



**Government of the
Republic of Tajikistan**

GREEN DEVELOPMENT FOR SHARED AND SUSTAINABLE PROSPERITY

Voluntary National Review



**Ministry of Economic
Development and Trade of the
Republic of Tajikistan**

2023



GREEN DEVELOPMENT FOR SHARED AND SUSTAINABLE PROSPERITY

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GREEN DEVELOPMENT FOR SHARED AND SUSTAINABLE PROSPERITY

INTRODUCTION

Over the past 30 years, the Republic of Tajikistan has been in the phase of radical transformations of its economic system. During this period, the sectors of country's national economy have consistently emerged from the state of crisis of an initial period of country's sovereign development and developed in a relatively greater extent and positive dynamics.

In the past decade, Tajikistan has shown remarkable achievements in several socio-economic development dimensions. To date, Tajikistan graduated to lower-middle-income country status. While GDP per capita is still low, it has increased from USD 2.5 thousand in 2011 to USD 4.3 thousand (by PPP) in 2021. With the exception of 2020, when the economic growth rate fell to 4.5% as a result of the Covid-19 pandemic, the economy is growing steadily averaging more than 7% growth per year.

In general, the key sources of economic development growth were economic liberalization; first and foremost, reforms in agricultural and industrial sectors, entrepreneurship and private sector support, favorable external environment; as well as remittances, which boosted the domestic demand.

At the same time, the Republic of Tajikistan participates in global efforts to achieve initially the Millennium Development Goals, followed by Sustainable Development Goals (SDGs), and consistently endeavors to improve its development indicators.

The focus of actions for implementation of SDGs is around the following areas:

- *adaptation of sustainable development goals to national and local conditions.* To date, progress has been made in integrating SDGs into legal framework and mainstreaming policies at the national and local levels. The tasks for implementation of SDGs are integrated into the country's program activities. The National Development Council under the President of the Republic of Tajikistan operates to ensure the consolidation of activities for implementation of SDGs. 13 interdepartmental working groups have been established under the Council with the main task of analyzing the implementation process of sectoral programs and their compliance with the long-term development goals and objectives in the context of SDGs.

- *extensive cooperation to achieve SDGs.* To successfully adapt and achieve SDGs, horizontal and vertical coordination across different policy areas and levels of government is ensured, involving different stakeholders in achievement and monitoring of goals. For Tajikistan, given the demographic dynamics and new challenges, including those related to COVID-19, it is important to stimulate and promote effective partnership between state organizations, public and private sectors, as well as between the civil society organizations, leveraging the expertise and resource strategies of all stakeholders. The country is working to ensure that goals and targets are linked to action plans, which are clearly linked to the budget processes and resource allocation.

- *data collection and oversight.* The country's statistical offices develop national indicators to track progress in implementation of sustainable development strategies and elaborate the national action plans for data production.

Most goals are positively interconnected and complementary so that the implementation of same objectives leads to achievement of a number of goals.

The Republic of Tajikistan has an average of 69.7% of the best possible result for 17 sustainable development goals for 2021, ranking 78th. The greatest progress has been made on SDG 1, SDG 7, SDG12 and SDG13, for which percentage of the best possible outcome is over 90%.

Based on the country's strategic program documents, actions are being taken to ensure the economic growth and to gradually improve the level and quality of life of the population by ensuring energy independence and food security, developing the country's infrastructure and communications, and expanding productive employment.

Country's national priorities, which are defined in the main strategic document - the National Development Strategy of the Republic of Tajikistan for the period up to 2030 - are implemented

through medium term strategies and development programs flowing from them in the relevant sectors of national economy.

The ultimate goal of the NDS-2030 is to improve the living standards and population's welfare through sustainable economic development. The strategy is built around four strategic development goals. Two additional priorities were added by the President in 2018:

- Ensure energy security and efficient use of electricity
- Exit from communication dead end and turn country into a transit country (includes telecommunications services)
- Ensure food security and people's access to good quality nutrition
- Expand productive employment
- Intensive industrialization
- Human capital development as a cross-sectoral issue.

The benchmark for the country's long-term development path up to 2030 is to move towards reaching the parameters of the middle-income countries per capita. To achieve this, the current GNI of the country should be increased at least 2.3 times to ensure the annual growth rate of the economy at the level of 7-8%. At the same time, the poverty level should be reduced to 15%, extreme poverty is completely eliminated, i.e., equal to 0%.

Poverty reduction will require accelerated creation of new jobs and increased inclusiveness of economic development - with increased access of the population to economic opportunities, especially vulnerable groups (women, youth, persons with disabilities). The pace of job creation must be linked to the most productive businesses and industries amid growing markets and a more dynamic private sector. It also requires significant emphasis on the growth of investment in human capital and establishment of an appropriate social protection system.

The formation of a green growth path will increase the emphasis on resource efficiency and resource conservation, strengthening mechanisms for adaptation to climate change. In this case, opportunities for attracting green investments by the country and economic complexes will play a key role.

The social direction of green economy and human development will be focused on creating conditions for social justice for all social groups (men and women, young and old, people with disabilities, rural and urban residents, etc.), creating decent jobs, ensuring the right to equal pay for equal work, ensuring access to basic goods (food and non-food products) and services (transport, construction, housing and communal services, education, new technologies), based on their broad participation in development and monitoring of implementation of these programs.

This Voluntary National Review focuses on the achievements and possible prospects for development of the country in implementation of Sustainable Development Goals considering building an environmentally friendly and sustainable future.

Methodology for developing the Voluntary National Review

Country development outcome assessments cover a seven-year period (2015-2022).

When preparing the material, the reporting data of the Agency on Statistics under the President of the Republic of Tajikistan, line ministries, databases and publications of international and local organizations, as well as expert assessments were used. Data and information collected from various sources and methodologies were compared and refined with other sources to confirm the reliability and validity of results.

The following methods were used in this Review to assess the progress towards implementation of Sustainable Development Goals:

- preparation of an information platform/framework for assessments and recommendations based on available data and departmental monitoring reports;
- diagnostics of progress in country's development with coverage of key areas and focus of actions;
- focus group discussions with direct participation of civil society on a set of issues aimed at clarifying the results, opportunities and limitations;

- identification of key areas for accelerating development while taking into account the green transformation.

With the support of the United Nations Economic and Social Commission in Asia and the Pacific (UNESCAP), Tajikistan has established partnerships with Uzbekistan and Mongolia through partnerships, peer review and learning from each other in the preparation of the VNR. As part of this partnership, a study visit was organized for delegates from Tajikistan and Mongolia to Uzbekistan to meet and share experiences and best practices with their counterparts in Uzbekistan. Delegates included government, private sector and civil society representatives. They met with several government agencies, civil society organizations, members of parliament and representatives of the private sector in Uzbekistan. They were able to gain insight and see how various stakeholders are involved in the VNR process. While three countries are at different stages of development, they are currently striving for greener and more environmentally sound economic development. The delegate acknowledged challenges facing the decarbonization of economy, which would require major changes in production processes and behavior. Mobilizing sufficient funding for green transformation is also critical. Delegates also noted the need to further expand space for civil society, legislators and the private sector to ensure more inclusive development in the future.

The key principles of this study are:

- ensuring that validated information and data are used for analysis;
- consideration of transient processes, long-term and new emerging trends;
- the attractiveness of the content of the document and the language used for various national and multilateral structures;
- thorough elaboration of national development strategies and programs, national progress in the area of Sustainable Development Goals.

CHAPTER 1. THE PATH TO GREEN DEVELOPMENT TO ACHIEVE THE SDGs

1.1. Economic prosperity, environment, climate change

Today, more than ever before, we are aware that humanity has gone beyond the limits of the Planet and is faced with an existential threat. The pursuit of unsustainable material growth comes with significant costs. Environmental degradation, biodiversity loss, global warming is just some of the manifestations of this imbalance. The first industrial revolution, which took place thanks to the invention of the steam engine, the introduction of mechanical machines, the organization of factories and factories for mass production, radically changed the way the extraction and use of natural resources. The revolution intensified production and increased consumption. The use of coal, and later oil and gas, made fossil fuels the main source of energy. Not all countries and regions benefited from the first wave of industrial expansion. The countries of the West became more and more prosperous, while other states lagged behind in development, which formed the so-called Global South. In the 1970s, the gap between the rich countries of the West and the developing countries of the South finally began to narrow. The countries of East and Southeast Asia began to grow at an unprecedented pace. Many other countries have joined the ranks of fast-growing emerging economies. The high rates of global growth in the 1980s and 1990s seemed to indicate that a template had been found to end global poverty; however, income inequality within countries remained significant.

Unfortunately, the intensive use of material resources and the desire for economic prosperity have increased the depletion of natural capital. Billions of tons of carbon were released into the atmosphere, which led to a warming of the planet's atmosphere and climate change. Initially, the relationship between economic development and the environment was not well understood. For the first time, the interdependence between physical and natural capitals and the need to curb unhindered economic growth were convincingly shown by the Club of Rome in the fundamental study "Limits to Growth".¹ Since then, extensive research has convincingly shown that humanity is heading towards the abyss. Without breaking the link between carbon and GDP and restoring the balance between physical and natural capital, the future of our planet will remain in jeopardy. Several high-level international conferences have been held to build consensus and commitment to sustainable development. The international community has formally negotiated several landmark agreements, from the UN Conference on Environment and Development in 1992 to Rio+ in 2012. These agreements were then reflected in the 2030 Agenda and the SDGs that Member States agreed to achieve by 2030.

1.2. Green transformation is a catalyst for achieving the SDGs

Green economic transformation is an alternative to the traditional growth model. This is the way to improve the quality of life in the present, as well as for future generations. This transition can be a catalyst for accelerating growth and progress towards the SDGs. The greening program is not just an adjustment of the economy, but transformative changes that allow us to reconsider the relationship between the state, people and the environment. The scale and nature of the expected changes, as well as the close relationship with people-centered development, make green transformation a potential accelerator for achieving the SDGs. Green transformation requires a fundamental change in our approach to development and expansion of indicators to measure results. Significant changes are needed in the production of goods and services, in the nature of consumption and delivery. As an alternative to linear growth, societal changes are needed to decouple carbon intensity from economic growth. Partnership between government, business and civil society is needed.

Governments around the world are challenged to implement regulations and create incentives for investment in green growth. Businesses will have to take care of more than just short-term profits and shareholder benefits. Civil society should play a more effective role in mediating between

¹ [The Limits to Growth - Club of Rome](#)

citizens, government and business. They should also be more effective observers and, together with the media, monitor and promote the idea of more inclusive development. The society should be more active in political debates, directly or indirectly, through its representatives, participate in the activities of legislative bodies and civil groups. The transition to green development can be a reset to ensure more inclusive economic growth, improve the quality of social services, reach the most vulnerable and marginalized segments of the population and achieve consensus on a new social contract between the state and the people.

It takes time to move towards an inclusive green economy. Moreover, the politics of change often result in winners and losers and the need for compromises. Changing the economic system will lead to disruptions, but this does not mean that political action should be postponed to the future. On the contrary, steps must be taken to ensure that the transformation is fair and equitable for all. World statistics demonstrate that a green transition can further stimulate economic growth and bring more tangible social benefits. Green transformation has the potential to create a more level playing field, improve human capital and help distribute wealth more equitably.

The start of the green transition gives an advantage to those who act earlier, especially low- and middle-income countries. First, unlike rich countries, they will not have to “pollute” in production and then “clean up the environment”. Second, as more and more countries transition to a green economic system, there will be a virtuous cycle of demand for carbon-neutral products and services. Third, instead of rebuilding industries, countries with small industrial bases can start from scratch, implement appropriate policies and invest in the industries of the future.

Over the past decade, the share of manufacturing has declined in a number of low- and middle-income countries. The expansion of global value chains has led to the fact that production processes have become “fragmented”. Production is increasingly broken down into components that are produced in different locations and then assembled into a finished product. China’s growth as a global manufacturing hub has also made it more difficult for emerging economies to increase their share of manufacturing. Many low-income countries hoping to follow in the footsteps of East and Southeast Asia through the development of export-oriented manufacturing face even greater difficulties. In some regions, especially in Africa, countries have to de-industrialize before reaching high income levels. In many industrialized countries, industrial production has declined and been replaced by the service sector. The service sector has also grown in low-income countries, but the main difference is that services in these countries are at the bottom of the value chain.

In addition to a broad assessment of the production of certain goods and services with significant carbon emissions, the classification of economic activity as green or “environmentally unfriendly” is a very technical task. As research grows, new evidence emerges of the impact of growth and material development on greenhouse gas (GHG) emissions and the depletion of natural capital. However, gaps still exist, and only minimal data are available in low- and middle-income countries. From a GHG perspective, the key factor is the type of energy source and the efficiency or lack thereof in its use. Among fossil fuels, coal is by far the dirtiest source of energy. On the other hand, renewable energy sources such as solar or wind are among the cleanest. In large economic sectors, agriculture and land use, several industrial sectors and transport are considered to have a large carbon footprint. Without simultaneous improvements in energy efficiency or increased use of renewable energy sources, industrialization, population growth and urbanization will further increase greenhouse gas emissions.

At the same time, it is important to create adequate and favorable conditions conducive to the transition to a green economy. Typically, these conditions include the adoption of domestic fiscal measures, stimulus and policy reforms, international cooperation, including in the direction of assistance, the development of market infrastructure, and assistance in capacity building.

1.3. How Tajikistan can switch to a green development path?

The Green Economy Development Strategy of the Republic of Tajikistan for 2023-2037 was adopted in 2022 in Tajikistan. The development of a green economy is linked to strategic goals of the

country, including ensuring energy independence and efficient use of energy, the country's exit from the communication dead end and turning it into a transit country, ensuring food security and access to quality nutrition, accelerated industrialization and expansion of productive employment.

In this process, priority is given to the diversification and competitiveness of the national economy, effective functioning of the real sectors of the economy, improving the living standards of population, developing human capital, institutional strengthening and as a result, ensuring sustainable and high-quality development of the national economy.

It is expected that in the near future Tajikistan, using its potential for the production of electricity from renewable sources, can become the fourth largest producer of energy from renewable sources in the world. Tajikistan also has the potential to develop organic agriculture, electric transport and infrastructure, as well as green trade considering the needs of world markets.

A green economic strategy cannot be implemented in isolation. It must be comprehensive - to shape the future economic development. In order to achieve coherence between policies and strategies, existing strategic documents need to be reviewed. Part of this process is the unpacking of sectoral strategies for agriculture, industry, transport, energy, water and services. The objectives of the Green Economy Strategy of Tajikistan should be included in sectoral plans and multi-year funding programs.

At the same time, it is important to combine environmental priorities with the economic objectives of the country, that is, economic activities should provide both economic and environmental benefits.

Tajikistan has a huge potential for the production of electricity through hydropower. Currently, hydropower accounts for more than 90% of the total electricity supply. Tajikistan has set targets to increase electricity generation from 21.4 billion kWh in 2022 to 27.6 billion kWh in 2025. In addition to increasing hydropower generation, the government also plans to increase the share of solar power and reduce distribution losses.

Increasing the availability of renewable and cleaner energy sources must go hand in hand with changes in industrial processes, so that more businesses are connected to the grid. It will also require the choice of investments in the grid-connected industry. Consumer behavior will also play a crucial role in stimulating demand for products that are less raw material-intensive and that can be reused and recycled. Regulatory frameworks for economic sectors should include incentives and standards. The Government planned to upgrade infrastructure and help industry modernize to improve resource efficiency. Modern methods can be applied in crop production, animal husbandry and agriculture. Drip irrigation and increased use of technologies in water management are expected to be a priority. These measures will be combined with incentives for more efficient use of arable land.

The green agenda should go beyond the productive sectors. In many countries, services make up the majority of total economic output. Compared to the past, people consume more services. There has been an increase in new services, whether software, entertainment, or travel and recreation. Before the pandemic, tourism accounted for 10% of global GDP and jobs. About one in four new jobs were created in this sector, directly or indirectly.² Despite the quality and standards of work, digitalization and expansion of platforms have created new forms of employment and can help reduce carbon intensity. The current wave of digitalization can be used to improve services, minimize environmental impacts and reduce carbon emissions.

With a higher baseline, the planned emission reduction targets are more ambitious.

Compared to 2015, fossil CO₂ emissions in Tajikistan in 2021 were 1.9 times higher and amounted to 10.13 million tons of CO₂, which is 0.03% of the global share and is equivalent to 1.05 tons of CO₂/person/year in terms of per capita is below the average per capita in the world (about 5 tCO₂ / person / year)³.

On October 12, 2021, Tajikistan submitted to the Intergovernmental Panel on Climate Change (IPCC) revised Nationally Determined Contributions (NDC), which stated the intention to reduce

² [Economic impact of travel and tourism | World Travel and Tourism Council \(WTTC\)](#)

³ CO₂ emissions of all world countries/JRC Science for policy report, 2022

emissions by 2030 to 60-70% of the 1990 baseline. With external support, Tajikistan intends to reduce emissions to 40-50% of the 1990 baseline. Although the revised 1990 baseline is much higher (35.5 MtCO₂eq) than the previous estimate (25.5 MtCO₂eq), the government is confident based on the current trend that the target will be reached.

Energy consumption in Tajikistan accounts for almost 45% of greenhouse gas emissions; followed by agriculture - 37.2%. CO₂ emissions from industrial processes account for 13% of the total. However, between 2015 and 2021, CO₂ emissions from industrial processes in Tajikistan increased by more than 72%. This reflects the growth and expansion of economic production. With the increasing share of the manufacturing industry, manufacturing-based emissions from this sector are likely to increase in the coming years. Similarly, emissions from construction and transport will also rise. Since 2015, energy consumption in all these sectors has increased significantly. From 2015 to 2020, energy consumption increased by 121% and 37% in industry and services, respectively. In the transport sector, growth was almost negligible, and in the agricultural sector, energy consumption decreased by 45%.

Statistics show that CO emissions per unit of value added of production (SDG 9.4.1.) are increasing in Tajikistan. At 1.08 kg in 2019, Tajikistan's CO₂ emissions were much higher than those of its neighbors in Central Asia.⁴ In Central Asia, there is a downward trend in CO₂ emissions from manufacturing, but in Tajikistan, after a sharp increase since 2014, this trend has only begun to plateau. Part of the reason for this may be the increased use of coal in industrial production, especially in the cement industry. Coal reserves in the country are estimated at 4.3 billion tons. In 2022, the industry produced more than 2.4 million tons of coal, over the past five years, production volumes have doubled. More than half of the total sales came from the district heating plant in Dushanbe; small batches of coal were exported to Pakistan and Uzbekistan. By 2030, the government plans to increase coal production to 10.4 million tons. This will lead to an increase in GHG emissions.⁵

To achieve higher sustainability within the industrial strategy, Tajikistan must urgently take measures to reduce CO₂ emissions. Similarly, emissions of other pollutants from the manufacturing sector need to be reduced. In general, for green industrialization in Tajikistan, it is necessary to improve environmental monitoring, improve waste and water management, and make changes to the regulatory framework - with less impact on the environment.⁶

Studies are being carried out in Tajikistan, but they do not sufficiently reflect the state of the environment, biodiversity and the impact of the environment on public health. As already mentioned, agriculture and land use in Tajikistan are the main sources of GHG emissions. Since the country is predominantly mountainous, there is not enough arable land for agriculture. The country generates 60% of Central Asia's water flow, but there is competition in the consumption of water for energy production, domestic needs and irrigation. Over 80% of the population has access to drinking water, but less than 50% have access to safe drinking water. Although this figure is lower in rural areas, the proportion of the population with access to sanitation is over 96%. Gaps still exist in access to water and sanitation in health centers and schools.

For many years, there has been a loss of biodiversity in Tajikistan. A recent analysis showed that about 38% of native flora and fauna species are threatened with extinction, and 50% are considered vulnerable.⁷ Forests cover only 3% of the total land area, and approximately 20% of the forests are plantations. In 2018, Tajikistan joined the global Bonn Challenge and pledged to restore over 66,000 hectares of degraded and deforested land by 2030. Tajikistan also adopted the Astana Resolution on increasing forest cover, stopping desertification and land degradation.⁸

⁴ CO₂ emissions per unit MVA were 0.9 kg in Kazakhstan, 0.6 kg in Kyrgyzstan, 0.2 kg in Turkmenistan and 0.8 in Uzbekistan. [UNIDO Statistics Data Portal](https://data.unido.org/en/data-visualisation/data-portal)

⁵ Tajikistan Industry Development Strategy.

⁶ https://unece.org/DAM/env/epr/epr_studies/ECE.CEP.180.Eng.pdf

⁷ Arkadiusz & Świercz et al (2020). The Red Book of Vascular Plants of Tajikistan - the main territory of the global hotspot of biodiversity "Mountains of Central Asia". Scientific reports. 1,627 taxa of which 23 are extinct, 271 are critically endangered, 717 are critically endangered and 639 are vulnerable.

⁸

In 2016, Tajikistan adopted the National Biodiversity Strategy and Action Plan until 2020 under the Convention on Biological Diversity. One of the main challenges the country faces in restoring biodiversity is limited funding. Tajikistan has also signed the Aarhus Convention.⁹ The country actively participates in the forums under the UNECE Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters. However, Tajikistan needs to improve the collection and exchange of environmental data and continue to build human and institutional capacity in the field of monitoring and reporting on natural resource management and the environment.

In addition, Tajikistan has developed a National Climate Change Adaptation Strategy until 2030, which aims to manage and reduce the risks associated with climate change. Among the risks in Tajikistan are floods, avalanches, droughts and other natural hazards that put the population at risk and undermine the country's food security.

Tajikistan has already developed a framework for green development that provides a solid foundation. Looking ahead, the country can focus on the following priorities to support and accelerate the transition to a greener economy:

- implementation of legislation and practices that do not harm the climate and the environment in all sectors of the production and services of the economy. In addition, it is important to provide the necessary incentives for the private sector to adopt such practices, actively seek to increase green public finance and use it to attract more green finance from the private sector as well as from development partners;
- expanding environmental impact assessment and green economy to assess policies and related budgetary allocations to ensure they support decarbonization efforts. It is also important to build national capacity to conduct such policy assessments;
- introduction of greening public procurement processes, introduction of climate and environmental safety requirements for goods and services purchased in all sectors, including infrastructure. It is important to establish guidelines and rules to encourage circularity by reducing overconsumption, reuse and recycling;
- strengthening inter-agency cooperation to overcome gender and social inequality in access to all types of resources, new technologies and methods of the green economy in accordance with the specific needs and interests of gender groups, representatives of different generations, people with disabilities, representatives of ethnic minorities and other vulnerable groups.

CHAPTER 2. ECONOMIC FOUNDATIONS FOR GREEN DEVELOPMENT

Establishment of macroeconomic conditions for sustainable development

The Republic of Tajikistan is implementing ambitious market reforms for eight years already, which are outlined within the framework of National Development Strategy for the period up to 2030. The country has entered a new stage of development, for which the three principles of sustainable development - prevention, industrialization and innovation - have been identified, which define peculiarity of country's development in a rapidly changing geopolitical, geoeconomic and technological picture of the modern world.

Efforts are now focused on strategic objectives that are aimed at improving living standards.

⁹ National report on the implementation of the Aarhus Convention, 2017.

[<https://aarhusclearinghouse.unece.org/national-reports>]

[http://www.unece.org/fileadmin/DAM/env/pp/a.to.j/AnalyticalStudies/EECCA_study_AJ/EECCA_study_EN_Final.pdf]

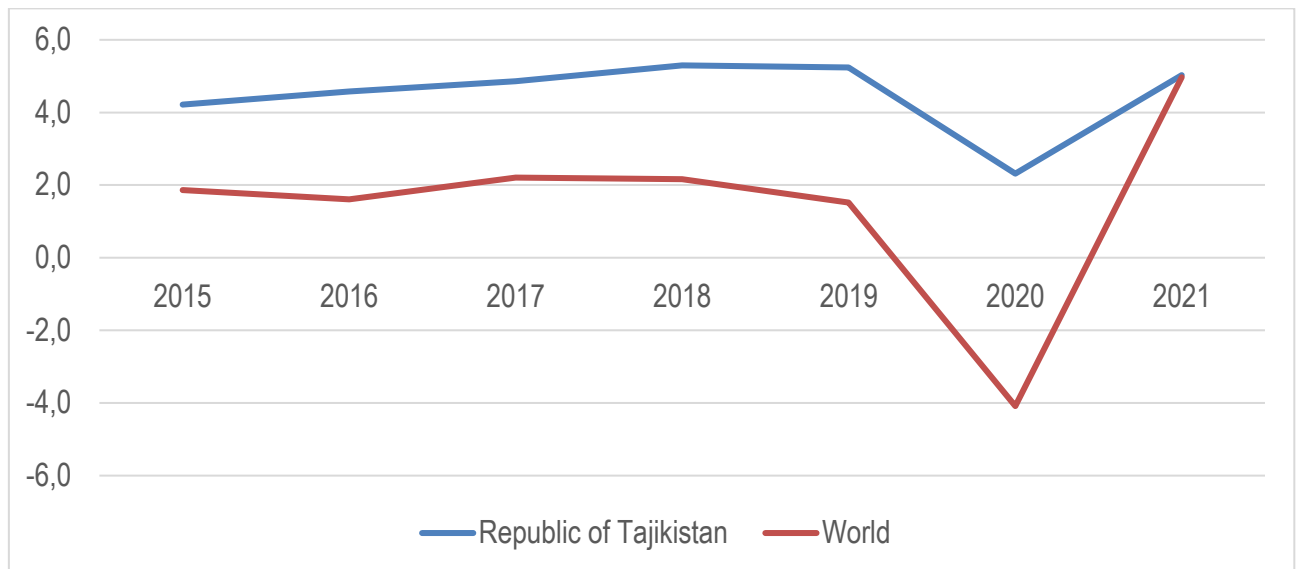
[https://unece.org/DAM/env/pp/a.to.j/AnalyticalStudies/2013_EECCA_Standing/2014_EECCA_standing_Eng_062014_final.pdf]

Consistent implementation of specific economic and management reforms has led to sustained economic growth averaging the level of 7.3%. Only in 2020, economic growth slowed down sharply due to the COVID-19 pandemic; nonetheless, in subsequent years, growth rates again became quite high - more than 8%.

Annual per capita GDP growth is well above the world average. While in 2020 most of the world's economies showed negative dynamics, Tajikistan achieved positive growth dynamics. Overall, growth fluctuations are largely due to external shocks.

Figure 1

GDP growth rate per capita, % (SDG 8.1.1.)



Source: WDI (World Development Indicators)

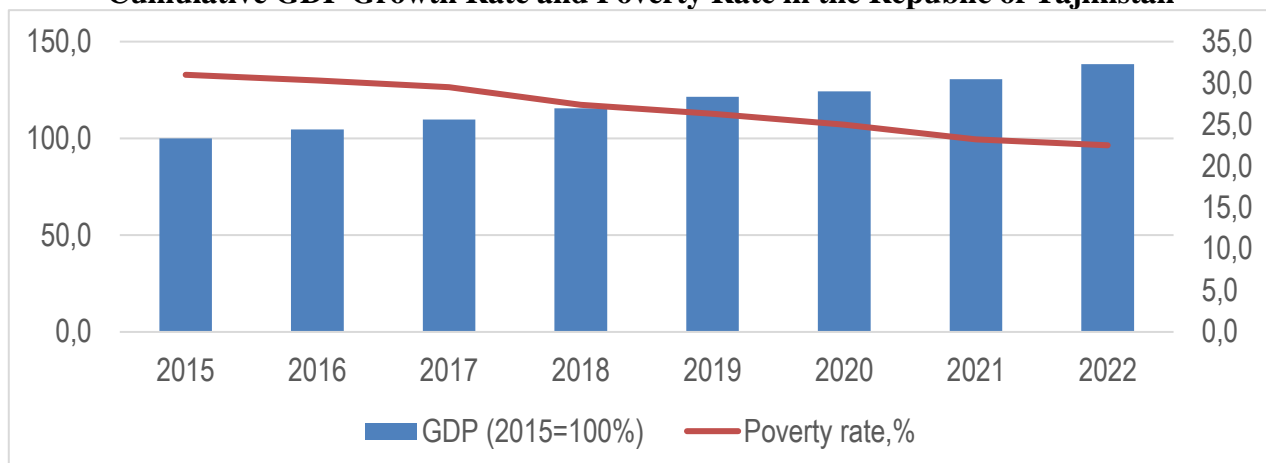
The COVID-19 Preparedness and Response Plan in the Republic of Tajikistan, including counter-cyclical measures, was implemented in two main packages of measures: the response package for the health and social protection sector, as well as an economic package for food security and business protection.

The country is experiencing a high 2% annual growth in the main productive force of society - the population of which more than 58% are of working age.

At the same time, the growth rate of GDP per capita is more than double that of the population, which created the conditions for an increase in living standards. As a result, there has been a steady decline in poverty, from 31% in 2015 to 22.5% in 2022 (SDG 1.2.1.).

Figure 2

Cumulative GDP Growth Rate and Poverty Rate in the Republic of Tajikistan



Source: Agency on Statistics under the President of the Republic of Tajikistan

As part of ensuring macroeconomic stability, the country's development was in a manageable range:

- inflation throughout the entire period was below the monetary policy target of 7%. The average value of the consumer price index in 2015-2019 was 6.2% (from December-to-December last year), which is within the manageable range (± 2 percent of the target value). Only in 2020, this level was slightly above the upper limit (at 1.4 percent), which was mainly due to financial and economic instability on a global scale and the impact of the pandemic, which were not influenced by monetary policy;

- the state budget deficit is decreasing (from 9.7% of GDP in 2016 to 2.6% in 2019), which was influenced by measures taken in the field of fiscal policy. Only in 2020 - due to the pandemic, the trend was reversed, the amount of tax revenues to the budget decreased (due to a decrease in economic activity), the amount of budget expenditures, in turn, increased, especially to support healthcare and social protection;

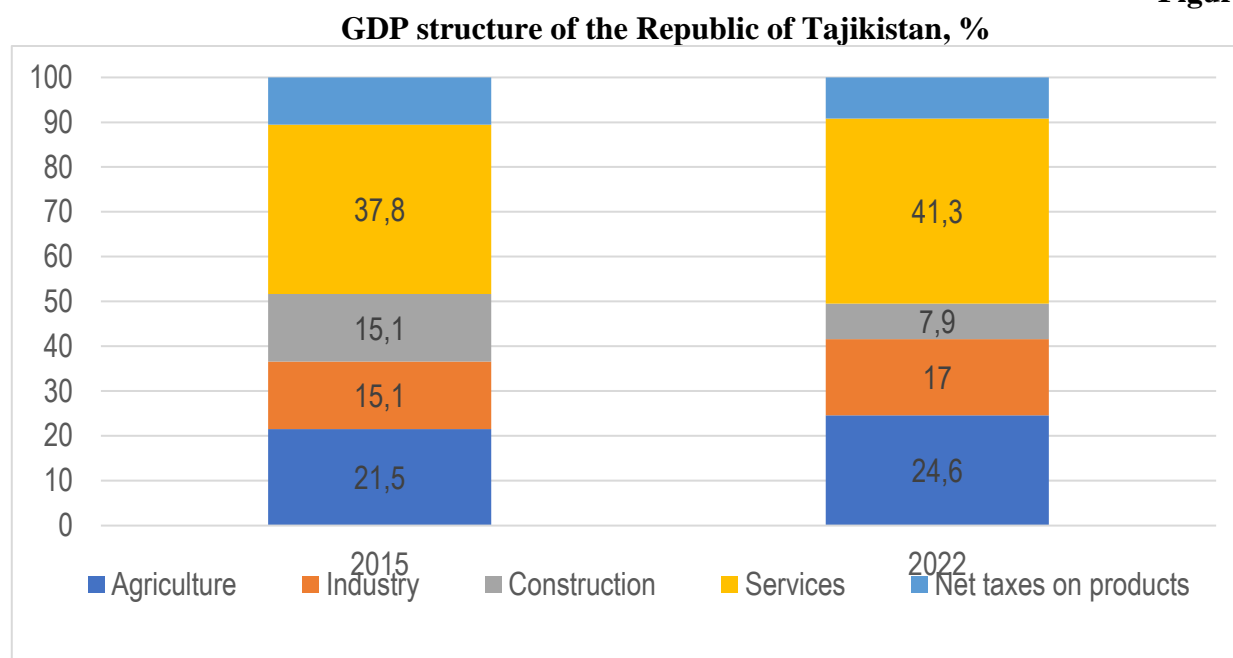
- the size of public debt is below the maximum level of 60% of GDP throughout the entire period (average about 40%).

Over the past five years, population's welfare has gradually improved, the income of the population has grown 2.1 times. The average salary has been increased by 1.5 times, and the pension - by 1.3 times.

The efforts of the country's Government for the period up to 2030 are aimed at ensuring annual GDP growth rates of at least 7-8%, contributing to the dynamic poverty reduction and expansion of the middle class. The solution to this problem is associated with accelerated industrialization and inclusive development trajectories.

The contribution of industrial sectors and services to economic growth is increasing, which creates the basis for the subsequent industrialization of the country.

Figure 3



Source: Agency on Statistics under the President of the Republic of Tajikistan

About 70% of GDP is produced by the private sector. The private sector makes a significant contribution to the process of accelerated industrialization of the country, the creation of manufacturing enterprises, social facilities and the creation of new jobs.

Large-scale reforms of the public administration system are focused on minimizing government interference in business activities. Institutional reforms to improve the business environment and

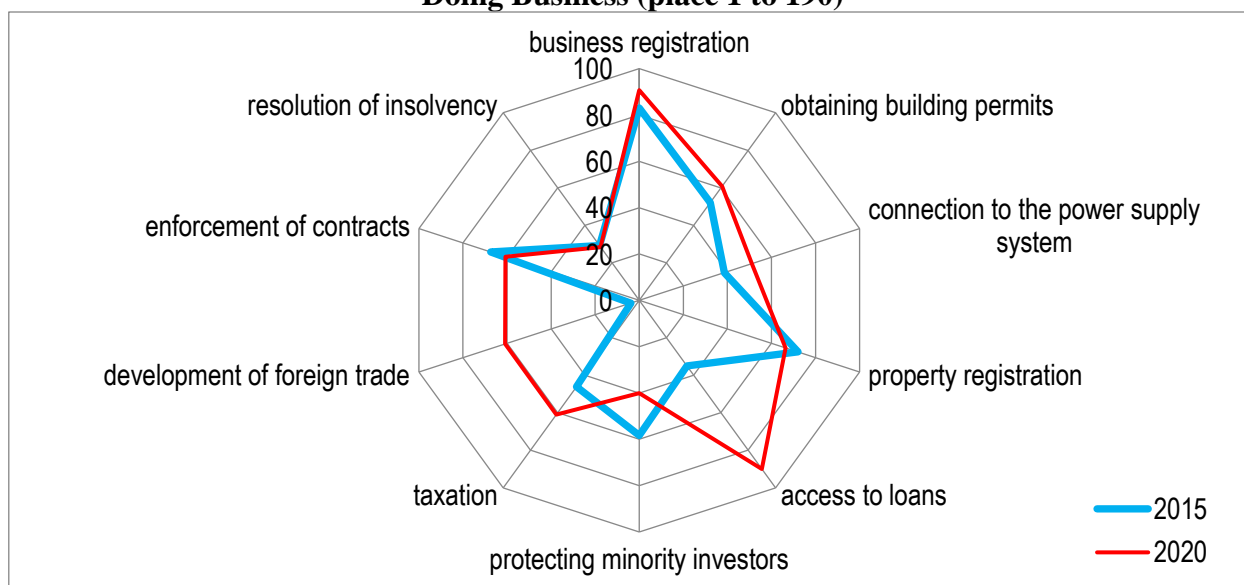
investment climate over the past five years have been aimed at improving the legislative framework, introducing corporate governance principles, strengthening the rights of creditors and borrowers, eliminating administrative barriers and reducing the costs of doing business.

The private sector was granted 120 tax and customs benefits and privileges, the number of structures involved in state registration of entrepreneurial activity decreased from 4 to 1, and services in this direction were established free of charge.

The result of significant reforms was recognition of the Republic of Tajikistan by the world community as a reformer by the country and inclusion in the list of top reformers in the World Bank report «Doing Business» for the fourth time.

Figure 4

Achievement of the leading edge of reforms of the Republic of Tajikistan in the rating of Doing Business (place 1 to 190)



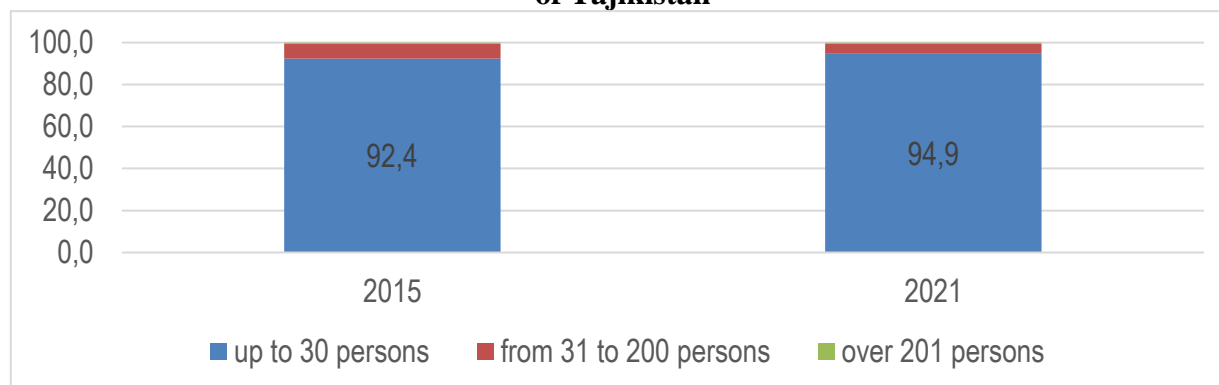
Source: www.doingbusiness.org

However, private sector's activity is not sufficient for the growth of economic diversification and sustainable development of the country. The volume of private investment does not exceed 5% of the country's GDP, which requires significant increase in incentives for the growth of entrepreneurship.

The private sector is dominated by small enterprises, the growth rates of medium and large companies and their contribution to employment are still very low.

Figure 5

Structure of operating non-state enterprises by the number of employees in the Republic of Tajikistan



Source: Agency on Statistics under the President of the Republic of Tajikistan

The structure of the tax regimes did not quite create momentum for small businesses to move out of the "small" category and increase the number of jobs. But, from the beginning of 2022, a new edition of the Tax Code was introduced, in which the total number of taxes was reduced (from 10 to 7), tax rates were reduced - VAT (from 18% to 15%), social tax (up to 20%). In the strategic plan, tasks were set to consolidate intersectoral actions aimed at improving the business environment, including in the direction of developing the regulatory legal framework for protecting the rights of owners and hired labor, developing the "state order" system and social responsibility of business.

In general, for the period since 2015, 1% of GDP growth accounted for an average of about 0.2% of employment growth, which indicates a low labor intensity of economic growth.

At the same time, within the framework of climate policy, the interest of enterprises in moving towards reducing emissions and increasing climate resilience has yet to be formed.

It is important for the Republic to encourage the integration of private businesses in global and regional value chains, inclusively green value chains based on existing production capabilities.

By 2030, it is projected that efforts will be focused on improving the efficiency of resource use to ensure sustainable economic growth. The private sector will need to have a greater contribution to the growth of domestic investment, employment and exports of the country. Among other things, it will be important to help attract more foreign direct investment by creating favorable conditions at all levels and in accordance with the country's development priorities as well, which will contribute to the transfer of technologies on mutually agreed terms and the growth of productive employment, including among women.

The Republic of Tajikistan is still a low-income per capita country and is moving towards joining the group of middle-income countries.

The republic's economy remains vulnerable to potential risks, including new macroeconomic shocks, which became more pronounced in 2020 (during the COVID-19 pandemic), which imposes additional obligations on the country's government to increase social achievements in development.

Tajikistan is included in the group of countries with an average level of human development and ranks 122 in the ranking of countries in terms of HDI = 0.685. Compared to 2015, Tajikistan in the ranking of countries has risen by seven steps, the annual growth rate was 0.68%. By 2030, the goal has already been set to move into the group of countries with a high level of human development.

Considering demographic trends in general, over the 31 years of state independence, 3,430 new educational institutions for almost 1.5 million students and 2,827 medical institutions were built and put into operation, which significantly improved access to quality education and healthcare.

The country can and will reap the demographic dividend from a large young population by offering productive employment opportunities, encouraging economic initiatives and innovation, and building in-demand knowledge and digital skills.

