



Innovation and Industrialization for SDG 9 in Uzbekistan

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INTRODUCTION

Inclusive and sustainable industrial development can contribute to the reduction of poverty and inequalities, a lower impact on climate and natural resources and even contribute to healthier societies. Although Uzbekistan has made strides to achieve Sustainable Development Goal (SDG) 9 and thus realize these benefits, accelerated efforts are needed to boost the country's productive capacities, further strengthen its innovation ecosystem, allow for better integration into value chains and foster the dynamic entrepreneurial activity. The purpose of this paper is therefore to provide an overview of Uzbekistan's progress and highlight areas for enhanced action. It was developed for the SDG Week organized by the Uzbek bicameral Parliamentary Commission on SDGs under the heading "Leaving No One Behind" from 10 to 17 June 2021.

KEY QUESTIONS FOR DISCUSSION

- What actions could boost the role of manufacturing and industry in Uzbekistan's economy?
- How can Uzbekistan further upgrade its innovation ecosystem?
- What can the Government do help Uzbek companies be better prepared for the opportunities and challenges of the Fourth Industrial Revolution?
- Which sectors could particularly benefit from branding and industrial modernization?

- What could be the role of international partners to support Uzbek businesses to adhere to quality standards and thus better integrate into global value chains?
- How can barriers to a thriving entrepreneurial sector be further reduced?

1. THE ECONOMY AND PRODUCTIVE CAPACITY OF UZBEKISTAN

Uzbekistan has been undergoing widespread and structural transformation touching all aspects of society. Under the leadership of President Shavkat Mirziyoyev, these changes have been felt across the economic, social, and political domains, representing a sea-change away from the 27 years of tightly centralised governance that characterised the immediate post-Soviet era. The National Action Strategy 2017-2021 is a key instrument for guiding the implementation of Uzbekistan's development agenda and prioritises 5 key areas: 1) improving the system of state and public administration; 2) ensuring the rule of law and reforming the judicial system; 3) economic development and liberalisation; 4) social development; 5) security, inter-ethnic harmony and religious tolerance, and implementation of balanced, mutually beneficial and constructive foreign policy.

Prior to the COVID-19 pandemic, the Uzbek economy was growing at an annualized rate of 4.1 per cent, according to IMF data. Legislative changes and policy interventions in governance have been taking place at a fast pace, including economic reforms. On the supply

side this included a unification of exchange rates, trade liberalisation, tax cuts and improvements to the business environment. Beginning in 2019, increased attention began to be paid to demand-side issues such as job creation and income support to ease the costs of structural transition for workers. Reform efforts are set to pick up again in the aftermath of the COVID-19 pandemic. Agriculture and services each account for around a third of the country's GDP, with another quarter generated by industry and the remainder by the construction sector. The main dichotomy at the heart of Uzbekistan's economy however has been exacerbated by the COVID-19 pandemic. On the one hand there are dominant, state-controlled, highly regulated, capital-intensive formal industrial and agricultural sectors based on extractive industries, as well as state oversight of cotton and wheat. On the other hand, a large informal sector of small, low-paid, family-based enterprises is absorbing surplus labour in the face of insufficient job creation given Uzbekistan's young and growing labour force.¹

While Uzbekistan's economy is more diversified than most of its neighbours, further increasing product complexity, value-added in production and diversification (as called for in Uzbekistan's National Action Strategy 2017-2021) could make it more resilient to external shocks. Industrial output in absolute terms has increased in recent years but the relative share of manufacturing in GDP has been declining while exports comprise mostly raw materials (such as gold and cotton) and basic manufactures.² Less than a sixth of all employees work in the industrial sector, a figure lower than in other countries in the region.³

According to domestic statistical information, the most important sub-sectors of Uzbekistan's manufacturing sector include its metallurgical industry, food production, manufacturing of motor vehicles, trailers and semi-trailers, textiles manufacturing and chemical production.⁴ Different forms of state-ownership prevail across a wide range of sectors, while there is potential for more private sector involvement in industry. Recognising this, in outlining priorities for 2021, the President in his December 2020 address to the Oliy Majlis (Uzbek Parliament) referred to the transformation of 32 large enterprises in industries of strategic importance, preparation to privatize six state-

owned banks and the auctioning of state shares across more than 80 enterprises in various sectors including fertilizer, food and beverages production. Other measures with a potential to bolster industrial development include an easing of state monopolies in commodities and resources for better private sector access, funding for expanded vocational training and the fostering of additional industrial clusters.⁵

