loss of hydrocarbon resources.

At the beginning of 2022, there were more than 1100 facilities in the country using solar energy for regeneration into electrical energy, and more than 400 facilities for water heating purposes. For example, in 2022 a textile enterprise project using solar energy through photovoltaic panels was launched in the Andijan region, which will be able to cover up to half of the company's electricity needs.

Textile waste recycling enterprises are often found. So-called 'cotton waste', or *ulyuk*, spinning production waste – lint and standards 3, 7, 11, obtained during the processing of raw cotton, weaving and sewing production waste – are processed by being loosened into a fibrous mass and added to the main raw materials in the production of low-ply yarn and non-woven fabrics, carpets and technical fabrics with high surface density. Among them are LLC MADANIYAT ATR TEX, SHAMS, OZKORTEKS, AZRUST, etc., which sort and repress by colors, types and sizes the waste of spinning, weaving, sewing production – trim, rags, cleaning materials used, knitwear, interlockings, cotton, nonwoven textiles, and synthetics in large volumes.

2. Preparation of a textile processing scoping study

Textiles and clothing are a fundamental part of everyday life, and the textile industry is an important sector in the global economy. The demand for clothing continues to grow rapidly, especially in emerging markets such as Asia and Africa. If this growth continues, it is expected to reach 160 million tonnes of total apparel sales by 2050, more than 3 times what it is today.[1]

The apparel industry is valued at USD1.3 trillion globally. It employs more than 300 million people (520,000 in Uzbekistan), and annually produces more than 80 billion garments worldwide (1.86 billion pieces from Uzbekistan in 2021). But over USD 500 billion is lost each year due to lack of recycling. The textile system works linearly: a large amount of clothing is used for a short time, then sent to landfill or incinerated. The way clothing is produced today is extremely wasteful and polluting.[2]

Textile production (including cotton growing) uses 93 billion m^3 of water per year, and 98 million tonnes per year of non-renewable resources, including oil for the production of synthetic fibres, fertilisers for growing cotton, for the production of chemicals, and dyes for finishing fibres and textiles.

An analysis of international experience shows that there are no specific methods for the transition to a circular economy model, because each country uses its own national characteristics while employing elements of SCP strategy.[3] For example:

- Japan transitioned to a highly efficient circular economy primarily through an innovative law to promote the efficient use of resources passed in 2000.
- Germany has formed the basis of a circular economy through material flows and the availability of materials.
- The Netherlands built a green economy based on innovation in materials and business models.
- Finland has developed a national roadmap for the transition to a circular economy.
- In China, the circular economy has begun to develop as part of an industrial ecology program that looks at how one company's waste can become another's resource. The legislative base of the circular economy has been laid down in the country, and the concepts of ecological design and extended producer responsibility are actively developing.4

The modern economy is built on the principle of 'rapid turnover': the faster we consume, the better for the producer. But here a contradiction arises: a clash between economic growth and the need to limit the intensity of natural resource use, which lies in the conflict between the consumption of natural resources and environmental pollution and degradation.

An entire range of studies of ecological economics is dedicated to the framework of sustainable development, the main condition of which is the preservation of a constant or non-decreasing value of natural capital, that is, the development of the economy is sustainable if it provides a style of production and consumption in which natural capital does not decrease:

- volumes of withdrawal of renewable natural resources should not exceed the volumes of their reproduction

1 Energy Efficiency Financial Institutions Group (EEFIG), Final Report covering Buildings, Industry and SMEs: https://ec.europa.eu/eefig/index_en
2 European Commission. 2018; updated 15 July 2020. Technical Expert Group on sustainable finance (TEG). https://ec.europa.eu/info/publications/sustainable-finance-technical-expert- group_en
3 European Commission. 2018; updated 15 July 2020. Technical Expert Group on sustainable finance (TEG). https://ec.europa.eu/info/publications/sustainable-finance-technical-expert- group_en
4 Circular Economy. Vision 2020. https://www.meti.go.jp/shingikai/energy_environment/junkai_keizai/pdf/20200522_03.pdf

- the use of non-renewable natural resources should be consistent with the inclusion in economic practice of their renewable substitutes
- production of waste should not exceed the assimilation capacity of the environment for their absorption (ecological technogenicity of the territories)

The textile industry has been operating on an outdated linear model and has been extremely wasteful and polluting. Enterprises have tried to reform and generalise as many processes as possible. For example, a modest production of terrycloth products from cotton fibre includes processes of weaving, dyeing and clothing production. In the dyeing industry, as in a number of others, there is the concept of a break-even point, which determines the volume of resource consumption and their rationality per unit of output. The lower the volume of production, the greater the cost of water, electricity and natural gas resources. A similar situation occurs in small knitting or hosiery enterprises.

Today, the textile and clothing industry of Uzbekistan is developing dynamically, and since 2015 has been gaining momentum with new types of products and reaching ever newer world.[5]

In order to determine the industry situation in textile and clothing manufacturing enterprises with the participation of the SWITCH ASIA team, we developed a questionnaire. Initially, the questionnaire contained more than fifty questions, including various topics regarding the legal status of the enterprise, information about investors, type of products manufactured, types of raw materials, production volumes and sales markets, and organisational and personnel issues; separate fields were provided for comments. Later on the number of questions was significantly reduced, and the final version contains 32 questions. This version was translated into Uzbek and Russian (see Annex 3) and distributed to enterprises through the Telegram social messenging channel, and was also distributed in printed form during visits to the national regions, and at seminar meetings and private visits to the enterprises themselves. The total number of enterprises that received the Questionnaire exceeded 260; the number of fully completed responses was much lower. For a variety of reasons, the enterprises were wary of providing accurate answers. See Annex 4 for the list of answers.

Based on the collected answers, an analysis of the state of the industry was carried out. At the time of the study in 2022, the following information was revealed:

- By type of products Andizhan and Tashkent regions is oriented to produce knitwear apparel. Suits, jackets and pants manufacturers are concentrated mainly in Namangan region. Terry fabrics and terry towel producers are located in Namangan, Bukhara and Tashkent regions. Socks and hosiery producers are concentrated mainly in Fergana, Tashkent and Samarkand regions. Flat fabrics are produced mainly in Bukhara and Namangan regions. Carpets made of synthetic yarn are produced in Samarkand and Bukhara, and handmade silk carpets are produced in Bukhara, Fergana and Khorezm regions.
- Concerning ownership, the bulk of enterprises belong to private owners: residents of Uzbekistan, with the exception of several large spinning and dyeing enterprises in the form of joint-stock companies with participation from abroad.
- Enterprises producing cotton products mainly use local raw materials. Sewing enterprises producing non-cotton products import raw materials from abroad, mainly from China, Turkey, Iran, etc.
- Based on the materials collected, it was revealed that enterprises do not keep records, nor do they monitor water and energy consumption.
- Managerial positions in enterprises are occupied by men, and their share of the total number of employees is on average 5–7%. In textile enterprises, more than 70% are women, and in sewing enterprises the proportion is at least 90%. Most of the manufacturers-exporters of textile and clothing products in the production workshops use the services of foreign specialists (from Turkey, India, Pakistan, China).

5 Текстильная промышленность: основные результаты реализации Стратегии развития Узбекистана в период 2017-2020 годы. https://ifmr.uz/files/publications/ru/912685.pdf

- Exporters sell their products mainly to neighbouring countries and CIS countries, such as Kazakhstan, Kyrgyzstan, Tajikistan, Azerbaijan, Russian Federation, Georgia, Ukraine, Poland, etc.

It can be said that the concept of the 'circular economy' (CE) is being actively implemented in advanced development countries. For Uzbekistan, this is a new phenomenon, still in at the initial stage of implementation. CE, in our opinion, represents an unprecedented business opportunity in the development of a new textile economy based on the principles of CE. It is important for Uzbekistan to create an agenda and state policies for the introduction and functioning of CE, while examining the accumulated experience of foreign countries, taking into account the specifics of the country, to introduce the principles of a CE and sustainable development in modern Uzbekistan today.

3. Preparation of proposals for innovative practices

3.1. Enabling conditions to minimise environmental impact

As a result of global climate change, the area of glaciers in Central Asia has shrunk by about 30% over the past 50–60 years. It is estimated that the volume of glaciers decreases by 50% when the temperature rises by 2 °C and by 78% when heated by 4 °C. According to estimates, by 2050 water resources in the Syrdarya basin are expected to decrease by 5%, and in the Amudarya basin by 15%. The total water deficit in Uzbekistan until 2015 amounted to more than 3 billion m^3, by 2030 it may reach 7 billion m^3, and 15 billion m^3 by 2050.[6]

Analyses show that climate change will exacerbate water shortages in Uzbekistan, increase the duration and frequency of droughts (as in 2000, 2008, 2011, 2014 and 2018), and create serious difficulties in meeting the economy's water needs. Over the past 15 years, per capita water supply has decreased from 3,048 m^3 to 1,500 m^3.