At the same time, it is necessary to strengthen intersectoral mechanisms for integrating environmental policy into a broader concept of sustainable development of the country, ensuring GDP growth and balanced economy. It will be important to assess the impact of environmental factors on the proposed public spending, the formation of a culture of production and consumption considering the green aspect of development, increasing incentives for the private sector to consistently transition to green production methods and the introduction of Clean Development Mechanisms, the creation of monitoring systems long-term results in all aspects of environmental protection and rational use of natural resources.

2.1. Development of renewable energy sources

The policy in the field of green energy, in general, is aimed at creating conditions that stimulate the development of the use of renewable sources for energy production (RES) based on hydropower, solar and wind energy.

Energy development in the Republic of Tajikistan is determined by a key strategic document - the National Development Strategy of the Republic of Tajikistan for the period up to 2030, which has already been embodied in the process of implementing the Medium-Term Development Program of the Republic of Tajikistan for 2016-2020 and the Medium-Term Development Program of the

Republic of Tajikistan for 2021-2025, in which the target direction of the development of the sector is indicated, which provides for the development of the country's electricity sector based on the concept 10/10/10/10:

- increase in the design capacity of the electric power system up to 10 GW;
- annual export of electricity to neighboring countries up to 10 billion kWh;
- ensuring the diversification of the capacities of the country's electric power system by at least 10% (increasing the capacities of other energy sources, including other renewable energy sources);
- reduction of electricity losses in the country up to 10%.

Long-term development priorities are related to the further development of renewable energy both to reduce poverty and ensure access of the population, especially rural, to social benefits, and for the overall development of the economy, including private entrepreneurship.

The basis of Tajikistan's energy sector is hydropower, which is considered an important factor in the sustainable development of the country. In this regard, in the context of the development of a green economy in Tajikistan, hydropower is presented as the basis for achieving energy independence and as a means of ensuring environmental sustainability.

In terms of specific indicators of hydropower potential per square kilometer of territory (3696.9 thousand kWh per year / km²) and per capita (65.9 thousand kWh per year / person), the country ranks first and second in the world, respectively. In terms of specific indicators of hydropower capacity per square kilometer and per capita, Tajikistan ranks first and second in the world, respectively. In this context, clean energy production is in line with the green economy process in the country.

More than 90% of electricity is generated by hydroelectric power plants in the country. Electricity generation by operating HPPs in Tajikistan amounted to about 19.9 billion kWh in 2022. In general, the electric power industry accounts for about 5% of GDP and 20.9% of the country's industrial output. The electric power network provides 99.5% access to electricity for the population with a 4.5% share in the country's export structure.

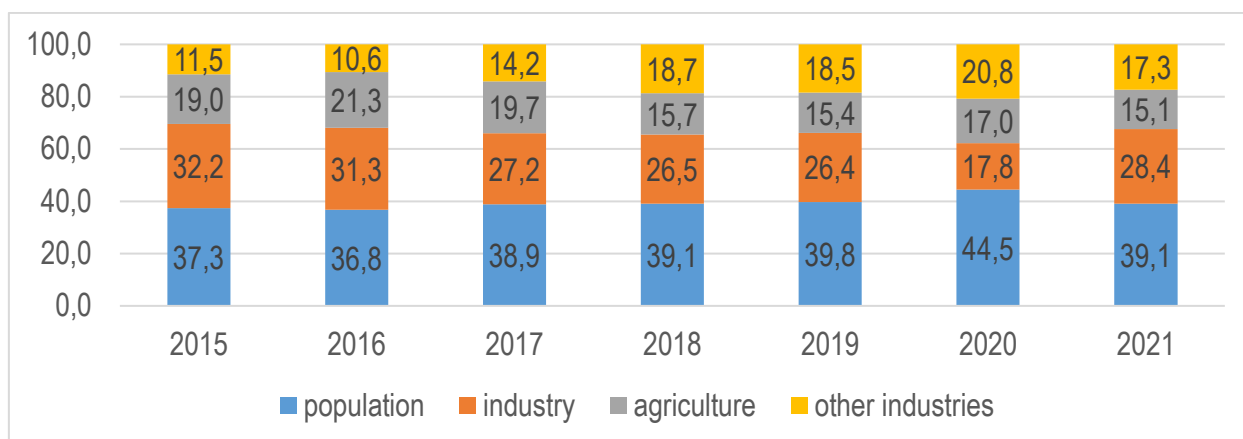
Electricity generation increased by 25% between 2015 and 2022, largely driven by growth in hydropower generation.

It should be noted that in 2022, 2.1 thousand kWh of electricity was produced in Tajikistan per 1 inhabitant, which is 6% higher than the level of 2015.

With the increase in electricity production, its domestic consumption has increased accordingly. The main consumer of electricity in the country is the population. Among the sectors of the economy, the largest volume of electricity consumed is in industry, which accounts for 28.4% of the total volume of electricity consumed by industries, 15.1% falls on agriculture, the remaining 17.3% falls on other sectors of the economy, including construction, transport, housing and communal services.

Figure 6

Structure of electricity consumption in the Republic of Tajikistan, %



Source: Agency on Statistics under the President of the Republic of Tajikistan

According to available estimates, the value of the indicator of sustainable energy supply of the population tends to increase, especially for the rural population. Over 2,000 MW of additional electrical capacity has been installed since independence, improving access to electricity.

Reliability of supply of the rural population for the period 2015-2021 increased – the proportion of the population with access to electricity in rural areas increased to 98% (SDG 7.1.1.). The time of outages and the number of accidents is being reduced due to ongoing measures to modernize and expand the power grid facilities.

In Tajikistan, in winter, due to a decrease in inflow, a limit is introduced on the supply of electricity, mostly in rural areas. Efforts are aimed at increasing energy capacities to ensure the system's ability to have year-round access to sustainable energy supply to all regions of the country.

But, of course, SDG target 7.2 “By 2030, significantly increase the share of energy from renewable sources in the energy balance” is of great importance for regions that do not have year-round access to electricity, adaptation to climate change, and solving important social problems.

The Republic retains zones of decentralized energy supply (for example, some high-mountainous territories of GBAO, the Rasht and Zeravshan valleys), which, due to the low population density and the dispersion of settlements throughout the territory, cannot be provided with energy from centralized energy generating sources. Therefore, in areas of decentralized energy supply, the all-round development of non-traditional renewable energy is a recognized need - this is the energy of small rivers, solar energy, geothermal water, wind energy and bioenergy.

On the basis of a public-private partnership, in 2022, it was possible to connect the GBAO power grid to the national grids of Tajikistan, improving the access of the population of the region to green and reliable electricity all year round. The republic has created the practice of public-private partnership in the field of energy through the creation of Pamir Energy, which provides clean electricity to over 98% of households in GBAO - more than 227 thousand people. Efforts are aimed at providing the remaining 2% of the region's population with electricity.

Case 1. In recent years, the practice of using hybrid stations has been formed. Thus, a private company operating in the field of renewable energy sources LLC Tekhnologiyakhoi Sabz offered the use of hybrid stations to homeowners of the Mastchokh high-mountain district, Sughd region. In the summer, when the flow of water in the river is sufficient, residents use the hydro turbines of small hydroelectric power plants. In winter, a solar power plant is connected to the energy system of this area. Thus, the combination of two types of stations, unique for this area, allows residents to receive uninterrupted electricity in their area.

Considering the objectives of economic growth in general, the demand for electricity will grow, therefore, tax incentives are being formed in the country to increase the capacity of hydroelectric power plants - during the construction of a hydroelectric power station and on the territory of the Republic of Tajikistan, the construction customer and the general construction contractor can be fully or partially exempt from taxes directly related to construction - value added tax, tax on road users, income tax (tax under the simplified regime), tax on vehicles, taxes on real estate, social tax in relation to foreign citizens directly involved in the construction of a hydroelectric power plant, state duty for registration of issue prospectuses of non-government securities carried out in connection with the construction of a hydroelectric power station, as well as suppliers of goods (works, services) for the construction of a hydroelectric power station in the territory of the Republic of Tajikistan may be fully or partially exempt from VAT.

At the same time, the country has a high need to improve energy efficiency and energy conservation, which manifests itself as an effective, less capital-intensive and quickly feasible direction for solving energy problems. But electricity losses are still a concern. Energy losses in Tajikistan at the stages of its production and transportation are up to 15%, and in the consumption sector - up to 30%.

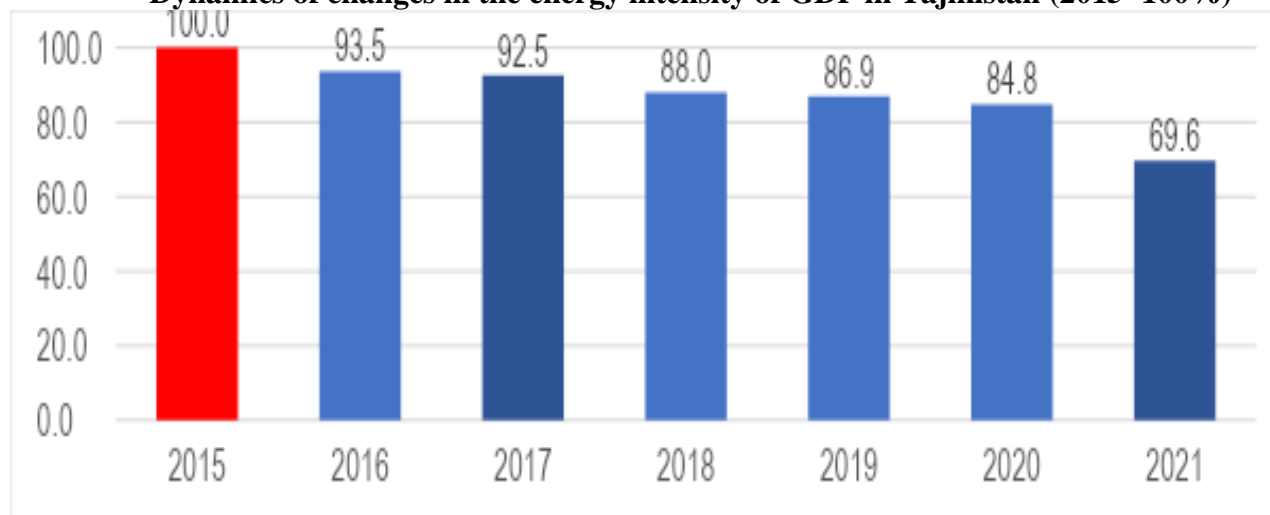
It is expected that efforts will be intensified to create a unified and centralized billing system, connect smart meters, which will allow to reduce electricity losses by 9% by the end of 2025 and ensure the full collection of funds for the use of electricity, as well as the fruitful use of the available resources of the sector.

The energy saving potential in the country is about 2.5 billion kWh ¹⁰.

At the same time, the country has significant reserves for improving energy efficiency. The level of energy intensity of GDP in Tajikistan is decreasing, amounting to 0.14 kWh of electricity consumption per 1 Somoni of the country's GDP (target SDG7.3.).

Figure 7

Dynamics of changes in the energy intensity of GDP in Tajikistan (2015=100%)



Source: Agency on Statistics under the President of the Republic of Tajikistan

Notwithstanding, energy intensity varies significantly across the regions of the country, which shows the need to improve the energy efficiency of the economy, including in those regions that host energy-intensive industries related to the production of aluminum and cement.

The Republic of Tajikistan in 2021 ranked 74th in the Energy Trilemma Index (search for a balance between three categories: energy security, equal access to energy supply and environmental sustainability). The country demonstrates the best result in the field of energy security - entering the top 10 countries that have made progress in the field of energy security¹¹.

Regarding climate change, the energy sector has not remained aloof from the processes taking place in this direction. It is obvious that the water used in power plants comes from glaciers, which, unfortunately, have been melting rapidly in recent years. According to experts, the glaciers of Tajikistan have lost 30 percent of their volume over the past century. On December 14, 2022, the UN General Assembly, at the initiative of Tajikistan, declared 2025 the International Year for the Protection of Glaciers, and March 21st - the World Glacier Day. This is the 5th global initiative of Tajikistan, implemented on a global scale, allowing the international community to take joint action on the sustainable use of water resources and climate change mitigation.

It is important for the country to form a long-term plan for the development of hydropower.

Meanwhile, the large-scale use of renewable energy sources, primarily solar energy, in Tajikistan (especially in rural areas and mountainous regions) will not only improve the energy supply of the population, improve the living standards of the population, preserve the environment, but also contribute to the development of new modern technologies, creation of science-intensive production in the country.

¹⁰ Report on the results of the analysis of the state of the energy sector, energy production from RES in the tourism sector at the community level in the Republic of Tajikistan// Project of the European Union program SWITCH Asia II "Promotion of energy efficiency and renewable energy production in the tourism sector at the community level in Central Asia", Dushanbe 2021

¹¹ [World Energy Trilemma Index 2022, published by the World Energy Council](#)

It will be important to carry out the development of non-traditional renewable energy sources in Tajikistan to green the energy sector of the country in the following areas:

- improvement of legislation and development of regulatory legal acts in the field of efficient use of green energy and energy conservation;
- expanding the installation of solar panels at social and economic facilities, including in buildings and street lamps of buildings and structures, especially in rural areas;
- introduction of solar attachments in boiler heat supply systems.

In this process, it will be important to increase the role of the private sector in facilitating the adoption of new technologies that can be applied to combat climate change, building on green finance solutions.

2.2. Improving sustainability of the agri-food system

Agriculture is an integral part of the green economy. Greening the economy through agriculture means improving food security while reducing the consumption of natural resources by improving efficiency at all stages of the food production chain.

Efforts are aimed at eradicating hunger and poverty in the Republic of Tajikistan, ensuring food security is an important strategic priority for the development of the country.

The country's agriculture must achieve intensive sustainable development to meet the challenges of growing global and domestic food demand.

This industry is the backbone of the economy of Tajikistan, it accounts for 24.6% of GDP and 19% of exports, it employs more than 60% of the population of the republic.

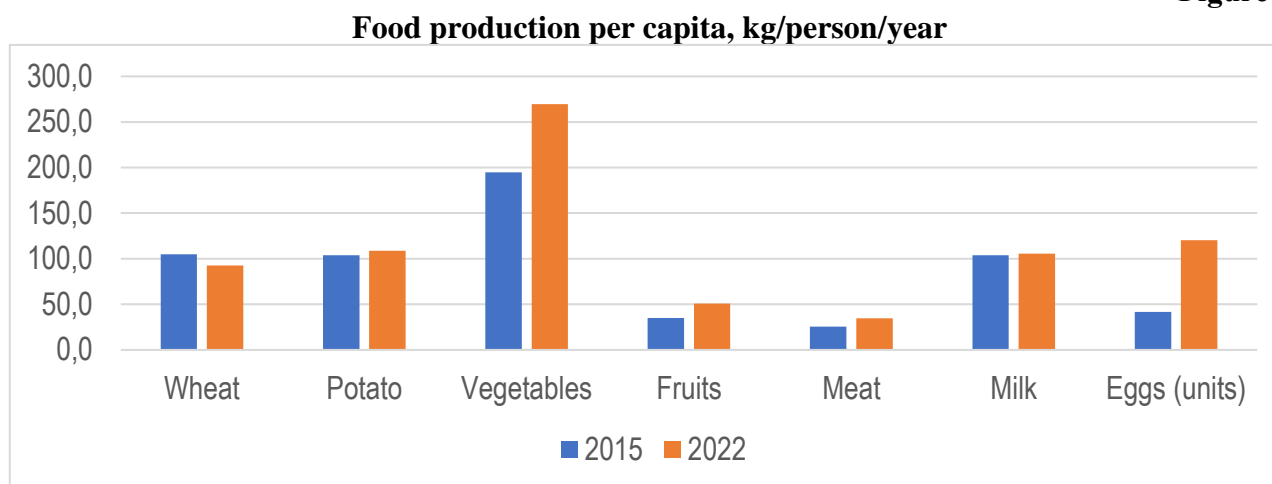
One of the directions of the reforms in the country is related to the trend towards a decrease in the share of agriculture in GDP and the share of people employed in it, the convergence of the difference between these two shares (as an indicator of the income gap between urban and rural areas, reflecting the degree of success of the transformations).

In the long term, the growth of the service sector in rural areas is very important, which would become labor-intensive enough to absorb the surplus of labor generated in agriculture.

Throughout the past years of development, even despite the pandemic, agriculture has remained one of the main sources of the country's economic growth. For the period 2015-2022, the annual rate of agricultural production was on average at the level of 6.2%, the volume of agricultural production increased by 1.6 times ¹².

The growth rate of food production in the country exceeds the growth rate of the population, which proves the increase in per capita production of most types of food in 2015-2022.

Figure 8



Source: Agency on Statistics under the President of the Republic of Tajikistan

¹² See: Agency for Statistics under the President of the Republic of Tajikistan. Food security and poverty.2023, p.8-9.

The country has developed and approved a program to create favorable conditions for the introduction of best agricultural practices. The program is focused on creating a legislative, financial and technical basis for the introduction of good agricultural practice in the management and production of agricultural products to comply with international food safety requirements provided by the International Standard Global G.A.P.

The Government of Tajikistan has initiated a number of reforms in the field of agriculture, private sector development, land use, the food security system, the development of an appropriate regulatory framework. Tajikistan still faces a number of challenges in transforming food systems to be sustainable, contribute more to human well-being and protect the environment.

This sector continues to be largely underdeveloped and the country is therefore dependent on imports to meet its food needs, especially for wheat.

Tajikistan also imports more than 50% of agricultural inputs such as seeds, seedlings, thoroughbred animals, fertilizers and agricultural machinery¹³.

The annual import of wheat grain is 1 million tons for recent years and the volume of wheat flour is 68 thousand tons¹⁴. Imports of wheat flour account for 40% of total domestic demand. The main export commodities are cotton, vegetables and fruits. Export earnings cover about 70% of the cost of imported wheat, flour and mineral fertilizers. Food imports to Tajikistan account for about 3.1% of the country's total GDP.

So far, the demand for products in almost all categories of consumption does not reach rational norms. Only potatoes and vegetables are covered taking into account domestic production. For all other considered types of food, the level of self-sufficiency is insufficient.

The goal was set to achieve food self-sufficiency up to 70% by 2025, including up to 80% for basic food products (wheat, potatoes, vegetable oil, rice)¹⁵.

The state of the land fund and water infrastructure is the most important factor in the efficiency of the country's agricultural sector and one of the fundamental indicators of the ecological state of the environment.

The population growth rate outpaces the increase in the area of irrigated land, which has led to a reduction in the period from 2016 to 2022 in the area of irrigated arable land per inhabitant of the country from 0.07 ha to 0.05 ha.

In recent years, despite the negative impact of external factors, aridity and limited food imports, some progress has been made in improving food security and saturating the domestic market with agricultural products. In particular, in 2022, grain production was brought up to 1 million 600 thousand tons, potatoes - up to 1 million, vegetables and fruits - up to 3 million 200 thousand tons¹⁶. The production of poultry meat during this period increased by 8 times, the volume of imports decreased by 11 times. The growth of re-sowing areas from 90 thousand hectares to 213 thousand hectares was also a great achievement¹⁷.

Measures to support the modernization of irrigation infrastructure and drainage networks are important for strategic priorities of agricultural development. Over the past 5 years, a number of objectives have been implemented in this area, and in particular, the reclamation condition of 50 thousand hectares of land has been improved, 13 thousand hectares of new land have been developed, 23 thousand hectares of land that have left their turnover have been included in agricultural circulation.

According to the World Bank, 85% of the country's arable land is irrigated, which accounts for more than 90% of the total value of crop production. To increase the sustainability of irrigated

¹³ World Bank: Supporting Efforts to Improve Food Security in Tajikistan, 2022

¹⁴ See: Agency for Statistics under the President of the Republic of Tajikistan. Food security and poverty. 2023, p.19

¹⁵ Medium-term Development Program of the Republic of Tajikistan for 2021 - 2025.

¹⁶ See: Agency of Statistics under the President of the Republic of Tajikistan. Summary report of the harvest, productivity of agricultural crops, in all sector categories in 2022 (29-agriculture), pp. 2-7.

¹⁷ See: Agency for Statistics under the President of the Republic of Tajikistan. Socio-economic situation of the Republic of Tajikistan: January-December 2022, p. 174.

agriculture, over the past 5 years, projects have been implemented to improve water management through the full implementation of basin and integrated water resources management (SDG 6.5.1) including: Sirdar river basin zone (with SDC); Zeravshan river basin zone (with EU); Pyanj river basin zone (with ADB); Vakhsh river basin zone (with WB, ADB); Kafarnigan river basin zone (with WB). In addition, at the moment, a number of large-scale construction and reconstruction of irrigation and drainage networks in the amount of USD165 million are being implemented in the field of irrigation and reclamation¹⁸.

An important feature of irrigated agriculture in Tajikistan is the fact that the productivity of more than 40 percent of irrigated land depends on the operation of pumping stations (the highest rates in Central Asia). This is a very costly practice, consumes about 20 percent of the total electricity and becomes an expensive resource. Improvement of irrigation and drainage is seen as a measure to increase the resilience of agriculture to drought and flood situations, which are serious problems for Tajikistan.

The Government of the Republic of Tajikistan has developed a legal framework in this area and approved the Water Reform Program of the Republic of Tajikistan for 2016-2025, within the framework of which solving the problems of attracting investments, introducing modern technologies in irrigation, rational use and management of land resources, preventing the deterioration of the ameliorative condition of lands and increase in agricultural production, profitability and productivity will be facilitated by the implementation of the principles of green economy in agriculture.

At the same time, within the framework of the “Strategy for Development of the Green Economy in the Republic of Tajikistan for 2023-2037”, the following main goals are laid down in the agricultural sector of the economy:

- ensuring fair access to land, agricultural resources, markets, increasing value added and green employment in agriculture (SDG-2.3);
- ensuring sustainable agricultural production by increasing crop yields and livestock productivity, based on the protection of ecosystems, improving land conditions and adapting to climate change (SDG - 2.4);
- entry of the country into the group of states with a stable level of food security;
- development of organic agriculture and the growth of exports of environmentally friendly products from the country.

Within the framework of greening on the whole, it is important to achieve an increase in the efficiency of the use of water resources and the prevention of further salinization and deterioration of land quality through the widespread use of water-saving technologies, the modernization of water management systems, an increase in the efficiency factor (COP) of canals, and the construction of an impervious cover on them.

It is expected that an effective way to introduce water-saving technologies will be the widespread use of drip irrigation technologies, which will reduce the water intensity of agricultural production and increase irrigated areas through the widespread use of sloping lands. At the same time, the introduction of modern irrigation technologies allows for more productive employment.

Simultaneously, a promising direction for the introduction of the green economy in the agriculture of the republic is the development of the production of eco-friendly food products. The production of eco-friendly (organic) agricultural products in the country is regulated by the Law of the Republic of Tajikistan "On chemicals and plant protection", the provisions of the Stockholm Convention on the restriction of the use of 12 chemicals and 11 Technical regulations.

The agricultural sector of the economy of Tajikistan, on which the well-being of more than 70% of the population of Tajikistan depends, as a source of livelihoods, income and employment, is one of the most sensitive to climate change.

¹⁸ Report of the MEWR RT “Progress in the implementation of the water sector reform program in Tajikistan and further steps to reform implementation”, 2023

Climate change is affecting the country's rainfall patterns, increasing the frequency and intensity of extreme weather events, increasing average temperatures and decreasing the availability of water for irrigation. Agriculture currently accounts for about 85% of the country's water consumption. Climate change could lead to negative consequences for the growth of yields of most agricultural crops in almost all regions of the country. As climate change impacts intensify, by 2050, average grain and fruit crop yields are expected to decline by 15% and 9-11%, respectively, compared to 2015¹⁹.

The natural conditions of Tajikistan make it one of the 10 most drought-prone countries in the world, the country also faces the risks of mudflows, earthquakes, which are difficult to resist. And in this context, it is important for the country to strengthen the disaster risk management system, including through the integration of actions to reduce the risk of natural and climate disasters into the country's agricultural management system.

Meanwhile, the value of the index of orientation towards agriculture, determined by the structure of public expenditures, remains at the level of 0.1 (SDG 2.a.1), which reflects the insufficient orientation of the state towards agriculture (due to the desire at this stage of development to solve social and infrastructural development objectives in rural areas, which creates a framework for growth).

At the same time, the agricultural sector of the Republic of Tajikistan is the second largest source of greenhouse gas emissions and the largest water user.

Due to the increase in labor migration (mainly men) in Tajikistan, women are increasingly involved in the management of dehkan farms, both legally and (more) practically. As of January 1, 2023, more than 172 thousand dehkan farms were registered in Tajikistan²⁰. The majority of dehkan farms in Tajikistan are small, up to 5 hectares (87%). In this respect, the presence of small-scale farming does not entirely allow for the widespread introduction of effective technologies such as land cultivation, the introduction of crop rotation, and the creation of processing capacities.

About 25% of dehkan farms are managed by women and their number increased by 1.3 times from 2016 to 2021 and they manage about 11% of arable land.²¹

However, the emphasis on the involvement of small dehkan farms in agro-industrial production chains is important. Through grants and credit lines, it is important to help dehkan farmers achieve economies of scale and reduce transaction costs through land consolidation, as well as horizontal (dehkan cooperatives) and vertical (production partnerships, clusters) coordination.

Exploring opportunities and creating conditions for agricultural insurance can have an important impact on the development of Tajikistan. Small farmers are trying to diversify their production to reduce risks and generate income. It is proposed to define the possibilities of weather insurance and crop insurance. It is proposed to consider the possibilities of insurance as additional products for the supply of seeds and other crops and offer them through service centers to farmers.

Furthermore, to promote transformation in food systems and attract investment, incl. FDI, in addition to skills and competencies related directly to agricultural production, will need to develop and improve other conditions, including such as storage, sorting and processing of products.

Growth in production must be accompanied by growth in storage capacity – for now, limited storage is one of the main barriers in the food supply chain. This problem is acute in remote areas such as the regions of the Rasht valley, Khatlon region and GBAO. The existing capacity of the cold stores does not meet the requirements - only about 187 thousand tons, although the need for storage of products in the winter is about 1432 thousand tons²².

¹⁹ World Bank: Supporting Efforts to Improve Food Security in Tajikistan, 2022

²⁰ See: Agency for Statistics under the President of the Republic of Tajikistan. Socio-economic situation of the Republic of Tajikistan: January-December 2022, p. 215.

²¹ See: Agency for Statistics under the President of the Republic of Tajikistan. Gender indicators in the production activities of dehkan farms for 2019-2021. 2022, from 62.

²² The Agro-food System and Sustainable Agriculture Development Program for the period up to 2030 from 01.03.2023, No. 54, p.-6

Tajikistan has made improvements in the modernization of land transport infrastructure. However, given that Tajikistan is a mountainous, landlocked country, roads and land transport play an important role in the food supply chain. Improvement of communications and development of transport corridors in the Central Asian region should be at the top of the political agenda.

The food industry is one of the main producers of general industrial products, domestic processing of fruits, wheat, tobacco and other agricultural products.

The dual nature of the development of primary agricultural production is also reflected in the country's food industry. Currently, only about 20% of agricultural products are processed²³. For greater processing, it is not so much the capacity that is insufficient, but the financial limitations of the creation of processing industries.

In the past five years, the domestic food industry has grown at a faster pace than agricultural production. However, the share of the food industry in the structure of the economy is still lower than in countries with comparable income levels, which means that there is room for value addition in the agri-food sector. Moreover, the “depth of the food industry” indicator, which measures the level of development of agricultural processing in the country compared to agricultural production, also has a rather low value in Tajikistan.

To ensure the transition of the country to the stage of industrial and agricultural development and increase the competitiveness of domestic products in the world markets, the Government of the Republic of Tajikistan has developed and adopted the Concept for the organization and development of agro-industrial clusters in the Republic of Tajikistan for the period up to 2040 and the Program to create favorable conditions for the introduction of best agricultural practices for the production of agricultural products (International Global G.A.P. Standard).

Food systems in Tajikistan need scientific support. There is a need to strengthen national capacity to develop a scientific database for a science-based approach to food security, including within the framework of Green Transformation.

An important component of the development of the food system can be e-commerce as a mechanism for economic development, poverty reduction and gender equality. E-commerce can be used as a mechanism for promoting export-oriented agricultural products of Tajikistan, adjusting marketing information mechanisms to improve production planning and business efficiency in domestic markets; create market incentives to expand new agricultural service sectors and improve existing sectors.

To overcome the known limitations of Tajikistan in this area, it is important to improve the regulatory framework, invest in supply chain management training for manufacturers, financial literacy and other digital e-commerce skills.

Overall, agriculture should focus on increasing productive crop yields, improving soil quality and more efficient water use, which together will create the right conditions for a sustainable reduction in malnutrition.

To implement main objectives of green economy in agriculture the following actions are envisaged:

- strengthening the institutional framework for the development of the green economy in agriculture;
- ensuring efficient and rational use of agricultural land; creating green jobs in rural areas;
- development and adoption of national standards for organic agriculture;
- transition to the use of environmentally friendly equipment and technologies in crop and livestock production;
- digitalization and the use of artificial intelligence in agriculture and irrigation;
- Strengthening the sustainable development of organic agricultural production to ensure the food security of the country;
- ensuring the quality and safety of agricultural products.

²³ Ibid, pp.-9

It is expected that implementation of above-outlined objectives will enable to achieve the following by 2037:

- double the productivity of labor in agriculture,
- share of production and processing of environmentally friendly (organic) agricultural products in the total volume of agricultural production will be increased to 100 percent;
- a network of agro-industrial clusters with efficient use of energy will appear, the volume of production of organic products with high added value will increase;
- use of green technologies and green infrastructure in agro-industrial production will be expanded, as well as the volume of exports of environmentally friendly (organic) agricultural products with modern organic packaging will increase;
- 5,000 ha of new land will be put into agricultural use with the introduction of modern irrigation technologies and drip irrigation will be used in 30 percent of farms.

2.3.Sustainable industrialization, innovation and infrastructure

The most important direction of the transition to green growth is the development of industrialization, infrastructure and expansion of application of innovations focused on reducing the negative impact on the environment.

The National Development Strategy of the Republic of Tajikistan for the period up to 2030 (NDS-2030) identifies the following priorities for industrial development were identified: increasing the competitiveness and value chain of industries; growth in production and sales of industrial products that are competitive in domestic and foreign markets; organization of effective system of reproduction of personnel, able to create and master industrial technologies, to produce innovative products; improving the institutional framework for the sustainable and preventive development of industries, the creation of innovative high-performance clusters; development of a national system of selective import substitution based on the processing of local resources, primarily in the agro-industrial complex.

After the presentation of the First Voluntary National Review (VNR) in 2017, a number of significant measures of the Government were implemented in the country to ensure further growth in the welfare of the population of the republic. Significant progress achieved in recent years in ensuring energy independence and efficient use of electricity, ensuring food security and access of the country's population to high-quality nutrition, exiting the country from a communication dead end and turning it into a transit country, and expanding productive employment have served as the necessary basis for the implementation of the accelerated industrialization of the country in Tajikistan. Therefore the Leader of the Nation noted in the Message to the Parliament of the country in 2018:"... given the importance of the industry in solving socio-economic issues and creating jobs, I propose to declare the accelerated industrialization of the country the fourth national goal".²⁴ The possibility of declaring the accelerated industrialization of the country as the fourth national goal is laid down in the NDS-2030, where it is noted that "The Government of the Republic of Tajikistan will finalize the provisions of the NDS-2030 with consideration of the annual monitoring and evaluation of changes in world markets and their impact on various sectors of the national economy"²⁵.

The main goal of the accelerated industrialization of the country is to create a developed, competitive national industry and, on its basis, raise the entire economy and the well-being of the country's population to a qualitatively higher level. Accelerated industrialization provides for the achievement of the share of industrial production in the country's GDP up to 30% in the shortest possible time while improving the structure of industry in general and the manufacturing industry as well. Along with achieving this indicator, the introduction of a green economy in industry is essential.

²⁴ Emomali Rahmon. Message of the President of the Republic of Tajikistan to the Parliament of the country. 2018. www.president.tj

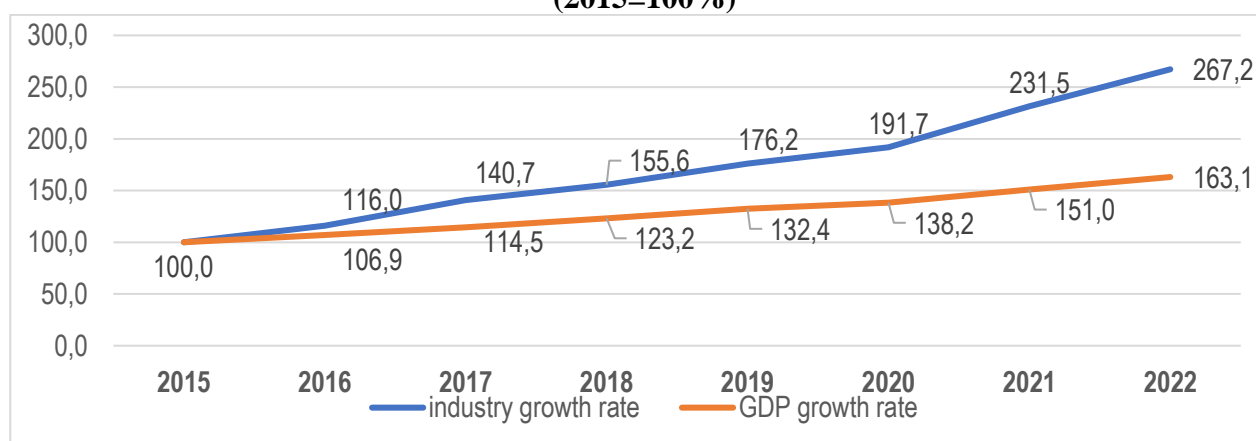
²⁵ National Development Strategy of the Republic of Tajikistan for the period up to 2030. C._.

To successfully implement the objectives of industrial development and achieve the goals of accelerated industrialization in the country are provided by: the Medium-Term Development Program of the Republic of Tajikistan for 2021-2025; State program for the development of exports in the Republic of Tajikistan for 2021-2025; The Strategy for the Development of Industry in the Republic of Tajikistan for the period up to 2030 and the Program for the Accelerated Industrialization of the Republic of Tajikistan for 2020-2025. Decree of the President of the Republic of Tajikistan dated January 06, 2022 No. No. 309, 2022-2026 have been declared the “Years of Industrial Development”, a number of sectoral development programs are being implemented, and the Green Economy Development Strategy in the Republic of Tajikistan for 2023-2037 has been adopted and is being implemented.

The implemented activities of the adopted state programs have made it possible to achieve certain success in the development of the country's industry. Thus, the volume of industrial production (in comparable prices) outpaced the growth rate of GDP, growth for the period 2015-2022 amounted to almost 2.7 times, which contributed to boosting country's industrialization processes.

Figure 9

**Growth dynamics of industrial production and GDP in the Republic of Tajikistan
(2015=100%)**

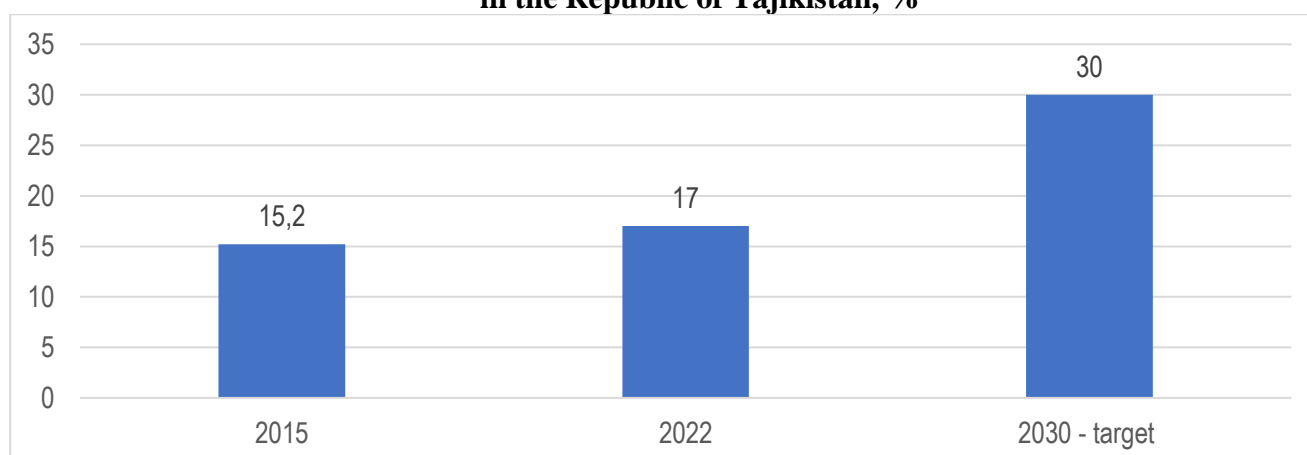


Source: Agency on Statistics under the President of the Republic of Tajikistan

The share of industrial value added in the country's Gross Domestic Product (GDP) amounted to 17% and efforts are aimed at bringing it up to 30%, which will require both an increase in emphasis on capacity building, and on industry diversification and competitiveness.

Figure 10

**Share of industrial value added in GDP
in the Republic of Tajikistan, %**

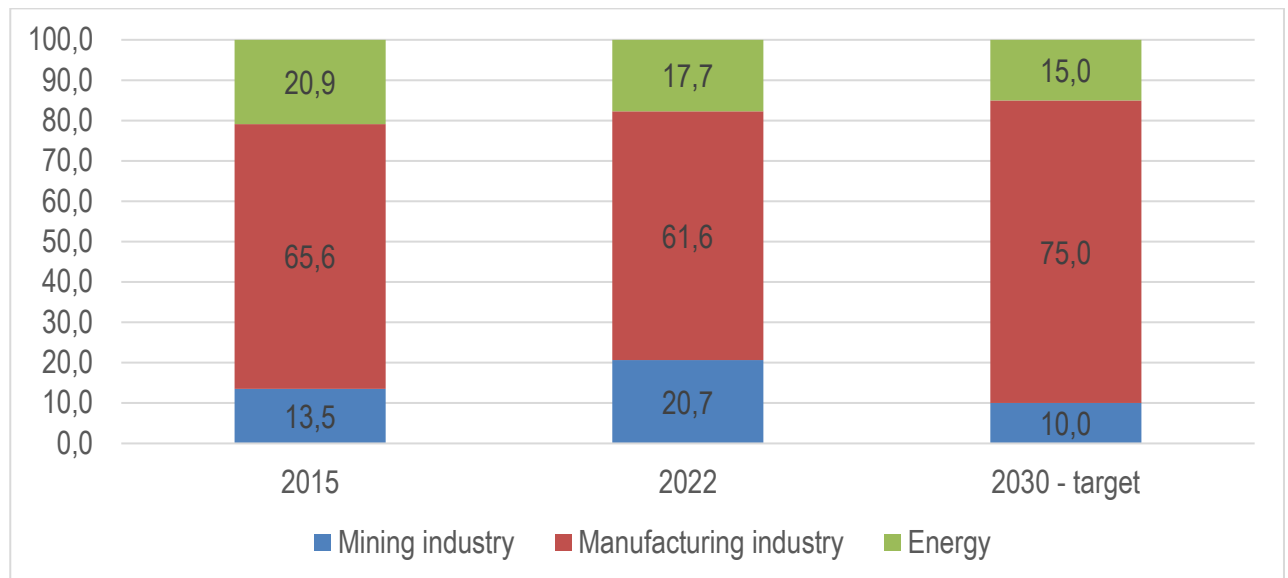


Source: Agency on Statistics under the President of the Republic of Tajikistan

Industrial output grew very unevenly by major industries (at comparable prices). It is important to note that the growth rate of mining is higher than that of manufacturing. This has affected the restructuring of the country's industrial structure. Thus, in 2015 the share of mining was 13.5%, in 2022 it was already 20.7%, while the manufacturing industries were respectively: 65.6% and 61.6%. The share of electricity, water, gas and heat production and distribution industries also decreased slightly.