2. PROGRESS AND CHALLENGES IN THE ACHIEVEMENT OF SDG 9

Industrialization, with the establishment of a thriving manufacturing sector nurtured by innovation and a supportive infrastructure, has historically gone hand in hand with economic development and makes a crucial contribution to economic growth. The 2030 Agenda adopted by the United Nations General Assembly in 2015 thus incorporated UNIDO's mandate towards achieving inclusive and sustainable industrial development (ISID) with its integration of the economic, environmental and social dimensions of sustainability. UNIDO is thus recognized as a custodian agency for six indicators, particularly related to manufacturing, listed under SDG 9 "Industry, Innovation and Infrastructure" and responsible for monitoring and reporting on their achievement.

¹ UN Common Country Analysis: Uzbekistan:

https://uzbekistan.un.org/sites/default/files/2021-05/CCA-EN-may14_1.pdf

² Uzbekistan's sustainable infrastructure investments:

<https://www.oecd-ilibrary.org/sites/5fd38a3d-en/index.html?itemId=/content/component/5fd38a3d-en>

³ World Bank Growth and Job Creation in Uzbekistan: An In-depth Diagnostic:

<https://documents1.worldbank.org/curated/en/130581560953053964/pdf/Growth-and-Job-Creation-in-Uzbekistan-A-In-depth-Diagnostic.pdf>

⁴ The State Committee of the Republic of Uzbekistan - Industry

<https://stat.uz/en/official-statistics/industry> (Structure of manufacturing industry)

⁵ President Shavkat Mirziyoyev's Address to the Oliy Majlis: <https://president.uz/en/lists/view/4057>

Manufacturing value added as a proportion of GDP (%)	2019	19.7
Manufacturing value added per capita (constant 2015 United States dollars)	2019	496
Manufacturing employment as a proportion of total employment (%)	2018	12
Proportion of small-scale industries in total industry value added (%)	-	-
Proportion of small-scale industries with a loan or line of credit (%)	2019	20.7
Carbon dioxide emissions from fuel combustion (millions of tonnes)	2017	8.8
Carbon dioxide emissions per unit of manufacturing value added (kilogrammes of CO ₂ per constant 2015 United States dollars)	2017	0.57
Proportion of medium and high-tech industry value added in total value added (%)	-	-

UNIDO SDG 9 indicators in Uzbekistan

In Uzbekistan, progress on SDG 9 as measured by UNIDO has been mixed. The long-term trend of declining manufacturing value added (MVA) as a proportion of GDP has continued, falling from 21.3% in 2015 to 19.7% in 2019. In contrast, the growth of MVA per capita has persisted, increasing from USD 461 in 2015 to USD 496 in 2019. Despite an increasing need for job creation in Uzbekistan, the share of manufacturing employment in total employment has changed little in recent years, rising only marginally from 11.3% in 2015 to 12% in 2018. The available data measuring access to finance points to a decrease in the proportion of small-scale industries with a loan or line of credit from 25.8% in 2013 to 20.7% in 2019. Substantial progress in reducing the carbon intensity of Uzbekistan's manufacturing sector had already been made before the adoption of the SDGs and CO₂ emissions per unit of MVA have fallen further from 0.73 kg in 2015 to 0.57 kg in 2017, far below the more than 2 kg per unit of MVA in 2000.⁶

Uzbekistan's manufacturing sector relies on resource based, low- and medium-technology, which account for the bulk of its manufacturing exports with high-technology manufacturing only contributing 1.2% in 2018.⁷ Relatively high energy-inefficiency in the industrial sector is based in outdated and inefficient technology as well as a lack of awareness of more efficient technologies and the benefits of investment in them.⁸ Uzbekistan has been facing a significant productivity gap in manufacturing, not least in sectors where it has a competitive advantage such as food processing, textiles, and apparel where productivity is 10% to 50% lower than in other middle-income countries. In addition, while productivity gains have

been made across most sectors of the economy in the past, job creation has been much weaker, especially in manufacturing. This includes rising productivity in the labour-intensive food processing and light industry sectors, where export potentials have yet to be fully exploited but employment has fallen between 1996 and 2016. Small manufacturing firms are more productive and innovative than large ones but employ fewer workers overall and the survival rate of newly-registered Uzbek manufacturing firms is low. While recent reform measures such as the liberalization of the foreign exchange regime and a reduction of the tax burden have addressed important concerns of manufacturing firms in Uzbekistan, the sector has been facing additional constraints in boosting employment, productivity and innovation due to unfavourable credit terms, unreliable infrastructure, a shortage of skilled labour and limited access to raw materials.⁹