At the same time, the population of the country will increase by an average of 650-700 thousand people per year and reach 39 million by 2030; a demand for drinking-quality water that will increase from 2.3 billion m^3 to 2.7-3.0 billion m^3 (18-20%) is expected. This requires a guaranteed supply of water to the utilities sector in the first place.[7]

In recent years, industry and energy areas have been developing actively, and their demand for water is growing yearly. It is estimated that the total annual water consumption of these sectors will increase from 1.9 billion m^3 to 3.5 billion m^3 (1.8 times) by 2030. The service life of most water infrastructure facilities built in the country is more than 50–60 years, and their technical condition is deteriorating from year to year. In particular, 66% of irrigation system canals are soil-drained, and water loss due to filtration remains high. In addition, the efficiency of the irrigation system and irrigation networks is on average 0.63, and in some areas even lower, with 35–40% of water from primary sources being lost in irrigation networks.

3.2. Clusters, water and irrigation, cotton

The territory of Uzbekistan has its own soil and climatic conditions, and as the result of a lack of natural drainage and high levels of groundwater mineralisation, a number of areas have become saline. At the same time, water resources are reasonable as a result of non-use and the negative impact of other anthropogenic factors, secondary salinisation of lands was observed in some areas, with 45.7% of irrigated land being saline to varying degrees.

The salinity levels of about 45.3% of irrigated lands in the country differ, with 31.1% at a weak level, 12.2% moderately saline, 2% highly saline, and 24.4% with groundwater levels of 2 m and higher.

Due to water shortages, poor land reclamation and other organisational measures taken in recent years, the level of water supply to 560,000 ha of irrigated land remains low.[8] In the country, agricultural crops are irrigated mainly by traditional methods: tillage, the level of land levelling with laser equipment remains very low.

Since 2019, a new system for water-saving irrigation technologies has been introduced by state. As a result, 77,470 ha of land were drip-irrigated in 2022, 1123 ha received sufficient rainwater, and 2000 ha were discreetly irrigated.

6 Аналитический доклад http://ced.uz/wp-content/uploads/2010-Tekstilnaya-promyshlennost-Uzbekistana-doklad.pdf
7 Деятельность хлопково-текстильных кластеров https://review.uz/post/infografika-deyatelnost-xlopkovo-tekstilnx-klasterov
8 Хлопковые кластеры: возможность снижения затрат и повышения рентабельности. https://www.agro.uz/ru/11-0272/

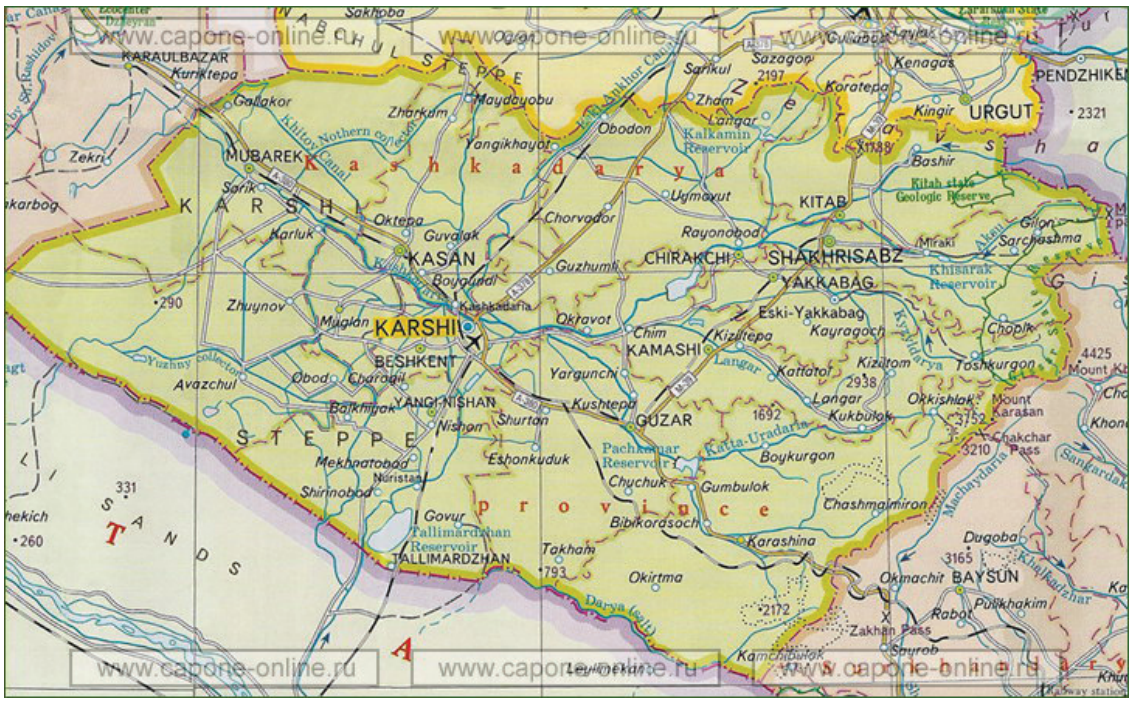
Concerning water use, the Uzbekistan Government pays a great deal of attention to the introduction of water-saving technologies, and many State Decrees are accepted to create sample opportunities for agricultural producers. As a result, there are 4.3 million ha of irrigated arable land in the country. Today, 291.2 thousand ha, or 7% of the total farmable area, is irrigated by water-saving technologies, including 120.5 thousand ha by drip irrigation, 3.5 thousand ha by rain and 4.2 thousand ha by discrete irrigation. Some 163 thousand ha of flexible pipe irrigating systems have been introduced.

In 2020, 132.9 billion Soums of subsidies were allocated from the state budget for 17,104 ha of cotton fields, where drip_irrigation technology was introduced by cluster organisations and farms. At the same time, the percentage of the area where modern irrigation technology has been introduced remains low (7%). As a result, the water consumption per complex area is 10,690 m^3, which remains higher than in developed countries.[9]

As a part of this project, it was necessary to travel to the most difficult regions of the country such as the desert regions, which are located away from the central regions (for example, the Kashkadarya region), and for us to participate directly in the processes of growing cotton. Why Kashkadarya region? This region has vast territories suitable for growing cotton and grain crops, but due to lack of water (resulting from the irrational use of resources in the past) during the periods necessary for irrigation, yields decrease every year.

Figures 1 and 2 show geographical and water maps of the Kashkadarya region, in which the water supply system for the entire region may be clearly observed. The northern regions are irrigated by the water resources of the Zarafshan River, which flows from the territory of the Samarkand region. The Kashkadarya River flows directly through the central and southeastern regions and is completely consumed. The southwestern regions are fed through the Tallimardzhan reservoir, which in turn is fed by the Amu Darya River through a multi-level cascade channel from the neighboring Republic of Turkmenistan.

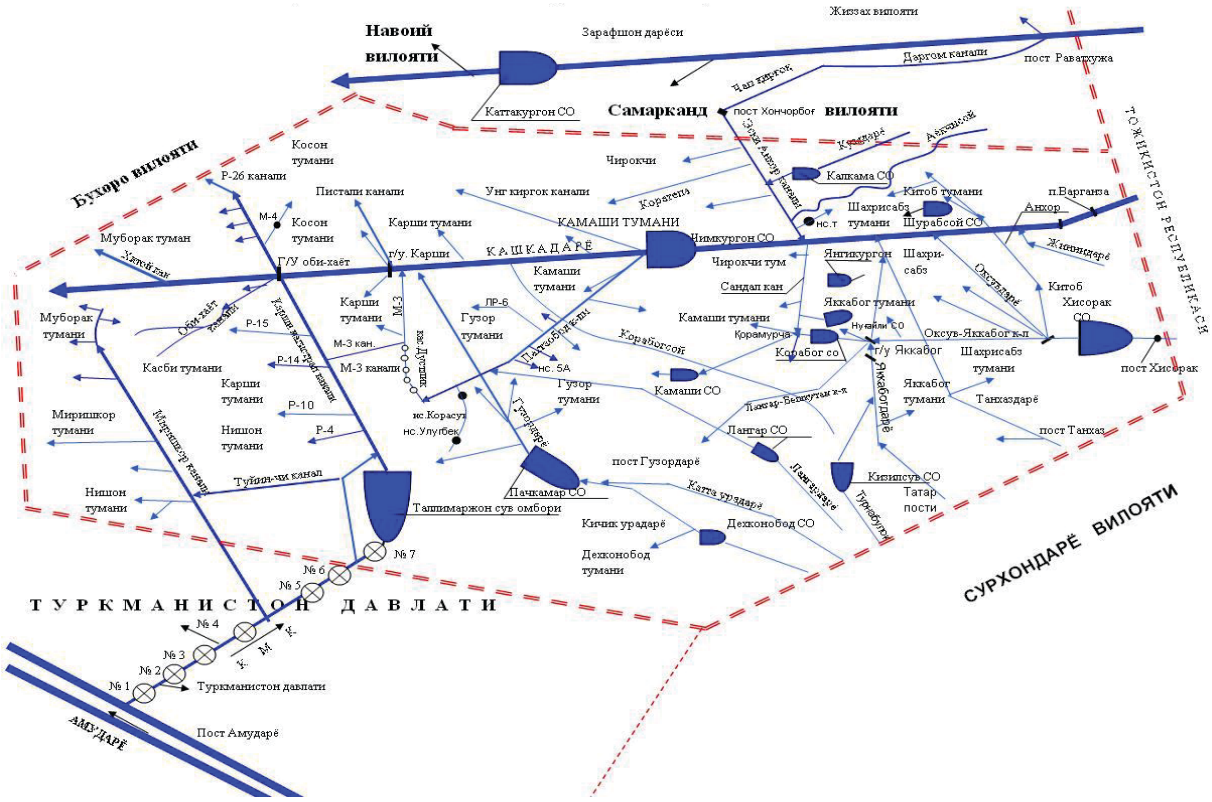
Fig.1. Map of Kashkadarya region, Uzbekistan.