Figure 11

Industry structure of the Republic of Tajikistan, %



Source: Agency on Statistics under the President of the Republic of Tajikistan

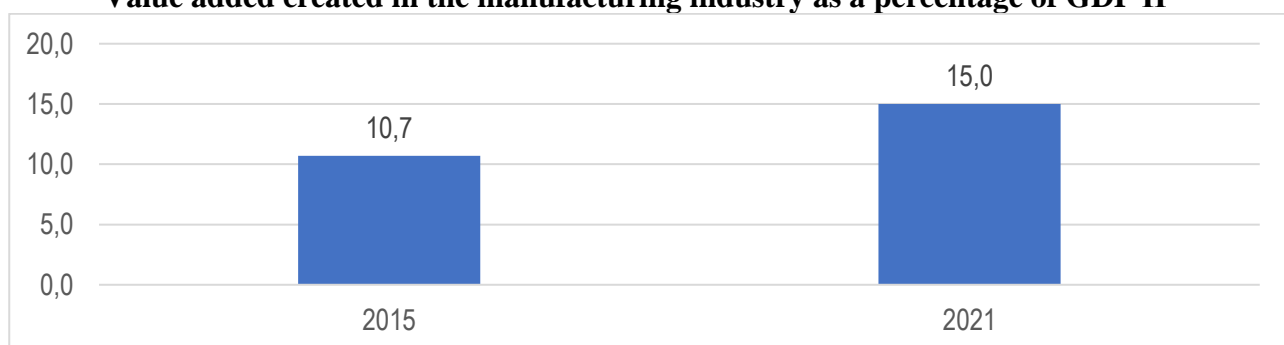
With green development goal as part of accelerated industrialization, it is becoming increasingly imperative for the sector to address not only the challenges of reducing emissions and environmental pollution, but also responding to the rapidly changing global production systems that require cleaner production processes, innovation and a talent pool to maintain competitiveness.

Besides to promote and present the environmental benefits of industrial products produced using green energy, efforts will be directed to support domestic enterprises to obtain a green production certificate from specialized international bodies.

Manufacturing value added as a percentage of GDP has increased over the past seven years (SDG 9.2.1.). In 2015, it was 10.7%. and in 2021 - 15.0%, that is, an increase of 4.3 percentage points, respectively.

Figure 12

Value added created in the manufacturing industry as a percentage of GDP II

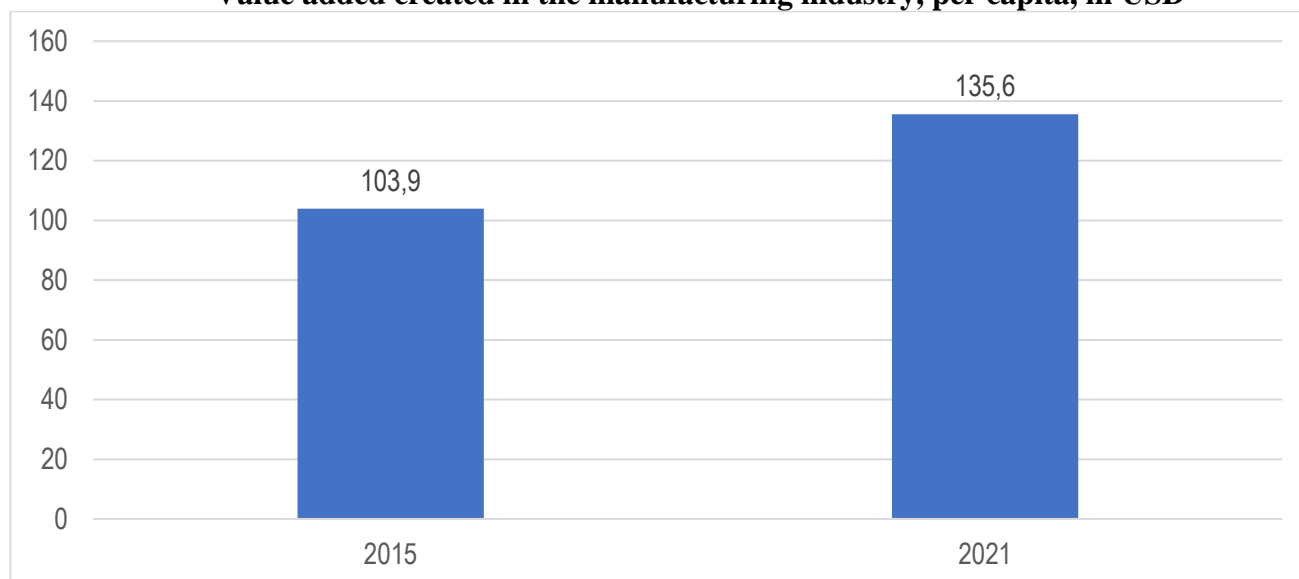


Source: Agency on Statistics under the President of the Republic of Tajikistan

At the same time, the added value created in the manufacturing industry per capita also increased (SDG 9.2.1). In 2015 it was USD103.9, and in 2021. - USD135.6, that is, increased by 1.3 times, respectively.

Figure 13

Value added created in the manufacturing industry, per capita, in USD



Source: Agency on Statistics under the President of the Republic of Tajikistan

However, the growth in the share of employment in the manufacturing industry as a percentage of total employment is very unstable (SDG 9.2.2.). In 2015 it was 2.5%, in 2017 - 3.6%, and in 2021 - 3.5%, i.e., it first increased by 0.9 percentage points, and then slightly decreased (by 0.1 percentage points).

Figure 14

The share of employment in the manufacturing industry as a percentage of total employment, %



Source: Agency on Statistics under the President of the Republic of Tajikistan

Textile production is one of the most promising branches of the country's manufacturing industry. The main emphasis is currently being placed on the creation of clusters, which include spinning, textile, knitwear and clothing production. It is expected that in the next 3 years, complexes for the final processing of cotton fiber will be built and put into operation in five cities and regions of the country. Full-cycle enterprises are provided with tax incentives.

As part of the country's advancement in the development of production facilities for tailoring the middle price segment associated with the fashion industry, conditions and prerequisites for the subsequent transition to a closed-cycle economic model will be consistently formed.

Case 2. Consolidation of the efforts of the private sector in protecting and promoting the national potential of the country in the development of textile industries is provided both on the basis of relevant business associations. Meanwhile, the promotion of sectoral aspects of industrial development in the country is connected, among other things, with cooperation with development partners. The International Trade Center (ITC - ITC) continues its activities in Tajikistan under the Global Textile and Apparel Program (GTEx) Project, UNIDO under the Project "Modernization of Industry and Increasing the Competitiveness of the Carpet Weaving, Embroidery and Textile Sectors in Tajikistan", the work of consulting companies significantly intensified, in particular, the company "Business Consulting Group".

The country's transport infrastructure has played a positive role in the development of the national economy and the achievement of the country's strategic goals. Its construction is of decisive importance for the transformation of the Republic of Tajikistan into a transit country and contributes to the growth of exports of domestic products.

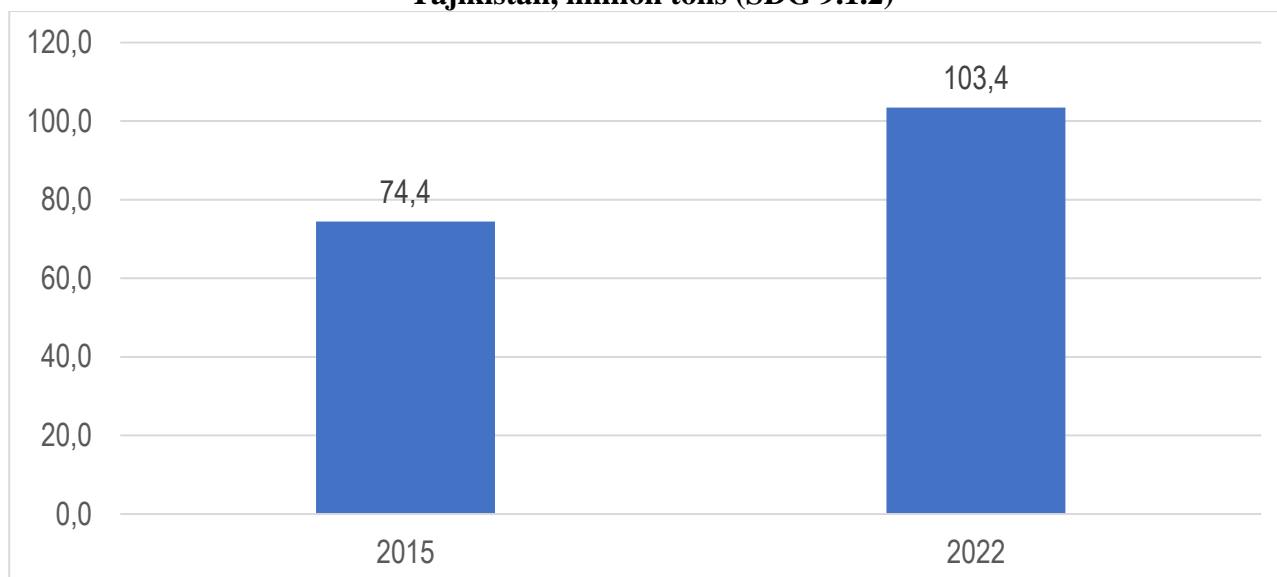
During the period of independence, 2400 km of roads, 326 bridges, 6 road tunnels, 219 km of railways were built, which ensured the accelerated industrialization and development of the country's infrastructure.

Over the past five years, 250 kilometers of roads, 42 bridges, 4 tunnels and several overpasses have been built, which contributed to the growth of traffic. In terms of road quality, the country consistently ranks 50th out of 138 countries covered by the study.

Although during this period the volume of cargo transportation by enterprises increased by 1.4 times, but this is lower than the growth rate of GDP. It is important to step up efforts to advance the development of the transport system for the country.

Figure 15

Volumes of cargo transportation by transport enterprises in the Republic of Tajikistan, million tons (SDG 9.1.2)

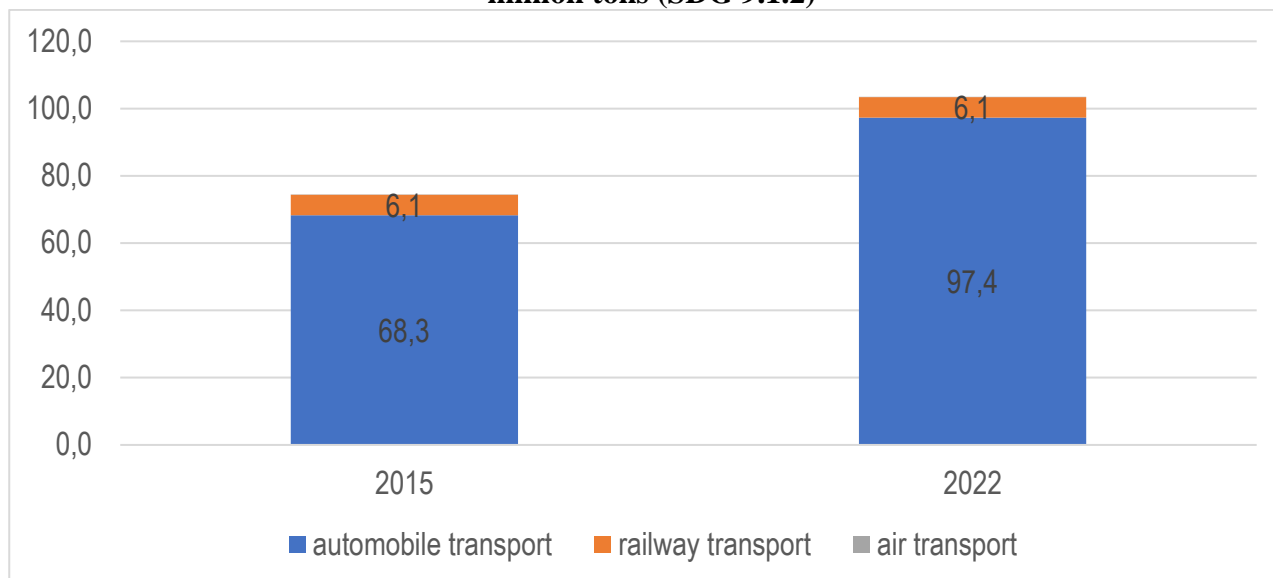


Source: Agency on Statistics under the President of the Republic of Tajikistan

As expected, cargo transportation by rail and air remained virtually unchanged, while cargo transportation by road increased.

Figure 16

Volumes of cargo transportation by modes of transport in the Republic of Tajikistan, million tons (SDG 9.1.2)

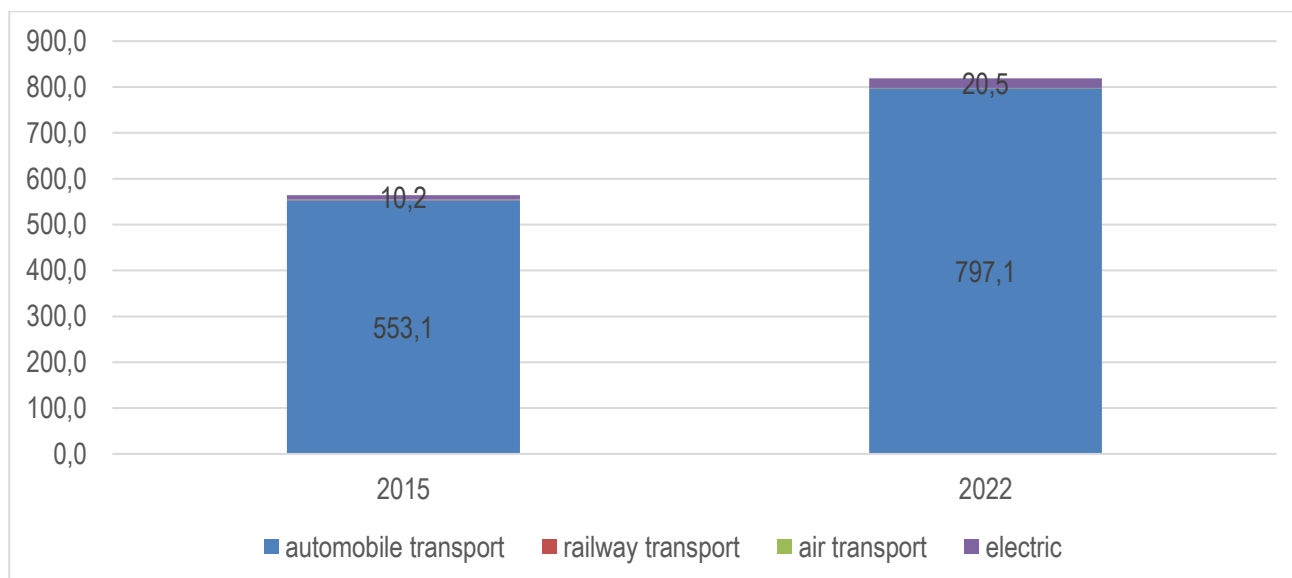


Source: Agency on Statistics under the President of the Republic of Tajikistan

For the period from 2015 to 2022 there is an increase in the number of passengers carried by all types of public transport - a cumulative increase of 1.45 times. In the structure of passenger traffic, the largest share is occupied by road transport (97.4%), much lower than electric transport (2.5%). At the same time, the share of rail and air transport remains extremely low - 0.1% each.

Figure 17

Volumes of passenger traffic in the Republic of Tajikistan, million people (SDG 9.1.2)



Source: Agency on Statistics under the President of the Republic of Tajikistan

The transport sector plays an important role in the country's economy as a key element of the service infrastructure, but the main transport sector runs almost exclusively on fossil fuels and is therefore one of the main sources of GHG emissions.

In addition, a significant share of road transport in the country is made up of private cars. This is also reflected in the structure of GHG emissions from this sector.

Currently, work is underway to develop legislation to limit the import of obsolete cars, in particular cars, as well as to encourage the development of electric transport. Efforts are aimed at

creating mechanisms for the introduction of the best available technologies, which will lead to improved air quality.

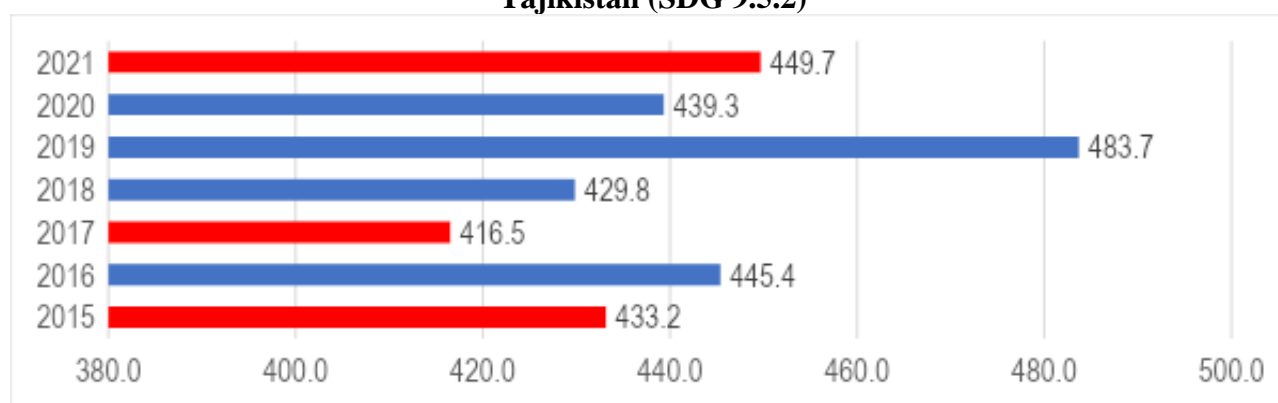
As part of the decarbonization of the transport sector, efforts will be directed towards improving urban planning and transport infrastructure, accompanied by incentives for the transition to transport using alternative energy sources. It is expected that if the "clean" electricity produced in the country is used in electric vehicles, it will be possible to reduce the country's need for petroleum products, and thus contribute to environmental protection and improve the ecological situation in the country.

At the same time, Tajikistan ranks 134th out of 160 countries in the Logistics Performance Index. This is the lowest figure among the five Central Asian countries.²⁶ Further improvement of transport will not only reduce transport costs and improve communications, but also reduce the negative impact on the environment and air pollution. Greater regional integration and improved connectivity within the region is also critical and will benefit all Central Asian countries. Addressing supply-side restrictions on trade can be best achieved through regional initiatives.

Despite economic growth, trade within the region accounts for only 5% of the total trade volume of Central Asian countries.²⁷ Most of Tajikistan's trade in the region consists of wheat imports from Kazakhstan.²⁸ Improving the quality of border crossing, customs clearance and increased use of digital technologies are priorities that will positively affect trade integration. The Special Program for the Economies of Central Asia (SPECA) is an excellent platform to strengthen trade integration, technology transfer, water management, energy security and the promotion of renewable energy.

Figure 18

Number of researchers (full-time equivalent) per million inhabitants in the Republic of Tajikistan (SDG 9.5.2)



Source: Agency on Statistics under the President of the Republic of Tajikistan

Technological capacity is a key component of economic diversification and carbon-neutral growth. Innovation driven by research and development plays a critical role in building technological capacity. At present, the value added of the medium-tech and manufacturing industries is relatively low²⁹ — well below the Central Asian average.³⁰ R&D spending, at 0.1% of GDP, is also very low and is mostly government-funded. There are only 300 researchers per million inhabitants. Less than 6% of them are engaged in engineering and technical activities.³¹ The government is investing heavily

²⁶ <https://lpi.worldbank.org/international/global>

²⁷ International Transport Forum, 2019, Strengthening Connectivity and Freight in Central Asia, Policy Papers, No. 71, OECD Publishing, Paris

²⁸ An estimated 29 percent of Tajikistan's trade is intraregional. Calculations based on data from the Trade Statistics Agency, Socio-Economic Report, December 2020. [<https://www.stat.tj/en/news/publications/the-publication-social-economic-situation-in-tajikistan-for-january-december-2020-was-released>]

²⁹ 2%-4% of total MVAs over the last two decades

³⁰ <https://iap.unido.org/data/?p=TJK&s=CHN&t=143>

³¹ <http://uis.unesco.org/en/country/tj?theme=science-technology-and-innovation>

in building economic infrastructure, such as highways; however, many unmet needs remain, which in turn increases transport costs and pollution.

In dynamics, the number of researchers (in full-time equivalent) per million inhabitants is growing. In 2015 they amounted to 433 people, in 2017 - 414, and in 2021 - 452 people, that is, at first the number decreased slightly (by 4.4%), and then increased by 9.2%.

Meanwhile, the average level of wages in the country's science system in 2021 only approached the average level in the country, which so far weakly stimulates the quality of scientific developments. The ratio of the salary of women to the salary of men in the field of professional, scientific and technical activities in 2019 amounted to 73%.³².

Young professionals do not yet tend to choose a career in research. In 2021, the number of PhD students was only 219, about 7.6 times less than in 2015. At the same time, if the number of men among graduate students during this period decreased by 6.6 times, then the number of women decreased by almost 10 times. For 2021, graduate students in technical specialization make up only 2.2% (5 people out of 219).³³

Common Challenges in Achieving the SDGs 9: -;high interest rates on bank loans; insufficient competitiveness and diversification of the manufacturing industry; lack of highly qualified specialists; low level of internal, intersectoral and interregional cooperation and integration, as well as weak cluster ties in the industry; lack of modern transport and logistics centers and infrastructure that meets international standards; insufficient development of the public-private partnership system and transit opportunities, especially in the field of air transport, low innovative activity of enterprises, etc.

The successes achieved in industry create the basis for the transition to a new level of development, but "considering resources and capabilities of the country, including domestic raw materials, production capacities, labor resources, green energy and the growing demand for industrial products inside and outside the country, are not yet sufficient to achieve one of our strategic goals – accelerated industrialization"³⁴. Without the creation of a highly developed industry, the transition from an agrarian-industrial model of development to an industrial-agrarian one, ensuring a high standard of living of the population, the formation of new highly efficient industries for the transition to an innovative economy, ensuring economic independence, social security is impossible in the conditions of Tajikistan

Therefore, the country has the following objectives that need to be performed in the context of the green transformation of the economy:

- increasing competitiveness and diversification of industrial production;
- increasing production volumes in the manufacturing industry and satisfying domestic demand for finished environmentally friendly products;
- increasing the value added of industrial products through the development of cluster relations in non-waste production;
- conducting scientific research and ensuring technological and innovative green development of the country's economy; formation and development of transit infrastructure;
- development of railway transport and civil aviation infrastructure, etc.

At the same time, the prospects for the development of key areas of science, technology and innovation in the country must meet modern global and national challenges (including the lessons of 2020 related to COVID 19).

1) at the global level are increasing:

- the need to ensure sustainable economic and social development, which should be based on new solutions, mechanisms and technologies;

³² Agency for Statistics under the President of the Republic of Tatarstan. Women and men of RT. Dushanbe 2020. p.132

³³ Agency for Statistics under the President of the Republic of Tatarstan. Education in RT. 2022, p.104.

³⁴ Emomali Rahmon. Message of the President of the Republic of Tajikistan to the Parliament of the country. 2022
www. president.tj

- problems associated with the lack of energy, food and other resources necessary for humanity, the deterioration of the environment;
 - requirements for ensuring life safety, both at the global level and at the country level;
 - competitive positions in the international markets of education, research and innovation.
- 2) at the national level, the challenges of growth in the fields of science, technology and innovation are associated with the need to:
- a significant increase in funding for research and development with the participation of the business sector, the development of mechanisms to attract investment in innovative developments;
 - solving problems of commercialization of new technologies;
 - development of mechanisms for regional investment and innovation activity.

2.4. Job creation and productive employment expansion.

И .

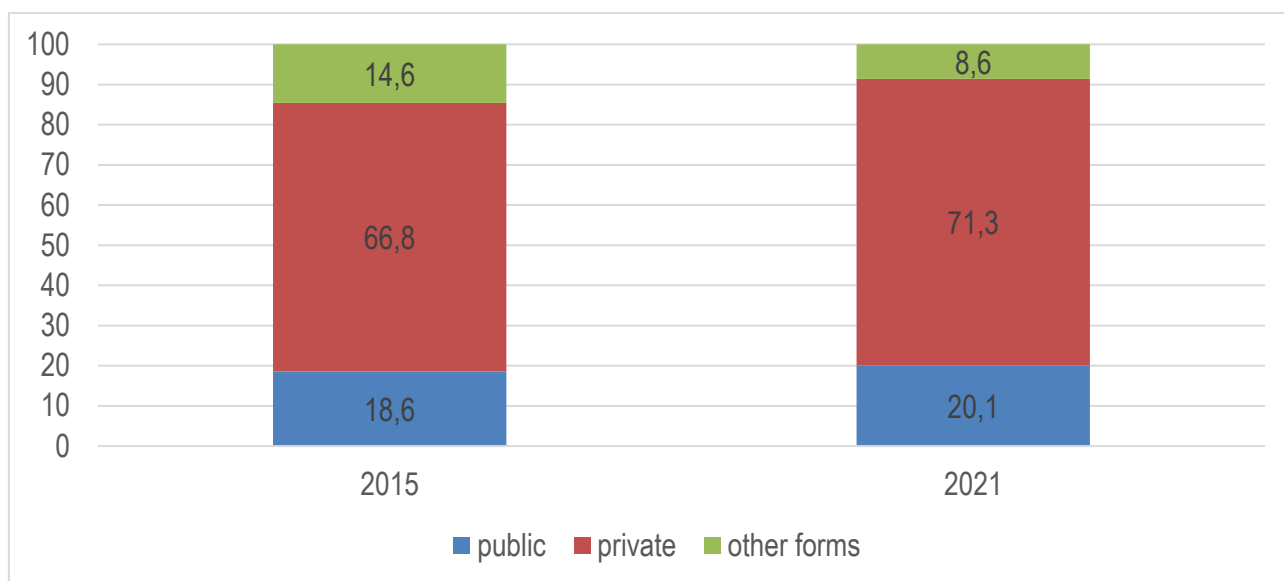
The Republic of Tajikistan strives to create decent jobs, ensure favorable working conditions, protect children and increase the economic activity of women.

By 2023, the average annual number of employed people in the Republic of Tajikistan amounted to 2.6 million people. Over the past five years, more than 900,000 new jobs have been created, including 190,000 in 2022, which has contributed to improving the employment of the population in the country. Objectives have been set to achieve targets for expanding productive employment in future. The employed population is expected to increase, with the employment rate rising to 75% by 2025.

Employment in the private sector continues to grow, which is associated with both privatization processes and the development of entrepreneurship.

Figure 19

Composition of employment by type of ownership, %



Source: Agency on Statistics under the President of the Republic of Tajikistan

Dynamic growth is observed among small businesses (individual entrepreneurs, small dehkan farms, small enterprises) - they account for almost 60% of total employment, but the prevalence of

employment in small private enterprises / farms does not allow using the economies of scale of production.

Going forward, the importance of the regulatory/incentive system for creating stable jobs and productive employment will continue to grow.

And the growth in demand for productive, good employment will increasingly be determined by the growth in demand for goods and services. It is private financing that is able to correspond to the real picture of market demand and the price of labor in creating productive good jobs.

Given the need for a greater role for the private sector in the economy in the future and the need for further diversification of exports, an example of good jobs would be jobs in private enterprises that support exports and import substitution.

In general, job creation was more associated with construction and the education system, as well as manufacturing.

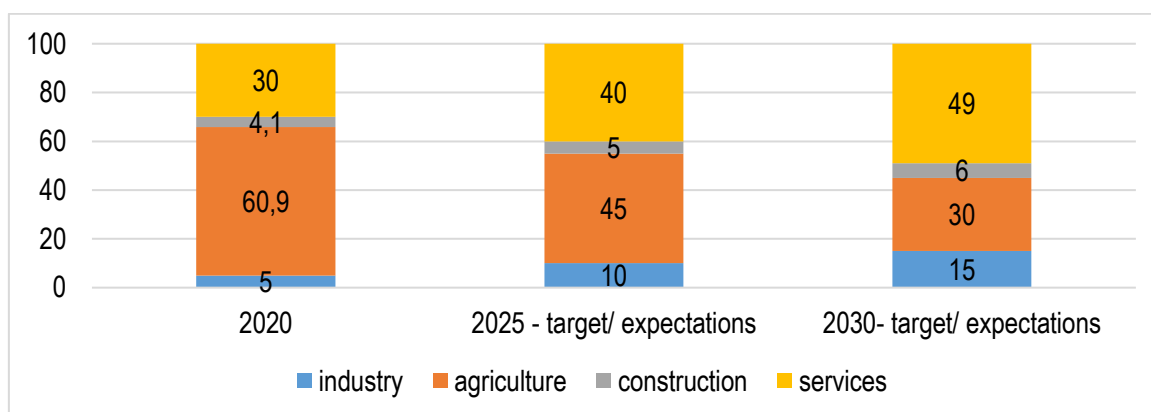
The observed changes in the sectoral structure of employment are associated with a reduction in those employed in agriculture from 64.9% in 2015 to 60.6% in 2021. However, this emerging process does not yet fully meet the needs of innovative development of production, since the rate of labor flow in more productive sectors is very slow and the rate of productivity growth, the production of higher value-added products, remains low. Accordingly, one of the key tasks in the medium term is the further modernization of types of employment and the creation of new jobs in technological, but labor-intensive sectors of the economy, accompanied by productive employment.

The dynamics of employment in the service sector is characterized by a steady trend of its slow growth. Over the past seven years, the proportion of people working in this area has increased from 28.4% to 30.4%. The change in the structure of employment in the service sector was in favor of such activities as education and health care. A negative trend was a decrease in the number of employees in the field of financial and insurance activities.

For 2015-2021 the number of employees in the service sector increased by 93.7 thousand people (by 14%).

Figure 20

Sectoral structure of employment, %



Source: Agency on Statistics under the President of the Republic of Tajikistan

There must be progressive changes in employment as a result of structural changes³⁵: growth in the share of those employed in the service sector (within the framework of the ratio between employment in material production and the service sector), in industries (within the framework of the ratio between employment in agriculture and industry), *inter alia*:

- total employment should increase from 44% to 70% of the working population in 2030;
- moving away from the dominance of employment in agriculture should become an important part of the reform in the field of employment and labor productivity growth and be

³⁵ National Development Strategy of the Republic of Tajikistan for the period up to 2030

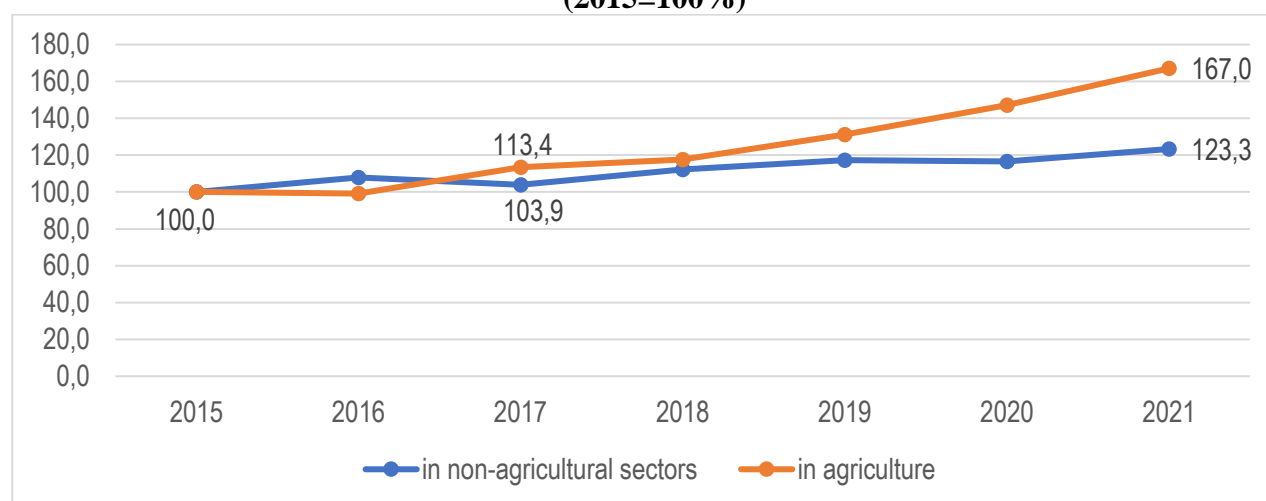
associated with the restructuring of the real sector (according to the industrial or industrial-innovative scenario);

- the share of people employed in agriculture should almost halve - from 65% to 28-30%;
- the share of employed in the service sector should increase from 27.6% to 60%, in industry — from 3.3% to 15-20%.

The key sector of employment is agriculture. It is important for the country to improve the performance of key agricultural producers, which is in line with the SDG-2.4 target related to ensuring the sustainability of agriculture. There has been progress in this direction over the past seven years, but needs more and sustained dynamism, as the current growth rate is more linked to a relatively low starting base.

Figure 21

**Growth dynamics of value added per 1 employed in the Republic of Tajikistan
(2015=100%)**



Source: Agency on Statistics under the President of the Republic of Tajikistan

Although the country's official statistics show a low unemployment rate - no more than 2.3%, the unemployed and their families are at significant risk of poverty, however, the availability of work in itself is not yet a guarantee against poverty, since wages are low, including due to prevalence of low productivity of employment.

At the same time, the actual unemployment rate exceeds the registered unemployment by at least 5 times, but this level is still relatively low due to the low level of participation of the able-bodied population in employment in the economy and the high level of labor migration.

The low rates of registered unemployment are largely explained by the fact that a very limited proportion of the actually unemployed turn to employment services for help, because the attractiveness of their services is low. Many of the jobs offered by employment services are low paid and unattractive, and service coverage is limited in rural areas. That is, in a situation where the supply of labor in the domestic labor market exceeds the demand for it, the jobs offered are still not entirely attractive financially.

Nevertheless, data on the development of the informal sector (at least 20%), the spread of temporary employment schemes and indicators of part-time employment, as well as the scale of labor migration (at least 10% of working age) indicate that the problem of absorption of excess labor force is much sharper than official unemployment figures suggest.

And of course, the large share of the informal sector in the total number of employed, coupled with the slow growth in the number of small enterprises (the proportion remains – only 1 enterprise per 1,000 people of the population), also point to unfavorable institutional environment for the creation of new and expansion of existing enterprises, especially in labor-intensive industries.

Previous surveys have shown that about 30% of youth (15-24 years old) were not in education, employment or training (NEET)³⁶. A much higher proportion (49%) of young women were NEET³⁷. An even higher NEET rate (66%) among women aged 20 to 24. Women's low participation in employment is partly due to cultural norms and a disproportionate amount of domestic and care work. Low qualifications and gender stereotypes of professions also prevent women from actively participating in the labor market.

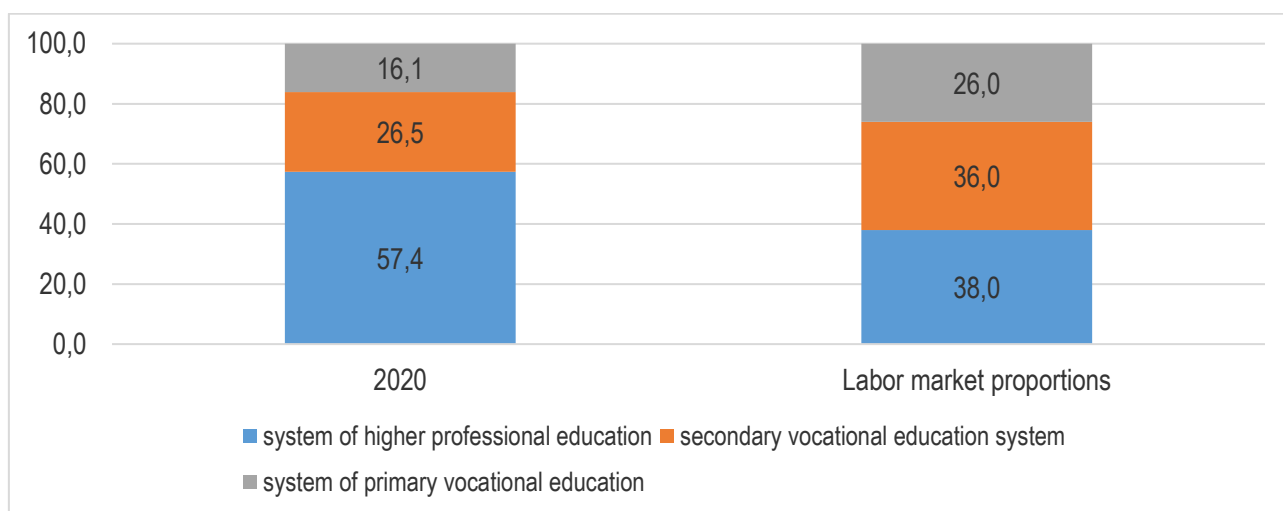
Efforts are now being made to step up investment in human capital to help people learn new and valuable skills. Skills development is expected to be geared towards current and future labor market needs. In this direction, emphasis will be increased on supporting programs and schemes to expand the provision of skills and the entrepreneurial ecosystem, both in the field of wage labor and for self-employment.

Solving the problem of shortage of productive jobs should be linked to promoting the activity of the private sector, strengthening market institutions and quality infrastructure.

To ensure a balance in the system of vocational education (by level of education), considering the needs of the labor market, it is planned to increase the attractiveness of education in primary and secondary vocational education.

Figure 22

The structure of training personnel and specialists, %



It is predicted that by 2025 the capacities in the training of specialists in the system of primary and secondary education should almost triple, covering at least 180 thousand young people aged 15-24 years. The objective of increasing the attractiveness of working professions and mid-level specialists for the population will be achieved.

The country is currently piloting a remote work model to contribute to the socio-economic development of the country as a whole and provide employment opportunities for teenagers, girls and boys. It is envisaged to develop the micro-work industry in Tajikistan with the aim of increasing

³⁶ Labor force survey, 2016. Routine employment data, periodically updated by the Agency on Statistics of Tajikistan, do not contain disaggregated indicators; labor force survey is a household survey that better reflects the employment situation in a country, including unemployment, labor underutilization and NEET

³⁷ Agency for Statistics of Tajikistan, 2017, Labor market in the Republic of Tajikistan (Report on the results of the labor force survey, July 20 - August 20, 2016), pp.87-88

digital literacy among adolescents and youth in the short term and creating a comparative advantage of Tajikistan in the digital work industry in the medium and long term. Micro-jobs seem particularly relevant to Tajikistan as they transcend geographic boundaries, providing earning opportunities for young people with diverse skill sets and access to a relatively basic digital infrastructure.

Going forward, competency-building measures, such as through well-designed active employment promotion programs and targeted investments in public employment services, especially in rural areas, will play a critical role in realizing the potential of women, youth and persons with disabilities.

Despite the fact that the ongoing policy of economic restructuring is accompanied by an increase in macroeconomic efficiency indicators, in particular, labor productivity increased by 1.4 times in 2015–2021, this indicator is still at a low level. For example, at the end of 2021, the production of GDP per employed person in Tajikistan was estimated at USD16.5 thousand at PPP, which is more than 1.8 times lower than the same indicator for middle-income countries. Over the past seven years of development, the productivity of one employed person has grown in the country by an average of 5.4% per year (SDG), due to the low level of the indicator itself, the growth rate should have been more significant.

The main sub-sectors that saw both employment and productivity growth were trade, construction, transport and communications, but they all started from a very low level.

The solution of problems in the field of interconnectedness of education and employment, especially in rural areas, will be ensured by increasing the effectiveness of sectoral actions and social support measures in obtaining high-quality affordable education and first employment, supporting the employment of socially vulnerable groups and promoting labor mobility.

The government is working on job growth, the establishment of at least 30 technology parks and industrial zones in remote cities and regions of the country in the next five years, which will contribute to the growth of opportunities for productive employment.

Green transformation will undoubtedly affect the labor market and the state of employment in Tajikistan. Increased investment in the greening of the economy will lead to the creation of new and green jobs. It will also mean that jobs in sectors with a heavier carbon footprint will be cut or lost. The current wave of digitalization is also creating disruptions in the labor market. Without data and research, it is difficult to predict the net impact of the green transition and digitalization on job creation in Tajikistan. Analytical studies carried out in other countries show that a carbon-saving economy and digitalization will have a positive impact on job creation. However, this expected result cannot be taken for granted.

The government policies and actions now being taken are shaping the vision of how the country can use green industry and technological developments to create more decent jobs.

Ensuring sustainable production patterns will be achieved through the introduction of new energy and resource saving technologies, the reduction of industrial waste and CO emissions, which will create opportunities for green employment (i.e., a combination of decent work with the use of clean technologies).

But greening the economy will require large-scale investment in new technologies, equipment, buildings and infrastructure, and therefore the growth in needed employment will largely be driven by the availability and composition of investment.

Making the economy more resilient will take time and incentives to transition for those who work in polluting brown industries.

It is expected that the main areas of green employment will be new areas of economic activity related to environmental protection, the rational use of natural and energy resources, the reduction of greenhouse gas emissions, the introduction of modern technologies, waste management, the production of environmentally friendly products and entrepreneurship in the field of environmental protection. environment.

The construction of the Rogun HPP and building capacity for energy efficiency and energy saving will create employment opportunities for people with scientific, engineering, technical or construction professions.

At the same time, the dynamics of agricultural development is associated with value chains, including food production, which will also potentially generate demand for new jobs.

The growth of the economy and population, the dynamics of the development of the construction sector by 2030 is associated with the processes of industrialization and the increase in industrial capacity, as well as the growth in living standards, which will generate demand for industrial and housing construction. Import substitution of basic building materials will create new jobs.