Uzbekistan's access to international financing has increased in recent years. Robust support from international financial institutions (IFIs) such as the World Bank or the EBRD to the Uzbek Government's ongoing reform efforts has increased through the Consolidated Multilateral COVID-19 Response and Recovery Offer by the UN and IFIs to upwards of USD 3 billion committed.¹⁰

3. INNOVATION ECOSYSTEM

Data on past financial commitments and human capital development in research and development (R&D) points to room for improvement to strengthen Uzbekistan's innovation ecosystem. The country's gross domestic expenditure on R&D as a percentage of GDP remained below 0.2% in recent years, standing at 0.13% in 2018. The Government and business enterprises have been responsible for the bulk of funding (54.3% and 42.4% in 2018, respectively) and intermural performance of R&D activities (41.6% and 40.4% in 2018 respectively). The bulk of overall funding for R&D has been directed towards natural sciences and technology and engineering (41.54% and 29% in 2018). The number of researchers per million inhabitants has been declining in recent years and in 2018 stood at 476.18 per million inhabitants in full-time equivalents (FTE) or a headcount (HC) of 980.3 per million. However, the share of

⁶ UNIDO SDG 9 Monitoring Uzbekistan:
<https://stat.unido.org/SDG/UZB>

⁷ UNIDO Competitive Industrial Performance Index 2020 Uzbekistan:
<https://stat.unido.org/country/UZB.pdf>

⁸ Uzbekistan's sustainable infrastructure investments:
<https://www.oecd-ilibrary.org/sites/5fd38a3d-en/index.html?itemId=/content/component/5fd38a3d-en>

⁹ World Bank Growth and Job Creation in Uzbekistan: An In-depth Diagnostic:
<https://documents1.worldbank.org/curated/en/130581560953053964/pdf/Growth-and-Job-Creation-in-Uzbekistan-A-In-depth-Diagnostic.pdf>

¹⁰ UN Common Country Analysis: Uzbekistan:
https://uzbekistan.un.org/sites/default/files/2021-05/CCA-EN-may14_1.pdf

researchers (both if measured in FTE or HC) with high formal qualifications (doctoral or equivalent level) has remained relatively stable at around a third of all researchers in recent years. Promisingly, in line with Uzbekistan's young overall population, the share of researchers between 25 and 34 years among total researchers has increased while the share of those 55 and over has decreased.¹¹

Recognising the need for higher productivity and the benefits of deploying modern technology, Uzbekistan has made strides to enhance its innovation ecosystem driving the development and realisation of new ideas, products and services. A dedicated Ministry of Innovative Development (MoID) was established in 2017 though other ministries (most notably the Ministry of Economics and Industry, the Ministry for Development of Information Technologies and Communications, and the Ministry of Higher and Secondary Special Education), the Republican Council on Science and Technology and the Academy of Sciences are also important institutional players. A number of subordinate organizations operate under the MoID to support and implement innovation including the **Center for Advanced Technologies**, the **Center for Scientific and Technical Information**, the **Foundation for support of innovative development and innovative ideas** and the **Scientific and practical center for the implementation of innovative projects**.¹² As of April 2021, the country had nine "technoparks" comprising 69 enterprises.¹³ This includes **Yashnabad Innovative Technopark** established by the MoID which provides tax breaks, customs benefits and concessional loans to support innovation in chemical and biotechnology, pharmaceuticals, robotics, engineering, construction materials, energy supply and the food industry. **IT Park** similarly provides tax and customs benefits as well as infrastructure to support start-ups in transforming their ideas in the IT sphere into real business projects, while also conducting trainings and workshops for youth involvement and the fostering of computer literacy among the population.