9 Хлопковые кластеры: возможность снижения затрат и повышения рентабельности. https://www.agro.uz/ru/11-0272/

Fig.2. Water supply system map of Kashkadarya region, Uzbekistan.

Source: Department of irrigation and water resources of Kashkadarya municipality.



The level of pressure on water resources in Uzbekistan and Turkmenistan has been assessed in a report from experts at the Food and Agriculture Organization of the United Nations (FAO) as critical (more than 100%). The volumes of water used by these countries account for 169% and 144% of their water reserves, respectively.

In Tajikistan, Armenia and Azerbaijan, water stress is estimated as average at levels of 62%, 56% and 54%, respectively. In Kyrgyzstan and Kazakhstan, the indicators of freshwater use also exceed the global level at 50% and 33%, respectively.

Taking these data into consideration, over the past few years water treatment plants have been actively installed for maximum water recovery at cotton-textile dyeing and finishing factories of Uzbekistan.

Starting in 2021, the government of Uzbekistan has mandated cotton clusters to introduce drip irrigation throughout the country. As in other regions, projects on drip irrigation of cotton fields have begun in all districts of the Kashkadarya region. The cotton clusters took on the work of the electrification of cotton fields and installing the drip water supply stations. Each station included huge water tanks, purification systems and water supply to the cotton fields through pipes and belts. But, in the hottest summer period, the stations were not provided with a stable water and electricity supply, and as a result the investments that were made did not justify themselves.

4. Primary production of textiles and garments, and resource efficiency

4.1. The farmers' clusters in Uzbekistan

Cotton cultivation in Uzbekistan used to be managed by the state, represented by the Uzkhlopkoprom Association. After separating the cotton fibre from the seeds, the fibre was sold to textile enterprises. But the cotton industry system was so complicated and unprofitable that in 2017 the state decided to change the structure to provide the textile workers themselves with the opportunity to grow raw materials. This is how the textile clusters arose.

Textile clusters are a group of companies (enterprises) with the specific ultimate goal of producing finished products. Each company performs a specific process: growing raw cotton in the field with its subsequent processing to turn it into into fibre, yarn, (woven, knitted, non-woven), fabric finishing (dyeing, printing, etc.), or sewing the finished products. A cluster may include all of these processes or just some of them. Cotton cultivation can be carried out by clusters or with the participation of farmers under futures contracts, as well as jointly.

In 2021, the government placed additional obligations on the clusters in the subsequent processing of raw cotton, such as organisations for crushing plants, cowsheds for the production of milk and/or meat, factories for the production of livestock feed and other manufacturing enterprises. Also, and since 2020, a drip irrigation system has been gradually introduced in the cultivation of cotton.

At the beginning of 2022, more than 120 cotton clusters were operating in Uzbekistan, where cotton is grown on 91% of cotton-sown land.[10]

With the introduction of the cluster system, the processing of cotton fibre in the republic increased by 2.5 in volume. Yarn production doubled, finished goods tripled, and export shares surpassed USD 3bn (2021).

Other no less important economic aspects of the cotton-textile sector in Uzbekistan today should also be revised. One of the key reasons for the underdevelopment of clusters in Uzbekistan in the past is the old tax system. After the 2019 tax reform, opportunities for their development finally appeared.

Today the most competitive companies are usually not randomly scattered across different countries and regions, but tend to be concentrated in one place. This is because one or more firms, achieving a certain degree of competitiveness, can extend its positive influence to its surrounding environment of suppliers, consumers and competitors. A 'cluster' results: a community of firms and closely related industries that contribute to the growth of each other's competitiveness. The cluster is composed of a large number of enterprises involved in the production and sale of final products, conducting their activities in a coordinated manner, implementing joint projects.

Combining enterprises into clusters makes it possible to use several important factors of competitiveness simultaneously:

- the deep specialisation of the companies included in the cluster (each participant is professionally engaged in one or a small number of activities, which makes it possible to improve in a narrower direction and by increasing productivity)
- economies of scale, achieved through large volumes of production (which makes cost reductions per unit of output possible), resulting from the larger volumes of sales of final products

10 Узбекские хлопковые кластеры: вперед и вверх https://nuz.uz/ekonomika-i-finansy/1249380-uzbekskie-hlopkovye-klastery-vpered-i-vverh.htm

- a reduction of costs per unit of production, and improvement of quality due to the synergy effect that results from the exchange of experiences, direct interactions, involvement in clusters within the scientific community, unification of approaches in matters of quality, logistics, engineering, information technology, etc.

Studies have shown that clusters stimulate significant productivity gains, innovation, and market promotion of final products.

So how is the Uzbek cotton cluster different from other clusters?

As world practice shows, clusters rarely arise only by 'design'. As a rule, clusters appear and evolve in a natural way, when the prerequisites in the form of intersectoral production links already exist. Nonetheless, planned actions such as providing land or of services can also facilitate such developments. Clusters are built on the voluntary cooperation of a large number of very different enterprises, mostly legally independent of each other.

However, Uzbekistan always chooses its own unique path of development, and therefore the clusters of Uzbekistan are also unique, and this applies to its cotton clusters as well. They arose as an alternative to the completely inefficient, essentially feudal (to put it bluntly) system of agricultural management that developed in the country in the 1990s. This system assumed that most of the land allocated to farmers did not actually belong to the farmers: they were required to grow cotton and wheat, then sell them at fixed prices to the state. This kind of 'system' is very ineffective because:

- the farmers have no incentive to increase the yield of mandatory crops (it is simply unprofitable to grow them)
- the state is a very poor manager in disposing of harvests; specifically in this case, the cotton was mostly being exported, and local processors were provided with it on a residual basis
- the system did not allow reforms to be carried out in agriculture, and thus the incomes of farmers and rural residents were severely hurt

In recent years, there has been a 'clustering' of this system: farmers growing cotton and wheat began to be attached to large industrial enterprises engaged in the processing of these types of raw materials. Accordingly, farmers are now obliged to supply their products not to the state, but to industrial enterprises. In addition, in some cases, industrial enterprises (clusters) received land for self-cultivation of the raw materials they needed.

What is the difference between the newly created clusters, for cotton in particular, for the Uzbek clusters, and real clusters?

- Uzbek clusters were created by government decisions, and not as the result of an independent merger of enterprises already operating on the market.
- Some of the participants (farmers) are included in the cluster not on a voluntary, but rather on a mandatory basis.

Roughly speaking, the owners of the farmers have changed: instead of the government, there is now a specific industrial enterprise. Of course, such a 'cluster' system is better than the old 'corvee':[11] the new 'owner' is closer and is more likely to help the farmer and be more attuned to his needs, etc. However, this is still not a market system built on mutual agreements of economically free subjects. Therefore, the cotton clusters of Uzbekistan can be called 'clusters' only conditionally. In order for them to become real clusters, it is first necessary to abolish the 'serfdom' of farmers and make them free entrepreneurs who independently decide what and how they produce, to whom and under what conditions they sell their products. Such independent farmers would join the clusters on a voluntary basis, including entering into long-term futures contracts with buyers of their products.

11 Unpaid labour due to a feudal lord from his vassals or serfs.

4.2. Irrigation

Drip irrigation was not invented yesterday; everyone has long been aware of its benefits. And the Uzbek government offers various kinds of benefits and subsidies for those who are ready to implement it. But for some reason, there are not enough farmers who want it. Literally a few percent of irrigated lands in Uzbekistan are equipped with modern water-saving technologies. The key question is *why*?

The answer lies in the same feudal-serf system in which farmers still work. Not only are they required to grow cotton and wheat, whether profitable or not, and sell at non-market prices, but in addition their land ownership rights are very weakly protected. Land can be taken away from a farmer for any reason or no reason at all, as part of the next 'optimisation of farms' or at the request of the *khokim* – the head of local administration. And there is no real protection of a farmer's rights to land ownership.