The waste management sector can employ a large number of human resources, mostly technical.

In general, it is expected that by working out the trajectory of green development and predicting the impact on the economy and incomes, the government of the country will be active in strengthening labor market institutions, relying more on intersectoral interaction and coordination.

CHAPTER 3. MAKE GREEN DEVELOPMENT INCLUSIVE

3.1. Vulnerability reduction and social protection

While the economic context of a country's growth is a priority for the implementation of the SDGs, the principle of "leaving no one behind" requires that this be inclusive for all.

Inclusive development involves removing obstacles to reducing inequality and expanding the economic and social opportunities of the poor and vulnerable segments of the population, various social groups.

The population of the country is more than 10 million people, while the share of the population under 18 years old is about 42%, the share of the population over 65 years old is 3.4%, most of the population lives in rural areas - 71.2%.

Tajikistan accepted a number of recommendations received within the framework of the third cycle of the UPR: "strengthen the legal and state policy framework to ensure the realization of the right to a healthy, clean and sustainable environment"³⁸, "ensure the constructive participation of women, children, persons with disabilities and local communities in the development and implementation of the framework programs on climate change and disaster risk reduction"³⁹ and "adjust inequalities in access to water and sanitation and meet the needs of the most vulnerable groups of the population"⁴⁰ which is in line with the concept of Tajikistan's green transformation to achieve the SDGs.

The Republic of Tajikistan has demonstrated its commitment to supporting vulnerable groups of the population during the COVID-19 pandemic as well. Since the official recognition of the first cases of COVID-19 infection in Tajikistan (April 30, 2020), the Government of the Republic of Tajikistan has taken a number of measures aimed at mitigating the socio-economic consequences of the impact of COVID-19 in Tajikistan.⁴¹

There are segments and groups of the population that are particularly vulnerable in the Republic of Tajikistan, as in other countries.

Social protection plays a critical role in reducing poverty, vulnerability and deprivation among affected families. However, coverage with social assistance programs is low, at about 15% of the population. Against this backdrop, the Government of Tajikistan in December 2022 approved a national social protection strategy aimed at strengthening social protection systems so that they become more inclusive, comprehensive and integrated, and expand its coverage to vulnerable groups

³⁸ UPR Recommendation 123.110, 3rd cycle

³⁹ UPR Recommendation 123.112, 3rd cycle

⁴⁰ UPR Recommendation 123.187, 3rd cycle

⁴¹ The Decree of the President of the Republic of Tajikistan "On preventing the impact of the infectious disease COVID-19 on the socio-economic spheres of the Republic of Tajikistan", the "Plan of measures of the Government of the Republic of Tajikistan to prevent the impact of potential risks of the coronavirus pandemic on the national economy" were adopted, tax and credit benefits were introduced, and financial assistance was provided to the vulnerable population groups.

of the population. This also includes strengthening the system's ability to respond to strikes so that it is ready to respond in the event of any natural or man-made disaster, in close cooperation and with the support of development partners.

At present, the government's efforts to budget financing of the social protection system are associated with two processes: the transition to program financing aimed at improving the efficiency of the system for managing public social insurance funds, and the creation of economic conditions for the transition to an insurance pension system. However, particular focus is made on the provision of targeted assistance and social support to vulnerable groups of the population.

Volumes of budget financing of the system of social insurance and social protection of the population for 2015–2021 averages 4.2% of the country's GDP.

Almost 85% of all funding goes to social insurance and pension programs and, accordingly, 15% goes to funding the social protection of children and other vulnerable segments of the population.

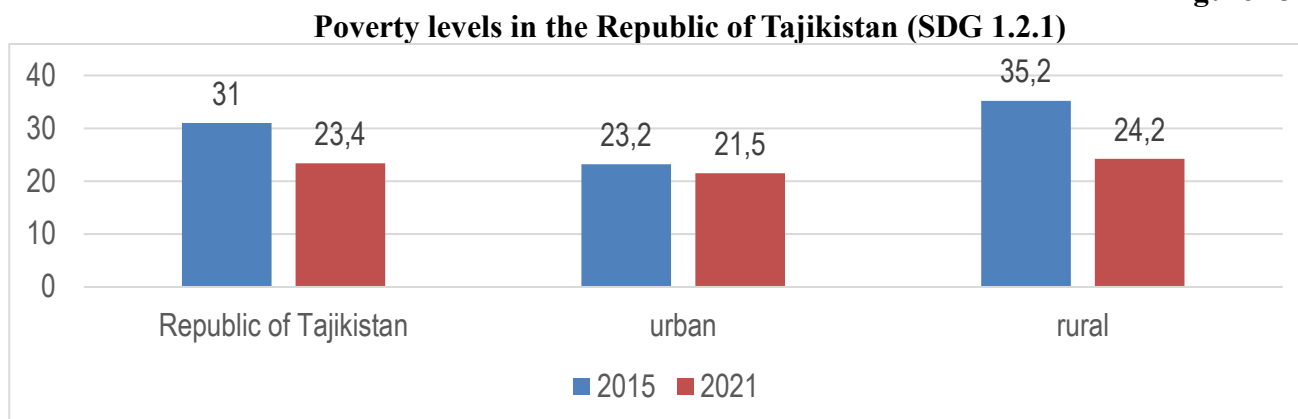
In specialized permanent institutions of social protection of the population, care has been organized for 1204 people (47 people more than in 2020), of which 632 are men, 466 women and 106 children with disabilities.

For children under 1 year old, disabled since childhood, disabled children under 18 years old, who are in orphanages, family orphanages (host families), boarding schools for orphans and children left without parental care, members of low-income families, medical care is completely free.

According to the income/poverty criterion, poverty is declining but remains an important vulnerability factor.

The benefits of economic growth have generally contributed to the reduction of poverty in the country. Poverty in Tajikistan has fallen by 6.4 percentage points over the past six years to 23.4%, but the benefits vary between regions and between urban and rural areas. In dynamics, poverty is declining in both cities and rural areas of the country but is still more concentrated in the rural regions of the country.

Figure 23



Source: Agency on Statistics under the President of the Republic of Tajikistan

The rural population remains highly vulnerable to the risk of poverty and the level of inequality is higher - if on average in the cities of the country the ratio of high-income and low-income groups of the population is 6.7 times, then in rural areas it is 10.7 times.

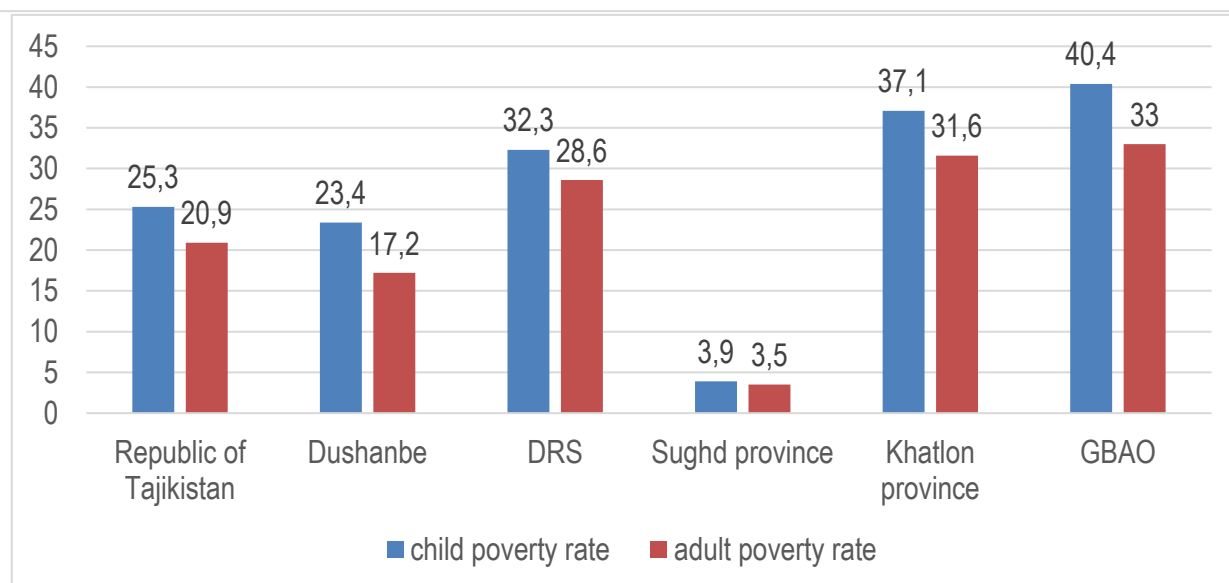
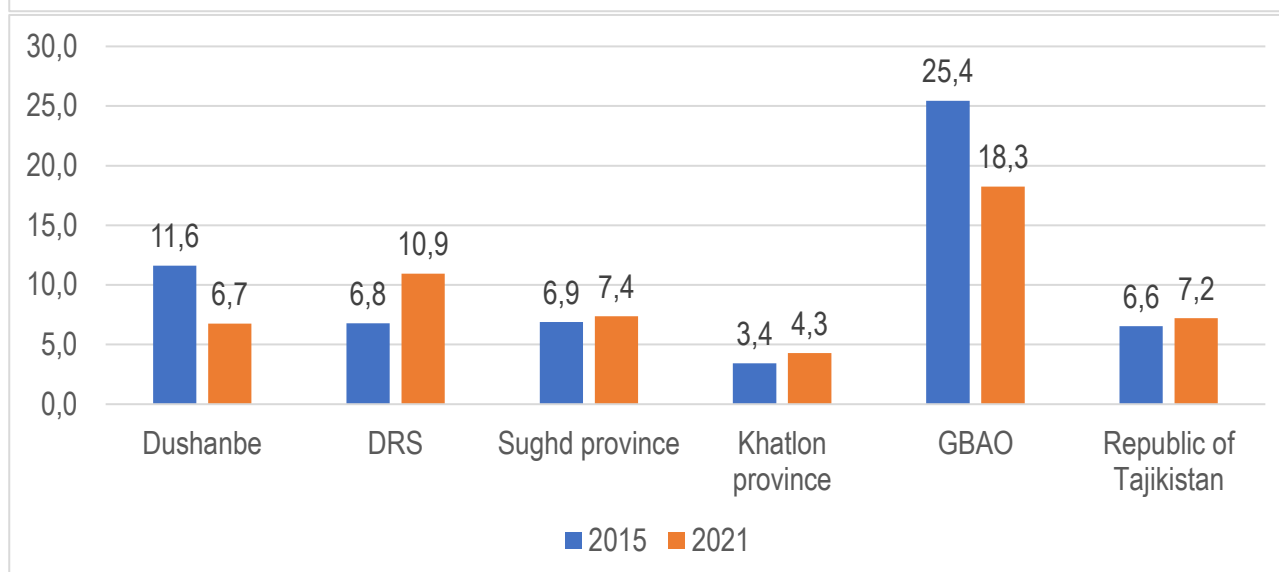
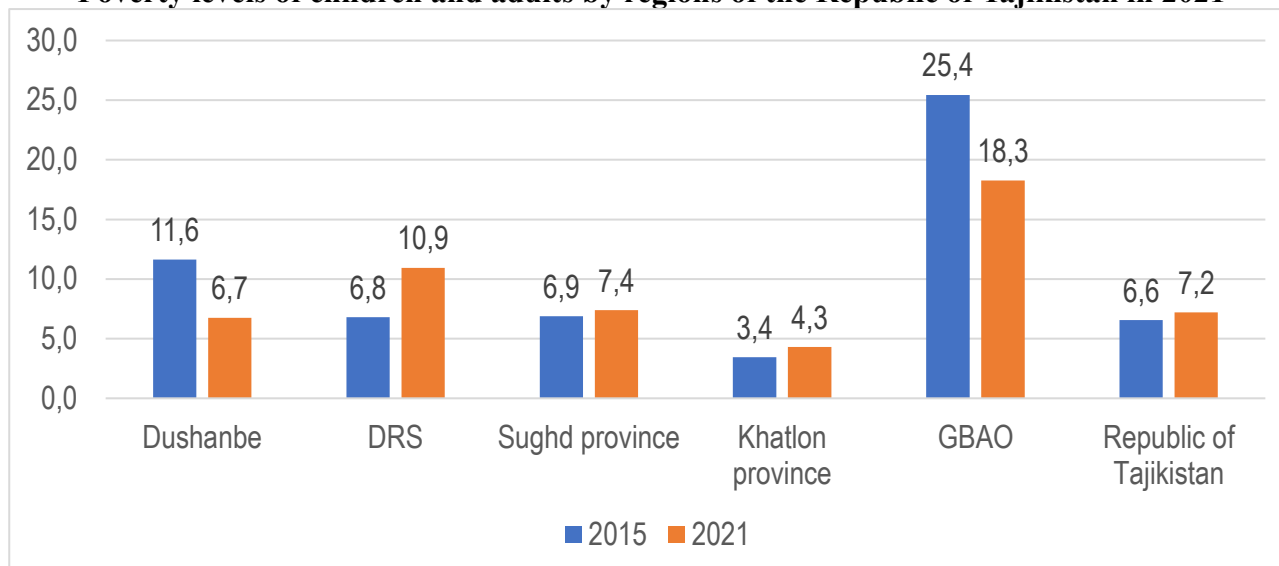
In addition, the share of private transfers in the form of remittances from abroad is relatively higher and the share of labor income is lower in the income structure of rural households.

Poverty affects children more severely, especially in rural areas. In all regions of the country, the level of poverty of children is higher than the level of poverty of the adult population. The gap between urban and rural child poverty is almost 10%.

The highest level of child poverty is observed in GBAO, Khatlon region and DRS, whose population is mostly rural.

Figure 24

Poverty levels of children and adults by regions of the Republic of Tajikistan in 2021



Source: Agency on Statistics under the President of the Republic of Tajikistan

Young children, most often very young children, preschool children and primary school children under the age of 10 are most at risk of poverty.

In 2021, about 5% of preschool children and 2% of those aged 7 to 16 lived in low-income families.

The poverty rate is higher in households with more children. Households in rural areas, where the average family size is much higher due to the birth of 4-5 or more children, are more likely to become poor.

Moreover, poor households with many children are more dependent on the physical and economic availability of food. The share of food expenditures is higher in households with many children, which indicates risks, including relatively limited resources for the development of human capital, which ultimately contributes to the “conservation” of poverty in later life stages.

A program of targeted social assistance is being implemented in the republic, within the framework of which low-income families are supported in all cities and regions of the country. Efforts throughout the implementation of the program were aimed at - increasing public awareness of this program, ensuring the use of improved methods for assessing the needs of households, creating a Unified National Information Register on low-income families and persons with disabilities. The program combines the provision of - cash payments of 464 Somoni (USD 45) per year and benefits for paying for medicines, utilities and transportation costs.

At the same time, as part of the mitigation of the effects of the Covid 19 pandemic, about 50,000 families with young children who were enrolled in the national targeted social assistance program were provided with additional assistance of 500 Somoni (USD 48), which helped cover their basic food needs and medicines during a difficult period. At the same time, now efforts are aimed at developing a sustainable practice of monitoring the assessment of the real effectiveness and efficiency of such assistance.

Notwithstanding, the concern is that the budget funds provided for children, especially those who live in rural areas, are not quite sufficient to meet basic needs.

Since most of the population lives in rural areas, a potentially larger number of those in need of support are concentrated in rural areas. At the same time, given the seasonal nature of poverty (during the harvest season, the poverty rate is 8% lower than in other seasons of the year), it is important to maintain year-round resilience of the population to the risks of poverty. Accordingly, the complexity of actions is associated both with ensuring macroeconomic stability and food security, and reducing non-material poverty, especially in terms of increasing the coverage of children in education, health services and social protection.

Even so, general recommendations for fighting poverty are related to supporting the formation of inclusive business models; stimulating structural reforms aimed at productive employment and social sustainability, the development of predominantly labor-intensive sectors of the economy.

There are proven effective ways to tackle child poverty, such as child-friendly social protection programs and investing in affordable and quality social services. Focusing on child poverty can end poverty and lay the foundation for stronger, more sustainable and inclusive development.

According to the criterion of age associated with exclusion from participation and stigmatization - there is a range of objectives that need a comprehensive implementation.

Orphans. Approximately 0.05% of children aged 0-14 are orphans in the Republic of Tajikistan. In 2018 and 2020, the Law of the Republic of Tajikistan “On the Protection of the Rights of the Child” was amended to provide additional guarantees for orphans and children left without parental care, and the Procedure for identifying and registering children left without parental care was approved.

For this category of children, pension payments are due (232 Somoni, which is equivalent to about USD20.5).

And for this category of children, the problem of accompanying them to adulthood is still acute, especially in rural areas.

Children are social orphans. Of every 100,000 children in the country, approximately 160 children lose parental care each year. In many cases, this is due to labor migration⁴². External labor migration covers at least 10% of the able-bodied population of the country and at least a quarter of

⁴² UNICEF in Tajikistan

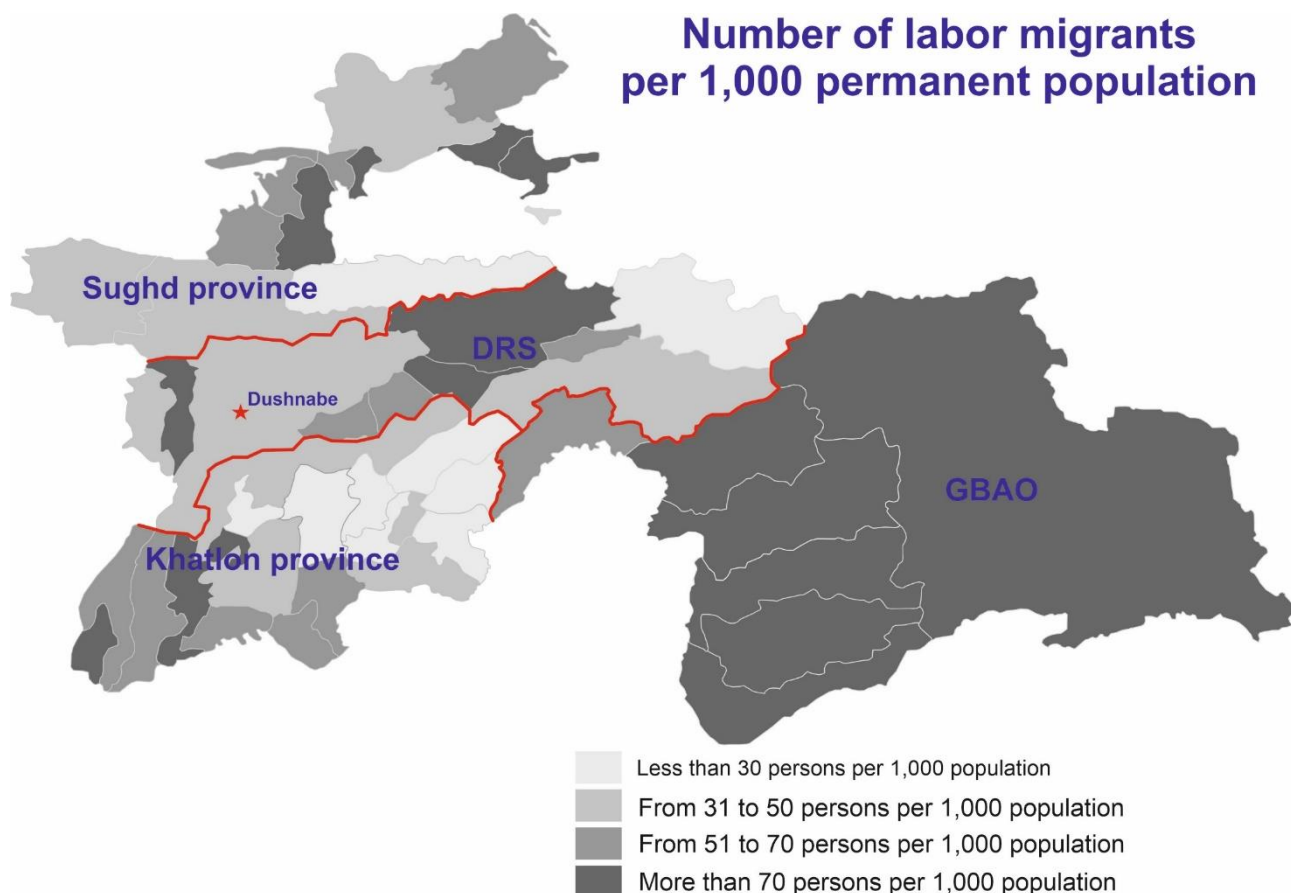
households, outside the republic in different seasons, from 400 to 800 thousand citizens of the country carry out labor and entrepreneurial activities, especially from rural regions.

The key influence on the absence of one of the parents (most often the father) is associated with migration processes in search of work. Accordingly, the vulnerability of children from such families increases due to the lack of a permanent income from the imposition of parental responsibilities mainly on mothers. At the same time, large families are more covered by labor migration - the larger the family, the more likely the decision on labor migration.

It is important to reduce the impact of labor migration on the well-being of affected children, in particular by providing local support, training caregivers and improving social and psychological support for affected children.

Tajikistan supported the Global Compact for Safe, Orderly and Regular Migration.⁴³ NDS-2030 considers the issues of external labor migration, it is planned to diversify external labor migration, taking into account the gender factor, and strengthen state regulation of the process of returning migrants. The interests of migrant workers are included in the National Climate Change Adaptation Strategy of the Republic of Tajikistan for the period up to 2030 and in the National Action Plan to Combat Human Trafficking for 2019–2021. The State Program for the Promotion of Employment of the Population of the Republic of Tajikistan for 2020–2022 included a separate paragraph “Social support for migrant workers who returned to their homeland”.

Currently, a relatively high level of labor migration is observed in GBAO and the regions of the Rasht Valley. Therefore, it is in these regions that it is important to create productive jobs at a relatively high rate.



⁴³ Adopted by the General Assembly on December 19, 2018

In general, structural changes in Tajikistan, with a significant strengthening of the capacity of the private sector, will weaken the factor of “exclusion” of the labor force in the context of maintaining high growth rates of the working-age population. Based on this, the accelerated development of labor-intensive industries and measures to ensure the development of communities are necessary to provide migrant workers and their families with new opportunities for income generation and employment, especially in rural areas.

Children who have been abused. According to the 2017 Demographic and Health Survey, overall, 69% of children aged 1-14 were subjected to some form of harsh discipline. At the same time, children are more vulnerable to domestic violence. Tajikistan has demonstrated its commitment to eradicate all types of violence against children, especially sexual violence. In 2021 and 2022, two policy documents, namely the Code of Administrative Offenses and the Criminal Code, were amended to provide punishment for corporal punishment or the threat of physical punishment against children, as well as tougher criminal penalties for sexual violence against children. In addition, Tajikistan has drafted amendments to the Law on the Rights of the Child to prohibit corporal punishment in all settings. To strengthen the practical implementation of the above amendments at the school level, Tajikistan has established complaint mechanisms in pilot districts, which has led to a decrease in the level of violence against children.

Children in conflict with the law. For 12 months of 2021, 763 cases of juvenile delinquency were registered in the country, which is 3.2% of all offenses. However, the dynamics of reducing the number of cases of juvenile delinquency is not stable, which makes it necessary to increase the scale of preventive measures.

Vulnerable and disadvantaged children are the first to suffer from injustice in the juvenile justice system. The detention of children is often the result of a long process of exclusion and is often described as an inclusive system for minorities or the poorest children. Children deprived of their liberty face serious human rights violations, including violence, harassment and abuse.

Deprivation of liberty of children should always be considered as a measure of last resort and should be used when any other measure is ineffective and applies only to very serious and persistent crimes.

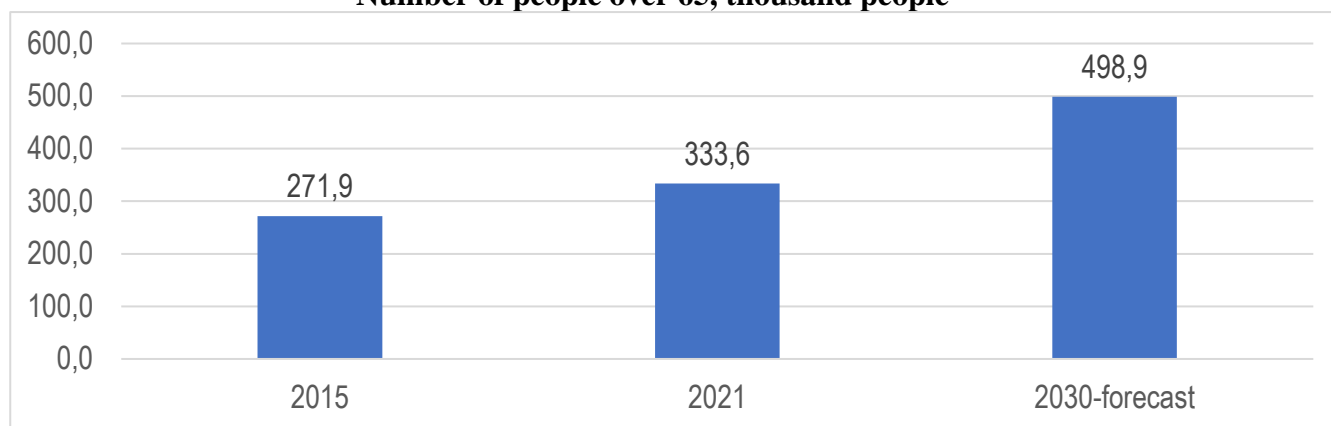
Although the Program for the Rehabilitation and Social Reintegration of Juveniles who have served their sentences in institutions of deprivation of liberty or restriction of liberty for 2020-2024 (dated July 25, 2020 No. 387) and the National Program for the Prevention of Juvenile Offenses for 2020-2024 (dated July 30 2020 No. 431), but consolidation of action both at the country level and at local levels needs more activity and continuity.

Released ex-prisoners. The legislation of Tajikistan (the Code of Execution of Criminal Punishments of the Republic of Tajikistan and some other legislative acts) contains a number of guarantees for people released from places of deprivation of liberty. Labor legislation provides for the payment of unemployment benefits and promotion of employment, including through a quota system. The strategy for reforming the system of execution of criminal sentences of the Republic of Tajikistan for the period up to 2030 provides for measures to support released persons, the establishment of a probation service and **an increase by 2030 in the total number of persons sentenced to punishments not related to isolation from society.**

Aged people. In recent years, there has been some change in the age structure of the population in Tajikistan. The demographic forecast indicates that the number of elderly people is increasing, and the process of population aging may develop. By 2030, the number of people over 65 years of age may increase by almost 1.5 times, which will significantly increase the burden on the budget in terms of not only paying pensions, but also providing access to medical services.

Figure 25

Number of people over 65, thousand people



Source: Agency on Statistics under the President of the Republic of Tajikistan

Older people are at risk of age discrimination in many areas of life and at risk of social exclusion.

In March 2021, the Agency for Social Insurance and Pensions under the Government of the country developed and implemented a new procedure for the appointment and payment of pensions based on the use of information technology and electronic document management. Accordingly, a classifier of types of pensions was developed and the form of statistical reporting was changed (improved).

The total number of pensioners receiving pensions has been growing annually in recent years - by an average of 4%. The increase in the number of the older generation is accompanied by an increase in the dependence of older people on the economically and socially active population. With the increase in the number of people of retirement age and the need for their social protection, the problem of increasing financial costs arises, which must be solved by expanding productive employment.

Despite the perfect recalculation and increase in pensions in recent years, the average pension in 2021 amounted to 21% of the average wage in the country. When, according to the ILO Convention, No. 102, the percentage of income replacement for a pensioner must be at least 40%. A significant part of old-age pensioners continues to work, mainly because pension payments do not provide an adequate level of existence.

The key goal of the pension reform in the country is to turn the pension system into an effective tool of economic policy that contributes to the growth of incomes and demand of the population, on the one hand, and an increase in investment activity, on the other.

The transition to a new system of pension provision, which combines state pension provision and the use of the accumulative principle of pension formation, aims to strengthen the relationship between the employee's labor contribution and the size of his pension provision.

In this aspect, efforts in the republic will be aimed at creating effective mechanisms for investing pension savings in the economy through development institutions.

According to the criterion of limited opportunities associated with exclusion, stigmatization, improper participation – there are also areas of activity that need to be intensified.

Persons with disabilities. Tajikistan demonstrates its commitment to promoting the rights of people with disabilities. The Constitution of Tajikistan guarantees the care of children with disabilities and social security in case of disability. The UN Convention on the Rights of Persons with Disabilities was signed by the President of the country in 2018, and in 2020 the country adopted a National Action Plan to prepare the Republic of Tajikistan for ratification of the Convention on the Rights of Persons with Disabilities (CRPD). Tajikistan has adopted all recommendations on the ratification of the CRPD within the framework of the third cycle of the UPR, as well as recommendations on improving access to social security for disabled people, expanding education coverage for children with disabilities, ensuring their participation in all national events on an equal basis with other people. Legislation and

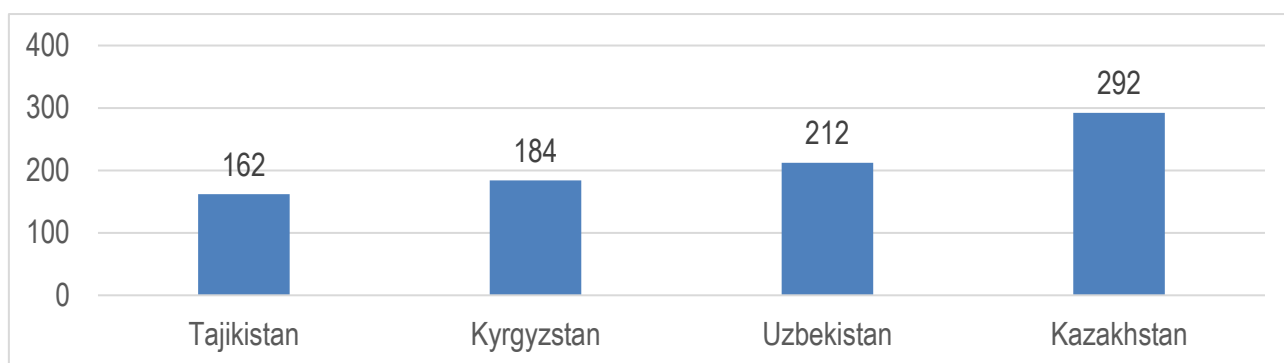
policy documents are aimed at the full realization of the rights and freedoms of persons with disabilities and their active participation in all spheres of public life. In the Law "On Equality and Elimination of All Forms of Discrimination", disability and health status are specified as discriminating features, among other things, and discrimination includes all its forms, including denial of reasonable accommodation.

In accordance with paragraph 2 of Article 25 of the Law of the Republic of Tajikistan "On the Social Protection of the Disabled", the planning and development of cities and other settlements, the formation of residential areas and recreation areas, the development of design solutions for new construction and reconstruction of buildings, structures and their complexes without adapting these objects for access to them by disabled people and their use by disabled people are not allowed.

At the same time, the level of registered disability in the country is lower than in neighboring countries.

Figure 26

The number of persons with disabilities in the Republic of Tajikistan is lower than in other countries of Central Asia (per 10 thousand people, 2019 results)

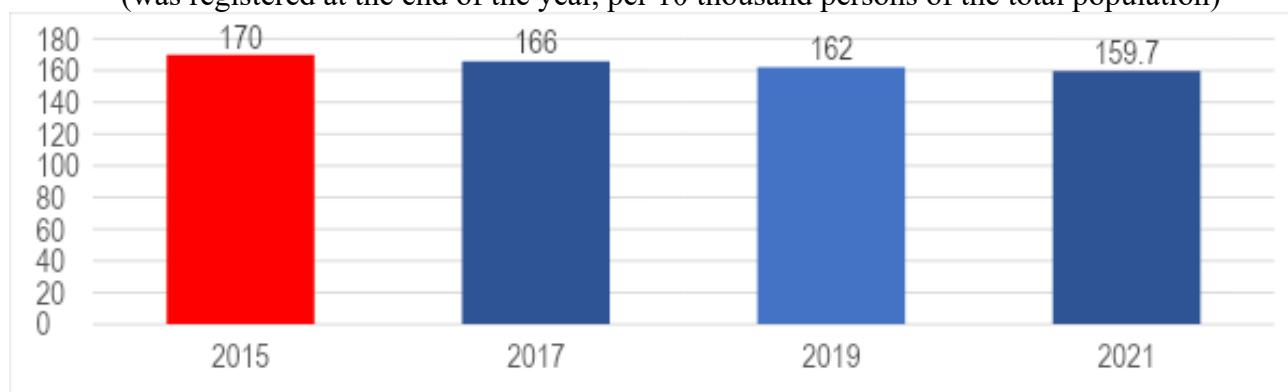


Source: CIS Statistics

And in dynamics, the level of registered disability in the country over the past seven years has a downward trend.

Figure 27

Number of persons with disabilities in the Republic of Tajikistan
(was registered at the end of the year, per 10 thousand persons of the total population)



Source: CIS Statistics

Creating conditions conducive to social adaptation and involvement of disabled people in labor activities, ensuring the availability of housing, social and transport infrastructure of cities is of particular importance in the republic.

So far, the legislation indicates the creation of special jobs (and not the adaptation of current jobs) for people with disabilities and the right to a shorter working day with full pay, which makes the employment of people with disabilities burdensome and unattractive for employers, the lawyer of

the youth organization of the blind emphasized. At the legislative level, there are discriminatory decrees on the deprivation of disability benefits (disability pensions) of those persons with disabilities who work in the public service (they make a choice whether you receive disability benefits or salary).

There are no comprehensive statistics on the unemployment rate among persons with disabilities. Although, a medium-term employment promotion program is being implemented, which also reflects the tasks of increasing the level of employment of persons with disabilities who have an appropriate medical recommendation.

There are 61 public organizations of the disabled in the country (together with branches in the regions), which are involved in addressing the challenges of promoting education and employment of the disabled.

In health and social care, persons with disabilities face insufficient access to quality health services and assistive devices tailored to the individual needs/size of persons with disabilities. Many drugs intended for the prevention of certain diseases are not available, which leads to complications and irreversible impairment of body functions (disability) such as Hemophilia.

Children with disabilities. According to national reporting data, in Tajikistan, as of January 1, 2022, the number of children with disabilities registered with the social protection authorities was 78 per 100,000 children (or about 0.8% of the total number of children under the age of 18 in the country), at least half of whom were born as a result of marriages between close relatives.

Only 0.06% of disabled children live in specialized boarding schools; the vast majority live with families.

The average size of the social pension for children with disabilities under 18 over the past five years in nominal terms has increased by 1.5 times, amounting to 236 Somoni (equivalent to about USD23), but the pension is only 59% of the minimum wage in the republic, which does not quite cover the necessary costs.

The number of day care centers for children with disabilities is expanding annually: in 2020 - 42 centers, in 2021 - 48 centers, in 2022 - 53 centers.

There are 13 comprehensive centers for social services for children with disabilities and people in difficult living conditions, and 1 rehabilitation center (with a hospital for 21 days) for children with disabilities with mothers in the Mir Said Ali Hamadoni district.

When implementing many construction projects for the implementation of social, scientific, educational, cultural, technical and technological infrastructure that provides access to means of pastime in cities and districts of the country, it is necessary to take into account the needs of adolescents with disabilities. At the same time, limited financial resources make it difficult to implement these projects. Therefore, it is important to consolidate actions at the local and national levels.

It is very difficult to ensure the coverage of children with disabilities in the general education system due to the limited available infrastructure and resources, as well as the lack of teaching staff trained to differentiate approaches to learning to facilitate the education of all students based on their individual needs.

The economic situation of families of children with disabilities is often very low, and the family situation is also difficult due to the fact that the head of the family is in labor migration. Healthcare institutions can contribute in this direction in cooperation with non-governmental organizations and international organizations.

It is important for children with disabilities to activate rehabilitation and integration systems at the local level, taking into account disability groups and the targeted/targeted actions of medical staff and the social protection system. In this direction, structures for youth work, sports and tourism, education, work with women and family, public associations and international organizations can provide support.

Homeless people belong to the category of people at risk of being "unheard". There are no statistics on the number of homeless people in Tajikistan, so there are no reliable statistics reflecting the number of homeless people in the country. According to unofficial data, about 500 homeless people live in the Sughd region alone. The Constitution of the Republic of Tajikistan guarantees

everyone the right to housing. Homeless persons, according to the legislation of the Republic of Tajikistan, belong to the category of people who find themselves in a difficult life situation, and are subjects-recipients of free social services.

Stateless persons. The Republic of Tajikistan pays attention to solving the problems of stateless people. According to the UNHCR 59,287 persons with undetermined citizenship and stateless persons were identified from 2014 to the end of February 2023 in Tajikistan. 55,416 of these received identity documents. Most of these persons are women and girls - more than 71%, and by age category 38% of them are minors. The adoption in December 2019 of the Law "On Amnesty in connection with the legalization of the legal status of foreign citizens and stateless persons, illegally staying on the territory of the Republic of Tajikistan", which allowed stateless persons and foreign citizens from the countries of the former USSR who entered the country before December 31, 2016, to legalize their stay in Tajikistan and obtain residence permits.

Stateless persons have problems accessing the basic services that the state provides to its citizens: health care, education, employment, social protection, civil status. These problems most affect women and children in rural areas. There are no official state statistics on stateless persons. The main reasons for the residence of people without passports of citizens of the Republic of Tajikistan are the remote location of some dehots (villages) from administrative centers; lack of money to pay fees and fines; legal illiteracy of the population; the need to collect additional documents confirming the identity and citizenship of the Republic of Tajikistan. Due to the lack of a passport of a citizen of the Republic of Tajikistan, the child also cannot receive a birth certificate and a passport. The validity of the Law "On amnesty in connection with the legalization of the legal status of foreign citizens and stateless persons illegally staying on the territory of the Republic of Tajikistan" expired on December 25, 2022, and foreign citizens and stateless persons remained in the country who did not have time to take advantage of the law for various reasons.

Refugees. Among the countries of Central Asia, Tajikistan occupies a leading position in terms of the number of refugees, mainly from neighboring Afghanistan. Over the past three years alone, the average number of refugees and asylum seekers in the country amounted to 9.9 thousand people, which is about 2.6 thousand families with children.

The legislation of the Republic of Tajikistan provides a number of guarantees to asylum seekers and refugees. The Republic of Tajikistan was the first among the countries of Central Asia in 1994 to ratify the UN Convention of 1951 "On the Status of Refugees" and the Protocol to it in 1967. In accordance with the Constitution of the Republic of Tajikistan, foreign citizens and stateless persons enjoy the proclaimed rights and freedoms, and also have equal duties and responsibilities by citizens, with the exception of cases provided for by laws (Article 16). The Law of the Republic of Tajikistan "On Refugees" generally complies with international standards.

The children of refugees and are provided with opportunities to receive education in the educational institutions of the country.

However, the choice of place of residence is limited for asylum seekers and refugees in Tajikistan which complicates their access to the labor market, health care, education and other social services. Tajikistan receives recommendations to improve the situation of asylum seekers and refugees from the UN treaty bodies and within the framework of the UPR mechanism. Finding housing for refugees is difficult due to high rents for private housing. The building of the Center for Temporary Accommodation of Asylum Seekers has been reconstructed in Gissar, but the Center has not yet been put into operation.

Gender (stigmatization, employment, level of payment). Women make up almost half of the country's population, so it is important to make better use of their opportunities in the economy and politics.

To ensure gender equality in Tajikistan, a regulatory and legal framework has been created and is being developed.

The Republic is implementing the National Strategy for the Activation of the Role of Women in the Republic of Tajikistan until 2030 and its Action Plan for 2021-2025, which define the main directions of state policy to enhance the role of women, create equal opportunities for women,

prevent, eliminate violence against women, protect rights and interests of the family, women and children were considered with the participation of civil society, such as NGO "Zerkalo", "Gender and Development", as part of the improvement of legal acts on the elimination of gender stereotypes, the protection of women's rights and the prevention of domestic violence, the intensification of the activities of interdepartmental working groups is indicated in three directions in the country:

- elimination of gender stereotypes (under the Committee on Women and Family Affairs under the Government of the Republic of Tajikistan in cooperation with the Prevention of Domestic Violence Project (PDV);
- protection of women's rights (under the Ministry of Justice of the Republic of Tajikistan in cooperation with UNDP Program "Rule of Law and Access to Justice");
- Prevention of Domestic Violence (under the Attorney General's Office in cooperation with the Project for the Prevention of Domestic Violence (PDV).

However, gender issues are integrated into the country's program activities, including the introduction of issues of reducing gender inequality as a cross-cutting issue in the NDS-2030, in the MTDP 2016-2020 and the MTDP 2021-2025, the adoption of new programs based on the gender approach. Meanwhile, mechanisms aimed at promoting gender equality are consistently strengthened, including "soft quotas" in party lists of candidates for deputies of the country's Parliament, preferences for admission to the civil service, Presidential quotas for university applicants, Presidential grants for women entrepreneurs.