Recent legal developments pertaining to innovation include the adoption of the law '**On Science and Scientific Activities**' in 2019 and the law '**On Innovative Activity**' in 2020 which refer to the relevant

stakeholders and a wide range of ambitions in the spheres of science and innovation. To guide innovation policy, the **Strategy for Innovative Development of the Republic of Uzbekistan for 2019–2021** set ambitious goals such as placing the country among the top 50 economies in the Global Innovation Index by 2030; increasing R&D expenditure to 0.8% of GDP by 2021; improving scientific excellence, and strengthening the links between education, science and industry; and placing its universities among the top 1,000 universities in international rankings.

Efforts to improve Uzbekistan's innovation ecosystem have also involved collaboration with international partners. Together with the World Intellectual Property Organization (WIPO), 21 **Technology and Innovation Support Centers (TISCs)** have been established in Uzbek host institutions, providing access to locally based, high quality technology information and related services.¹⁴ In 2020, UNESCO in cooperation with the MoID published an in-depth report on the innovation ecosystem of Uzbekistan (**Mapping Research and Innovation in the Republic of Uzbekistan**) which serves as the basis for a draft *National Science, Technology and Innovation Policy of the Republic of Uzbekistan for 2021-2030*.¹⁵ The publication highlights that the country's innovation ecosystem could further benefit from improvements to the innovation policy and governance structure (avoiding fragmentation, ensuring sustainability, reducing regional disparities), increased involvement and targeting of the private sector (especially SMEs), enhanced infrastructure (including quality infrastructure) and capacity building and human capital development.¹⁶

Building a strong innovation ecosystem

A dynamic ecosystem which favours entrepreneurial activity is likely to create economic growth, resulting in value addition, enhanced productivity, market access and in the long-term, development. Newly created enterprises are a driving force for economic dynamism, while barriers to establishing new businesses are often seen as a hindrance to a viable economy.

Boosting innovation is critical to ensure a smooth transformation to the Fourth Industrial Revolution (4IR),

¹¹ UNESCO Institute for Statistics Data: <http://data.uis.unesco.org/>

¹² Ministry of Innovative Development Subordinate Organizations: <https://mininnovation.uz/en/organizations/>

¹³ The State Committee of the Republic of Uzbekistan on Statistics: <https://www.stat.uz/en/press-center/news-of-committee/9357-activities-of-organizations-belonging-to-the-special-economic-zone-small-industrial-zone-technoparks-and-clusters-in-the-republic-of-uzbekistan-january-march-2021>

¹⁴ WIPO TISC Directory Uzbekistan:

https://www.wipo.int/tisc/en/search/search_result.jsp?country_cod e=UZ

¹⁵ "UNESCO has supported the elaboration of the draft national STI policy of Uzbekistan (2021-2030)":

<https://en.unesco.org/news/unesco-has-supported-elaboration-draft-national-sti-policy-uzbekistan-2021-2030>

¹⁶ Mapping Research and Innovation in the Republic of Uzbekistan: <https://unesdoc.unesco.org/ark:/48223/pf0000374566>

which is inevitably an ongoing challenge globally. A thriving innovation ecosystem can support innovative companies, start-ups and helps them to scale up and internationalize. Strengthening innovation ecosystems, the support infrastructure and enhancing public-private dialogue is central to improving an innovation ecosystem. Learning from other countries is a way to bring knowledge, technology and new perspectives to an ecosystem.

Upgrading the innovation ecosystem can have many benefits that can support inclusive and sustainable growth in a country:

- Public and private institutions (inter alia, incubators, accelerators, training programmes, funds and financial entities) strengthened in provision of infrastructure and support to start-ups and scale-ups;
- Enhanced coordination and linkages between national actors and partner institutions;
- Promoted entrepreneurial culture and capacities among youth;
- Enhanced competitiveness and export capacities;
- Enabled access to finance for enterprises through increased bankable business plans;
- Boosting sustainable jobs in the innovative sectors;
- Facilitated global exposure and networking;
- Fostered conducive investment climate;
- Evidence-based policy capacity in the Government to enhance industrial innovation through monitoring and mapping.