If land ownership rights are not secured, then the owner will not invest in either water-saving technologies or increasing land fertility. As a result, water is wasted in agriculture, and soil fertility is deteriorating from year to year.

Yes, at least now the power of officials, compared to the past, is limited by: a) the president's shouts, b) scandals in the media and social networks, and c) the growing awareness of their rights by entrepreneurs and ordinary citizens. But for people to feel like the real owners of the land and start investing in it, this is not enough. It is necessary to:

- give people the opportunity to buy the rights to own land (in private ownership or long-term leases) for real money in transparent and fair auctions, and then it will be much more difficult to take away the land away from them
- expand the rights to owning land, including the rights to resell the rights of ownership, to sublease, or to be able to transfer rights on bail
- deprive khokims (heads of local administrations) and other representatives of the executive branch of power of the opportunity to take land away from farmers
- carry out a radical judicial reform

Without these actions, efficient agricultural enterprises that invest in land fertility and water-saving technologies will remain the rare exotic exception against the backdrop of unprofitable farms, soil degradation and squandered irrigation water.

To conclude: it is obvious that the prospects for the development of the cotton and textile sectors must be based on agrarian reform. The reform at the beginning of 2020 was proclaimed and designated, including by the President of the country. Something, at least, has been done. But reform is still a long way off from becoming a turning point in the situation in agriculture. The reform is being hampered both by objective circumstances, such as the pandemic, and outright sabotage by officials at almost all levels of government who do not want to give up their power to the market and the private sector, seeking to preserve the sources of power and corruption income at any cost.

The mandatory state order for cotton and grain, according to officials, seems already to have been canceled. But in fact, this is another way of playing on words, and little has changed for farmers: there are still the same supply plans and administrative pressure to fulfill these plans. And the president himself confirmed that the state order is still in place by promising to abolish it.

Much is being done to strengthen land ownership rights (including lease rights) and develop a transparent land market. But for some reason the decisions being made deal mainly with non-agricultural lands. The rights to own agricultural land are still supposed to be transferred, not at open auctions, but through regular bureaucratic 'competitions'.

The tasks of agrarian reform are extremely obvious. There must be:

- a categorical rejection of the practice of planned targets for the production of cotton and wheat, a the rejection of land quotas for these crops
- the formation and development of free and competitive markets for resources and services for agricultural producers
- a strengthening of land tenure rights for land users, providing opportunities for land resale, sub-lease and mortgage
- redistribution of part of the land in favor of a wider range of land users, including land that is now allocated for crops that the state manages
- the introduction of market principles of land taxation, taking into account the real value of plots of land
- a reform in the water supply system for agriculture, including the introduction of public-private partnership mechanisms in the delivery of water (the use of irrigation infrastructure) and the introduction of a paid water-use system that stimulates the efficient use of water
- a reform of the system of state regulation of the agricultural sector, and the creation of a fundamentally new system of support for agricultural producers

Despite the obviousness of the tasks outlined above, it will be very difficult to achieve them. But it is impossible to move towards a brighter future for the country in any other way.

5. Textile sector stakeholder workshop to present SCP & CE, outcomes, policy options and recommendations

On February 2, 2022 the Association of Textile and Knitting Industry of Uzbekistan Uztextileprom, and the consulting companies SEQUA and EnComPass, within the framework of a training program funded by the Confederation of the German Knitting Industry (Gesamtmasche) and the German Federal Ministry for Economic Cooperation and Development (BMZ), met in the conference hall of the Korean-Uzbek textile Technopark, city of Tashkent. And on February 9 in the conference hall of the Boulevard Palace Hotel city of Samarkand, training seminars were held. Photos from both events are included in Annex E.

The following activities was brought to industry enterprises closer to:

- improving sales and marketing skills for managers and professionals working in textile companies involved in export and customer service; product certification for exporters; and preparation for entering European markets and obtaining subsequent support
- sustainable consumption and control of natural raw materials and energy resources in the production of textile and clothing products; promotion of the concepts of SCP and the elements that define them; the Green Economy; the introduction of resource-saving technologies on the example of drip irrigation from cotton-textile clusters; and other topical issues at the present stage of development of the textile and clothing industry in Uzbekistan

At these events, international and local experts shared best practices and knowledge in the field of exporting certified products to the EU market, customer service practices, and resource management with representatives from more than 30 companies in the textile and garment industry in Uzbekistan. The concept of SCP tools and the Green Economy were presented by the national key expert for SWITCH-ASIA in Uzbekistan.

6. Conclusion

In the digital world, from e-commerce and digital manufacturing to a connected and responsible consumer, the fashion and textile industry have changed dramatically. In this brave new world, the Uzbek cotton and textile sector is well positioned to become a global player changing the dynamics of the entire industry. A fully integrated cotton sector, proximity to major consuming markets and an enabling political/economic environment are but a few of the advantages our industry enjoys. To capture this opportunity, Uzbekistan needs to step-up its game; it needs to improve transparency and sustainability. Textile and garment companies need to be prepared to offer fast and high-end service, from design to delivery.

In the coming years, the Uzbek textile industry will focus on sharpening its offer and reaching out to the rest of the world with a unique product and service.

Uzbek textile and garment companies will get state-of-the-art coaching, training and a unique suite of opportunities to access the European and US markets as a launching pad to the rest of the world.

Particular focus will be on building up the skills of people and the supporting infrastructure of services to enable the country to become a well-skilled solution provider in an ever-changing environment.[12]

There is no question that the old practices in cotton harvesting were a serious violation of human rights. Those practices were also in contrast with Uzbekistan's modern principles and values. The country has come a long way since then and the current administration believes that the path to growth is through an equitable, educated and engaged society. Over the past 4 years, the country has made leaps in bringing its laws and practices up to par with the rest of the world. These efforts have prompted the International Labour Organization to issue a report compiled for the World Bank declaring that Uzbekistan is free of forced labor, as well as a cotton campaign declaring a number of regions free of all forced labor: 'Systematic child labour has been eradicated and child labour is no longer a major concern' (ILO report, 2020).[13]

The days of the cotton pledge were a difficult time for Uzbekistan; however, many lessons were learned that have resulted in the country changing not only its practices but also the core of its approach. Today, the textile industry is one of the leaders in transparency offering a fully integrated cotton value chain.[14]

There are few (if any) manufacturing countries that have the ability and the opportunity to disrupt the global textile and apparel industry. Uzbekistan has all the strategic tools to change the entire chain by offering a rare combination of speed to market and price competitiveness coupled with a fully transparent and integrated value chain.

- Fully integrated value chain from fibre to finished product
- Only 14 days by truck to Europe making it the supplier of choice for short lead times
- Since April 10, 2021, GSP+ status allowing 6200 Uzbek products to access the EU without custom duties
- Low manufacturing costs from labor to utilities and transportation
- Home grown cotton world renowned for its superior quality
- Continuous investment in state-of-the-art manufacturing facilities

12 Пахта тўқимачилик кластерлари томонидан амалга оширилган ишлар тўғрисида https://uzts.uz/paxta-toqimachilik-klasterlari/
13 https://www.ilo.org/washington/news/WCMS_767753/lang--en/index.htm
14 US Department of Labor lifts restrictions on Uzbek cotton. https://uzts.uz/en/us-department-of-labor-lifts-restrictions-on-uzbek-cotton/

- Although though Uzbekistan enjoys a long history in textile manufacturing, investments in modern facilities only started a few years ago with large conglomerates investing in state-of-the-art manufacturing complexes.15 In the coming years the industry will work on bringing its manufacturers up to speed. Some of the key targets for the near future include:
    - Diversification: a shift from a cotton-focused industry to synthetic fibres is a must to answer the growing shift toward synthetics
    - Market access: many brands and retailers are still not aware of the colossal efforts that habe been made in the cotton sector and the ending of the pledge remains a priority. We will make an effort to provide promotion, advertisement and information in the world.
    - Know-how: capacity-building for labour is a must to bring our workforce to par with other textile manufacturing countries
    - Global integration: as a young industry, we still need to inform the world of what the industry can offer to textile and apparel buyers

We are confident that with exposure, Uzbekistan will become the preferred sourcing partner for a majority of textile and garment brands.