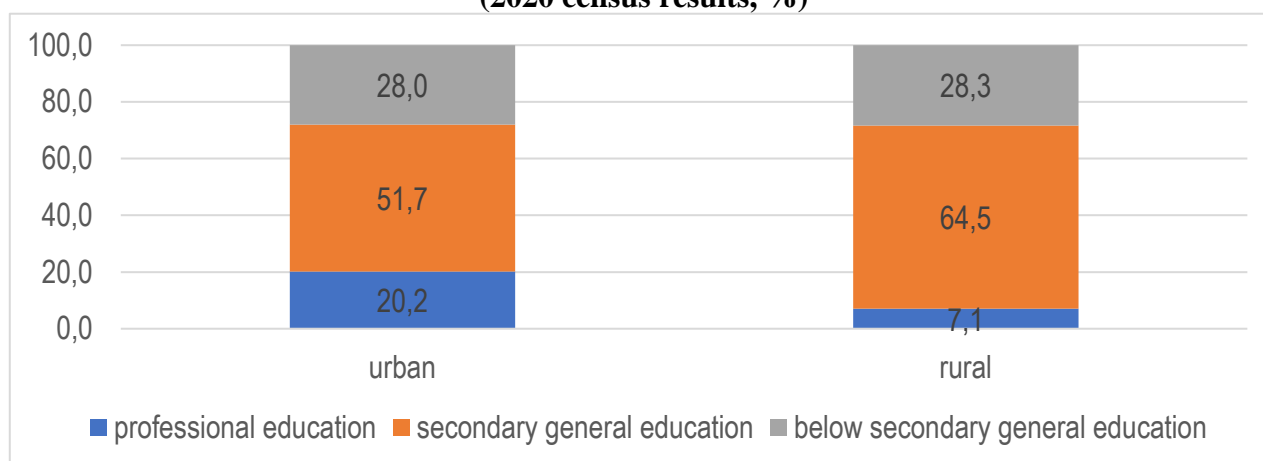
Although, there are still a number of common areas of action that characterize uneven progress in achieving gender equality in the Republic of Tajikistan.

The gender development index is 0.909 and, compared to 2015, the country, unfortunately, moved from group 3 to group 4 (countries with equality in HDI achievements between men and women below the average - absolute deviation - from 7.5 to 10%) with exponent. According to the results of the assessment at the global level, Tajikistan for the implementation of SDG 5 is included in the critical group of countries for which "the main problems remain unresolved. The valuation stagnates or increases by less than 50% of the required rate".⁴⁴

Even before the start of the Sustainable Development Goals, the country's policy documents set a goal - at least 30% of the representation of women in government bodies, towards which efforts are directed. Although, women and girls make up 25% of the total number of civil servants, and almost 20% of the leading cadres so far.

Figure 28

**Distribution of women of working age by levels of education
(2020 census results, %)**



Source: Agency on Statistics under the President of the Republic of Tajikistan

⁴⁴<https://dashboards.sdindex.org/profiles/TJK>

There is a persistence of stereotypes regarding women's work in the public sector and at the level of decision-making in society. Although, in dynamics the situation is improving. For the period 2010–2020 the representation of women in parliament increased from 19 to 23.8%, the number of women working at the national and local levels of government reached 31.3%.

Between the last two censuses (2010 and 2020), the number of women of working age with a vocational education has decreased from 114 out of 1,000 women in 2010 to 108.3 out of 1,000 women in 2020⁴⁵.

Women living in urban areas have relatively higher levels of education: 20.2% of urban women of working age have a vocational education, while this figure is only 7.1% of rural women. In addition, both in the city and in the countryside, the presence of secondary general education prevails among women, but in the countryside their share is even more significant.

And in general, a relatively large proportion of women of working age are less competitive in the labor market.

Women predominate in low-paid sectors of the economy (agriculture, health care and education). In addition, many women do unpaid work on family farms. Women are also less likely to be self-employed (7% compared to 12% of men). Their unemployment rate is relatively higher.

Women receive lower wages. Economy-wide, women's average wages in 2021 were 66.7% of men's average wages. For 10 years, the gap in the wage levels of women and men has not been reduced significantly.

Women make up a large proportion of unpaid workers involved in caring for children and other family members, especially in rural areas. This situation is aggravated by the fact that access to kindergarten services in rural areas and small towns is limited.

It is expected that the reform processes will be accompanied by active promotion of initiatives to expand economic opportunities for women in the country, efforts to promote gender equality in the labor market will have to be comprehensive (taking into account the growth in vocational education, social infrastructure).

Capacity building actions for female and male agricultural producers are focused on:

- awareness raising of women and men about the rights to economic resources, about the components of the ongoing agrarian reform, about the opportunities and benefits of various types of economic activity;
- • increase the coverage of various forms of training of specialists in the field of agriculture and land management, the creation of ongoing capacity building programs on new financing systems, technologies for growing crops, the use of IT;
- • development of training programs and training materials focused on local alternative farming systems, on energy and water systems with accumulative financing;
- • implementation of motivational programs and increase in Presidential quotas for girls in universities of agriculture, land management and other popular profiles related to the green economy.

The representation of women as civil society leaders is higher than in other sectors. The civil society in the country can encompass a wide range of organizations, from local organizations (community councils, mahalla councils, etc.) to more formal, officially registered public associations. Women's non-governmental organizations work more on social protection issues and provide direct assistance to communities (in particular, empowerment through training and mobilization of services for victims of domestic violence), in the field of human rights and in monitoring the implementation of gender equality commitments.

Women, compared to men, have even more limited access to information technology. In the context of the country's reorientation towards a digital and green economy, it will be important to use a balanced approach to introduce advanced technologies aimed not only at men, but also at women.

⁴⁵ Population and housing census of the Republic of Tajikistan 2020: Educational level of the population of the Republic of Tajikistan - Dushanbe, 2023

The country has developed and improved legal acts on providing assistance to victims of domestic violence within the powers of the Ministry of Health and Social Protection of the Population, as well as developed certain standards for providing assistance to victims of domestic violence.

To effectively implement the provisions of the legislation on the prevention of domestic violence, as well as to provide assistance and support to women victims of violence, the prevention and suppression of domestic violence in the family, the protection of the rights, freedoms and constitutional guarantees of women in the sphere of family and domestic relations, 33 crisis centers and 3 of their branches have been created and are functioning in the republic. At the maternity wards of hospitals in a number of cities and regions of the republic, offices for counseling and providing medical assistance to victims of domestic violence have been organized and are functioning, where women and minor children most often turn.

There are also state institutions and public organizations, including the Committee on Women and Family Affairs, the crisis center of public organizations "Bovary ba fardo" (Faith in the Future) for women, inspectors to combat domestic violence in the structure of the internal affairs bodies, information and advisory centers under local executive bodies of state power (110), crisis centers for the rehabilitation of women who have been subjected to violence (18) under NGOs. A helpline - 1313 - has been opened to prevent domestic violence, which receives free calls from mobile phones daily on weekdays from 08:00-17:00 and on Saturday from 08:00-12:00 except Sunday.

Various civil society institutions contribute to providing assistance to women, preventing and eradicating cases of violence against women, as well as increasing the legal literacy of vulnerable groups of women, in particular those living in rural areas.

Although, there is an urgent need to optimize the legislative framework for the elimination of violence against women and girls, qualified professional personnel to work on violence issues, develop a mechanism for monitoring and controlling the implementation of existing laws, measures and programs on the elimination of violence.

In the medium term, the most significant advances in gender equality are associated with expectations of an increase in the role of women in leadership and decision-making, access to economic resources and labor participation, achievements in education, health and social protection.

General proposals

It is important to continue to demonstrate commitment to the achievement of the SDGs, taking into account the principle of "leaving no one behind", international obligations and the implementation of the recommendations of international human rights bodies and procedures; continue to explore the status of empowerment and access to services for disadvantaged groups, including those at risk of being left behind;

At the same time, it is necessary to provide wide access to social services, income and food security for all people and families in need at different stages of life; continue developing targeted mechanisms for the system of social assistance; develop a state program on aging and social protection of older people; develop a Concept for reforming the pension system;

Social policies should contribute to the reduction of inequality of opportunity, which includes economic aspects (for example, unequal access to productive jobs, financial services, land ownership), social aspects (for example, unequal access to health care, education, nutrition, participation in politics) and environmental aspects (for example, unequal access to water supply, sewerage, sanitation and energy). Accordingly, policies should not have a narrow sectoral focus, but should promote a comprehensive set of actions that will increase opportunities.

The countryside should be the starting point for intensifying efforts to ensure inclusiveness in the development of the country.

The development of sectoral and regional policies should include a vulnerable group impact analysis (or, more generally, a human rights impact analysis).

It is important to build national capacity to create a database on different dimensions of vulnerability, such as territory, ethnicity, age, gender, disability, etc., which should be used in the process of formulating, implementing, monitoring and evaluating policies.

3.2. Nutrition Improvement

Access to quality food as a result of climate change affects one of the most important parameters of life activity - the nutritional status of the population, especially pregnant and lactating women and children.

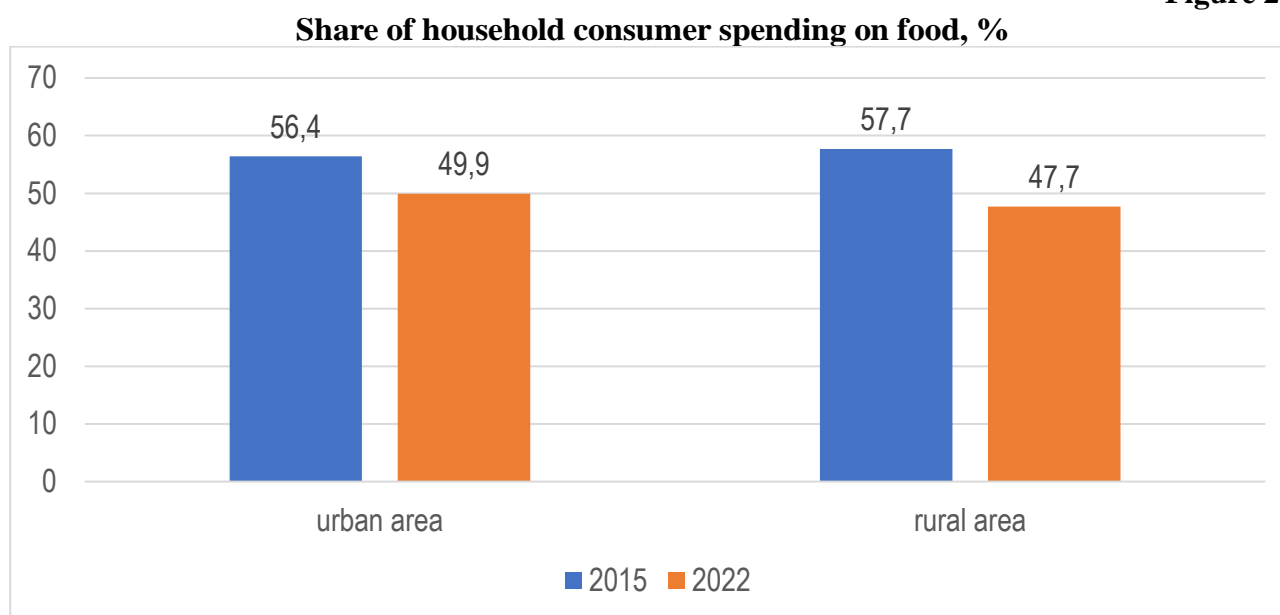
The strategic guidelines for the development of the country's food system are related to ensuring healthy nutrition through sustainable agri-food systems.

In recent years, the country has adopted a number of programs aimed at improving the provision of the population with food products, in particular: the Food Security Program of the Republic of Tajikistan for 2020-2024, the Food Safety Program of the Republic of Tajikistan for 2019-2023, the Nutrition and Physical Activity Strategy in the Republic of Tajikistan for 2015-2024, Multi-sectoral plan to improve nutrition in the Republic of Tajikistan for 2021-2025, Program for the prevention of obesity and the formation of a healthy diet in the Republic of Tajikistan for 2019-2024.

Government efforts are increasingly focused on a coherent multi-sectoral policy that brings together the food, health and education sectors, and social protection to promote the transition to nutritional patterns that provide people with the nutrients they need, serve the interests of human health and the environment.

Over the past five years, the level of food spending has decreased - both in rural and urban areas.

Figure 29



Source: Agency on Statistics under the President of the Republic of Tajikistan

The share of household spending on food in total spending decreased from 57.3% in 2015 to 48.7% in 2022, but remains high. The task was set to reduce this share of expenditures to 42-40% by 2030 due to the growth of incomes and food production.

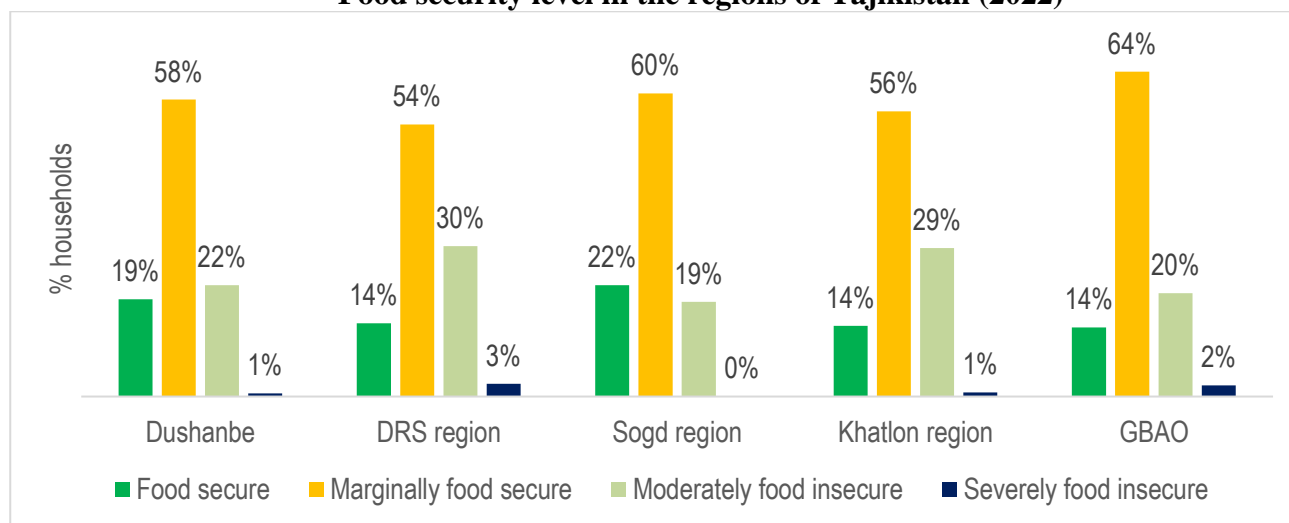
In 2022, the level of the indicator of the energy value of the diet in the Republic of Tajikistan amounted to 3783.58 kilocalories per 1 member of the household per day, which indicates that the country has consumption levels that exceed the norms recommended by the World Health Organization (2100 kilocalories per day). This means that food resources are sufficient to sustainably meet needs, although dietary imbalances remain. The current diets in terms of calorie content and the content of basic nutrients (fats, carbohydrates, proteins, including those of animal origin) do not yet fully meet the recommended standards.

In December 2022, an estimated 25% of households in Tajikistan were classified as food insecure and one percent as severely food insecure. In all regions of the country, 54 to 64% of

households were marginally food insecure. About a third of all households in DRS and Khatlon were classified as moderately food insecure.

Figure 30

Food security level in the regions of Tajikistan (2022)



Source: World Food Programme: Food Security Monitoring Report, December 2022.

Ensuring children have access to healthy food is expected to be a basic component for increasing life expectancy and productivity in the coming years.

A number of policy documents are directly aimed at solving the problem of improving child nutrition, namely: the National Communication Program for the first 1000 days of a child's life in the Republic of Tajikistan for 2020-2024, the Strategy for the Sustainable Development of School Feeding in the Republic of Tajikistan for the period up to 2027.

Universal childhood immunization against major vaccine-preventable diseases is one of the most cost-effective programs to reduce infant and child morbidity and mortality. In Tajikistan, routine vaccination of children protects against tuberculosis (BCG vaccine), hepatitis B (HepB monovaccine), diphtheria, tetanus, whooping cough, Haemophilus influenzae type b and viral hepatitis B (pentavalent DTP-Hib-HBV vaccine or penta), polio (oral polio) vaccine or OPV), rotavirus (rotavirus vaccine), measles and rubella (MR vaccine).

Tajikistan has a high level of vaccination coverage: among children aged 24-35 months, 82% got all essential vaccinations at the time of the survey. Only 3% of children were not vaccinated. Coverage remains high for subsequent doses of DTP-Hib-HBV and polio vaccines, with 87% of children receiving the third dose of each of these vaccines. Eighty-seven percent of children aged 24-35 months received measles and rubella vaccinations. For 2022, coverage of the third dose of Penta (DPT) is 96.5% (according to departmental statistics).

Efforts are being made in the republic to reduce the prevalence of malnutrition and stunting among children under the age of 5, although at the same time there is a tendency for an increase in the number of overweight children.

According to national reporting, in 2021, 0.8% of newborns were born with low birth weight (less than 2500 g); this is slightly higher than in 2015, when this figure was 0.7%, but in absolute terms, a 5% decrease in the number of births of children with low birth weight is recorded over this period. To achieve the goal of reducing the prevalence of low birth weight by 30% by 2030, consolidated efforts will be essential both to improve access to nutritious nutrition and health care.

The proportion of children under six months of age who are exclusively breastfed was 34% in 2012 and 36% in 2017; however, these figures are well below what is needed to reach the 2030 target of at least 70% globally. Nearly half of mothers start giving their babies complementary foods between four and six months, and one in ten mothers introduce complementary foods even earlier.

Efforts are expected to intensify towards implementing measures that promote and sustain exclusive breastfeeding, create an enabling environment for breastfeeding, and scale up prenatal and postnatal breastfeeding counseling.

The country is making progress in reducing stunting in children under five years of age (SDG 2.2.1). The share of stunted children decreased from 26% in 2012 to 17% in 2017. Boys and girls are equally affected by stunting. Among urban children, the percentage of children suffering from stunting is almost the same as among children living in rural areas. Stunting is most prevalent in financially disadvantaged households whose mothers have not received formal education. To reduce the number of children with stunting by 50% by 2030, this figure will have to decrease to at least 10%. Greater progress in reducing stunting will require greater investment in nutrition-specific interventions.

The proportion of children suffering from wasting in the country (SDG 2.2.2.) decreased from 10% in 2012 to 6% in 2017. But it is more than double the global target for 2030 of less than 3%. Analysis by age group shows that wasting is highest (14%) among children under 6 months of age and lowest (2%) among children aged 36-47 months. Almost 37% of children suffer from vitamin A deficiency and 12% from vitamin D deficiency. Only 40% of children aged 6-23 months receive optimal food variety and frequency of meals. Wasting is more common among children under the age of five living in financially disadvantaged households whose mothers have not received formal education. The solution to the problem is associated with the need for a significant increase in investment in the prevention of wasting, its early detection and treatment.

The 2030 target assumes a significant reduction in the prevalence of overweight in children under five years of age (SDG 2.2.3.) - to no more than 3%, while the scale of this problem in the country is not high, but is increasing slightly: in 2012 it was 1%, and in 2017 - 3%. To achieve the 2030 target, efforts will be directed towards improving the quality of human nutrition and other lifestyle factors such as physical activity.

Malnutrition also contributes to poor maternal health. In 2016, 21% of women of childbearing age were anemic. Women suffering from anemia are more likely to live in rural areas, in low-income households, and have no formal education. To achieve the global goal for 2030 of anemia prevalence of no more than 14.3%, it will be important to promote a comprehensive, multisectoral approach aimed at identifying and eliminating all causes and risk factors for anemia in women, including those associated with poor nutrition, gynecological diseases and low socioeconomic status.

In combating the triple burden of malnutrition, efforts will be intensified to expand services for maternal and child nutrition and care for pregnant women, as well as for breastfeeding women, children under five years of age, caregivers and family members of pregnant women and young children.

Adult obesity does not yet pose a serious threat compared to other countries. About 17% of the population of the republic are overweight. In 2019, according to the World Health Organization, the Republic of Tajikistan ranked 128th in the world's list of obesity. But, at the same time, there is no progress in curbing the growth in the prevalence of obesity in adult men and women in the country. In addition to improving diets and improving the quality of nutrition, investment in health measures to promote healthy lifestyles will be required.

As part of the provision of school meals in the country, it was possible to increase - the coverage of secondary school students of the Republic of Tajikistan with free school meals from 21% in 2014 to 45.5% in 2021; the number of schools that include foods fortified with vitamins and microelements in their diets; number of school chefs with professional education.

Almost 55% of general educational institutions have canteens necessary for organizing school meals, more than 22% of schools have school gardens and plots where food can be grown to improve school meals, the Procedure for Procuring Food and Services for School Catering has been approved.

The quality of school meals depends on factors such as sustainable access to clean water, electricity and heating, as well as the availability of a developed transport infrastructure. Currently, only about a third of schools have a stable supply of drinking water. There are problems with the stability of heat and electricity supply during the school year, especially in rural areas. At the same

time, in rural areas, it is necessary to solve the problem of transport accessibility and establish the transport infrastructure necessary for the timely delivery of products to schools. The problems of school feeding development are cross-sectoral, and their solution will require coordinated efforts of various authorities.

In recognition of the goal - by 2030 to end all forms of malnutrition and bring the level of extreme poverty to 0%, it will be very important to ensure systematic actions towards increasing physical and economic access to healthy nutrition, the level of education of the population, incomes in the framework of productive employment and social protection targeting.

3.3. Improving health and well-being for all

As in the whole world, there is an increasingly clear trend towards strengthening the priority of preserving human health in solving the problems of environmental pollution in the country.

The health care system of Tajikistan is a key sector in achieving the Sustainable Development Goals, as efforts made to improve the health of the population have the potential to contribute to sustainable economic growth and human development of the country.

It is important to consistently increase the financing of health care, improve the quality of training and provision of medical services, and ensure decent wages. Over the past seven years, there has been a consistent increase in healthcare financing, from 2.1% of GDP in 2015 to 2.9% in 2021. The task was set to bring the volume of financing of the industry to 4% of GDP.

The main priorities of health financing reforms as part of the overall reforms of the health sector in the country, identified by the government as part of the health financing strategy, as well as the strategic health action plans for 2015–2018 and 2019–2021, are: a) a gradual increase in public spending on the sector health sector, b) pooling health sector resources, c) establishing a new provider payment system, and d) increasing the salaries of health workers.

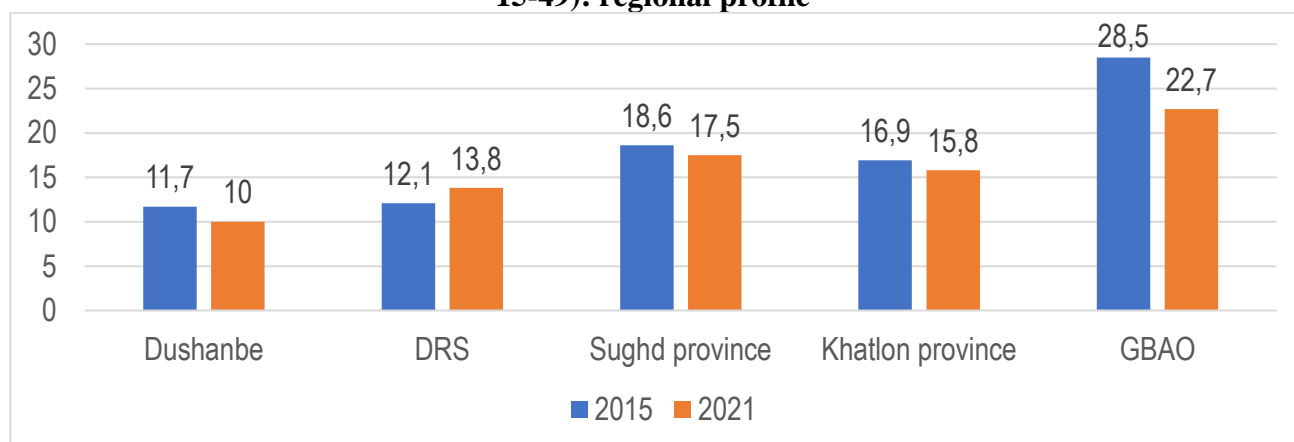
It should be noted that funding of the healthcare sector in the State Budget of the country for 2020, was increased by 1.4 times over the approved budget to implement measures to counteract the spread of COVID-19,

With the support of the international community, the Republic of Tajikistan in 2020-2021 was able to bring the level of immunization of the population to 80%, which, along with other actions, reduced the incidence of COVID-19.

In general, efforts continue to improve the system of primary health care by organizing rural medical centers, urban and rural family clinics, and increasing its accessibility to the population.

Figure 31

Provision of beds for pregnant women and women in childbirth (per 10,000 women aged 15-49): regional profile



Source: Agency on Statistics under the President of the Republic of Tajikistan

In 2021, the provision of medical workers per 10,000 population was 20.5 doctors, against 20.8 in 2015, and 56 nurses against 59.4, respectively, in 2015. A slight decrease in the parameters of the

provision of doctors to a relatively greater extent is due to the slower growth in the number of doctors compared to the growth rate of the population, especially in rural areas.

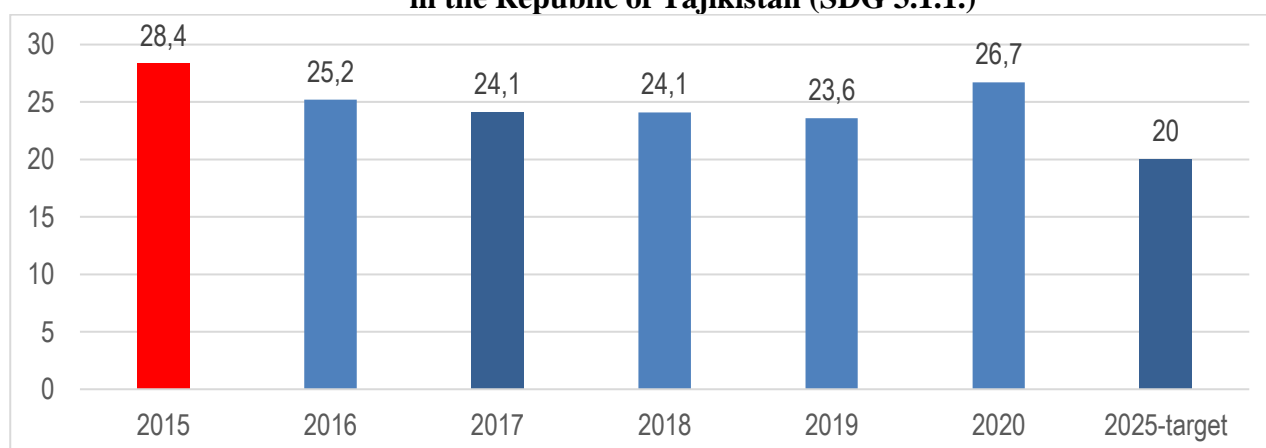
Programs have been implemented to improve the reproductive health of the population and protect the health of mothers and children.

At the end of 2021, the total number of women of childbearing age increased by 206.8 thousand compared to 2015. Meanwhile, the stable trend towards an increase in the number of pregnant women and childbirth, as well as the birth rate of children is observed.

However, the provision of pregnant women and women in childbirth with beds needs to grow - in 2015 there were 16.1 beds per 10,000 women aged 15-49 years, then in 2021 only 15.3 beds. This parameter is especially low in rural areas - RRP and Khatlon region (if you do not take into account the city of Dushanbe, where the birth rate is relatively low, but also in the city needs).

Figure 32

**Maternal mortality rate per 100 thousand live births
in the Republic of Tajikistan (SDG 3.1.1.)**



Source: Agency on Statistics under the President of the Republic of Tajikistan

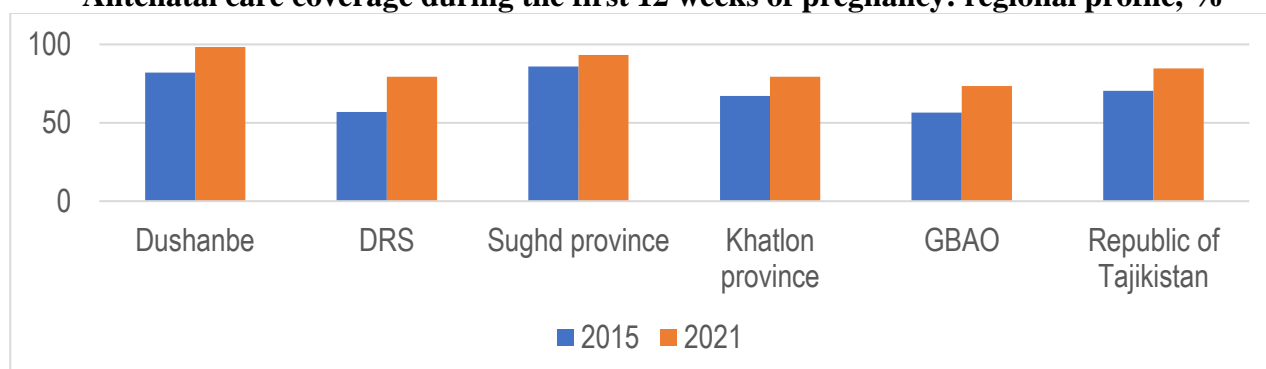
It is important in the medium term, given the growth in population and the importance of increasing the physical accessibility of medical services, to increase attention to the growth of the capacities of medical institutions, especially in rural areas, including for mothers and children.

Over the past seven years, the registered maternal mortality rate has decreased by about 70%, and the infant mortality rate has decreased by about 36%.

In 2020, the maternal mortality rate per 100,000 live births was 26.7 per 100,000 live births (against 28.4 per 100,000 live births in 2015). At the same time, until 2020, the dynamics of this indicator had a steady downward trend, but then, considering the outbreak of Covid-19, the maternal mortality rate slightly increased. And now efforts are aimed at improving results in this area through a set of actions implemented in all regions of the country, especially in rural areas, where access and quality of health care coverage needs more dynamism.

Figure 33

Antenatal care coverage during the first 12 weeks of pregnancy: regional profile, %



Source: Agency on Statistics under the President of the Republic of Tajikistan

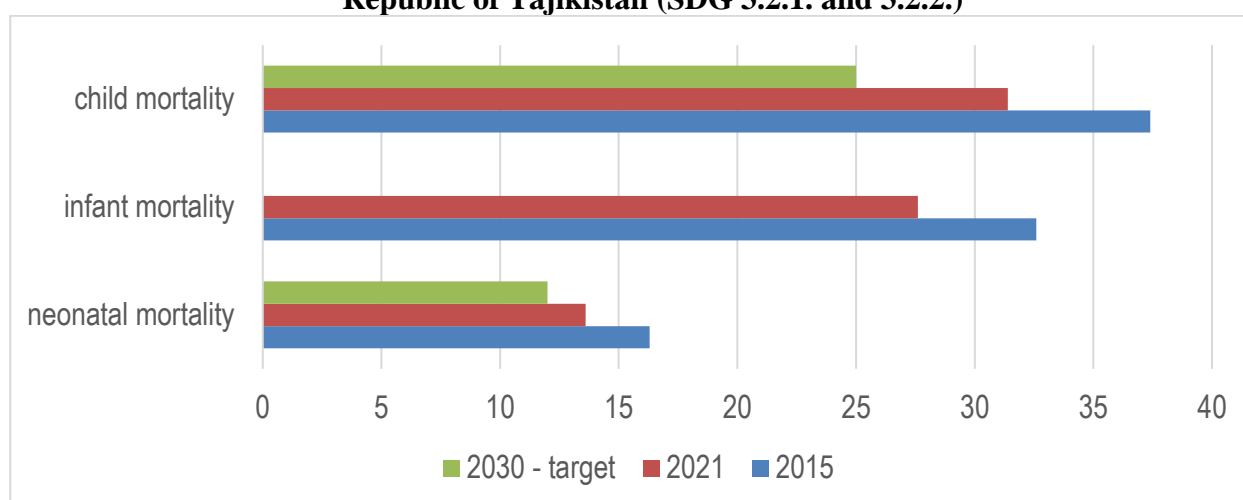
Coverage of pregnant women with antenatal care during the first 12 weeks of pregnancy increased from 70.4% in 2015 to 84.7% in 2021. During this period, coverage of antenatal care especially increased in those regions where this parameter was relatively low - in the Districts of Republican Subordination and in GBAO.

The proportion of women who gave birth in hospitals is almost 95%, the practice of home births tends to decrease, but in rural areas of the country, relatively more efforts are needed in this direction.

At present, an increasing number of children are surviving in the country, including in rural areas. Neonatal, infant and child mortality rates are on a downward trend, below the global average.

Figure 34

Levels of neonatal, infant and child mortality (per 1 thousand live births) in the Republic of Tajikistan (SDG 3.2.1. and 3.2.2.)



Source: World Bank database

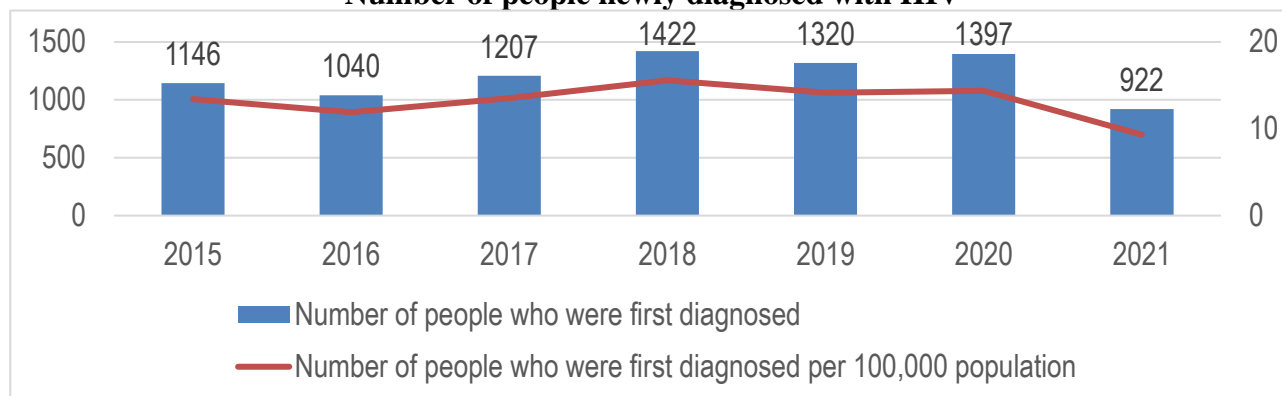
Achieving some success in reducing infant and child mortality may also be associated with a gradual improvement in the conditions of medical institutions, expanding immunization coverage. However, to achieve the targets by 2030, it is important to continue consistent comprehensive national efforts with international support.

Tajikistan is one of the countries piloting intersectoral approaches to HIV, TB and viral hepatitis.

Over the past seven years, the number of newly diagnosed cases of HIV infection has been gradually decreasing and in 2021 reached 922 (9 cases per 100 thousand people).

Figure 35

Number of people newly diagnosed with HIV

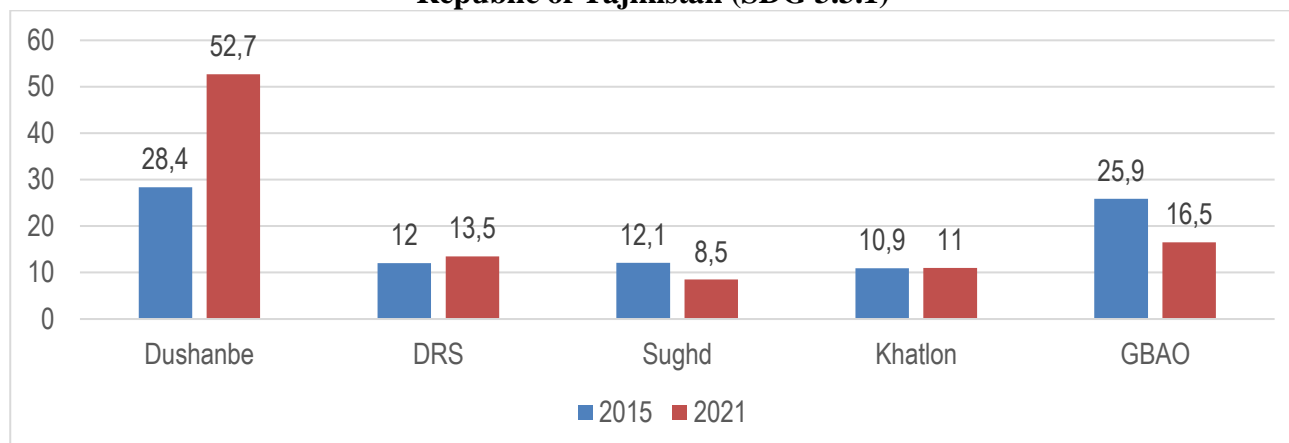


Source: Agency on Statistics under the President of the Republic of Tajikistan

Between 2015 and 2021, the total number of HIV tests conducted in the country among the population increased, and the geography of testing expanded significantly. The prevalence of HIV infection cases by region of the country indicates that the epidemiological process in various administrative territories of the country is being held at certain stages - the process is relatively more pronounced in Dushanbe (a more extensive medical infrastructure that serves not only residents of the capital, but also residents of other regions of the country), there is a decrease in the Sughd region and GBAO.

Figure 36

Prevalence of HIV infection cases (rate per 100,000 population) by regions of the Republic of Tajikistan (SDG 3.3.1)

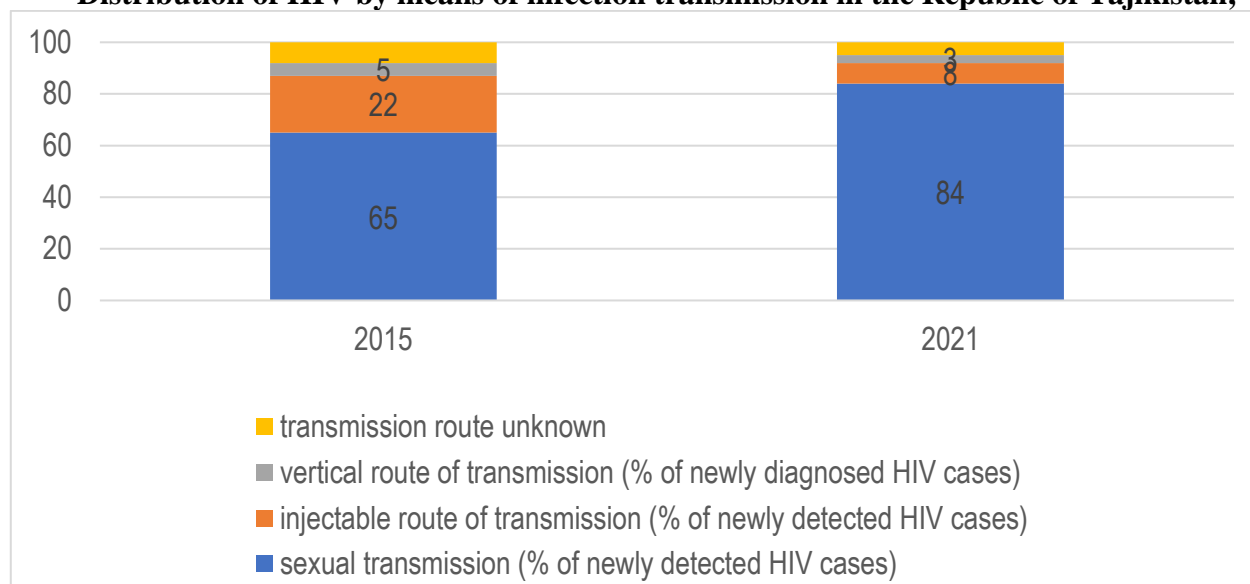


Source: Ministry of Health and Social Protection of Population of the Republic of Tajikistan

Over the past seven years, the structure of HIV transmission modes has changed slightly - although unprotected sexual intercourse remains the main mode of HIV transmission, there has been a decrease in the injection route of transmission. In conjunction with the vertical transmission path is decreasing - from 5.6% in 2015 to 3% in 2021.