4. THE FOURTH INDUSTRIAL REVOLUTION AND DIGITAL TRANSFORMATION

4IR technologies are creating opportunities to realize economic, social and environmental gains and achieve the SDGs. The economic benefits of the adoption of 4IR technologies and business models result from an increase in revenues owing to lower operating costs, improved manufacturing process control, more reliable manufacturing and higher productivity, higher product quality and customer involvement in the production

¹⁷ The definition of small business is stipulated in Article 5 of Law N 69-II, enacted on 25 May 2000 and amended on 2 May 2012, which states that small business includes individual entrepreneurs, microfirms, and small enterprises. The Law of the Republic of Uzbekistan N 69-II on Guarantees of Freedom of Entrepreneurial Activity; 2012 Presidential Decree No. 328 on Measures for Further

process. The environmental benefits of 4IR technologies include greater resource efficiency and effectiveness, wider access to electricity and water, reduced emissions of greenhouse gases and other pollutants. They have the potential to eliminate waste through circular economy business models that consume renewable material resources and keep materials from finite stocks in an infinite loop. The social benefits of 4IR technologies include improvements in human cognition, health and physical capabilities, better food security and safety, greater worker safety, better access to food, sustainable energy and universal healthcare, enhancements in creativity and innovation, creation of a knowledge society, and opportunities for disadvantaged and vulnerable population groups as well as small and medium sized enterprises (SMEs) to participate in the real economy.

Alongside these benefits, there are multiple challenges and risks. Those include threats of a rising technology gap between countries; job losses and rising unemployment for some workers; slow institutional changes (in norms, standards, regulations); cyber security threats to industrial security; ethical issues; and threats to global peace and security arising from the military uses of new technologies. Countries with high capabilities in science, technology and innovation (STI) as well as in institutional adaptations will be the first to reap the benefits of breakthroughs in 4IR technologies.

The primary barrier to SME transition to 4IR is the access to infrastructure required for innovation. Inadequate information and awareness, finance, communication and innovation technology infrastructure but also a lack of skilled workforce and supportive Government policies are key impediments. Upgrading and developing skills and knowledge are required to meet the demands of the 4IR for new qualifications and remote, flexible and on-demand work.

5. SMES AND INDUSTRIALIZATION

Small businesses in Uzbekistan include individual entrepreneurs and micro and small enterprises.¹⁷ There is no legal definition for medium-sized enterprises in the legislation.¹⁸ Within the SME sector, micro-enterprises

Improvement of the Business Environment and Providing Greater Freedom of Entrepreneurship: <https://lex.uz/docs/4403340>

¹⁸ Asian Development Bank Institute: <https://www.econstor.eu/bitstream/10419/222764/1/1676941622.pdf>

make up 91.8% of all registered businesses and small firms around 8.2%.¹⁹

The number of registered non-agricultural SMEs stood at around 115,000 in 2001, increasing to 200,000 in 2016 (see figure 1). They accounted for 89 % of registered enterprises in 2016. The number of SMEs in the industrial sector rose from around 23,000 (18% of the total number of SMEs) in 2001 to 50,000 (22% of the total number of SMEs) in 2016.²⁰

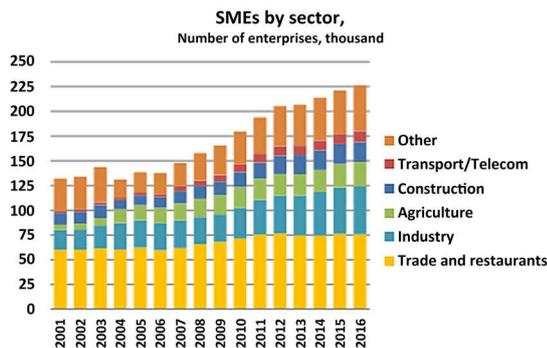


Figure 1. SMEs by sector in Uzbekistan (Source: The State Committee of the Republic of Uzbekistan on Statistics.)