15 Текстильная промышленность: основные результаты реализации Стратегии развития Узбекистана в период 2017-2020 годы. https://ifmr.uz/publications/articles-and-abstracts/textile

7. References

International references

Energy Efficiency Financial Institutions Group (EEFIG), Final Report covering Buildings, Industry and SMEs: https://ec.europa.eu/eefig/index_en

European Commission. 2018; updated 15 July 2020. Technical Expert Group on sustainable finance (TEG). https://ec.europa.eu/info/publications/sustainable-finance-technical-expert- group_en

Circular Economy. Vision 2020. https://www.meti.go.jp/shingikai/energy_environment/junkai_keizai/pdf/20200522_03.pdf

Uzbekistan national references

Текстильная промышленность: основные результаты реализации Стратегии развития Узбекистана в период 2017-2020 годы. https://ifmr.uz/files/publications/ru/912685.pdf

Аналитический доклад http://ced.uz/wp-content/uploads/2010-Tekstilnaya-promyshlennost-Uzbekistana-doklad.pdf

Анализ возможностей хлопково-текстильных кластеров Узбекистана. http://ced.uz/wp-content/uploads/2012-Klastery.pdf

Деятельность хлопково-текстильных кластеров https://review.uz/post/infografika-deyatelnost-xlopkovo-tekstilnx-klasterov

Хлопковые кластеры: возможность снижения затрат и повышения рентабельности. https://www.agro.uz/ru/11-0272/

Узбекские хлопковые кластеры: вперед и вверх https://nuz.uz/ekonomika-i-finansy/1249380-uzbekskie-hlopkovye-klastery-vpered-i-vverh.htm

Тўқимачилик соҳаси қандай қўллаб-қувватланади https://uzts.uz/toqimachilik-sohasi-qanday-qollab-quvvatlanadi/

https://uzts.uz/wp-content/uploads/2022/03/pitch-deck-document_eng_final_print.pdf

Пахта тўқимачилик кластерлари томонидан амалга оширилган ишлар тўғрисида https://uzts.uz/paxta-toqimachilik-klasterlari/

A vision for the Uzbek textile industry https://uzts.uz/wp-content/uploads/2022/03/pitch-deck-document_eng_final_print.pdf

US Department of Labor lifts restrictions on Uzbek cotton. https://uzts.uz/en/us-department-of-labor-lifts-restrictions-on-uzbek-cotton/

Текстильная промышленность: основные результаты реализации Стратегии развития Узбекистана в период 2017-2020 годы. https://ifmr.uz/publications/articles-and-abstracts/textile

Список хлопково-текстильных кластеров Узбекистана https://uzts.uz/paxta-toqimachilik-klasterlari/

Annexes

- **Annex A.** The list of normative acts that Uzbekistan country has adopted
- **Annex B.** Pictures from cotton fields of Uzbekistan, Kashkadarya region with implementation of drip irrigation systems for cotton harvesting
- **Annex C.** Questionnaire in Uzbek and Russian languages
- **Annex D.** Answers of the factories to the Questionnaire
- **Annex E.** Questionnaire in English
- **Annex F.** Presentation and pictures from the seminars at Korean-Uzbek textile Technopark, city of Tashkent on February 2, 2022 and in the conference hall of the Boulevard Palace Hotel city of Samarkand on February 9, 2022.

Annex A: The list of normative acts that Uzbekistan has adopted

- The National Policy on Environmental Protection (2019–2028)
- The Waste Management Strategy (2019–2028)
- The Law on Renewable Energy (April 2019) and target parameters for further development of renewable energy sources (with increasing proportion of renewable energy in total generation to 25% by 2030)
- The roadmap for Basic structural reforms for the period 2019–2021 (which includes fiscal and tax reform, land using, digitalisation, entrepreneurship, and energy efficiency)
- A new document for the implementation of voluntary eco-labelling in the production sector (February 2019), as well as the transition to international standards connected with expanding the export of local products
- Five priority directions have been identified by the country: i) climate change mitigation, ii) increasing energy efficiency in industry, iii) adaptation to climate change, iv) development of renewable energy, and v) implementation of green technology. The strategy to transition to a green economy and the implementation plan are approved, with the Ministry of Economy and Reducing Poverty as the responsible institution. The main goal is to mainstream green economy principles into Uzbekistan's structural reforms. The main target is to increase the percentage of renewable energy to 19.7% until 2025. The State Committee for Tourism Development has also come up with a draft strategy for the development of tourism in Uzbekistan through 2030.
- Decree of the Cabinet of Ministers of the Republic of Uzbekistan No. 397 dated June 22, 2020, On additional measures to develop cotton and textile production
- Decree of the President of the Republic of Uzbekistan No. PP-4477 dated 04.10.2019, On approval of the Strategy for the transition to a green economy for the period 2019–2030
- Decree of the President of the Republic of Uzbekistan No. PP-4422 dated August 22, 2019, On accelerated measures to improve the energy efficiency of economic and social sectors, the introduction of energy-saving technologies and the development of renewable energy sources
- Decree of the President No. UP-14 dated November 16, 2021, On measures to regulate the activities of cotton-textile clusters
- Decree of the President No. UP-5989 dated 05.05.2020, On urgent measures to support the textile, clothing and knitwear industry
- Decree of the President of the Republic of Uzbekistan No. PP-308 dated 07.07.2022, On additional organisational measures to increase cotton productivity, and to introduce science and innovation in cotton cultivation
- Law of the Republic of Uzbekistan No. ZRU-784 dated July 22, 2022, On drinking water supply and waste water disposal
- Decree of the President of the Republic of Uzbekistan No. PP-4919 dated 11.12.08.2020, On measures to further accelerate the organisation of the introduction of water-saving technologies in agriculture
- Закон Республики Узбекистан № ЗРУ-784 от 22.07.2022 г. О питьевом водоснабжении и отведении сочных вод
- Постановление Президента Республики Узбекистан № ПП-4919 от 11.12.08.2020 г. О мерах по дальнейшему ускорению организации внедрения водосберегающих технологий сельском хозяйстве

Annex B: Photos from cotton fields in Uzbekistan – Kashkadarya region, with implementation of drip irrigation systems for cotton harvesting

Annex C: Questionnaire in Uzbek and Russian

Ишлаб чиқарувчи сўровномаси - Ўзбекистонда Тўқимачилик ва тайёр кийим-кечак ишлаб чиқариш саноати

Контакт маълумотлари

1. Сўровномани тўлдириш санаси: _____ (сс/оо/ййй)
2. Компания номи: _____
3. Компаниянинг тўлиқ манзили/жойлашуви: _____
4. Компания телефон / факс рақами: _____
5. Сўровномага жавоб берувчининг исми / лавозими: _____
6. Сўровномага жавоб берувчининг телефон рақами / электрон почта манзили:

_____

Компания ҳақида умумий маълумот

7. Ушбу компаниянинг жорий ҳуқуқий ҳолати қанақа? [Вариантлардан бирини танланг]
   a. Акционерлик компанияси (мулки акцияларга бўлинадиган корпорация)
   b. Якка эгалик тартибдаги корхона (бир кишига ёки саноат гуруҳига тегишли компания)
   c. Хамкорликдаги корхона (бир неча кишига тегишли компания)

8. Компания кимга тегишли? [Вариантлардан бирини танланг]
   a. Ўзбекистонликларга
   b. Хорижлик мулкдорларга
   c. Ўзбекистонликлар ва хорижликлардан иборат аралаш таркиб

9. Корхона тури [Вариантлардан бирини танланг]
   a. Газлама бичиш ва аксесуарлар билан тикув ишлаб чиқариш
   b. Вертикал яхлит ҳолатга келтирилган ишлаб чиқариш (жумладан йигириш, бўяш ва бошқа амалиётлар)
   c. Бошқа, (кискача таъриф беринг) _____

10. Фабрика/компания қуйидагилар учун масъулми? (Тегишли барча вариантларни танланг)
    a. Хом ашё ва материал қидириш
    b. Маҳсулотни лойиҳалаштириш/ Дизайн ишлаб чикиш
    c. Маҳсулотни ишлаб чикариш, безак бериш / Хизмат кўрсатиш
    d. Маҳсулотни тарқатиш

11. Фабрика/компания ишлаб чиқаришда: [Вариантлардан бирини танланг]
    a. Узбекистондаги манбалардан фойдаланади
    b. Минтакавий (МДХ-Россия, Киргизистон, Козогизстон, х.к.з.) манбалардан фойдаланади
    c. Халкаро манбалардан фойдаланади (кискача тариф беринг) _____
    _____

12. Фабрика/компания маҳсулотлари кайси бренд остида сотилади? (Тегишли барча вариантларни танланг)
    a. Мижоз бренди остида
    b. Хусусий бренд остида

13. Компания фаолият бошлаган йил: _____

14. Фабрика/компания экспорт қиладими? [Вариантлардан бирини танланг]
    a. Ҳа
    b. Йўқ

Корхонада ишлаб чиқариш

15. Корхонада кайси махсулот ишлаб чикарилади / хизмат бажарилади? Ишлаб чикариладиган махсулотлар / кўрсатиладиган хизматлар хакида таъриф беринг _____ __
    _____

16. Ўтган бир йил давомида ишлаб чикарилган махсулотларнинг/ кўрсатилган хизматларнинг категориялар сони канча? (қиска таъриф беринг)
    Мисол учун:
    Корхонада мато тўқилса ва футболка тикилса, жами махсулотлар категориялари сони 2та
    Категория 1. _____
    Категория 2. _____
    Категория 3. _____