Figure 37

Distribution of HIV by means of infection transmission in the Republic of Tajikistan, %

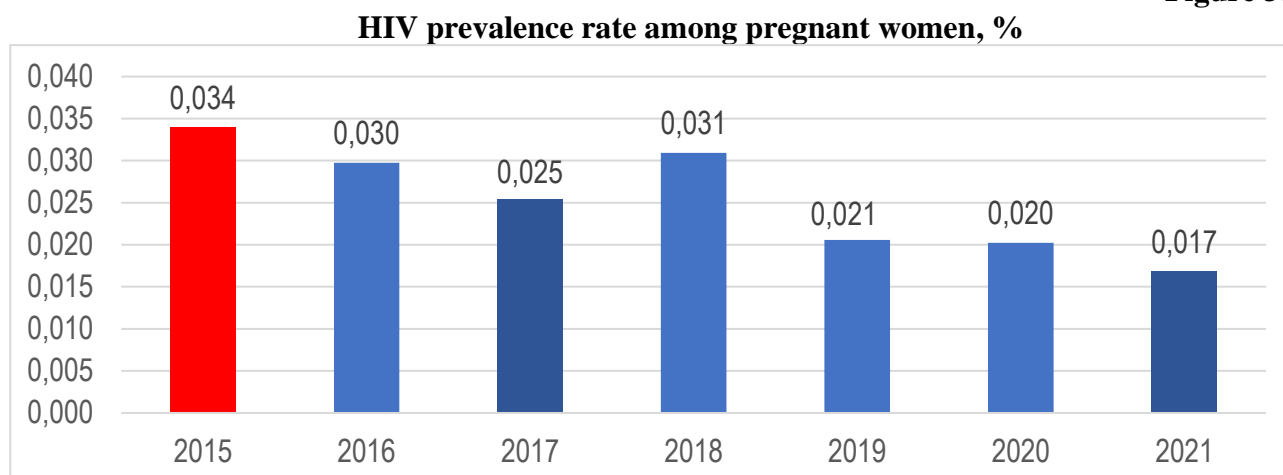


Source: Ministry of Health and Social Protection of Population of the Republic of Tajikistan

Simultaneously, there is a decrease in the prevalence of HIV infection among pregnant women - the prevalence of HIV infection among pregnant women decreased in 2021 to 0.017%.

The primary coverage of pregnant women with HIV testing is increasing - if in 2016 this figure was 76.0%, then in 2020 this figure increased to 85.0%, which contributes to a decrease in the activity of the epidemic process in the regions and the proportion of HIV-infected children born from HIV-infected mothers.

Figure 38

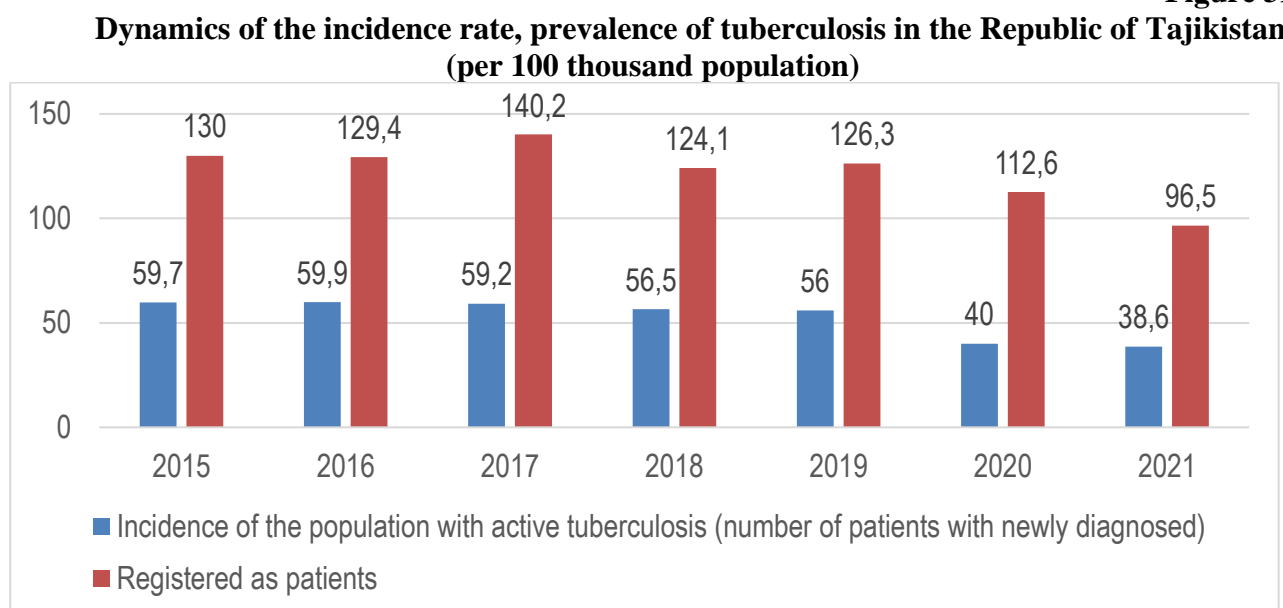


Source: Ministry of Health and Social Protection of Population of the Republic of Tajikistan

For the timely diagnosis of HIV infection, it is necessary to strengthen the screening of the population, especially among risk groups and those subject to hospitalization in various medical institutions of the republic. It is expected that the medical examination of patients with newly diagnosed HIV infection will be carried out by a multidisciplinary team of specialists, including infectious disease specialists, family doctors, phthisiatricians, narcologists, psychologists and social workers.

Tajikistan is one of the 10 countries in the world with the highest burden of multidrug-resistant TB. In 2021, 3787 cases of newly diagnosed tuberculosis were registered with an incidence rate of 39.5 per 100,000 population. Compared to 2015, this indicator decreased by 26.0%.

Figure 39

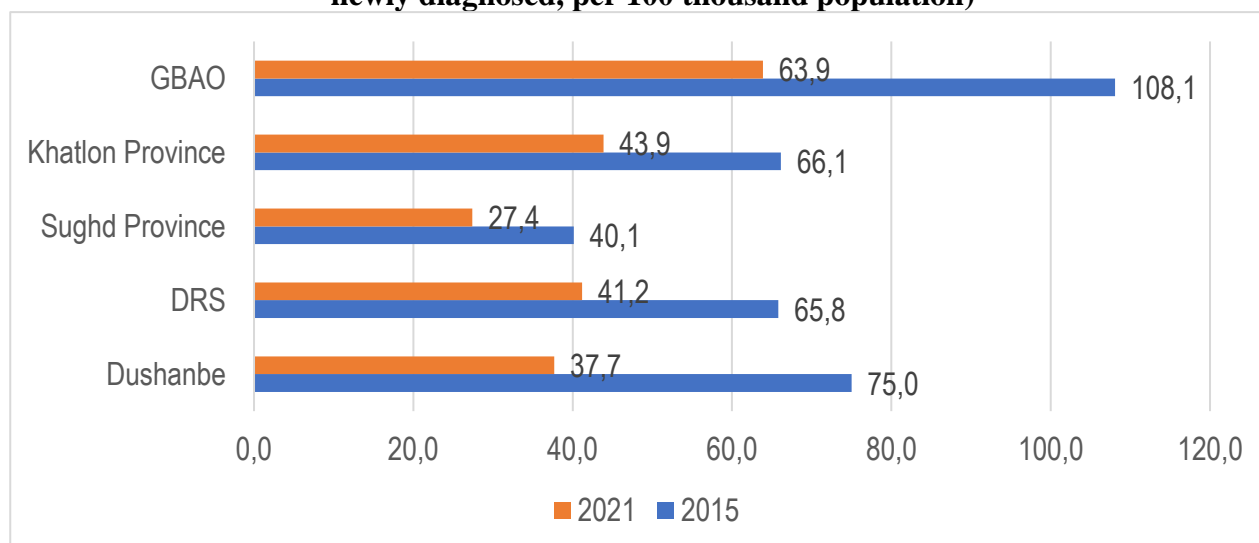


Source: Agency on Statistics under the President of the Republic of Tajikistan

The incidence of tuberculosis by region is also declining, but there is still an acute problem of regional access to modern equipment for early detection of tuberculosis. The incidence of tuberculosis has decreased significantly in - Dushanbe and GBAO.

Figure 40

Regional morbidity of the population with active tuberculosis (number of patients with newly diagnosed, per 100 thousand population)



Source: Agency on Statistics under the President of the Republic of Tajikistan

It is important for the republic to increase the capacity to prevent the spread, implementation of treatment and infection control measures in TB facilities in accordance with international standards, including WHO guidelines for the examination and treatment of patients with drug-resistant forms of tuberculosis.

To expand the practice of early functional diagnosis of respiratory diseases and improve the effectiveness of specialized phthisiatric and pulmonological care, and in general, to ensure a stable sanitary and epidemiological situation in the republic, it is necessary to steadily and consistently fulfill the requirements of the developed standards in this area.

According to the WHO, the Republic of Tajikistan is among the countries with a moderate prevalence of viral hepatitis C, covering from 1% to 3.5% of the population. According to official statistics, the incidence of hepatitis C is declining - in 2015 it was 12.3 cases per 100 thousand of the population, and in 2020 - 8.8.

Tajikistan, with the support of WHO, has developed and is implementing a roadmap for the elimination of viral hepatitis, which will accelerate progress towards SDG indicator 3.3.4.

Environmental interventions should also have a positive impact, such as measures to improve water supply and sanitation, as well as strengthening activities for the prevention of substance abuse (intravenous drug use).

Within the framework of the Program of State Guarantees for Providing the Population with Health Services in Pilot Cities and Districts of the Republic of Tajikistan for 2020-2022, children with diseases of a social nature are provided with medicine and medical substances at the expense of the budget, grants and humanitarian aid, additional funds that are allocated by local executive bodies of state power, as well as other sources that are not prohibited by the legislation of the Republic of Tajikistan free of charge, in particular, diarrheal diseases and acute respiratory diseases, hemophilia, tuberculosis, insulin-dependent diabetes mellitus and children with HIV / AIDS⁴⁶.

Non-communicable diseases (NCDs) remain the leading cause of death in Tajikistan, accounting for about 80% of deaths in the country, setting the focus for efforts over the medium term. Issues of prevention, diagnosis, high-quality and timely treatment and rehabilitation of patients with

⁴⁶ Convention on the Rights of the Child. Combined sixth and seventh periodic reports submitted by Tajikistan in accordance with Article 44 of the Convention and due in 2022

diseases of the circulatory system, obstructive pulmonary diseases, oncological diseases. It is necessary to significantly reduce the impact on the health of the country's citizens of such risk factors as access to water and a balanced diet.

The digitalization and greening of healthcare is becoming an increasingly urgent need.

Even before the COVID-19 pandemic, the daily volume of hospital waste was significant. With the spread of the virus, the amount of garbage has increased due to the constant disposal of disposable protective equipment, including used masks. A study conducted in Tajikistan with the support of WHO showed that the management and disposal of medical waste in medical institutions is not carried out in accordance with confirmed national regulations (for example, SanPiN approved by Order 410). Expected towards identifying opportunities for innovative and sustainable healthcare waste management solutions to reduce CO2 emissions, efforts will be directed towards:

- supporting the widespread use of special technologies for the shredding of medical waste and the recycling of solid biohazardous waste into household waste;
- installation of technologies and training to work on them;
- overall capacity building of health workers.

In general, the introduction of a circular economy requires systemic changes, including those based on public-private partnerships.

3.4. Providing accessibility and quality of education

Education has significant potential to reduce vulnerabilities and redefine attitudes towards the environment by improving knowledge, developing the necessary skills and transforming attitudes and beliefs.

Furthermore, within the framework of the country's strategic documents, the direction of development is associated with the creation of opportunities for learning for all people, regardless of their place of residence, social class, abilities, and health opportunities.

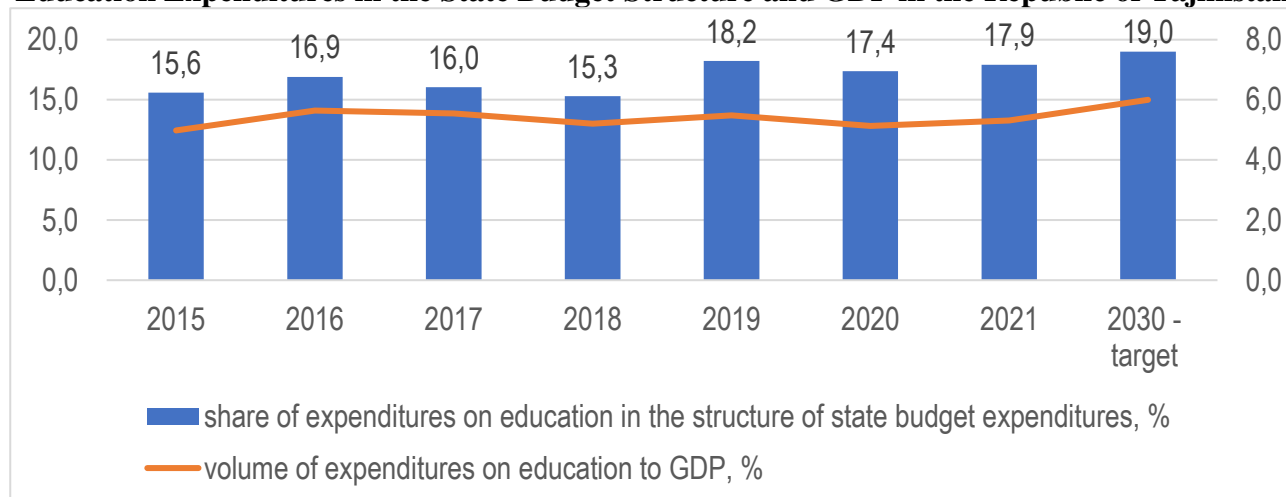
To improve the quality and accessibility of education in accordance with the needs of the innovative economy and the requirements of the information society, the country is implementing the Education Development Strategy for the period up to 2030.

Population growth is putting pressure on the country's education system. Leveraging the demographic dividend requires increasing investment in human capital development.

The implementation of measures within the framework of the national training system contributed to ensuring sustainable high public spending on education. In the period from 2015 to 2021, the share of expenditures on education in the structure of state budget expenditures increased from 15.6% to 17.9%.

Figure 41

Education Expenditures in the State Budget Structure and GDP in the Republic of Tajikistan



Source: Agency on Statistics under the President of the Republic of Tajikistan

The value of this indicator is not lower than similar indicators of other Central Asian countries.

At the same time, the key goal for the future is to increase the relationship between spending on education and its results in the form of a level of knowledge.

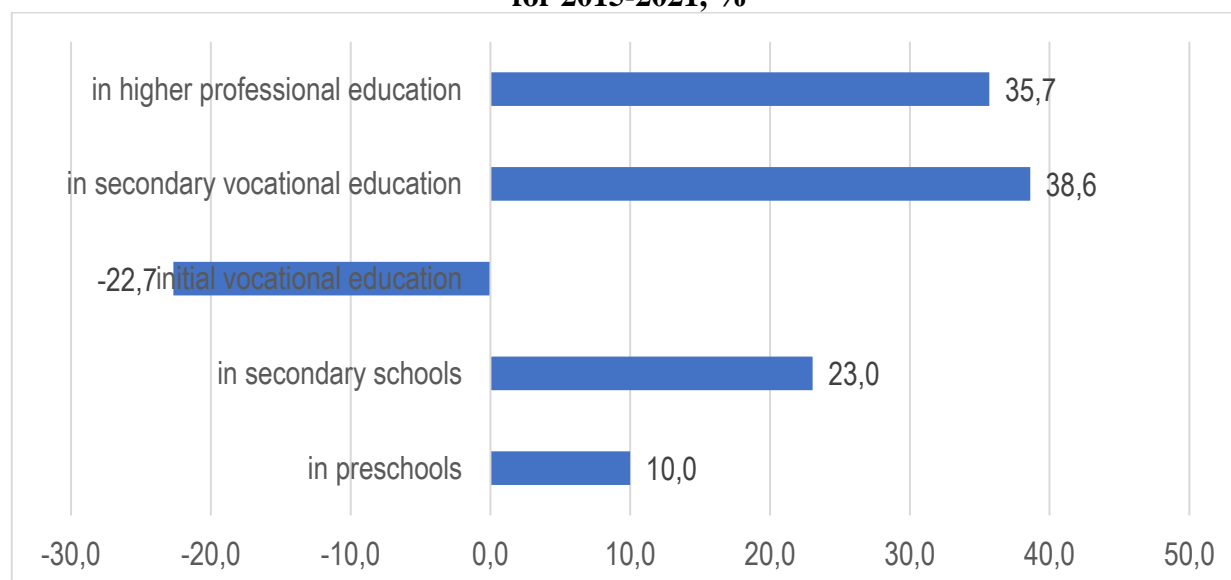
Given demographic trends, there is an increase in the number of students at all levels of education, which indicates an increase in the capacity of the country's education system.

If in 2015 2.1 million people studied in the education system of the republic, then in 2021 it will already be 2.7 million people. It is expected that by 2025 the number of students will increase to at least 3.2 million people, which will increase the burden on the education system and shows the importance of increasing the financial, infrastructure and staffing of the education system.

The highest rates of increase were in the number of students in the system of higher and secondary specialized education, which, to a relatively greater extent, should be directly related to the labor market.

Figure 42

Growth in the number of students in the education system of the Republic of Tajikistan for 2015-2021, %

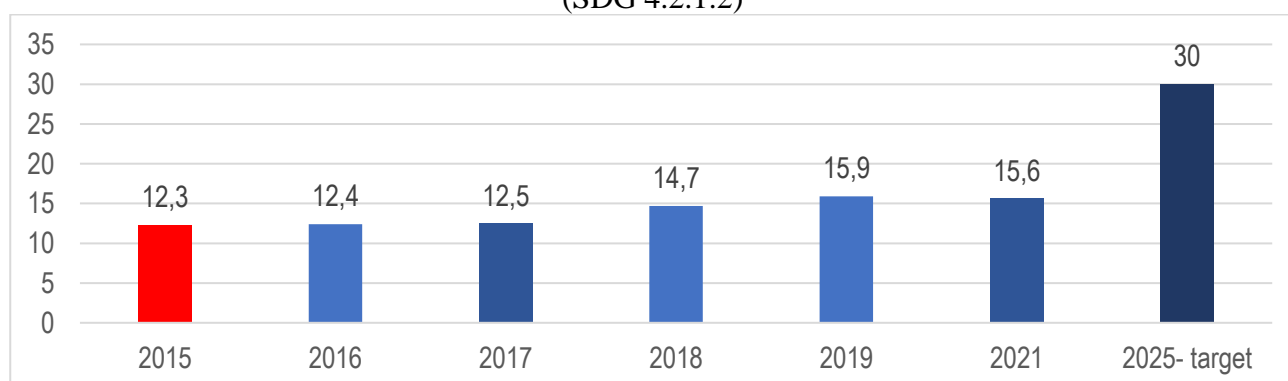


Source: Agency on Statistics under the President of the Republic of Tajikistan

The most urgent objectives of the educational system of the Republic of Tajikistan are associated with a significant increase in the access of the population to preschool and vocational education, as well as the quality of education.

Figure 43

Coverage of children aged 3-6 in pre-school education in the Republic of Tajikistan, % (SDG 4.2.1.2)



Source: Agency on Statistics under the President of the Republic of Tajikistan

The enrollment rate in preschool education for children aged 3-6 increased from 12.3% in 2015 to 15.6% in 2021.

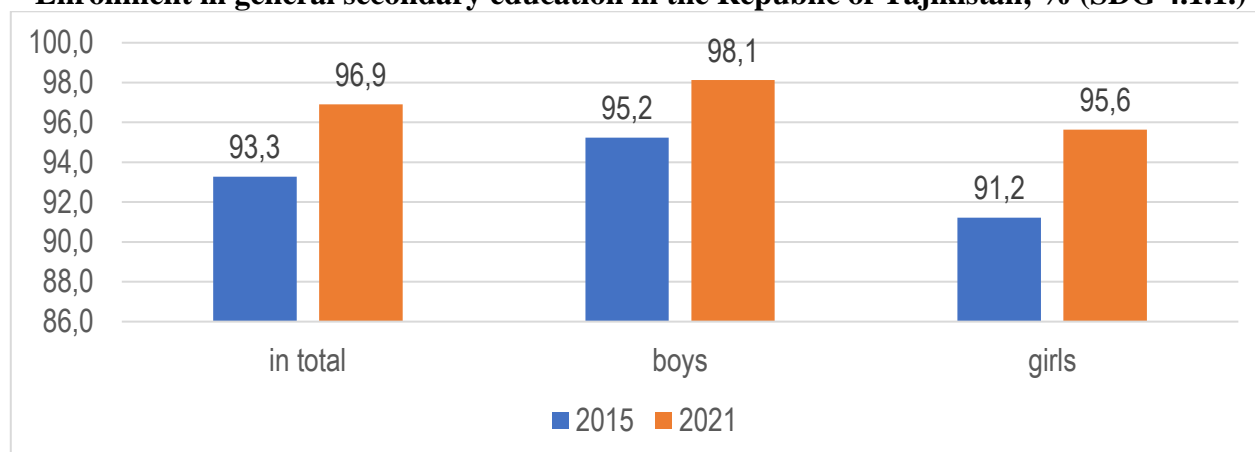
The available data for preschools point to the importance of improving infrastructure. 48% of urban preschool institutions have permanent centralized cold-water supply against 17% of rural preschool institutions. Functioning central sewerage is available only in 7% of kindergartens and early development centers located in rural areas and in 41% of kindergartens/early childhood centers in cities⁴⁷.

To increase the coverage of children aged 3-6 with preschool education, as well as to achieve targets in the future (30% by 2025), it is necessary to create new places in preschool educational institutions for at least 127 thousand children in all regions of the republic, including by supporting the high growth of alternative forms of preschool education, including child development centers, which is an ambitious and difficult task. Furthermore, the requirements for personnel, infrastructure and software equipment of the preschool education system will have to increase. It is necessary to continue promoting innovative models of blended finance through public-private partnerships, supporting the inflow of private investments.

There is almost universal access to general secondary education. In 2021, 96.9% of the population aged 7-17 are covered by formal (primary, secondary general, secondary specialized education) education against 93.3% in 2015. The gender gap in enrollment at these levels of education persists, but it is narrowing.

Figure 44

Enrollment in general secondary education in the Republic of Tajikistan, % (SDG 4.1.1.)



Source: Agency on Statistics under the President of the Republic of Tajikistan

The situation in general secondary education with first grade enrollment looks quite favorable, where out of the total number of children of 7 years old, almost all children of this age group are covered. A difficult situation is observed after the end of the 9th grade, where the dropout of children, especially girls, is about 30%. The solution to that challenge in the upper grades is also associated with the complexity of actions, including strengthening propaganda among students, especially girls, about the importance of education in their adult life, improving school infrastructure and improving the quality of education.

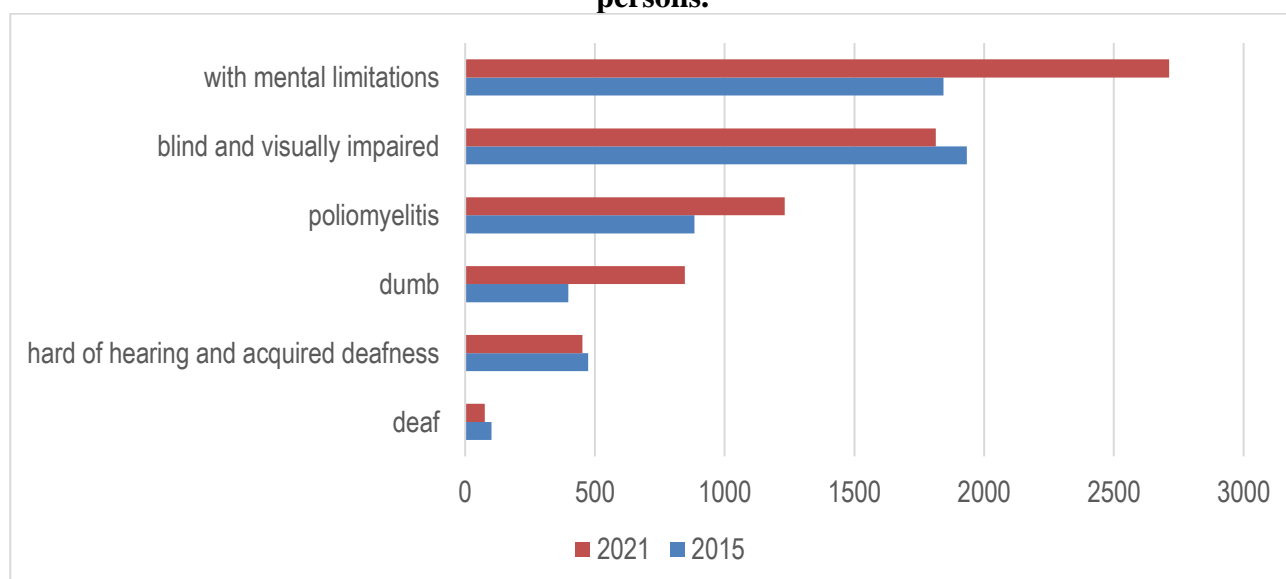
The number of children with disabilities enrolled in the school system increased by 27 p.p. compared to 2015. At present, 7,362 (2,922 girls) students with disabilities in general educational institutions of the country and 975 children (377 girls) with disabilities study at home.

Relatively more children with disabilities enrolled in education are mentally handicapped, blind and visually impaired, and poliomyelitis.

⁴⁷ UNICEF. Situation Analysis on Water, Sanitation and Hygiene in Tajikistan

Figure 45

Number of children with disabilities enrolled in school in the Republic of Tajikistan, persons.

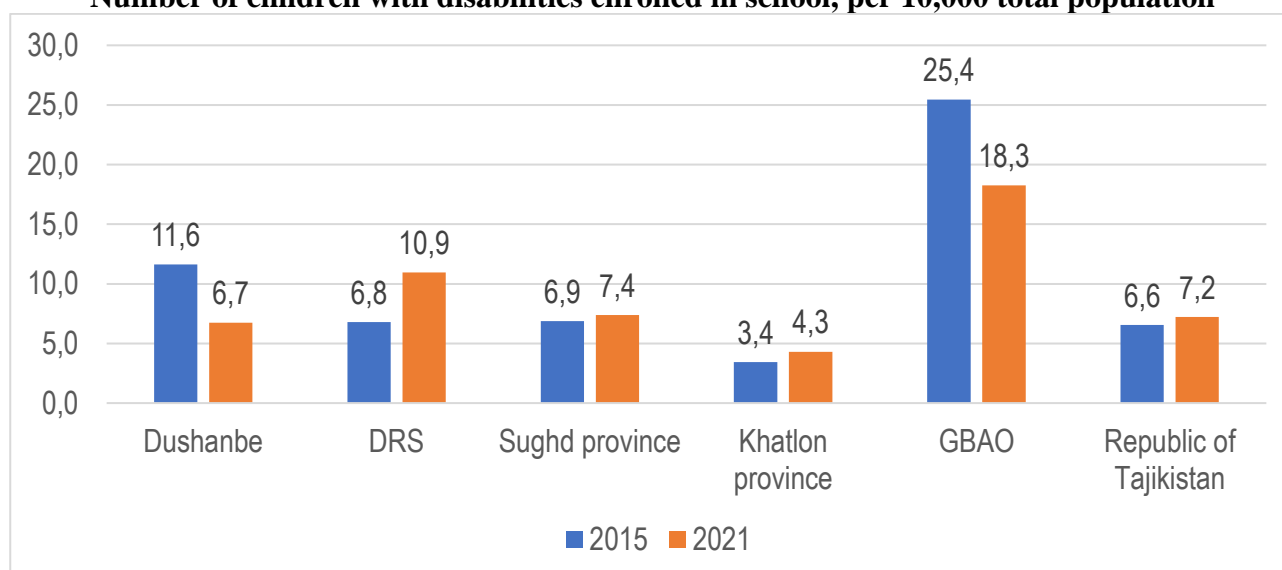


Source: Agency on Statistics under the President of the Republic of Tajikistan

At the same time, in the context of the regions of the country, the number of children with disabilities enrolled in school education per 10 thousand people in GBAO is relatively higher - if on average in the country there are 7.2 children with disabilities per 10 thousand people, who in one or school education to some extent, in GBAO it is almost 2.5 times more.

Figure 46

Number of children with disabilities enrolled in school, per 10,000 total population



Source: Agency on Statistics under the President of the Republic of Tajikistan

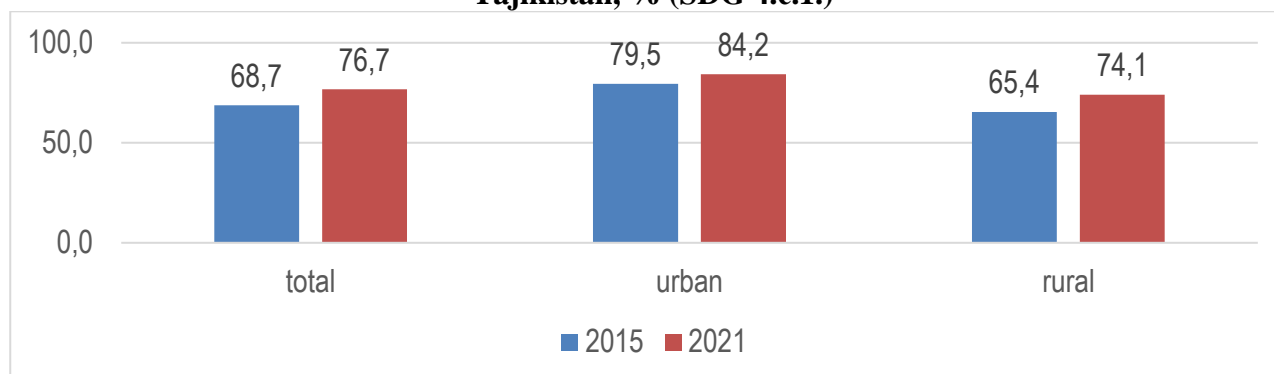
As part of building up the system of inclusive education and ensuring regional equality of access for children with disabilities to education systems, it is important to strengthen regional education systems - with an emphasis on personnel, technological and infrastructure equipment.

Until 2021, the country did not conduct comprehensive national assessments of the competence of secondary school students. The results of the assessments conducted by the National Testing Center under the President of the Republic of Tajikistan for students of 5th -11th grades will lay the foundation for analyzing the internal effectiveness of general secondary education and improving the validity of decisions based on performance data.

The share of teachers with higher education in general education institutions increased to 76.7% in 2021, it is planned to increase their share to at least 90% by 2025.

Figure 47

Share of teachers with higher education in general education institutions of the Republic of Tajikistan, % (SDG 4.c.1.)



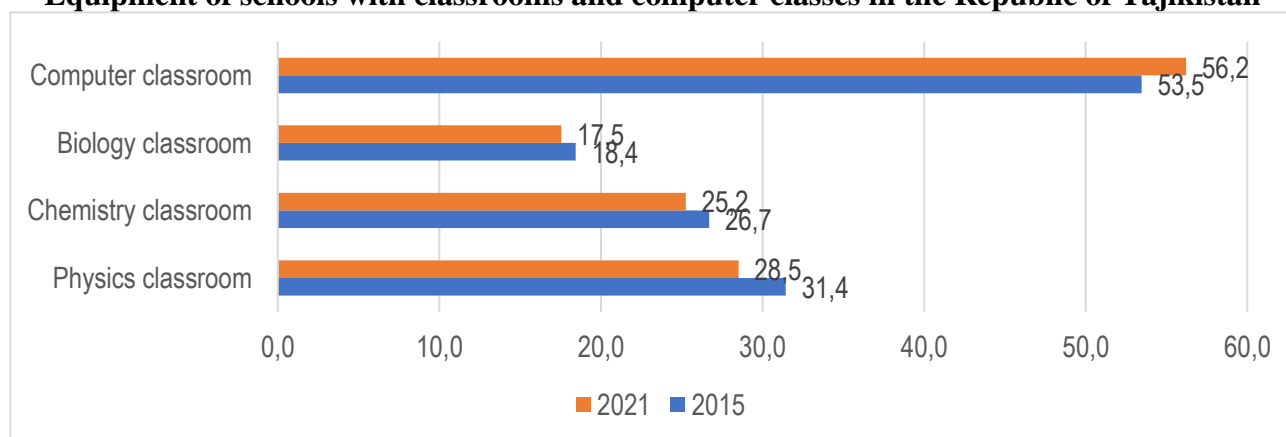
Source: Agency on Statistics under the President of the Republic of Tajikistan

Over the past 5 years, a competence-based pedagogy approach has been introduced in the system of general secondary education, within the framework of which educational programs, teacher training and retraining systems and the national system for assessing learning outcomes are being reviewed.

Over the past seven years, the provision of schools with classrooms with equipment and visual aids has not increased. Activities in this direction require significantly more activity, especially in medium-sized schools located in rural areas.

Figure 48

Equipment of schools with classrooms and computer classes in the Republic of Tajikistan



Source: Ministry of Education and Science of the Republic of Tajikistan

Available school data shows that only 55% of schools across the country have access to a functioning water system, 44% of schools have access to improved sanitation facilities, and only 26% of schools have water and soap available in designated handwashing areas near toilets. This means that 45% (~ 1,750 schools = 918,750 children) of schools still do not have access to safe water, 56% (2,175 schools = 1,141,875 children) of schools do not have access to improved sanitation, and 74% (2,875 schools = 1,509,375 children). Schools do not have handwashing facilities and there is no soap near the toilets.⁴⁸

At the same time, the issue of sustainable energy supply for children, in particular in rural areas, has not yet been resolved, this is especially observed in the autumn-winter period, when children have to spend 5-6 hours in school buildings with low temperatures and polluted air as a result of heating

⁴⁸ UNICEF. Situation Analysis on Water, Sanitation and Hygiene in Tajikistan

rooms with using coal or wood. This affects the health of children and can have irreversible consequences in their adult life. Also, there are schools that need major repairs and some schools do not meet safety standards, that is, they are in disrepair.

The need to increase consolidated efforts to solve the problems of infrastructural inclusiveness in the education system is becoming increasingly acute.

The improvement of fundamental and basic knowledge, including the development of cognitive skills (such as math and reading) and life skills (foreign language skills and digital literacy) will have to play a greater role in ensuring the country's sustainable growth, including within the framework of green transformation. These skills and knowledge should be the most important factor in teaching more complex high-level skills at later stages of training.

Also, since 2020, as part of the digital transformation policy in the school system, an assessment has been carried out to identify needs and gaps for the successful transformation of the education system, taking into account a holistic approach to creating a digital ecosystem, including the availability of digital resources, ICT equipment, digital educational platforms, ICT skills among teachers and most importantly, the availability of high-speed Internet based schools in cities and rural areas.

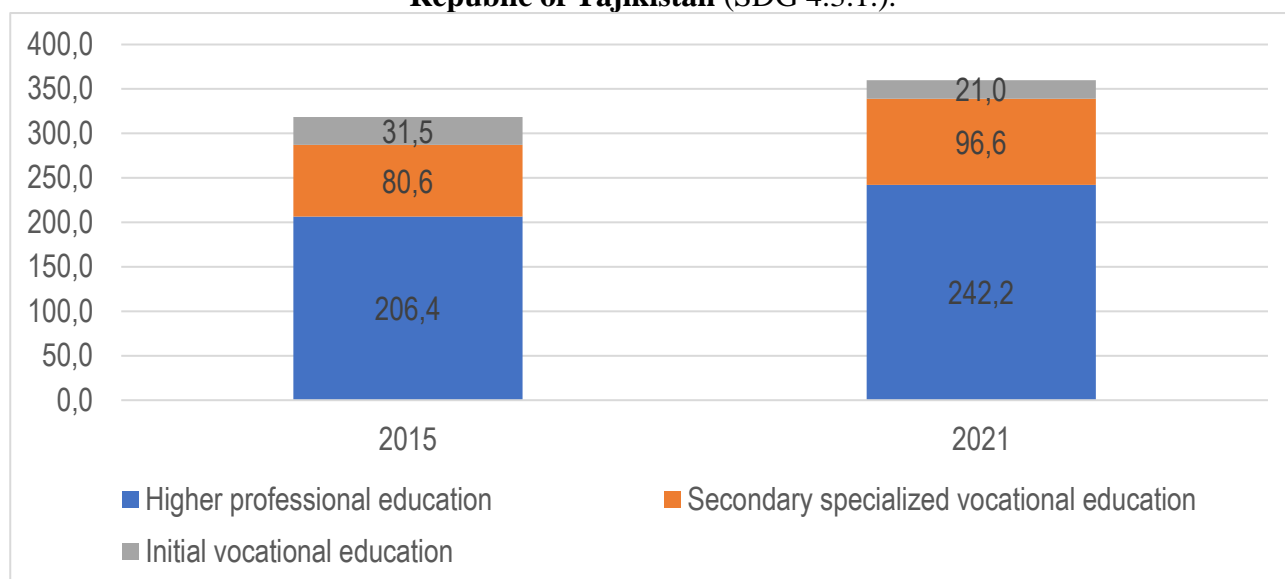
The development of a digital ecosystem in education requires an integrated approach to addressing ICT and non-ICT gaps, which should be based on national strategic documents for the transformation of digital education led by the National ICT Council, and it is essential to create a strong partnership and digital policy coordination between government agencies, development partners and the private sector. Government involvement and institutional reform are key to effective digital learning strategies. Without reform and resources at the system level, the development of digital competencies and the use of digital technologies in teaching and learning processes remain untenable and unscalable.

Considering that by 2025 the goal was set to ensure 100% coverage of children aged 7-17 years with formal education and, according to forecast calculations, the number of children at this age will be 2.4 million people, then by the 2025/2026 academic year it will be necessary to additionally create 0.2 million study places.

The number of students in the vocational education system is growing - if in 2015 there were 318 students per 10 thousand people, then in 2021 their number was almost 360 people.

Figure 49

Number of students in the vocational education system per 10 thousand people in the Republic of Tajikistan (SDG 4.3.1.).



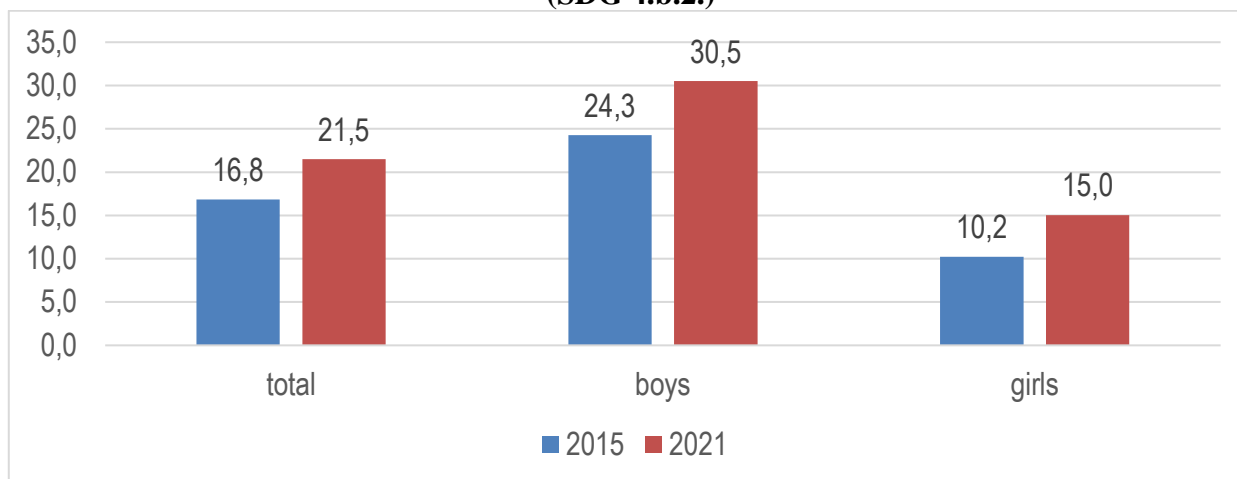
Source: Ministry of Education and Science of the Republic of Tajikistan

The vocational education system is dominated by the number of students in the higher education system.

The coverage of higher education (bachelor's degree) of the population aged 18-21 is growing: in 2021 it was 21.5% against 16.8% in 2015. The gender gap in coverage although is significant and not narrowing.