The development of private micro and small enterprises (MSEs) and entrepreneurship has frequently been declared a priority by the Uzbek president. It is recognized now that small business is a driving force for economic growth, an increase in GDP and the primary solution to acute social problems such as unemployment (see figure 2), poverty – especially among women and youth – and poor quality of life.²¹ For two decades, the Government has focused on comprehensive and tailored SME support schemes, which embrace tools ranging from the creation of business plans, preferential bank lending, one-stop shop firm registration, simplified and soft tax regimes, and trade finance tools. Nowadays SMEs represent a significant part of Uzbekistan’s economy and are accepted as a means for rural development through entrepreneurial activity.²²

¹⁹ Asian Development Bank Institute: <https://www.adb.org/sites/default/files/publication/524081/adbi-wp997.pdf>

²⁰ EBRD Uzbekistan Diagnostic: <https://www.ebrd.com/publications/country-diagnostics/uzbekistan>

²¹ Asian Development Bank Institute: <https://www.econstor.eu/bitstream/10419/222764/1/1676941622.pdf>

²² Tashkent Financial Institute, Econometric analysis of small business lending: <https://uzjournals.edu.uz/interfinance/vol2020/iss5/6/>

SME sector in Uzbekistan

Source: State Statistics Committee of the Republic of Uzbekistan.

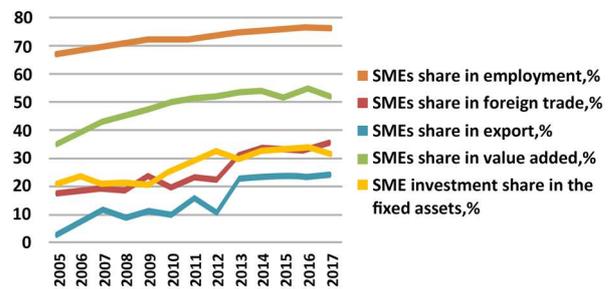


Figure 2. SME sector in Uzbekistan (Source: The State Committee of the Republic of Uzbekistan on Statistics.)

Sources of finance for SMEs in Uzbekistan are limited and can be classified as either informal or formal. Informal sources of financing include personal savings, friends, relatives, business partners and unregistered moneylenders. Self-financing is a key source of funds, which includes the profit of the enterprise, reserve financing and capital increases through the founders’ contributions. Evidence from enterprise-level surveys suggests that there is room to extend financial services to smaller enterprises. According to a 2018 World Bank/IFC Survey, 64% of surveyed firms in Uzbekistan reported using bank financing and 8% having family and friends’ support. A large proportion of Uzbek SMEs also finance their growth internally – 64% reported self-financing.²³ Financial support of small business and private entrepreneurship by banks on the basis of loans has been identified as one of the main directions of the ongoing reforms in the country. The **National Action Strategy 2017-2021** sets the task of "further expansion of lending to small business and private entrepreneurship".²⁴

Branding and industrial modernization

When it comes to transforming businesses and even whole sectors, branding is a useful tool which has proven to help ailing sectors of the economy to reinvigorate its job creation potential, particularly in the artisanal and originative industries. Accompanied by industrial modernization and upgrading, strategic brand

²³ 2019 Asian Development Bank Institute, Small and medium-sized enterprise finance in Uzbekistan: Challenges and opportunities: <https://www.econstor.eu/bitstream/10419/222764/1/1676941622.pdf>

²⁴ Decree of the President of the Republic of Uzbekistan dated February 7, 2017 No. PF-4947. On the Action Strategy for the further development of the Republic of Uzbekistan: <https://cis-legislation.com/document.fwx?rgn=94327>

management can open the door to new markets and make SMEs appeal to international customers. Building brands requires a company to fully transform itself and ensure all parts of the operation are up to the task to deliver to the product or company image, which usually requires new management structures, and more resources in innovation. A brand that does not innovate or consistently deliver on its promises will quickly disappear.

Own brand manufacturing, which is usually the most profitable segment of a global value chain, calls for market access, technological competencies and innovation. The development of enterprises aiming to reach this segment of the market requires capability enhancement through expanding functional responsibilities, from original equipment manufacturing to including some responsibility for own design and manufacture, driving the firm to then market its own designs under its own brand and reach the own brand manufacturing position.

Key considerations to keep in mind include the following:

- Industry innovations and diversification are important to support the creation of new domestic and global markets, decreasing the reliance on imported goods and raw materials;
- Quality, safety and digital infrastructures as well as the innovation ecosystem must be strengthened through effective policies and programmes;
- Government and other incentives can boost technology development and adoption, and investment promotion, ensuring access for SMEs and socio-economic inclusion for many.