17. Охирги якунланган молия йилида, турли категориялар бўйича ишлаб чиқарилган махсулот (кўрсатилган хизмат) хажми:
    Категория 1. _____ Хажми
    _____
    Категория 2. _____ Хажми
    _____
    Категория 3. _____ Хажми
    _____

Инсон ресурслари

18. Корхонада ишлаб чиқариш билан шуғулланмайдиган (ўрта, юқори бошқарувдаги) ишчилар сони:
    a. Сони: ___
    b. Аёл ишчилар фоизи ___

19. Корхонада ишлаб чиқарувчи ишчилар сони:
    a. Сони: ___
    b. Аёл ишчилар фоизи ___

Иш самарадорлиги

20. Ҳозирда, корхона ҳафтасига неча соат ишлайди?
    a. (Ҳафтасига меъёрий/ўртача соат олинсин): ҳафтасига_____соат
    b. (Ҳафтасига энг юқори кўрсаткич) ҳафтасига_____соат

21. Ишлаб чиқариш циклингизда энг кўп ишлаш соатлар мавсуми кузатиладими?
    a. Ҳа, ишлаб ичқариш мавсумга қараб ўзгаради. Мавсумда энг кўп соат ишланган ойлар:
    зарурият бўйича ойлар руйхатини киритинг _____
    _____

b. Ҳа, ишлаб чиқариш мавсуми келмаган пайтларда ҳам мижоз талабига кўра ўзгариб туради.
c. Йўқ, ишлаб чиқариш йил давомида бир маромда кетади.

22. Йил давомида иш соатидан кўпроқ ишлаш қачон рўй беради? [Битта вариантни белгиланг]
    a. Мавсуми келганда
    b. Мижоз талаби бўйича
    c. Тегишли эмас

23. Мониторинг ўтказилса, ишлаб чиқариш линияларини эски услубдан (охирги маҳсулотдан кейин) янгисига (биринчи маҳсулот чиқишигача) ўзгартиришгача қанча вақт сарфланади?
    a. ___ соат
    b. ___ минут

24. Маҳсулот турларингизни ўзгартириш ва юқори нархли маҳсулотлар ишлаб чиқариш бўйича режаларингиз борми? [Вариантлардан бирини белгиланг]
    a. Ҳа
    b. Йўқ

Инфратузилма. Ресурслар истеъмоли

Электроэнергия

25. Корхонанинг бир ой давомида энг кўп истеъмол килган электр энергия сарфи канча? кВт ____

26. Корхонанинг бир ой давомида ўртача истеъмол киладиган электр энергия сарфи канча? кВт ____

Сув

27. Корхонанинг бир ой давомида энг кўп истеъмол килган сув сарфи канча? Куб метр ____

28. Корхонанинг бир ой давомида ўртача истеъмол киладиган сув сарфи канча? Куб метр ____

Табиий Газ

29. Корхонанинг бир ой давомида энг кўп истеъмол килган табиий газ сарфи канча? Куб метр ____

30. Корхонанинг бир ой давомида ўртача истеъмол киладиган табиий газ сарфи канча? Куб метр ____

Қолдиқ чиқиндилар

31. Корхонанинг бир ой давомида категориялар нисбатида қолдиқ чиқиндилар хажми канча?
    Категория 1. _____ Хажми _____
    Категория 2. _____Хажми _____
    Категория 3. _____Хажми _____

Ишлаб чиқаришнинг умумий таннархи ҳақида

32. Франко-борт[16] (FoB) бўйича сотилган нархининг тушиш % кўрсаткичи қанча:
    a. Хом ашё(тола/ ип/ мато): _____%
    b. Ишчи кучи харажатлари_____ %
    c. Фабриканинг қўшимча харажатлари: Сув _____ %
    d. Фабриканинг қўшимча харажатлари: Энергия _____ %
    e. Фабриканинг қўшимча харажатлари: Ижара _____ %
    f. Божларнинг умумий қиймати _____ %
    g. Агентлик/воситачилик комиссиялари қийматлари ____%
    h. Бошқа харажатлар ____%

Ушбу саволномада тушунарсиз савол учраганида ёки тушунтириш талаб этиладиган холат вужудга келганида мархамат килиб қуйидаги рақамлар орқали бизга кўнғироқ қилишингизни сўраймиз: +99890 9094720

Сўровнома якуни - Ташаккур!

16 FoB деганда етказиб бериш ва суғурталаш комиссиялари олинмайдиган кийим қиймати назарда тутилади, чунки бу харажатларни харидор ўз зиммасига олади. У келгусида компанияни кенгайтириш ва такомиллаштириш учун қайта сармоя киритишда зарурий бўлган хом ашё нархига компания даромадлари ва суммаси қўшиладиган Cut Make Trim (CMT) қиймати сифатида баҳоланади.

Annex D: Answers of the factories to the Questionnaire

Контакт маълумотлари

1. Сўровномани тўлдириш санаси: __23.09.2021_____ (сс/оо/ййй)
2. Компания номи: ___ООО 'TURON TEX'_____
3. Компаниянинг тўлиқ манзили/жойлашуви: _____Тошкент ш.Чилонзор тумани, Катортол тор кўчаси 8 уй._____
4. Компания телефон / факс рақами: __71 2734690_____
5. Сўровномага жавоб берувчининг исми / лавозими: Хакимходжаев С.А. Директор ўринбосари.
6. Сўровномага жавоб берувчининг телефон рақами / электрон почта манзили: 90 1863693, Saidvali1982@mail.ru

---

Компания ҳақида умумий маълумот

7. Ушбу компаниянинг жорий ҳуқуқий ҳолати қанақа? [Вариантлардан бирини танланг]
   a. Акционерлик компанияси (мулки акцияларга бўлинадиган корпорация)
   b. Якка эгалик тартибдаги корхона (бир кишига ёки саноат гуруҳига тегишли компания)
   c. ✓Хамкорликдаги корхона (бир неча кишига тегишли компания)

8. Компания кимга тегишли? [Вариантлардан бирини танланг]
   a. ✓Ўзбекистонликларга
   b. Хорижлик мулкдорларга
   c. Ўзбекистонликлар ва хорижликлардан иборат аралаш таркиб

9. Корхона тури [Вариантлардан бирини танланг]
   a. Газлама бичиш ва аксесуарлар билан тикув ишлаб чиқариш
   b. ✓Вертикал яхлит ҳолатга келтирилган ишлаб чиқариш (жумладан йигириш, бўяш ва бошқа амалиётлар)
   c. Бошқа, (кискача таъриф беринг) _____

10. Фабрика/компания қуйидагилар учун масъулми? (Тегишли барча вариантларни танланг)
    a. ✓Хом ашё ва материал қидириш
    b. ✓Маҳсулотни лойиҳалаштириш/ Дизайн ишлаб чикиш
    c. ✓Маҳсулотни ишлаб чикариш, безак бериш / Хизмат кўрсатиш
    d. Маҳсулотни тарқатиш

11. Фабрика/компания ишлаб чиқаришда: [Вариантлардан бирини танланг]
    a. ✓**Узбекистондаги манбалардан фойдаланади**
    b. Минтакавий (МДХ-Россия, Киргизистон, Козогистон, х.к.з.) манбалардан фойдаланади
    c. Халкаро манбалардан фойдаланади (кискача тариф беринг)
    _____ _____
    _____

12. Фабрика/компания маҳсулотлари кайси бренд остида сотилади? (Тегишли барча вариантларни танланг)
    a. Мижоз бренди остида
    b. ✓Хусусий бренд остида

13. Компания фаолият бошлаган йил: _____1998 йил____

14. Фабрика/компания экспорт қиладими? [Вариантлардан бирини танланг]
    a. ✓Ҳа
    b. Йўқ

Корхонада ишлаб чиқариш

15. Корхонада кайси махсулот ишлаб чикарилади / хизмат бажарилади? Ишлаб чикариладиган махсулотлар / кўрсатиладиган хизматлар хакида таъриф беринг _Трикотаж матоларини тўқиш, пардозлаш ва гул босиш._____ _____ _____

16. Ўтган бир йил давомида ишлаб чикарилган махсулотларнинг/ кўрсатилган хизматларнинг категориялар сони канча? (қиска таъриф беринг)
    Мисол учун:
    Корхонада мато тўқилса ва футболка тикилса, жами махсулотлар категориялари сони 2та
    Категория 1. _Тўқув_____
    Категория 2. _Бўёқ_____
    Категория 3. _____

17. Охирги якунланган молия йилида, турли категориялар бўйича ишлаб чиқарилган махсулот (кўрсатилган хизмат) хажми:
    Категория 1. ___Тўқув _____ Хажми _241381,35 кг_____
    Категория 2. ___Бўёқ_____ Хажми _319432,01 кг_____
    Категория 3. _____ Хажми _____

Инсон ресурслари

18. Корхонада ишлаб чиқариш билан шуғулланмайдиган (ўрта, юқори бошқарувдаги) ишчилар сони:
    a. Сони: _23__
    b. Аёл ишчилар фоизи _5_

19. Корхонада ишлаб чиқарувчи ишчилар сони:
    a. Сони: _96__
    b. Аёл ишчилар фоизи _11__

Иш самарадорлиги

20. Ҳозирда, корхона ҳафтасига неча соат ишлайди?
    a. (Ҳафтасига меъёрий/ўртача соат олинсин): ҳафтасига__40_соат
    b. (Ҳафтасига энг юқори кўрсаткич) ҳафтасига_____соат

21. Ишлаб чиқариш циклингизда энг кўп ишлаш соатлар мавсуми кузатиладими?
    a. Ҳа, ишлаб ичқариш мавсумга қараб ўзгаради. Мавсумда энг кўп соат ишланган ойлар: зарурият бўйича ойлар руйхатини киритинг _____ __ _____
    b. ✓Ҳа, ишлаб чиқариш мавсуми келмаган пайтларда ҳам мижоз талабига кўра ўзгариб туради.

c. Йўқ, ишлаб чиқариш йил давомида бир маромда кетади.