Figure 50

**Enrollment in higher education (undergraduate) in the Republic of Tajikistan, %
(SDG 4.b.2.)**



Source: Agency on Statistics under the President of the Republic of Tajikistan

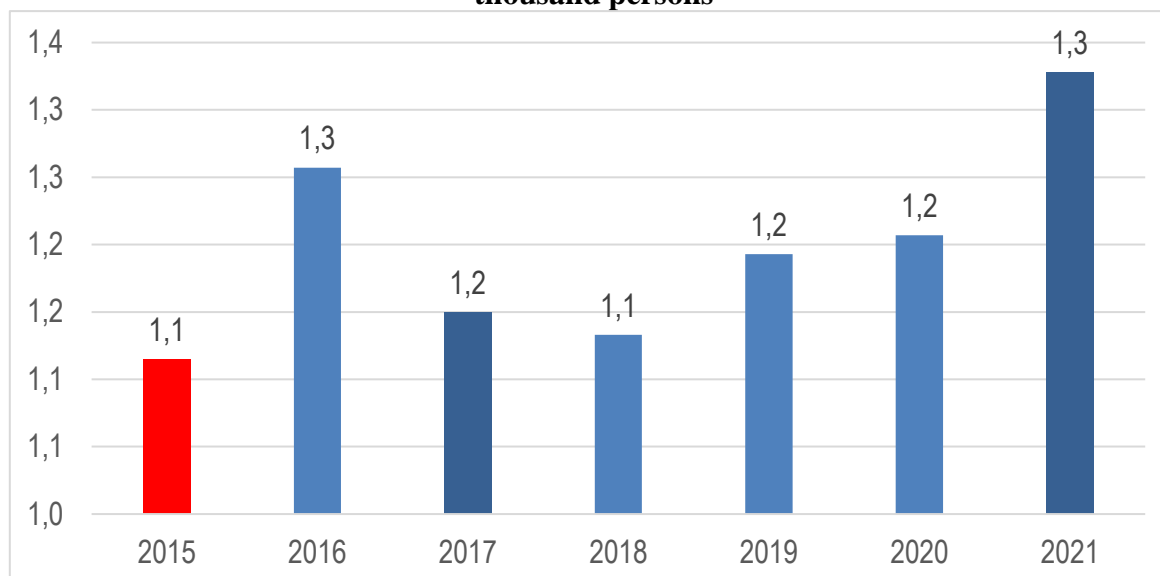
Progress has been set and is being made to solve the problem of attracting citizens over 18 years of age who do not know professions to acquire a profession, which should ensure the achievement of universal professionalization of the population by 2026.

In general, the coverage of disabled people over 18 years of age by the vocational education system does not exceed 0.3%. Accordingly, this group of the population is in dire need of professional orientation and labor adaptation, especially in rural areas.

As part of the implementation of the task of increasing the proportion of young people/adults who have skills in the field of information and communication technologies in the country, the number of graduates of state higher educational institutions in the field of Computer Science and Information Security is increasing.

Figure 51

**Graduation of specialists in the system of higher professional education related to ICT,
thousand persons**



Source: Agency on Statistics under the President of the Republic of Tajikistan

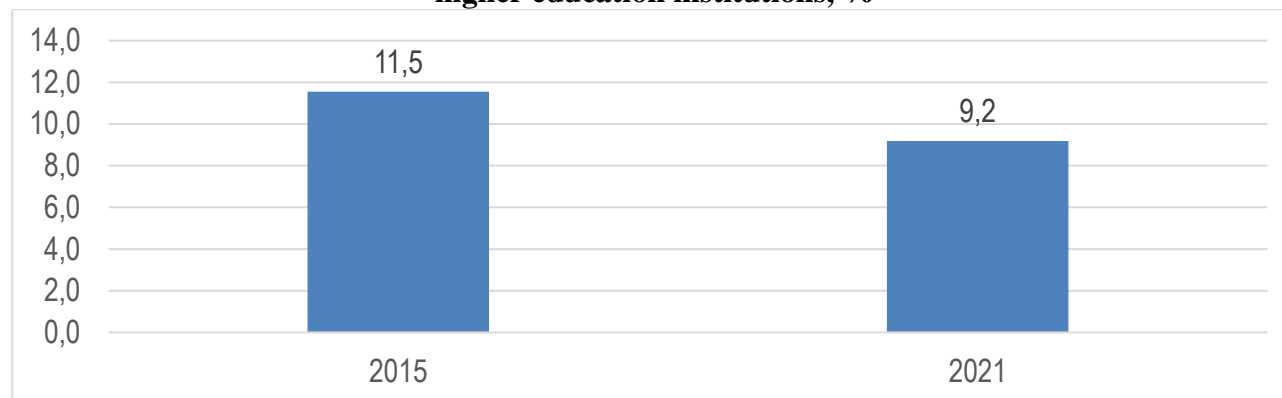
However, considering the coronavirus (COVID-19) pandemic, inequality in education may increase - it is difficult to ensure the development of online learning systems in the face of the importance of students who do not have access to the Internet, especially in rural areas. That is, the digital divide associated with inequalities in the reliability, speed and availability of the Internet and data access, as well as access to electronic devices that facilitate learning, can exacerbate inequalities in access to education.

In the country, on the basis of vocational educational institutions and adult education centers, it is possible to take short-term courses in working specialties that are in demand on the labor market. On average, about 156 thousand people are covered by short-term courses per year. of various ages, slightly more than 40% of which are women. Given that at least 900,000 people remain outside of vocational education every year, it is extremely important to consistently address the problem of increasing the capacity of the training system both within vocational education institutions and within additional education.

In general, the key objective of vocational education is to bring the structure of areas and individual specialties of training in line with both the demands of the modern labor market and the structure of employment in the future. Given the increasing advancement of digital technologies, the demand for specialists in the field of STEM (natural and computer sciences, technology, mathematics) will increase, therefore, increasing the capacity of the higher education system in this direction is extremely important. While the rate of growth in the output of specialists in this area lags behind the growth rate of output in all specialties, as a result, their share in the volume of output is decreasing. At the same time, ensuring equal access in terms of gender to the training of specialists in the field of STEM becomes extremely important.

Figure 52

The share of graduates in STEM disciplines in the total volume of graduation from higher education institutions, %



Source: Agency on Statistics under the President of the Republic of Tajikistan

To strengthen the process of studying the natural, exact and mathematical sciences, as well as the development of the technical thinking of the younger generation and youth, 2020-2040 has been announced in Tajikistan as "Twenty years of the study and development of natural, exact and mathematical sciences in the field of science and education." In 2020, the Action Plan for 2020-2025 was approved to implement the announcement of 2020-2040 as "Twentieth Anniversary of the Study and Development of Natural, Exact and Mathematical Disciplines in Science and Education". In 2021, the Strategy for the study and development of mathematical, exact and natural disciplines in the field of education and science for the period up to 2030 was adopted⁴⁹.

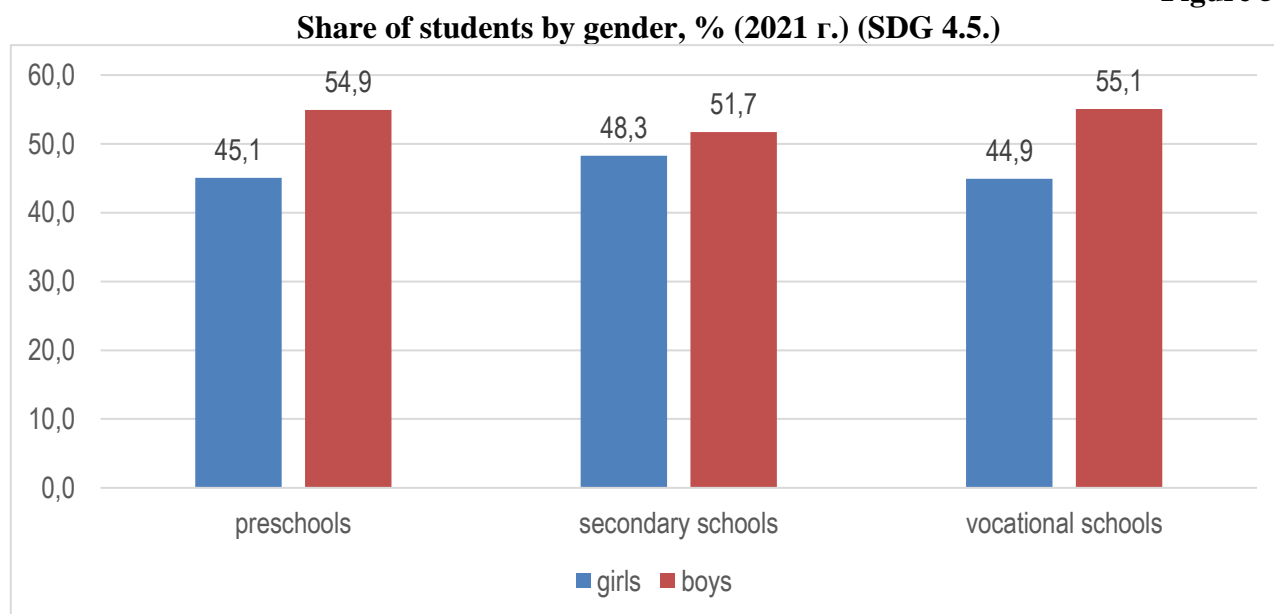
However, against the backdrop of a significant gender imbalance in the field of specialization in science, technology, engineering and mathematics (STEM), neither in the Action Plan for 2020-2025,

⁴⁹ Approved by Government Decree of April 30, 2021, No. 185

nor in the Strategy for the study and development of mathematical, exact and natural disciplines in education and science for the period up to 2030 gender-neutral again.

A significant gender imbalance in the system of vocational education, despite its reduction, remains the cause of inequality of opportunities in the country.

Figure 53



Source: Agency on Statistics under the President of the Republic of Tajikistan

Accordingly, young men are relatively more prepared for industrial-innovative development and green transformation.

Prerequisites for green development are being created in the education system:

- disciplines "Acquaintance with the environment", "Natural science", "Ecology", "Bioecology", "Geoecology", "Radioecology", "Environmental monitoring", "Medical Ecology", "Agricultural ecology" and others have been introduced at all levels of education;
- the enrollment of students in higher educational institutions of the country in the field of ecology is growing;
- to strengthen ecological culture and equality in the country, the republican competitions "Young Ecologist", "Young Defenders of Nature", "Young Ecologists", "The Best Ecology Teacher", "Poetry and the Best History" and the actions "Clean Coast", "Cleanliness of the area", "Cleanliness of the road";
- purposeful work is underway to attract students to scientific activities in the field of ecology.

However, the mechanism of education, public awareness and education in the process of environmental education needs to be strengthened, the necessary competencies in the field of environmental education need to be increased, the introduction of education for sustainable development, the use of multimedia educational resources such as "GreenPack" should go faster.

3.5. Improving the living environment

Important demographic and environmental challenges facing the country include increased demand for housing and living conditions, habitat pollution and poor ecosystem management, biodiversity conservation, land degradation, vulnerability to climate change impacts, access to clean water and sanitation, and household waste disposal⁵⁰.

When developing and implementing master plans for cities, towns and villages of the country, special attention is paid to the planning and construction of buildings and structures in accordance

⁵⁰ National Development Strategy of the Republic of Tajikistan for the period up to 2030.

with the norms and rules of urban planning and construction, high architectural art, with the widespread use of national and modern architectural elements, modern technologies and high-quality building materials, but for the widespread introduction of these elements, it is necessary to strengthen the process of green economy, in the field of architecture.

In the medium term, efforts will be directed to improving the legislation and institutional structure of the housing market, including the development of an affordable housing program and affordable mortgage lending. The new Housing Code of the Republic of Tajikistan, which entered into force in 2022, contains the concept of social hiring for persons in need of housing, which was not in the previous code.

Housing construction plays an important role in the economy of Tajikistan, it has a strong multiplier effect and causes the growth of industries and industries associated with housing construction.

Over the past twenty years, the annual volume of commissioning of housing from 245 thousand square meters has reached more than 1.5 million square meters.

To improve the living conditions of the country's people, over the past 10 years alone, 7.2 thousand hectares of household plots have been allocated to the population for housing construction on more than 14 million square meters.

In general, during the period of independence, more than 9 million citizens of the country got the opportunity to improve their living conditions.

Since 2015, the housing stock of the republic has increased by 14.7 million sq.m. (16%). Most of the housing stock was put into operation in rural areas - 64% of the total housing area. The average annual growth rate of the housing stock is 2.4%, which is higher than the country's population growth rate, which allows increasing the average housing supply of the country's population. However, 0.6% of the housing stock is in a worn out and emergency condition yet.

New marriages create additional demand for housing. Over the past seven years, more than 77 thousand marriages have been concluded annually, which significantly affects the demand for housing.

The dynamics of population growth and the need to bring the level of housing provision to 17 sq. per person (target for the National Development Strategy for the period up to 2030) significantly increases the volume of orders that the construction industry and related industries will receive. Until 2030, the working-age population will increase by 1 million people compared to 2021, which will be a key factor in the dynamic growth in demand for housing in the country. And stimulating an increase in the pace of housing construction can become the engine of economic growth, give impetus to the development of related sectors of the economy, and the growth of productive employment.

In the coming decades, the population of cities will grow, which will require increased investment. The condition for the creation of green cities will be the modernization of buildings. Heating, lighting, cooling and ventilation of buildings is one of the most important sources of greenhouse gas emissions into the atmosphere.

Construction of new green buildings and refurbishment of existing buildings with high energy and resource consumption will achieve significant savings

During the transition to the principles of a green economy in architecture and construction, the improvement of technical regulations related to energy saving when using electrical equipment of residential and public buildings, heating networks and thermal protection of buildings in accordance with modern standards (norms) will be ensured. It is important to take steps to introduce a system for monitoring, reporting, and verifying the energy efficiency of buildings.

To increase the effectiveness of the implementation of the principles of the green economy in architecture and construction, it is important to adopt regulatory legal acts to improve the mechanisms of state regulation and control related to the mandatory labeling of all buildings in terms of energy efficiency and compliance with the principles of the green economy.

A wide range of energy-efficient and energy-saving technologies such as solar panels on rooftops, small geothermal plants on the ground, or special window units with nanotechnological

wood frames that protect the building from the weather and keep the temperature down. Buildings built in accordance with the principles of green building can create a comfortable atmosphere and climate without the use of traditional heating and cooling systems.

At the same time, it will be important to ensure access to appropriate public services.

On the basis of the implementation of the Concept of reforming the housing and communal services in the Republic of Tajikistan and the Housing and Communal Services Development Program, the State Unitary Enterprise "Housing and Communal Services" began to implement a policy of decentralization of the provision of services.

In the field of housing and communal services, measures are being taken to build and repair housing, improve the infrastructure for electricity supply, water supply and sewerage, and upgrade the fleet of municipal equipment. In this process, the transition to a green economy requires the formation of such a process of sustainable management of production and consumption, based not only on energy saving mechanisms, but also on an effective system of housing and communal services and waste management.

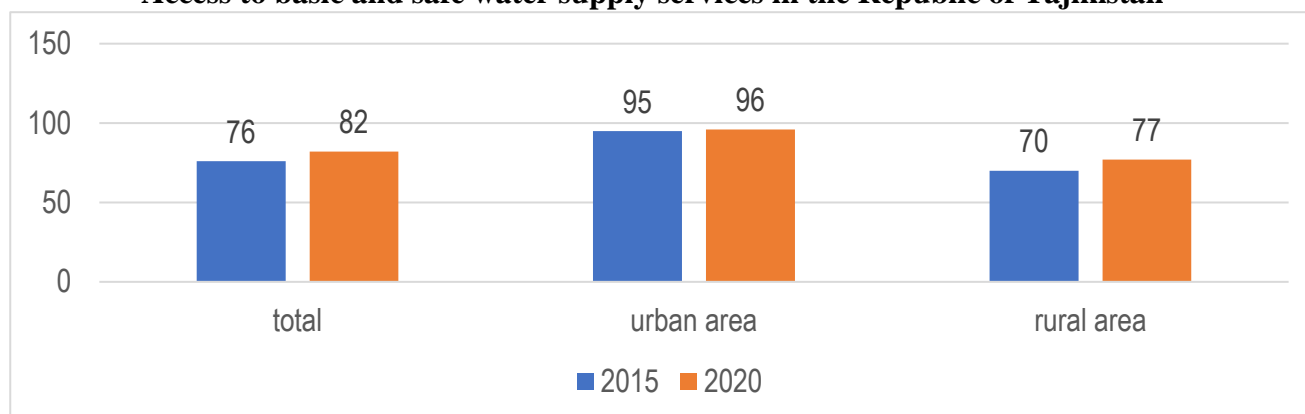
Efforts are already aimed at improving existing living conditions and providing basic services in all regions of the country.

Institutional measures contribute to the development of the sector and the improvement of the quality of services. A new law on drinking water supply and sanitation has been adopted, and the Law of the Republic of Tajikistan “On the Water Users Association” has been adopted in a new edition. In accordance with the new Water Code of the Republic of Tajikistan and the Law of the Republic of Tajikistan “On Drinking Water Supply and Sanitation”, 17 by-laws have been adopted to regulate various aspects of the water sector. The National Water Strategy of the Republic of Tajikistan for the period up to 2030 was developed, the Program for the restoration of industrial water supply systems and their equipment with water meters was developed; Large-scale work has been carried out in all regions of the country to assess the state of the water supply and sanitation sector for the development of the State Program for drinking water supply and sanitation for the period up to 2030, the tariff policy is being improved, accounting is improving and resource losses are being reduced, automated payment systems for the use of water and electricity are being introduced.

In the field of water supply and sanitation, currently (2022) 7 projects are being implemented with a total value of USD 243 million⁵¹ (SDG 6.a.1). About 80% of these funds are directed to the restoration and construction of infrastructure.

Figure 54

Access to basic and safe water supply services in the Republic of Tajikistan



Source: Agency on Statistics under the President of the Republic of Tajikistan

⁵¹ Report of the MEWR RT “Progress in the implementation of the water sector reform program in Tajikistan and further steps to implement the reform”, 2023.

The result of this was an increase in the indicators of access to safe water for residents of cities and villages in Tajikistan.

Access to basic drinking water services increased from 76% (70% in rural and 95% in urban areas) in 2015 to 82% (77% in rural and 96% in urban areas) in 2020⁵².

The annual increase in access to water supply services on average in the country is 4%, which is not enough given the dynamics of population growth and the scale of the tasks to improve water infrastructure.

Considering that the problem of water vulnerability has not yet been completely eliminated (at least almost 15% of the population does not have access to clean drinking water and approximately only 15% of the total population of the country is connected to water treatment services), further population growth and deterioration of water infrastructure, the needs in financing this sector are significant.

Especially, it is important to pay attention to small settlements, which are dispersed over long distances in Khatlon region and DRS and have very low coverage of water supply and sanitation services. There have been positive developments in recent years in the field of sanitation. Coverage with basic sanitation in Tajikistan increased from 95% in 2015 (96% in rural and 94% in urban areas) to 97% (98% in rural and 94% in urban areas) in 2020. 3% of the population has access to limited (public) sanitation facilities, while open defecation is typically practiced by less than 1% of the population. 80% of the population have access to public latrines, 3% use septic tanks, and 16% have sewer outlets.

However, there are a number of acute problems in the water sector that need to be addressed. In particular, the presence of duplication of tasks in the existing management system, the use and protection of water resources; low level of intersectoral and vertical-horizontal coordination of actions; incomplete system of accounting and payments for water supply services; high level of deterioration of the existing water supply and irrigation infrastructure; insignificant investment; insufficient capacity of the organization responsible for water resources management and water users; low level of participation of users and civil society in the use and protection of water resources. Significant differences between urban and rural areas in terms of access to a centralized system of drinking water supply, sanitation and hygiene; limited opportunities to collect accurate data on the actual state of drinking water supply and sanitation in cities and regions of the country due to the lack of appropriate accounting and reporting in water supply and sanitation (including access to sanitation and hygiene). There is no reliable estimate in Tajikistan in terms of the costs of achieving the goals in the water sector, and in relation to the new SDG indicator linked with water supply. To establish financial requirements (including the cost of reforms, monitoring, infrastructure development, etc.) and determine the sources of financing, it is necessary to make a careful estimate and draw up a detailed list of water resources, in the broadest sense of this term.

With economic development and population growth, the generation of solid household waste is increasing. The volume of household waste in cities ranges from 280 to 330 kg per capita, including household food waste for Tajikistan estimated at 97 kg per capita per year, equivalent to 906,209 tons per year. The volume of solid household waste also increases as the population grows.

The general system of waste collection, treatment and disposal is not well developed. There are some criteria and requirements, but the level of compliance does not meet the requirements due to insufficient monitoring. Stimulating and funding of the innovative technologies for recovery and reuse of waste for added value from various sources is crucial in this process.

To prevent environmental pollution, the generated waste is transported to special landfills, where recycling, storage and disposal are organized. In 2021, the country had 15 units of such special landfills with a total area of more than 0.3 thousand ha, where 20 million m³ of solid household waste accumulated.

⁵² JMP 2021 Report

The practice of separate collection of different streams of solid household waste, including paper, packaging and glass, organic waste, and pre-sorting them before disposal is only being developed.

The largest volume of municipal solid waste has been accumulated in the cities of Dushanbe, Khujand and Bokhtar. There is a tendency to support the creation of enterprises involved in the processing and disposal of waste (at present, there are no such enterprises yet). The provision of incentives as a system to facilitate the licensing of innovative activities in the housing and communal services and waste management system and the involvement of the private sector in R&D in the development and implementation of programs is important in this sector. It will be important to reduce the total GHG emissions from municipal solid waste through the gradual elimination of open waste disposal and a significant reduction in waste disposal at landfills, stimulating sustainable progress in increasing the coverage of waste collection, sorting and processing.

The formation of a circular economy can play an important role in achieving the Sustainable Development Goals in the country.

Case 3. As part of the observance of the basic principle of conservation activities to preserve and improve biodiversity, the company CJSC "Kullahoi Tojik" in 2020 created a specially protected natural area - a reserve on the territory of the Gissar district. The company spent more than 25 million Somoni to create it. The administration of the reserve carries out purposeful work in all areas of environmental protection. This is the protection of water resources from pollution, depletion and irrational use, the conservation of animal and plant biodiversity, the development and reproduction of the mineral resource base, and much more. To increase the population of animals, as well as the emergence of new species, more than ten species of large and small cattle (red deer, bison, mouflon, maral ibex, etc.) have been brought to the territory of the reserve and are breeding. Including increased the population of new species of birds - ostriches, pheasants, guinea fowls. More than 50,000 trees and shrubs have been planted to maintain and improve the quality of the reserve's land.

One of the most important factors in improving the living environment is the protection of the population and territory of the country from emergency situations.

Climate change and the security situation are also key threats to the economic development and stability of Tajikistan. Highly prone to natural disasters, extreme temperatures and irregular rainfall, Tajikistan is considered the country most vulnerable to climate change in the Central Asian region. The World Bank estimates that climate-related natural disasters have affected a large portion of the country's population and resulted in GDP losses of about US\$1.8 billion. Moreover, the recent escalation of violence in neighboring Afghanistan has resulted in an influx of refugees and Afghan soldiers crossing the border to escape the Taliban. This forced Tajikistan to strengthen the security of its borders and prepare for the influx of refugees.

For Tajikistan, which is very sensitive to climate change, the trend of a constant increase in the number of natural disasters and especially water ones in recent years are especially problematic. So, for example, there was alarming data of a sharp increase from 213 (2020) to 359 (2021)⁵³ in the number of dangerous incidents and natural emergencies, as a result of which 67 people were injured, including 42 people who died. During the period from 2010 to 2021, natural disasters caused damage to the country's economy in the amount of almost 1.5 billion Somoni (about USD253.7 million)⁵⁴.

Cities are particularly vulnerable to natural disasters, so it is important to step up efforts to design them in ways that mitigate the impact.

Plenty of work has been done in recent years in the Republic of Tajikistan to increase the country's capacity in conjunction with disaster risk management and fulfill its obligations under the Sendai Framework for Disaster Risk Reduction 2015-2030 (SFDRR) (SDG 13.1.2). The country

⁵³ Overview of emergency situations in the Republic of Tajikistan for 2021. Committee for Emergency Situations in Tajikistan, p.9.

⁵⁴ Same document, p.19

developed and adopted in 2019 the National Strategy for Disaster Risk Reduction, which sets out a vision and commitment to disaster risk reduction for the next decade (SDG 13.1.1.). The National Platform for Disaster Risk Reduction is functioning successfully, and international cooperation is developing positively in this area, including with partners of the REACT group (a rapid assessment and coordination group for emergency assistance created by the UN Office).

Chapter 4. Partnerships for financing green development

4.1. Global trends and developments in green finance

Green finance is an emerging but rapidly growing segment of the financial market. Significant amounts of financial resources are needed to transfer the entire world economy to green development trajectories.

It was determined that, on average, additional investments amount to 2% of global GDP per year from 2010 to 2050. These investments will need to be channeled across a range of industries to build competencies, introduce new technologies and management practices, and develop green infrastructure.⁵⁵

In the practice of financial and credit institutions in developed countries, green financial instruments, such as green bonds, as well as green debt, green deposits, green mortgages, green insurance, are now becoming widespread.

There is increasing global focus on improving the ability of the financial system to mobilize private capital for green investment and manage climate change risks.

The volume of green emissions in the world reflects the dynamics of growth. As of 2020, more than 80% of green investments in the world are in developed countries (80.5%), emerging markets - 16.0%, international institutions - 3.6%⁵⁶.

Despite the fact that green financing as a segment of the financial market is still at the stage of formation, such financial instruments as green loans, green bonds, green investment funds and green stock indices demonstrate rapid development.

Green" bonds are the most developed instrument of green financing in terms of the definitions used and the possibilities of tracking the use of funds. In the period from 2007 to 2020, the issue of green bonds in the world increased from USD 1 billion to USD 1 trillion.

The principles of green lending have been developed, which form the basis for the implementation of green lending on world markets.⁵⁷

A green fund is a mutual fund or other investment vehicle that invests only in companies that are considered socially conscious in terms of their business operations or directly promote social responsibility using standardized green assets.

National sustainability priorities should be based on green economic incentives and sufficient financial resources to reverse the current trend of reducing public spending on environmental protection. Developed countries annually spend on environmental management an average of 2-3% of GDP. Many developing countries annually spend less than 1% of GDP on environmental management, believing that caring for the environment is not on the list of top priorities. In 2014, OECD countries reported that the share of (public) environmental spending in their systems of national accounts averaged 1.1% of total government spending.

There is a significant potential for the growth of green financing, the development of this market is associated with implementing the following objectives:

- strengthening strategic signals and mechanisms at the national level;

⁵⁵ Towards a Green Economy: A Path to Sustainable Development and Poverty Eradication. Summary report for representatives of power structures. United Nations Environment Program 2011

⁵⁶ Analytical report "On international experience in the development and implementation of the principles, measures and mechanisms of the green economy", Moscow, 2021

⁵⁷

- formation of unified approaches to assessing the volume of green financing and the effect of green investments;
- raising awareness of green financing;
- increasing the potential of market participants in terms of assessing environmental and financial risks associated with projects underlying financing.

At the same time, it is expected that:

- public policy and markets will have to create opportunities for combining public and private financing;
- efforts will be directed to the development of capital markets.

International climate assistance. The total annual climate-related assistance in the period from 2010-2012 in the world reached USD 21.5 billion; only 58% is directed to mitigation, only 25% is directed to adaptation, and 18% is directed to both mitigation and adaptation.

In addition to international climate funds, there are important adaptation projects supported by official bilateral development assistance. Countries supporting these adaptation projects are Switzerland (<USD 7.5 million), Germany (<USD 4 million), and Finland (<USD 1 million) according to data provided by the Organization for Economic Co-operation and Development, by flows of climate finance from bilateral and multilateral sources directed to the Government of Tajikistan in 2014.

Financing under the Clean Development Mechanism should help developing countries achieve a range of economic, social, environmental and sustainable development goals.

Tajikistan is at an early stage of accessing various international sources of funding for adaptation processes as experience shows. Accordingly, it is important for the country to build capacity in this area.

4.2. Trends in financing the development of Tajikistan

4.2.1. Long-term expectations for development financing

According to the National Development Strategy for the period up to 2030, the estimated number of required resources is set at USD118 million for the period 2016-2030.

The main part of the financing is expected from the state budget - USD 56.1 billion (47.5%) and the private sector - USD 54.7 billion (46.3%). The contribution of development partners is expected to reach USD 7.3 billion (6.2%).

Each stage of the implementation of the National Development Strategy for the period up to 2030 is designed for 5 years and represents a set of interrelated steps leading to the achievement of the goals of the strategic goals:

1. The country's medium-term Development Program for 2016-2020 focuses on improving economic policy and institutional structure, including education and training to create the conditions necessary for development;
2. The medium-term development program of the country for 2021-2025 - completes the creation of institutional capacity and focuses on the mobilization of investments in infrastructure and the real sector as the basis of economic growth;
3. The country's medium-term development program for 2026-2030 focuses on the transition from investments based on industrial growth to development based on knowledge and innovation

At the first stage of the implementation of the National Strategy (in the period 2016-2020), it was supposed to attract and develop USD 25.5 billion.

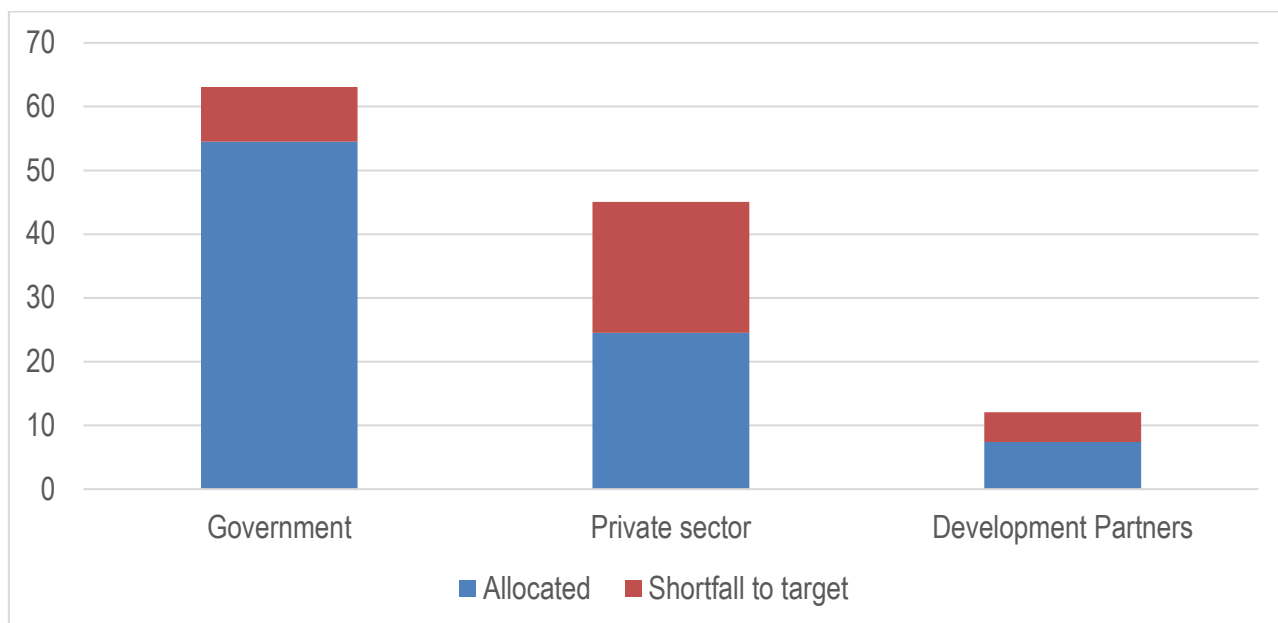
But monitoring assessments showed that 71.9% of the expected resources (90.6 billion Somoni) were allocated for the implementation of the medium-term development program of the country.

The Government allocated 86.4% of the planned resources, while the funds of development partners amounted to 61.4% of the expected figure, and private sector funds were the lowest - 54.4%.

While there are doubts about how the private sector's contribution has been assessed, the figures point to a complex financing scenario.

Figure 55

Deficit of financing of the Medium-term Development Program of the Republic of Tajikistan for 2016-2020, billion Somoni



Source: Medium-term development program of the Republic of Tajikistan for 2021-2025

The financial requirement for the period 2021-2030 is USD92.5 billion. It is estimated that the state budget and development partners will need to cover 53.7% of this amount (USD49.7 billion), leaving a funding gap of 46.3% to be covered by the private sector to meet the overall funding requirement of the National Development Strategy for period up to 2030.

Despite the efforts of the government and significant international assistance in the form of additional financing and debt relief, financing the SDGs remains a very difficult task. The forecast shows that even under the best-case scenario, the government is likely to face a funding gap of 27% or more than USD13 billion over the period 2021-2030. In principle, decision makers have several common levers to increase fiscal space, namely:

- increase in tax and non-tax revenues
- Improving the efficiency of spending or reallocating resources from less efficient to more efficient sectors
 - reduction in external debt servicing, presumably through agreements with creditors
 - increase in external financing

It is expected that an integrated approach to financing strategic development and the SDGs will be strengthened. This requires the strengthening of existing institutions and mechanisms involved in the implementation of the NDS for 2016-2030, as well as the creation of tools and capacity necessary for decision-making and monitoring of progress in the development of goals. In this context, the methodology and data used to assess development funding needs will need to be open to public scrutiny.

4.2.2. Domestic government financial flows

Achieving the level of public spending proposed in the National Development Strategy for the period up to 2030 will not be easy.

Government revenues are the largest source of financing for the country's development. The structure of state revenues includes both tax and non-tax revenues, receipts under the state investment program, special funds of budgetary organizations.

Government tax and non-tax revenues in the Republic of Tajikistan are estimated at 20.9% of GDP in 2022. The pandemic and the economic crisis that followed caused these revenues to decline from 24.4% of GDP in 2015 to 21.9% in 2020.

Tax revenues account for more than 80% of all budget revenues, approximately 19–22% of GDP, which is higher than in lower middle-income countries (16.8%).

Case 4. In the context of Covid 19, the Government has taken serious fiscal measures in relation to budget revenues. These include:

- 1) temporary tax holidays for medical institutions, tourist facilities and sports centers, catering establishments, international passenger transportation and air navigation in the period from April to September 2020;
- 2) temporary tax holidays for real estate tax in respect of individuals from May to September 2020;
- 3) exemption from customs duties, VAT and excises for the import of disinfectants, medicines, protective clothing, medical instruments, laboratory equipment, materials for testing for COVID-19 and materials necessary for the production of these goods, during the period from July to September 2020 of the year.

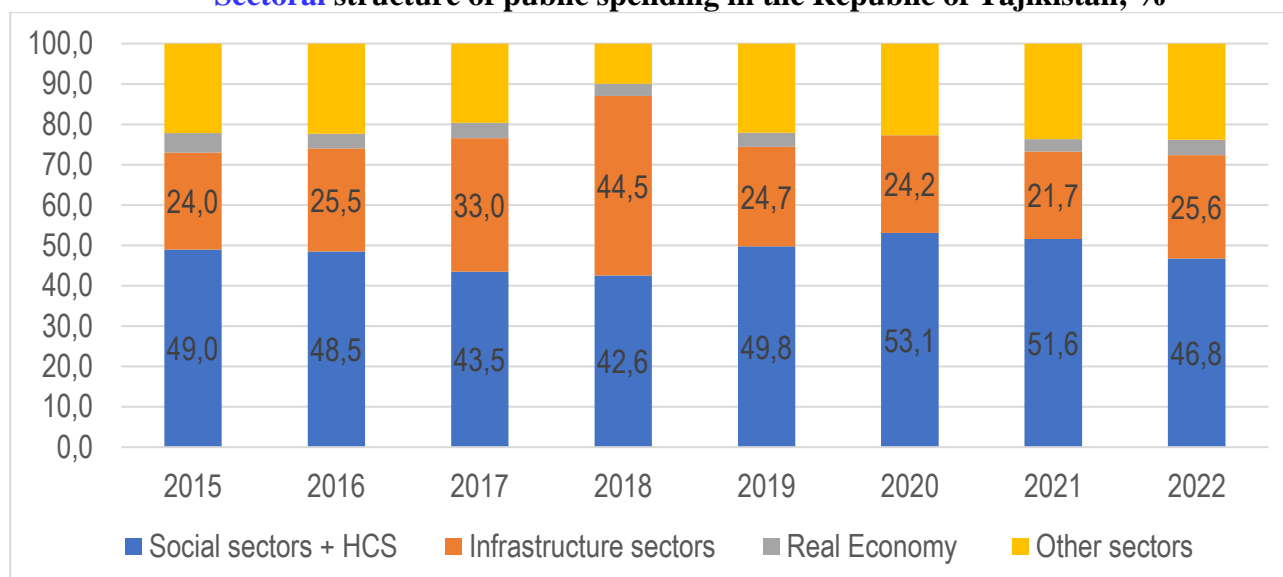
The Government is expected to review its plans to further increase the tax burden to better align with development priorities, namely creating a more business-friendly environment that will ultimately lead to the creation of more and better paying jobs.

Government spending tends to increase. They grew from 28.5% of GDP in 2010 to 30.0% in 2022. The increase in spending was driven by investment in infrastructure and the expansion of public services.

The sectoral structure of spending indicates a clear priority for the government of the social and energy sectors. The state allocated almost 47% of total spending to programs related to healthcare, education, social protection and culture.

Figure 56

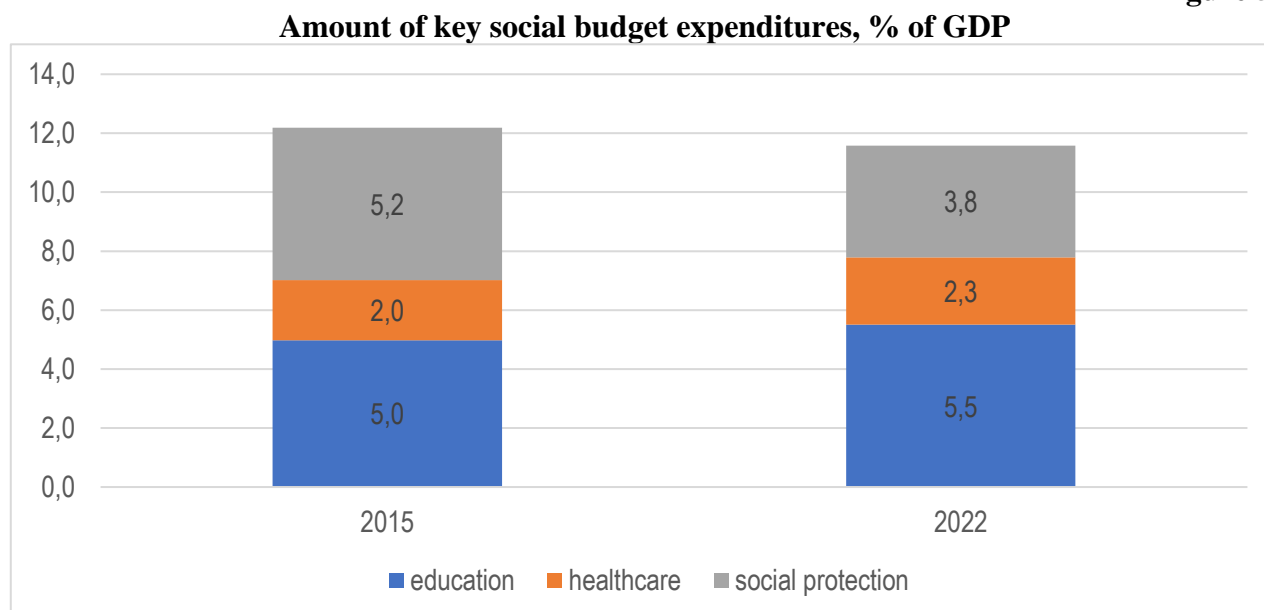
Sectoral structure of public spending in the Republic of Tajikistan, %



Source: Agency on Statistics under the President of the Republic of Tajikistan

The growth in social spending reflects the demographic structure of a country with a rapidly growing population. Social spending increased gradually, from 10.4% of GDP in 2015 to 14% of GDP in 2022. Social spending is mainly driven by the education and social protection sectors.

Figure 57



Source: Agency on Statistics under the President of the Republic of Tajikistan

Spending on education rose from 5% of GDP in 2015 to 5.5% in 2022, well above the average of 3.4% for low-income countries. However, government spending is insufficient to keep up with demographic pressures and growing needs for infrastructure, especially in preschool and general secondary education. By 2030, education spending is expected to grow by at least 6% of GDP.

State budget expenditures on health increased from 2% of GDP in 2015 to 2.3% in 2022 and account for nearly 20% of total social spending in 2022. Health spending in Tajikistan is above the average for low-income countries. It is expected that the volume of public financing of the health system until 2030 will be increased to 4.4% of GDP. Increasing health spending will be critical to achieving the health-related SDGs and increasing human capital.

State budget spending on social protection also grew in absolute terms, but the growth rate was lower than GDP growth. Pension programs account for about three-quarters of social protection spending, with social assistance programs in the form of transfers to vulnerable households and social services for the disabled making up the remainder. Pensions make up the bulk of social protection spending (2,937.8 million Somoni or USD 260.7 million in 2020), while unemployment benefits, social care services, and other schemes make up a relatively small share of social spending.