6. THE ROLE OF STANDARDS AND QUALITY CONTROL IN VALUE CHAINS

Uzstandart, Uzbekistan's Government agency for standardization, metrology and certification, provides means for implementing national policy in those fields and represents Uzbekistan's interests within international and regional organizations for standardization. The agency publishes **technical regulations** and **proposed technical regulations** and foreign entries that have a manufacturing presence in Uzbekistan can participate in national standards development. As of 2019, the national quality standards system included 97 groups of standards and 40 groups

of technical guidelines, with Uzbekistan's transition to updated and international methods such as **GlobalG.A.P.** and **ORGANIC** ongoing.²⁵

Uzbekistan's participation in regional and global value chains (RGVCs) has been concentrated mainly in commodity-type intermediate goods such as base gold, fuels and cotton. Uzbekistan's strong economic growth over the last decade was driven in part by growing external trade and a changing export structure. While processed goods are progressively overtaking raw materials exports, trade remains relatively concentrated. With an aim to modernise and diversify its industry sector, the Government strived in its Action Strategy 2017-2021 to move up the value chains towards high-tech industries primarily for the production of finished products with high value added with bottlenecks identified including little price or exchange rate liberalisation, limited privatisation and enterprise restructuring and a weak banking system.

More trade agreements covering both goods and services could further boost Uzbekistan's RGVC integration. **Only nine free trade agreements (FTAs) are in force** between Uzbekistan and other countries, and the country has no FTA covering services, which could help the economy not only link up to value chains but also higher value-added activities. This is low compared to other countries in Central Asia including smaller economies such as the Kyrgyz Republic with over 20 FTAs in force. More FTAs could also ease trading, which is currently hampered by lengthy procedures at the border and frequent changes in regulations, causing the country to lag behind regional peers in terms of cross-border trade.

As measured by the **OECD Trade Facilitation Indicators**, reforms with the greatest benefit for Uzbekistan are in the areas of formalities (e.g. simplification and harmonisation of documents and procedures), governance and impartiality and availability of information. Uzbekistan's performance is similar to the average of lower-middle income countries in some areas such as the involvement of trade community, fees and charges and internal border agency cooperation, but it is below worldwide best practices in all Trade Facilitation Indicators areas. Further improving trade facilitation could help Uzbekistan become more competitive: In general, a 10% improvement in trade facilitation is correlated with gains in product diversity of about 3-4%.

²⁵ Uzbekistan Country Commercial Guide – Standards for Trade: <https://www.trade.gov/country-commercial-guides/uzbekistan-standards-trade>

Enhanced export promotion policies can help address market failures such as the lack of knowledge and limited connections to key markets among SMEs. Uzbekistan has reformed its institutional support for export promotion by creating the **SME Export Promotion Fund (EPF)** and has developed expansion plans to better reach target markets and diversify exports.²⁶

7. DYNAMIC ENTREPRENEURSHIP AND GROWTH

Given Uzbekistan’s very recent political, economic and societal reforms, Uzbekistan has increased its score to 69.9 (Rank 69 out of 190) in the **2020 Ease of Doing Business Ranking** and Tashkent ranks 37th out of 57 cities in the **Startup Friendliness Index** with an overall score of 36.1 (to compare, the highest ranked city, Berlin, scored 67.5). Uzbekistan is a newcomer to the global start-up and innovation scene, but an ecosystem is fast emerging in the country. According to multiple resources, the two main problems facing start-ups in the country are a lack of talent and funding. In this regard, a number of reforms are being carried out in the country aimed at simplifying procedures and reducing the number of required documents, costs of obtaining them and processing times. The creation of a new *Public Services Agency*, created in 2017 under the Ministry of Justice of the Republic, contributed to this.²⁷

That same year, the Government established the **Ministry of Innovative Development** aiming to accelerate innovation-driven growth in all sectors and the Entrepreneurship Development Support Fund to provide resources and guarantees for bank loans to finance projects in agriculture and agricultural product processing among others.²⁸ As a dedicated law outlining benefits for startups does not exist, only startups sitting in the subordinate divisions of the various ministries and agencies (e.g. **IT Park**, **Center for Advanced Technologies**, **Yashnabad Innovative Technopark** and **Mirzo Ulugbek Innovation Center**) enjoy reduced or waived taxes (see figure 3).