22. Йил давомида иш соатидан кўпроқ ишлаш қачон рўй беради? [Битта вариантни белгиланг]
a. Мавсуми келганда
b. ✓Мижоз талаби бўйича
c. Тегишли эмас

23. Мониторинг ўтказилса, ишлаб чиқариш линияларини эски услубдан (охирги маҳсулотдан кейин) янгисига (биринчи маҳсулот чиқишигача) ўзгартиришгача қанча вақт сарфланади?
a. _160 соат
b. ___ минут

24. Маҳсулот турларингизни ўзгартириш ва юқори нархли маҳсулотлар ишлаб чиқариш бўйича режаларингиз борми? [Вариантлардан бирини белгиланг]
a. Ҳа
b. ✓Йўқ

Инфратузилма. Ресурслар истеъмоли

Электроэнергия

25. Корхонанинг бир ой давомида **энг кўп** истеъмол килган электр энергия сарфи канча? кВт 188643

26. Корхонанинг бир ой давомида **ўртача** истеъмол киладиган электр энергия сарфи канча? кВт 158873

Сув

27. Корхонанинг бир ой давомида **энг кўп** истеъмол килган сув сарфи канча? Куб метр 8009
28. Корхонанинг бир ой давомида **ўртача** истеъмол киладиган сув сарфи канча? Куб метр 4885

Табиий Газ

29. Корхонанинг бир ой давомида энг кўп истеъмол килган табиий газ сарфи канча? Куб метр 201757

30. Корхонанинг бир ой давомида ўртача истеъмол киладиган табиий газ сарфи канча? Куб метр 190642

Қолдиқ чиқиндилар

31. Корхонанинг бир ой давомида категориялар нисбатида қолдиқ чиқиндилар хажми канча?
Категория 1. __Тўқув – 30 кг_____ Хажми _____
Категория 2. __Бўёқ – 50 кг_____ Хажми _____
Категория 3. _____ Хажми _____

Ишлаб чиқаришнинг умумий таннархи ҳақида

32. Франко-борт[17] (FoB) бўйича сотилган нархининг тушиш % кўрсаткичи қанча:
    a. Хом ашё(тола/ ип/ мато): __65_%
    b. Ишчи кучи харажатлари__5__ %
    c. Фабриканинг қўшимча харажатлари: Сув __5__ %
    d. Фабриканинг қўшимча харажатлари: Энергия __5___ %
    e. Фабриканинг қўшимча харажатлари: Ижара __-__ %
    f. Божларнинг умумий қиймати __15_ %
    g. Агентлик/воситачилик комиссиялари қийматлари _-__%
    h. Бошқа харажатлар __5_%

Ушбу саволномада тушунарсиз савол учраганида ёки тушунтириш талаб этиладиган холат вужудга келганида мархамат килиб қуйидаги рақамлар орқали бизга кўнғироқ қилишингизни сўраймиз: +99890 9094720

Сўровнома якуни - Ташаккур!

Контакт маълумотлари

33. Сўровномани тўлдириш санаси: 14.10.2021й

34. Компания номи: МЧЖ шаклидаги ‘COTTON ROAD’ кушма корхонаси

35. Компаниянинг тўлик манзили/жойлашуви: Карши шахри Жайхун куча 8-миттитуман

36. Компания телефон / факс раками: 78-771-05-11

37. Сўровномага жавоб берувчининг исми / лавозими: _____

38. Сўровномага жавоб берувчининг телефон раками / электрон почта манзили:
_____

Компания ҳақида умумий маълумот

39. Ушбу компаниянинг жорий хукукий холати канака? [Вариантлардан бирини танланг]
    a. Акционерлик компанияси (мулки акцияларга бўлинадиган корпорация)
    b. Якка эгалик тартибдаги корхона (бир кишига ёки саноат гуруҳига тегишли компания)
    c. Хамкорликдаги корхона (бир неча кишига тегишли компания)

40. Компания кимга тегишли? [Вариантлардан бирини танланг]
    d. Ўзбекистонликларга
    e. Хорижлик мулкдорларга
    f. Ўзбекистонликлар ва хорижликлардан иборат аралаш таркиб

41. Корхона тури [Вариантлардан бирини танланг]
    d. Газлама бичиш ва аксесуарлар билан тикув ишлаб чикариш

17 FoB деганда етказиб бериш ва суғурталаш комиссиялари олинмайдиган кийим қиймати назарда тутилади, чунки бу харажатларни харидор ўз зиммасига олади. У келгусида компанияни кенгайтириш

ва такомиллаштириш учун қайта сармоя киритишда зарурий бўлган хом ашё нархига компания даромадлари ва суммаси қўшиладиган Cut Make Trim (CMT) қиймати сифатида баҳоланади.

e. Вертикал яхлит холатга келтирилган ишлаб чикариш (жумладан йигириш, бўяш ва бошка амалиётлар)
f. Бошка, (кискача таъриф беринг) _____

42. Фабрика/компания куйидагилар учун масъулми? (Тегишли барча вариантларни танланг)
e. Хом ашё ва материал кидириш
f. Махсулотни лойихалаштириш/ Дизайн ишлаб чикиш
g. Махсулотни ишлаб чикариш, безак бериш / Хизмат кўрсатиш
h. Махсулотни таркатиш

43. Фабрика/компания ишлаб чикаришда: [Вариантлардан бирини танланг]
a. Узбекистондаги манбалардан фойдаланади
b. Минтакавий (МДХ-Россия, Киргизизстон, Козогизстон, х.к.з.) манбалардан фойдаланади
c. Халкаро манбалардан фойдаланади (кискача тариф беринг) _____
_____

44. Фабрика/компания махсулотлари кайси бренд остида сотилади? (Тегишли барча вариантларни танланг)
c. Мижоз бренди остида
d. Хусусий бренд остида

45. Компания фаолият бошлаган йил: 2004й_____

46. Фабрика/компания экспорт киладими? [Вариантлардан бирини танланг]
a. ха
b. Йўк

Корхонада ишлаб чиқариш

47. Корхонада кайси махсулот ишлаб чикарилади / хизмат бажарилади? Ишлаб чикариладиган махсулотлар / кўрсатиладиган хизматлар хакида таъриф беринг Тайёр трикотаж махсулотлари

48. Ўтган бир йил давомида ишлаб чикарилган махсулотларнинг/ кўрсатилган хизматларнинг категориялар сони канча? (киска таъриф беринг)
Мисол учун:
Корхонада мато тўкилса ва футболка тикилса, жами махсулотлар категориялари сони 2та
Категория 1. _____
Категория 2. _____
Категория 3.
Йигирув, мато тўқув, трикотаж тўқув, буяш ва пардозлаш, бичиб-тикиш.
Жами 5

49. Охирги якунланган молия йилида, турли категориялар бўйича ишлаб чикарилган махсулот (кўрсатилган хизмат) хажми:
Категория 1. _____ *Хажми*
_____
Категория 2. _____ *Хажми*
_____
Категория 3. _____ *Хажми* _____*37 297 496 минг сум*

Инсон ресурслари

50. Корхонада ишлаб чикариш билан шугулланмайдиган (ўрта, юкори бошкарувдаги) ишчилар сони:
    c. Сони: ___30
    d. Аёл ишчилар фоизи __30

51. Корхонада ишлаб чикарувчи ишчилар сони:
    c. Сони: 180
    d. Аёл ишчилар фоизи: 60

Иш самарадорлиги

52. Хозирда, корхона Хафтасига неча соат ишлайди?
    c. (Хафтасига меъёрий/ўртача соат олинсин): Хафтасига соат
    d. Хафтасига энг юКори кўрсаткич) Хафтасига_35____соат

53. Ишлаб чикариш циклингизда энг кўп ишлаш соатлар мавсуми кузатиладими?
    d. ха, ишлаб чикариш мавсумга караб ўзгаради. Мавсумда энг кўп соат ишланган ойлар:
    зарурият бўйича ойлар руйхатини киритинг _____
    _____
    e. ха, ишлаб чикариш мавсуми келмаган пайтларда хам мижоз талабига кўра ўзгариб туради.
    f. Йўк, ишлаб чикариш йил давомида бир маромда кетади.