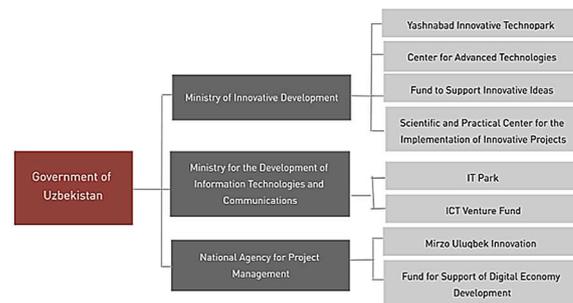


Figure 3. Ministries supporting entrepreneurship and subordinate structures (Source: Enpact, Startup Ecosystem Report, 2019)

Uzbekistan offers a wide range of opportunities for the active engagement of start-ups. Uzbekistan is rich in natural resources such as gold, copper, uranium and gas and while other areas for development and entrepreneurial activity include fintech solutions, food processing, textiles, construction, tourism and the ICT sector. Comparing figures from 2018 and 2019 points to substantial growth in the number of created small enterprises and micro-firms, lead by the industry and trade sectors. While the overall ICT sector is small compared to other sectors where small and micro-firms were created, a positive trend can be observed and there is high potential for startups in the ICT sector (see figure 4).²⁹

	Jan-June 2018	Jan-June 2019
Total	25.929	54.007
Agriculture, forestry - fisheries	3.222	4.153
Industry	5.746	12.245
Construction	3.344	5.283
Trade	6.021	21.143
Transportation-storage	1.011	1.696
Accommodation - food services	1.961	3.905
Information communication	666	904
Health social services	654	643
Other types	3.304	4.035

Figure 4. Number of newly created enterprises and micro-firms by the type of economic activity (Source: The State Committee of the Republic of Uzbekistan on Statistics, 2019)

²⁶ OECD, Uzbekistan’s sustainable infrastructure investments: <https://www.oecd-ilibrary.org/sites/5fd38a3d-en/index.html?itemId=/content/component/5fd38a3d-en#figure-d1e33552>

²⁷ Embassy of the Republic of Uzbekistan in Ukraine: [http://www.uzbekistan.org.ua/en/41-](http://www.uzbekistan.org.ua/en/41-uncategorised/publikatsii/5291-business-in-uzbekistan-easy-and-simple.html)

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²⁸ The Tashkent Times: <https://tashkenttimes.uz/finances/1315-entrepreneurship-development-support-fund-created-in-uzbekistan>

²⁹ Enpact, Startup ecosystem report, 2019: <https://www.enpact.org/wp-content/uploads/2020/11/startup-ecosystem-report-tashkent-uzbekistan.pdf>

According to surveys, banks loans are the most widely available financial source for entrepreneurs. Yet, the banking system is characterised by state interference in loan decisions and favored lending to state-owned companies. Access to finance for starting new businesses is characterised by substantial within-country differences with regions in the north/west having the widest access of around 40%.³⁰ Government support for a younger generation of entrepreneurs is provided through the state programme “Youth is our Future – Yoshlar Kelajagimiz”, which provides preferential loans with an interest rate of 7% per annum for the implementation of youth business initiatives, start-ups, ideas and projects. Retraining and improving the skills of young people is a part of the programme.³¹

Mapping and identifying growth companies

Through market analysis and mapping the innovative SME, start-up and innovation ecosystem in Uzbekistan, targeted services are delivered to specific regions. Additionally, the benefit of curriculum development for innovation institutions to improve the synergies between universities, research institutes, Government and SMEs can maximize the innovation potential through local service hubs.

Additionally, based on known potential driving sectors, comprehensive upgrading achieves results that can enhance the whole sector. By upgrading technical capacities in innovative and dynamic companies by promoting business networking and institutional partnerships, and export promotion, through upgrading and competitiveness building, the benefits and additional value added can be kept within the sector and boost the economy.

Some select activities are beneficial to help entrepreneurship in the country, particularly in terms of digitalization:

- Sectoral upgrading and innovation vision, mission and goals (including matching/mapping with existing targets and policies);
- Sectoral innovation system surveys to identify barriers to uptake of 4IR technologies and innovation systems building;
- Supporting evidence-based policy advice for ensuring the smooth structural transformation to the 4IR.

³⁰ European bank for construction and development: <https://www.ebrd.com/documents/strategy-and-policy-coordination/uzbekistan-diagnostic-paper.pdf>

³¹ UZ Daily: <https://www.uzdaily.uz/en/post/44563>



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