54. Йил давомида иш соатидан кўпрок ишлаш качон рўй беради? [Битта вариантни белгиланг]
    a. Мавсуми келганда
    b. Мижоз талаби бўйича
    c. Тегишли эмас

55. Мониторинг ўтказилса, ишлаб чикариш линияларини эски услубдан (охирги махсулотдан кейин) янгисига (биринчи махсулот чикишигача) ўзгартиришгача канча вакт сарфланади?
    a. __8_ соат
    b. ___ минут

56. Махсулот турларингизни ўзгартириш ва юкори нархли махсулотлар ишлаб чикариш бўйича режаларингиз борми? [Вариантлардан бирини белгиланг]
    a. ха
    b. Йўк

Инфратузилма. Ресурслар истеъмоли
Электроэнергия

57. Корхонанинг бир ой давомида **энг кўп** истеъмол килган электр энергия сарфи канча? кВт 100 минг

58. Корхонанинг бир ой давомида **ўртача** истеъмол киладиган электр энергия сарфи канча? кВт 70-80минг

Сув

59. Корхонанинг бир ой давомида **энг кўп** истеъмол килган сув сарфи канча? Куб метр 20 минг

60. Корхонанинг бир ой давомида **ўртача** истеъмол киладиган сув сарфи канча? Куб метр 15 минг

Табиий Газ

61. Корхонанинг бир ой давомида **энг кўп** истеъмол килган табиий газ сарфи канча? Куб метр 50минг

62. Корхонанинг бир ой давомида **ўртача** истеъмол киладиган табиий газ сарфи канча? Куб метр 35минг

Қолдиқ чиқиндилар

63. Корхонанинг бир ой давомида категориялар нисбатида колдик чикиндилар хажми канча?
    Категория 1. _____ Хажми _____
    Категория 2. _____ Хажми _____
    Категория 3. Трикотаж мато кийтимлари_____ Хажми ____500кг тахминан_____

Ишлаб чиқаришнинг умумий таннархи ҳақида

64. Франко-борт[18] (FoB) бўйича сотилган нархининг тушиш % кўрсаткичи канча:
    a. Хом ашё(тола/ ип/ мато): _50____%
    b. Ишчи кучи харажатлари____20_ %
    c. Фабриканинг кўшимча харажатлари: Сув __5___ %
    d. Фабриканинг кўшимча харажатлари: Энергия _10____ %
    e. Фабриканинг кўшимча харажатлари: Ижара _____ %
    f. Божларнинг умумий киймати _____ %
    g. Агентлик/воситачилик комиссиялари кийматлари ____%
    h. Бошка харажатлар _15___%

Ушбу саволномада тушунарсиз савол учраганида ёки тушунтириш талаб этиладиган холат вужудга келганида мархамат килиб қуйидаги ракамлар оркали бизга кўнгирок килишингизни сўраймиз: +99890 9094720

Сўровнома якуни - Ташаккур!

18 FoB деганда етказиб бериш ва сўрталаш комиссиялари олинмайдиган кийим йиймати назарда тутилади, чунки бу харажатларни харидор ўз зиммасига олади. У келгусида компанияни кенгайтириш ва такомиллаштириш учун айта сармоя киритишда зарурий бўлган хом ашё нархига компания даромадлари ва суммаси ўшиладиган Cut Make Trim (CMT) йиймати сифатида баоланади.

Annex E: Manufacturer Survey – Textile and Readymade Garment Industry in Uzbekistan (English)

Contact Information

65. Date of the questionnaire completion: _____ (dd/mm/YYYY)

66. Company name: _____

67. Company Full address/location: _____

68. Company Phone/Fax Number: _____

69. Survey Respondent Name/Position: _____

70. Survey Respondent Phone Number / Email Address: _____

Company General Information

71. What is this company's current legal status? [*tick one option*]
    a. Shareholding company [*A corporation whose ownership is divided in shares*]
    b. Sole proprietorship [*A company owned by one individual or industrial group*]
    c. Partnership or limited partnership [*A company owned by more than one business owner*]

72. The company is owned by: [*tick one option*]
    g. Uzbek Nationals
    h. Foreign Owners
    i. Mix of Uzbek Nationals and Foreigners: Shareholding / Joint Venture

73. Type of factory [*tick one option*]
    g. Cut-Make-Trim production
    h. Vertically integrated production (includes spinning, dyeing and other operations)
    i. Other, (please specify) _____

74. Is the factory/company also responsible for: [*tick all applicable options*]
    i. Sourcing raw materials and inputs
    j. Designing of the product
    k. Product producing, finishing / Service providing
    l. Product distribution

75. Where are inputs sourced from? [*tick all applicable options*]
    a. Uzbekistan
    b. Regionally (CIS countries: including Russia, Kyrgyzstan, Kazakhstan, Turkmenistan, etc.)
    c. Internationally, please specify: _____

76. Does the factory/company design products to be sold: [*tick all applicable options*]
    e. Under the client's brand
    f. Under its own brand

77. In what year did the factory begin operations?
    Year _____

78. Does the factory/company export? [*tick one option*]
    a. Yes
    b. No

Factory Production

79. What product (service) your establishment producing (providing)? Please specify product/service categories. _____

80. Number of product categories produced in the last: _____
(For example, if a factory produced fabrics and T-shirts, the total number of product categories is 2).

81. Monthly production capacity by categories:
Category 1. _____

Category 2. _____

Human Resources

82. Number of non-production (middle, high management) workers in the factory
    e. Number: ___
    f. ___ % of female workers

83. Number of production workers in the factory
    e. Number: ___
    f. ___ % of female workers

Productivity

84. Currently, how many hours per week does the factory operate?
    e. [normal/average hours per week]: _____ hours per week
    f. [peak hours per week]: _____ hours per week

85. Do you see any production peaks in your production cycle?
    g. Yes, production fluctuates according to seasons.
    High season is during the months of: _____
    _____
    h. Yes, production fluctuates according to client demands with no seasonal pattern.
    i. No, production is consistent throughout the year

86. When does overtime peak during the year? *[tick one option]*
    a. Overtime peaks according to seasons
    b. Overtime peaks according to client demands
    c. Not applicable

87. What is the average time needed for the production lines to switch between an old style (last piece out from the line) to a new style (first piece output)?
    a. _____ Hours b. _____ Mins

88. Do you have plans to change your product assortment and seek to produce higher value products? *[Tick the option]*
    a. Yes
    b. No

Resource consumption

89. What is the capacity of regular monthly **electric energy** consumption in your establishment? (kWt) ____

90. What is the average monthly consumption of **electric energy** in your establishment? (kWt/month) ____

91. What is the capacity of regular monthly **water** consumption in your establishment? (Cubic meters) ____

92. What is the average monthly consumption of **water** in your establishment? (Cubic meters/month) ____

93. What is the capacity of regular monthly **natural gas** consumption in your establishment? (cubic meters) ____

94. What is the average monthly consumption of **natural gas** in your establishment? (Cubic meters/month) ____

95. What is the average monthly quantity of textile wastes in your establishment by categories?
Category 1. _____ Quantity: _____
Category 2. _____ Quantity: _____
Category 3. _____ Quantity: _____

Review of total output cost

96. What is the % breakdown of the cost of a sold product (provided service) at free on board[19] (FoB) price:
    a. Raw Material (Fibre): _____%
    b. Labor Cost _____ %
    c. Factory overhead: Water _____ %
    d. Factory overhead: Energy _____ %
    e. Factory overhead: Rent _____ %
    f. Total cost of duties _____ %
    g. Cost of agent/intermediary fees ____%
    h. Other ____%

End of the Questionnaire – Thank you!

19 Free on Board (or Freight on Board) refers to the cost of the garment excluding the shipping and insurance fee as they are borne by the buyer. It is calculated as Cut Make Trim (CMT) cost, plus cost of raw material plus company profits and amount needed to reinvest for future expansion or improvements.

Annex F: Seminars in Tashkent and Samarkand, February 2022

Presentation and pictures from the seminars at Korean-Uzbek textile Technopark, city of Tashkent on February 2, 2022 and in the conference hall of the Boulevard Palace Hotel city of Samarkand on February 9, 2022.

www.switch-asia.eu

EU SWITCH-Asia Programme
@EUSWITCHAsia

SWITCH-Asia
@SWITCHAsia

SWITCH-Asia Official
@switch-asia-official