To prevent the impact of the consequences of the infectious disease COVID-19 on the socio-economic spheres of the Republic of Tajikistan, a package of anti-crisis measures was adopted, including Decree of the President of the Republic of Tajikistan dated June 5, 2020 No. 1544 “On preventing the impact of the infectious disease COVID-19 on the socio-economic spheres of the Republic of Tajikistan”, which became the basis for the provision of state financial support to a vulnerable group of the population of the Republic of Tajikistan, as well as the use of fiscal incentives, monetary measures, and exemption from paying rent of state property and other measures in relation to business entities. Government committed to increase health and social spending to support poor and vulnerable groups, publish quarterly reports on health and social spending related to COVID 19 to further strengthen good governance.

While the government has been able to keep overall spending stable, the COVID-19 pandemic has forced changes to the budget structure. In some areas, actual expenditures differed from those planned. In 2020, health care spending was increased by 44 percent. Likewise, social spending was

increased by 10 percent. Pensions and salaries were also raised by 10-15 percent, in line with pre-COVID-19 plans. The authorities reallocated budgeted current spending and cut other lower priority programs to reduce the overall budget envelope by 0.5 percent of GDP. They also cut budgeted capital expenditures. Government data show that execution has not always been in line with changes in the budget. For example, despite the budget increase, only 71 percent of the health budget was executed. Social security spending was similarly increased, but execution reached only 93% of the budget. At the same time, expenditures on the fuel and energy complex were reduced, but the execution exceeded the government's budget by 7%.

Fiscal adjustments in the context of the pandemic provided fiscal freedom in 2020 and demonstrated the commitment of the Tajik authorities to fiscal consolidation. Improving the quality of social services, such as education and healthcare, is important to achieve the goals set in the NDS and, as a result, the SDGs. This will require more investment.

With limited public resources, one of the alternatives is to redirect spending from other sectors to social sectors. Increasing tax collection also poses some challenges, but there is potential to generate additional tax revenue by increasing the level of formalization of the economy. An increase in the formal sector, including workers, can generate additional revenues in the form of income taxes, as well as social security contributions to health and pension systems. Greater private sector participation can also be encouraged to increase access to services and/or help build facilities.

The energy sector accounts for one fifth of the state budget and over 40% of public investment. This sector is seen as a decisive factor in supporting the industrialization process, increasing exports and increasing budget revenues.

Expenditure on agriculture is 0.9% of GDP for agriculture, with limited impact on the results, sustainability and competitiveness of dehqan farms. It is expected that with the adoption of the new program for the development of the agro-food complex, the total amount of allocated funds for agricultural development will increase over the coming years, which, along with other measures, will help increase the sustainability of agricultural production.

The volume of budget expenditures for financing activities in the field of climate change is not yet completely quantifiable. In order to be able to use domestic public resources more strategically to finance the country's environmentally sustainable socio-economic development, it is expected that efforts to identify and track budget allocations will increase by an order of magnitude.

The volume of public investment in Tajikistan is about 7-8% of GDP, which is high by international standards, which signals the importance of improving the quality and efficiency of public investment.

Over the past decade, Tajikistan has generally followed a conservative fiscal policy. However, the crisis in Russia in 2016 triggered an economic shock that led to the rescue of domestic banks. As a result of this and the investment needs of large infrastructure projects, there were large deficits of -9% and -6% in 2016 and 2017, respectively. After returning to more conservative policies, the fiscal gap widened again in 2020 as a result of the COVID-19 crisis.

Fiscal management during the COVID-19 crisis and international assistance allowed Tajikistan to reduce its budget deficit in 2020, but despite this, the level of debt has increased. An initial deficit of 7.7% was projected for 2020 (according to the IMF), while the actual deficit was around 4.4% of GDP. Despite increased international aid and efforts to contain deficits during the pandemic by reprioritizing spending, the shock of the COVID-19 crisis has been significant. Following this shock, public and publicly guaranteed external debt rose from the equivalent of 36.0 percent of GDP at the end of 2019 to 40.6 percent in 2020, while total public debt rose from 43.1 percent of GDP at the end of 2019 to 48.1 percent a year later.⁵⁸ This has narrowed future fiscal space, putting public finances at high risk of a debt crisis. In addition, there are implicit debt obligations of state-owned enterprises (SOEs). Their large impact on the economy, combined with the rising losses and liabilities of some SOEs, pose a significant fiscal risk to the government.

⁵⁸ Asian Development Bank (2021). Asia Development Outlook 2021. Financing a Green and Inclusive Recovery. Asian Development Bank. Manila.

Fiscal Space Forecast Analysis results include four alternative scenarios:

- Scenario 1 assumes that the economic recovery follows the trajectory described by the country's National Development Strategy. However, the government finances the additional costs through additional borrowing.
- Scenario 2 assumes that the increase in spending to finance economic recovery can be financed through better tax administration instead of deficit spending.
- Scenario 3 assumes that the economic recovery is slower than projected in the baseline scenario and the government maintains a financing gap below -2.5% of GDP.
- Scenario 4 retains the same growth assumptions as Scenario 3 but assumes that the levels of real per capita expenditure projected in the baseline are maintained.

Under all scenarios, financing the SDGs remains a very challenging task. The first two alternative scenarios show that, under favorable growth conditions, the government can afford additional spending either through more deficit financing or through more efficient revenue collection, potentially reducing the financing gap to 27 percent. Less favorable economic conditions would widen the financial gap to 37 percent. To narrow the financial gap to a baseline of 31 percent under these circumstances, the government would have to significantly increase its debt stock and therefore negatively impact future fiscal space.

Table 13

Forecasting outcomes by scenarios

Outcomes	Base Scenario	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Average tax and non-tax revenues/GDP, 2021-2030	28.4%	28.4%	28.7%	28.4%	28.4%
Average non-interest expenditure/GDP, 2021-2030	28.6%	30.0%	28.5%	29.1%	30.8%
Average expenditure per capita (TJS in 2016 prices), 2021-2030	2,680.5	2,825.4	2,679.4	2,448.4	2,680.5
Average Fiscal Deficit/GDP, 2021-2030	-0.5%	-2.2%	-0.2%	-1.2%	-4.1%
Total public debt/GDP in 2030	27.7%	38.2%	25.0%	35.9%	57.1%
Total expenditure in current prices USD (millions, 2021-2030)	34,473	36,302	34,459	31,379	34,473
Financing gap to cover the costs of the National Development Strategy of the country for the period up to 2030 (percentage of the costs of the NDS)	31%	27%	31%	37%	31%

In 2020, the government adopted the "Public Financial Management (PFM) Reform Strategy 2030"⁵⁹. Public financial management (PFM) reforms can generate and release resources to fund the SDGs. PFM has a direct impact on the effectiveness of the budget distribution mechanism, distribution and collection of revenues (taxes). Indirectly, more reliable and transparent public finances can increase government credibility and attract additional funding and/or reduce financial costs.

⁵⁹ Republic of Tajikistan (2020). Public Financial Management Reform Strategy for the period up to 2030

There are several main elements of the advanced budget cycle in the country, including long-term development planning (National Development Strategy for 2016-30 and related 5-year medium-term development programs, sectoral strategies and related action plans), medium-term planning (Medium-term fiscal framework, medium-term cost structure) and annual budgeting, as well as monitoring of budget execution and, to some extent, strategy and policy evaluation.

Public Expenditure and Financial Accountability Assessment (PEFA) was conducted in 2017.⁶⁰ It identified progress in several areas, but also recognized that the linkages between the various stages of the planning and budgeting cycle needed to be better integrated, with some elements themselves requiring improvement.

To this end, a number of PFM reform activities can be considered, including (i) further adapting the concept of policy-based budgeting to the conditions of Tajikistan, (ii) redefining and strengthening the role of various actors, in particular at the level of the main budget holders, such as ministries, (iii) extending program budgeting to all sectors and subnational government, (iv) strengthening strategy and policy formulation and in particular the costing of development strategies and plans, (v) strengthening monitoring and evaluation mechanisms.

Successful implementation of the PFM reform strategy is fundamental to increasing SDG funding in Tajikistan, but its impact cannot be assessed. The PFM reform strategy includes actions to improve forecasting and increase the efficiency of resource allocation. It also includes reforms to significantly increase tax collection from about 22% of GDP in 2021 (see section 3.3.1) to 30% of GDP in 2030.

The introduction of program budgeting (or performance budgeting), as envisaged by the PFM reform strategy, can make a significant contribution to improving integrated planning and budgeting. Performance budgeting can also institutionalize the tracking of budgetary and actual expenditures for the development of Tajikistan.

Fiscal decentralization reform can also help achieve Tajikistan's long-term development goals. Subnational governments (oblasts and districts) play an important role in financing and delivering public services, especially in the social sector, and thus in achieving the SDGs. At the same time, there may be pressure on public service budget allocations due to volatile local revenue performance and relatively complex revenue distribution mechanisms. In addition, it is recognized that the mechanisms and capacity for strategic planning at the subnational level in relation to national development goals need to be further strengthened.

State debt. In 2022, the ratio of public debt to GDP was 34.8%, of which external debt is 30.8% of GDP.

Thanks to the measures taken by the Government of the Republic of Tajikistan, the level of public and publicly guaranteed debt of the Republic of Tajikistan does not go beyond the limits provided for in the strategic documents of the Republic of Tajikistan. The government has committed to fiscal consolidation and updated its debt management strategy for 2021-2023. This strategy defines borrowing criteria and debt ceilings over the medium term. Until 2018, Tajikistan's external debt was not supposed to rise above 40 percent of GDP. This threshold has been increased to 60 percent and a new priority has been given to attracting highly concessional loans.

Moreover, the stability of public debt indicators has made it possible to maintain the relative stability of the promotion of public finance policy, to ensure the effective implementation of priority development projects, as well as the timely and strict fulfillment of debt obligations.

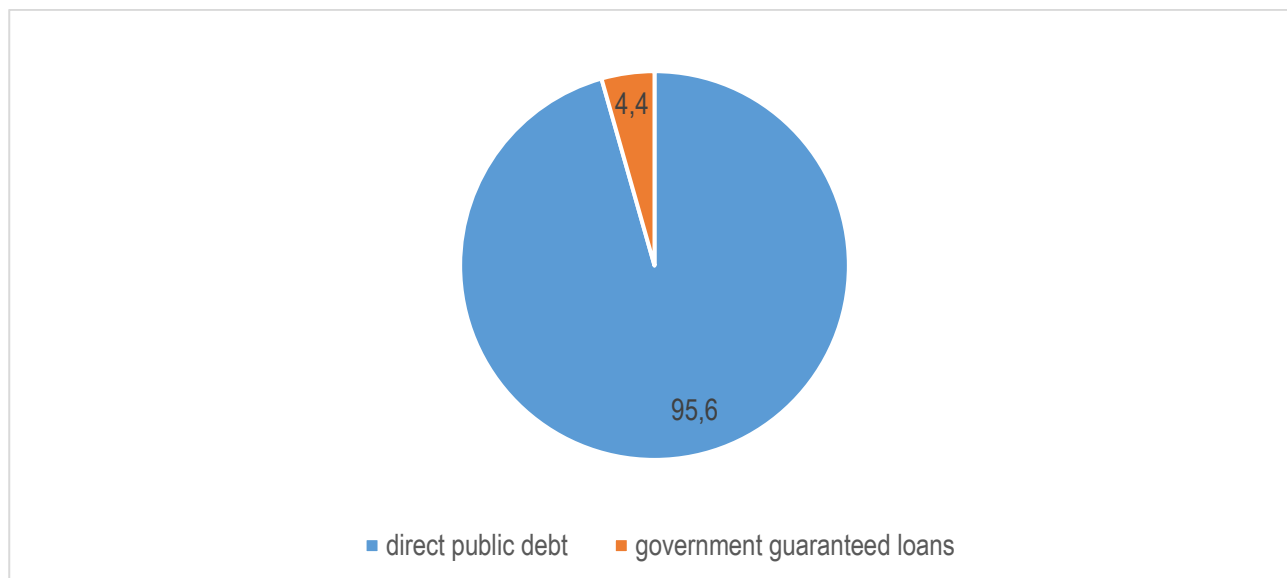
In view of the government's clear commitment to maintaining a sustainable debt situation, the public external debt package consists mainly of concessional external borrowing.

The structure of the external debt of the Republic of Tajikistan is dominated by direct external public debt, which accounts for 95.6% of the total debt portfolio of the country. The rest of the debt is accounted for by loans with a state guarantee.

Figure 58

60 Government of Tajikistan (2017). Public Expenditure and Financial Accountability Assessment (PEFA). Final report. November 2017.

Structure of the external debt portfolio for 2022, %

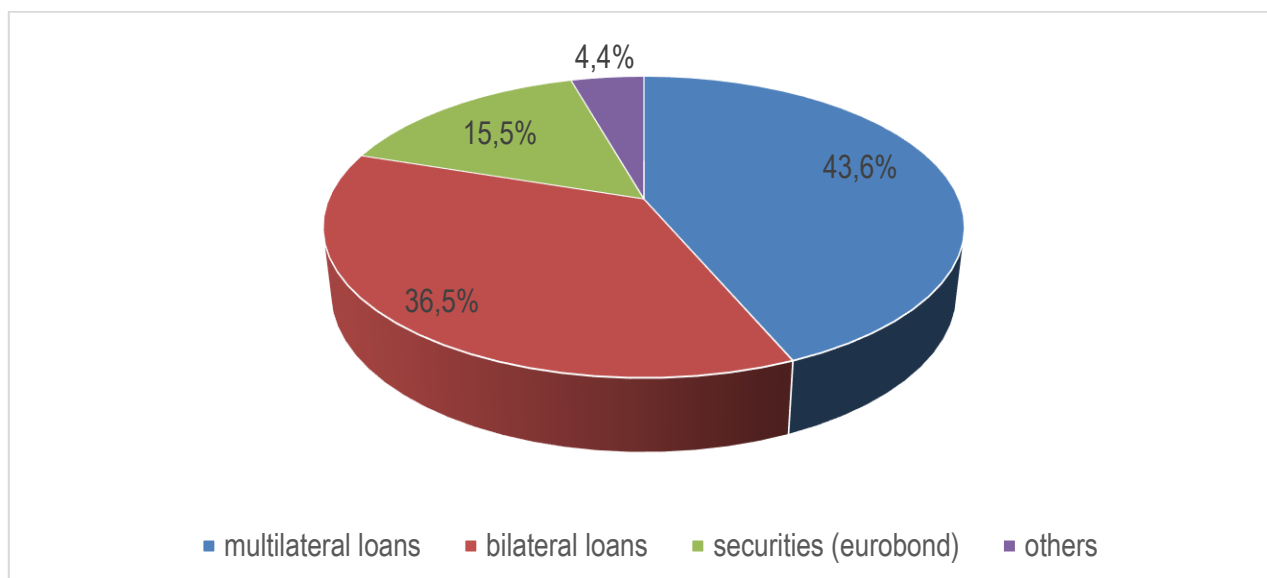


Source: Ministry of Finance of the Republic of Tajikistan

The structure of external public debt is balanced between bilateral creditors and international financial institutions.

Figure 59

External debt structure, by creditors



Source: Ministry of Finance of the Republic of Tajikistan

The government also successfully issued USUSD500 million in bonds maturing in 10 years in 2017. This was the first time Tajikistan issued a bond on international markets. The main and largest

creditors are Exim Bank of the People's Republic of China, the World Bank and the Asian Development Bank (ADB).⁶¹

The G-20 Debt Service Suspension Initiative (DSSI) has allowed Tajikistan to suspend debt service payments and create fiscal space for priority spending. The DSSI initiative was launched in response to the COVID-19 pandemic and aims to support low-income countries by suspending official bilateral debt service until mid-2021 to free up fiscal space to fund social, health and economic responses to the pandemic. Tajikistan took advantage of the suspension of debt payments to China and postponed the servicing of over USD43 million of debt under DSSI ⁶².

Tajikistan's public debt is expected to stabilize over the medium term. As a result of official fiscal consolidation commitments and the avoidance of non-concessional borrowing, the country's debt is assessed as sustainable, but the risk of disaster remains high, according to the IMF. This is because Tajikistan's public finances remain vulnerable, especially to export shocks and contingent fiscal liabilities.

Efforts will also be directed towards debt repurposing to free up additional resources. Some initiatives in this regard have included using the IMF Catastrophe Containment and Relief Trust and signing a debt suspension memorandum with the Paris Club. In addition, the government could explore debt swaps with official creditors as a way to redirect debt repayments to development priorities.

Tajikistan can increasingly use international financial markets to finance its development. The international rating agency Moody's Investors Service assigned the Republic of Tajikistan a rating of "B3, stability (B3, Outlook Stable)".

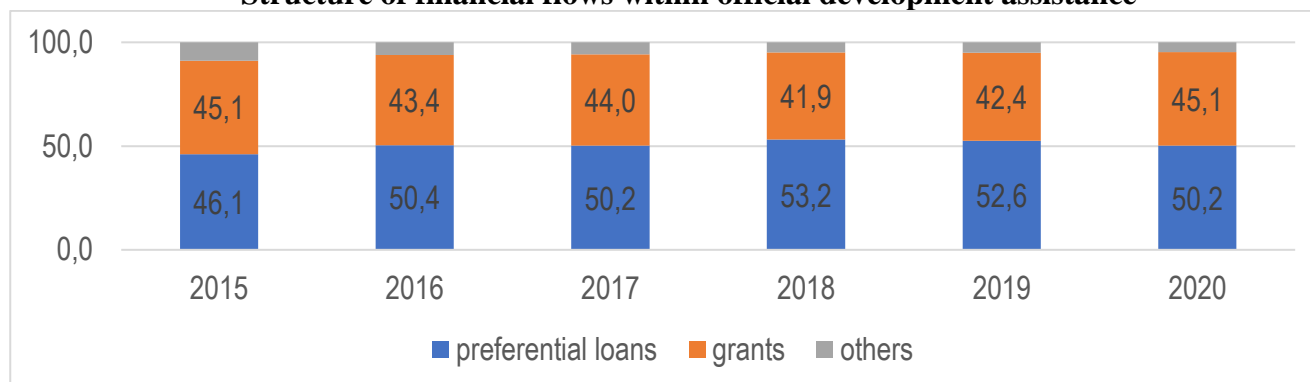
In the medium term, emphasis will be placed on balancing capital borrowing, obtaining a social return on investments in the energy and transport system, increasing funding for the social sector of the country's economy, which will affect the ability to implement strategic goals and priorities.

4.2.3. Funding from development partners

Tajikistan is eligible for concessional funding, both through grants and loans., A constant dialogue has been established in the Republic of Tajikistan between the government of the country and development partners (donors), a consultative and advisory platform of the National Development Council has been created and is functioning (since 2007), participation in the international monitoring process of the Global Partnership is being carried out, which creates the necessary prerequisites for ensuring conjugation of areas of global cooperation with national development priorities, the effectiveness of external development assistance.

Figure 60

Structure of financial flows within official development assistance



Source: State Committee for Investments and State Property Management of the Republic of Tajikistan

⁶¹ Claussen, J. & Sultonov, F. (2018). Financial analysis to support the implementation of the SDGs in Tajikistan. United Nations, Dushanbe.

⁶² World Bank (2021). Macro Poverty Forecast: Country Analysis and Projections for the Developing World. World Bank Group. Washington.

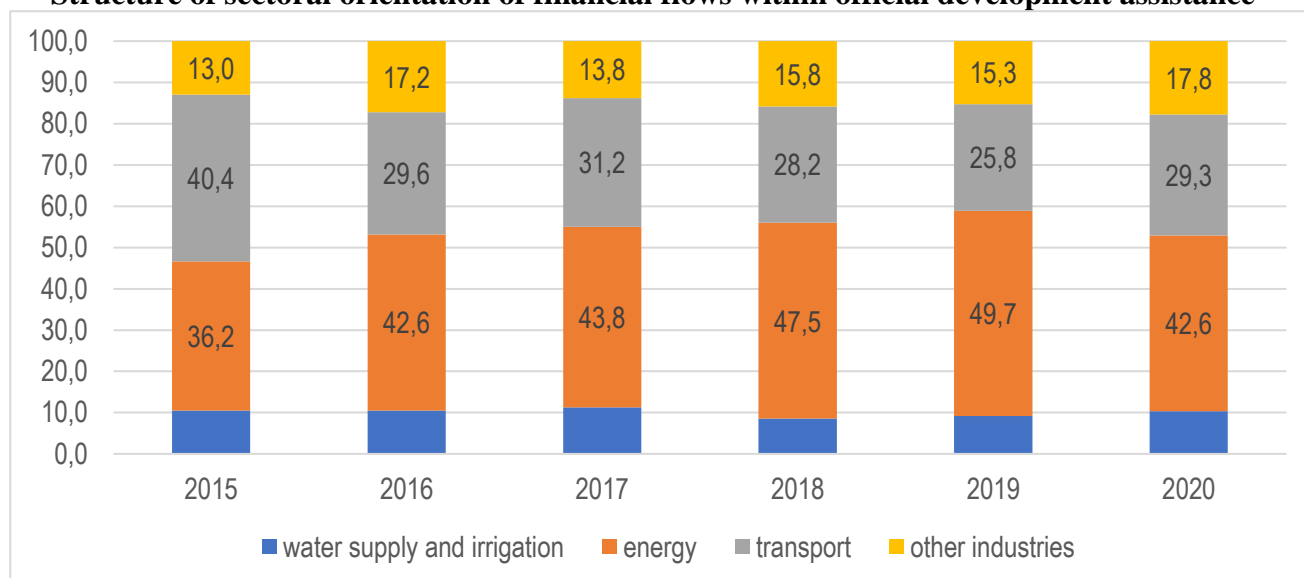
In average annual terms, for the period 2015-2021, official development assistance (ODA) provided to the country amounted to 4.6% of GDP.

Given that funding from development partners was mainly raised through the provision of ODA grants until 2015, followed by concessional ODA loans, now it is the other way around and non-concessional resources are taking place.

All financial flows under the country's ODA in general are more focused on infrastructure development - 70% of assistance was directed to the development of transport and energy infrastructure, contributing to improved opportunities for reducing poverty and inequality.

Figure 61

Structure of sectoral orientation of financial flows within official development assistance

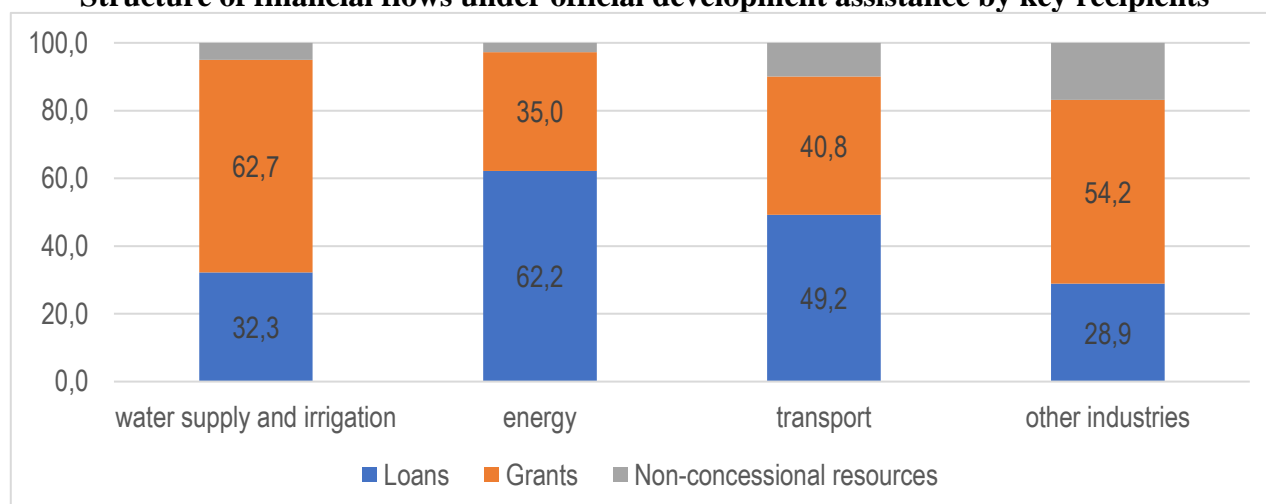


Source: State Committee for Investments and State Property Management of the Republic of Tajikistan

Nevertheless, infrastructure projects in the transport and energy sectors have attracted significant funding from bilateral (for example, Chinese Exim Bank) and multilateral organizations (for example, ADB and WB), but have become an important source of debt.

Figure 62

Structure of financial flows under official development assistance by key recipients



Source: State Committee for Investments and State Property Management of the Republic of Tajikistan

At the same time, one sixth of the ODA was associated with the promotion of the development of social sectors - education, health and social protection, which contributed to the progress in the implementation of the objectives of the Sustainable Development Goals and priority areas for the development of a socially oriented economy.

The predictability of aid is quite high - discrepancies between commitments and actual payments are insignificant (no more than 4% on average), which, in general, makes it possible to ensure the inclusion of ODA in the processes of medium-term budgeting in the country. Meanwhile considering the rapidly changing political and economic conditions in the world markets, which are reflected both in the budget and in the external development assistance of the country, it is important to improve the capacity in the option planning and budgeting.

Considering the funding target of USD 5.7 billion for the period 2021-2030, if the current trend continues, concessional resources are likely to fall short of the USD 1.7 billion requirement.⁶³ Looking at non-concessional resources, the average for the same period increases to USD 458 million, implying a gap of USD 1.1 billion by 2030. It is important to note that these figures do not reflect flows from Russia and China. For comparison, in 2018, the volume of concessional assistance (ODA) from Russia to Tajikistan amounted to about USD 11.7 million.

Opportunities for a significant increase in ODA resources are limited. In the period 2017-2019, ODA per capita was USD 40.2.⁶⁴ This is three times the average for low-income countries (LMICs like Tajikistan) at USD13.8 per capita over the same period. By comparison, the average for least developed countries is USD 52.3. Moreover, Tajikistan was classified as a lower middle-income country in 2020, after three years in the low-income category. If the country continues to progress as expected, access to concessional resources, in particular grants, could become more difficult.

Funding from development partners also shows limited potential for growth, and the space for concessional flows may shrink further as Tajikistan strengthens its status as a lower middle-income country. This leaves the option of increasing non-concessional flows, but debt ceilings may limit borrowing. The best-case scenario is an enhanced credit facility arrangement with IMF. Using these flows as catalysts should be a priority for all development stakeholders.

The signing of the IMF Extended Credit Facility (ECF) agreement will help unlock financing for infrastructure projects. The IMF ECF includes a detailed set of reforms that help reassure development partners. Some development partners, such as ADB, will be ready to invest in major infrastructure projects once the programme is developed. Negotiations on the programme have been ongoing for many years, but discrepancies and lack of data on Rogun have hampered progress. Recently, access to soft loans to mitigate the effects of COVID-19 and ODA reform have opened fiscal space for the government and made negotiations less urgent.

Considering the current trends and socio-economic conditions in Tajikistan, more attention needs to be paid to the enabling role of financial flows from development partners. Increase in ODA loans and other official flows could be expected over the period up to 2030. However, the government's borrowing capacity is limited, and with limited resources and a complex agenda, it is becoming increasingly important to identify and finance projects with the highest value added in terms of development potential. As a result, the enabling use of development finance requires strong coordination mechanisms.

Three different areas can be identified in which development finance can have a stimulating effect in Tajikistan in the context of the NDS and government policy:

- Support for key government reforms
- Financing of key investment projects
- Mobilize or attract other sources of funding through blended finance and other mechanisms
- Given the limited budget, it is becoming increasingly important to identify and focus on those projects that have the greatest development potential. Hybrid PPP approaches may be considered in the future.

⁶³ This considers the target amount of funding USD 5.7 billion for the period 2021-2030.

⁶⁴ Based on data from the World Development Indicators database.

Development finance can also be used to mobilize or attract other sources of financing. Sometimes projects fail to be implemented because the project has an excessively high level of risk in relation to the investor's propensity to risk, the expected financial return is low or there is a bad investment climate that creates uncertainty. Mixed financing (or combined financing) uses small grants or other forms of development financing to overcome investment obstacles and ensure the viability of projects. For example, grants can be used to provide technical assistance to reduce uncertainty, reduce the cost of borrowing, or provide a guarantee that improves the risk profile.

4.2.4. Private financial flows

Finding compromise solutions between attracting commercial investment (creating incentives or simplifying regulatory provisions) and maximizing the impact on one's sustainable development (creating jobs, developing skills, stimulating innovation, generating green growth, etc.) is a challenge.

Domestic private investment is becoming an increasingly important source of financing for development for the country.

Over the period 2016-2022, as a result of the reforms carried out in the country's financial sector, aimed, among other things, at strengthening financial stability, developing the skills of personnel in the use of information technology, risk management and modeling, as well as strengthening the risk monitoring system, the situation of the country's banking system is gradually improving, the volume of lending from credit institutions is increasing, and at the same time, many indicators of financial stability meet the established requirements, and in some cases exceed them.

The capital adequacy ratio, which is one of the main indicators of the financial stability of the banking system, shows an annual growth of an average of 1.2%. By the end of 2019, this indicator amounted to 22.0% and almost doubled compared to 2015, which is twice the minimum requirement.

The National Bank is taking a number of measures to reduce the level of dollarization of the financial sector as a result of which the share of attracted deposits in foreign currency in the total volume of attracted deposits decreased from 69.5% in 2015 to 46.9% in 2019, and the share of loans issued in foreign currency in the total volume of loans decreased from 63.1 to 48.7%. The measures taken are designed to reduce the exposure to both internal and external risks, not only of the financial sector, but also of the entire national economy.

In fact, the volume of lending to the country's economy by the banking sector is lower than in 2015. The total volume of loans issued by the banking system to the national economy, which amounted to more than 12.5 billion Somoni in 2015, decreased to 10.9 billion Somoni in 2020. At the same time, the share of loans provided to industrial sectors, which are very important for the implementation of the country's strategic goals, decreased from 65% in 2015 to 41.6% in 2020. This confirms that there is still no financial inclusion in the country.

While the banking sector has the potential to support domestic investment, high interest rates remain one of the biggest barriers to private sector access to credit. The small size of the banking system results in high transaction costs. In turn, the combination of risk exposure and high costs results in high interest rate spreads on lending. Trust in the banking system and penetration of banking services in rural areas is low.

Strengthening the financial sector and increasing confidence in the banking system is expected to be a key driver of access to finance. So far, the banking system is vulnerable as credit and risk are concentrated in SOEs and subject to exchange rate fluctuations. After the 2016 crisis, two medium-sized banks were closed and two large systemically important banks were bailed out by the state. In 2017, only 11 percent of the working-age population saved in financial institutions, and the ratio of deposits to GDP is low. There is also a lack of products that reflect the needs of households and small businesses, including products designed with remittances in mind. Similarly, the insurance industry is small, underdeveloped and dominated by two large SOEs. Reforms to credit bureaus and the insurance sector are encouraging, but results so far have not led to significant improvements for business.

It is expected that in the future efforts will be increased to ensure the financial stability of the banking system.

Direct foreign investments. FDI can make a significant contribution to development. The development of the financial system in the country is an important condition for attracting FDI and its positive impact on economic growth. As the effectiveness of economic reforms, including in the field of finance, is expected to increase, incentives for foreign direct investment are also expected.

In the period 2015-2021 net FDI inflows to GDP averaged 3.5%, which is at least two times lower than the optimal level (7-10% range for countries with economies in transition), indicating that FDI is insufficient to provide a significant contribution to economic growth. It is expected that the current predominance of FDI investments in the mining sector of the industry in the coming years will be corrected by structural shifts aimed at a significant increase in the share of investments in the manufacturing sectors, with a focus on the growth of finished goods production.

Subject to the creation of favorable conditions, Tajikistan should be able to attract additional FDI. The country is rich in natural resources (minerals) and is also an attractive destination for tourists. Access to sustainable sources of electricity may also be an important factor once the Rogun HPP is operational. The government has also set up an investment promotion agency, Tajinvest. The Agency has received significant technical assistance and capacity building from development partners and is gradually expanding its support services⁶⁵. In the future, access to clean, sustainable energy could increase confidence in green manufacturing among local businesses.

Public-Private Partnerships (PPP). PPP could be a viable model for promoting investment in Tajikistan. PPP schemes, in which private investors provide financing and assume the risks associated with the project, are attractive to the government. Moreover, a successful PPP project can also help promote Tajikistan as a destination for foreign capital inflows.

Tajikistan was the first country in the region to implement PPP projects and they provide some valuable lessons. Two early infrastructure PPP projects, the Pamir Energy Power project in eastern Tajikistan and the Dushanbe-Chanak toll road, were recently reviewed by ADB and showed positive impact.⁶⁶ The Dushanbe-Chanak toll road also exhibits some design flaws, resulting in a skewed distribution of risks and benefits in favor of the private sector.⁶⁷ Tajikistan has also used the provisions of the PPP law (Article 22) to allocate large infrastructure projects without a competitive process.

In 2020, Tajikistan joined the "Convention on the Recognition and Enforcement of Foreign Arbitral Awards" (New York Convention). In 2015, Tajikistan also joined the "Hague Convention on the Notarization of Foreign Documents".

Given the institutional and macroeconomic context, hybrid PPP models can be explored in Tajikistan. Hybrid PPP models differ from traditional PPP approaches in that they have a more prominent role (and more risks) for governments and their development partners, while the private sector and financiers play a less dominant role.⁶⁸ This approach can help maximize the project's contribution to development. Plans for the development of the Shymkent-Tashkent-Khujand economic corridor are being developed in such a way that they can be considered as a hybrid PPP.⁶⁹

So far, the use of blended finance to stimulate private sector investment in Tajikistan has been limited. As of the end of 2020, a total of 4 blended finance projects have been approved in Tajikistan, supported by the EU Investment Facility for Central Asia. These four projects focus on water

⁶⁵ ADB (2019). Tajikistan: Investment Climate Reforms. Completion Report

⁶⁶ Parpiev, Z. (2020). Is public-private partnership a solution to Tajikistan's infrastructural backwardness? Asian Development Bank Institute.

⁶⁷ Ibid.

⁶⁸ Leigland, J. (2018). Public-Private Partnerships in Developing Countries: An Emerging Evidence-Based Criticism, World Bank Research Review, Volume 33, Issue 1, February 2018, pp. 103-134.

⁶⁹ ADB (2021). Roadmap for the development of the economic corridor Shymkent-Tashkent-Khujand. Asian Development Bank, January 2021.

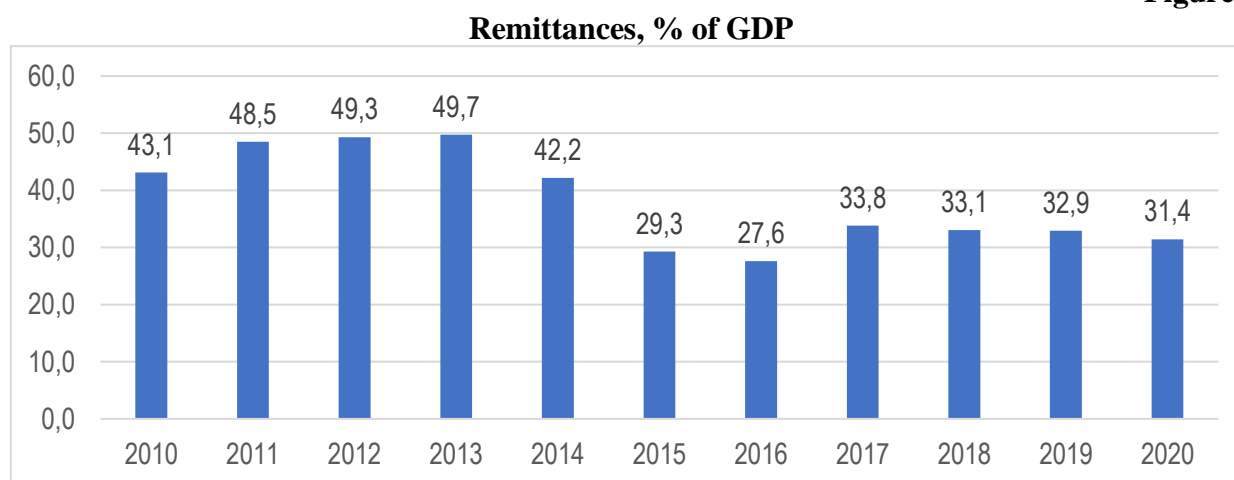
(wastewater) and energy (distribution) infrastructure. All of these projects were implemented by the European Bank for Reconstruction and Development (EBRD), and the counterparties have always been government-owned utility companies.

Blended finance can be used to promote the development and growth of the private sector. Blended finance has often been used to support infrastructure projects in developing countries, but blended projects have increased in size, variety and complexity over time. The development and growth of the private sector is often constrained by access to financial services, including credit. Various blended project models aim to increase access to finance for entrepreneurs and MSMEs.

Remittances. Remittances are the most important source of income for families and the economy. In 2020, the share of remittances received by Tajikistan was the second largest in the region and the third largest in the world.

Remittances have become an important factor in poverty reduction in Tajikistan.⁷⁰ Remittances stimulate household consumption and play an important role in financing investment and household spending. Remittances have also transformed the Tajik economy, expanding the service sector and shifting the structure of production from tradable to non-tradable goods⁷¹. From 2010 to 2014, Tajikistan had the highest remittances to GDP ratio in the world (for example, remittances were equivalent to 49.3 percent of the country's GDP in 2013). Remittances were the second most important and stable source of household income after wages and accounted for 35 percent of household income over the period 2007–2014. Currently, the volume of remittances is significant - at least 30% of GDP.

Figure 63



Remittance flows generally follow the economic cycle of the Russian Federation, which hosts the majority of Tajik migrants (97.6% in 2019)⁷². The poor state of the Russian economy explains the significant decline in remittances in 2014 and 2015. COVID-19 has had little impact on remittance flows through border closures and travel restrictions.

So far, government attempts to use remittances as a source of income have not been entirely successful.

There is potential to increase the contribution of remittances to the achievement of Tajikistan's development goals. This can be achieved through measures aimed at overcoming three main limitations or barriers:

- Failure to capitalize on the financial potential of remittances and lack of investment incentives

⁷⁰ WB (2018). Systematic Country Diagnostics of Tajikistan. Turning the National Development Strategy 2030 into a Success: Laying the Foundation for Shared Prosperity. World Bank, Washington DC.

⁷¹ Brownbridge, M. & Kanagaraja, S. (2020). Migration and remittances in the countries of the former Soviet Union in Central Asia and the South Caucasus. What are the long-term macroeconomic implications? World Bank Working Paper No. 9111

⁷² ADB (2020). Strengthening support for labor migration in Tajikistan. Evaluation and recommendations. Asian Development Bank

- Low value added of remittances
- Inefficient migration systems.

The contribution of remittances to development can be increased through the development of financial products and reforms. Studies have shown that remittances are often used to finance current expenses or for short-term savings, but almost never invested in new business.⁷³ In fact, business investment is lower among households that receive remittances compared to households that do not.⁷⁴ The country also lacks remittance-supported financial products and low levels of confidence in the banking system.⁷⁵ Some programs have been designed to support returning migrants, but they pay little attention to financial products and financial inclusion aspects.⁷⁶ There are also precedents for financial products based on remittances, such as deposits, student loans or health insurance.⁷⁷ In Tajikistan, the “financialization” of remittances requires building confidence in the financial system and developing an architecture that protects investors.⁷⁸ By their nature, these are long-term reforms.

Remittances can also help local business development through the promotion of specific financial products. To stimulate investment in business, it is also important to provide favorable conditions for entrepreneurship and legal self-employment in Tajikistan.

Development partners have also launched projects to harness the potential of remittances to support local businesses. Diaspora bonds can also provide migrants with the opportunity to invest in local business development.

The government can increase the added value of migrant remittances by investing in skills development and training. Skilled workers can bring in additional remittances. The education system can be more closely integrated with the needs of migrants to develop skills training based on international standards, provide language training and recognize skills already acquired.⁷⁹ Closely related to these factors are the opportunities to enter new labor markets and create opportunities for employment abroad in countries other than Russia and neighboring countries. This may require an overhaul of the technical and vocational education and training (TVET) system in Tajikistan.

A more efficient and digital system will make migration more efficient and help to cope with some of the social impacts of migrant labour. Most migrants come from rural areas. This makes it difficult and costly to disseminate information and meet administrative and traffic requirements. A digital system covering information and registration services, including access to training, would make migration cheaper and safer. In turn, the digital system will also facilitate the monitoring and tracking of migrant families and communities, and the provision of additional services or support when needed.

There are opportunities to use the large inflow of remittances to Tajikistan to support private sector development and create new opportunities in rural areas. Instead of trying to increase income from remittances, there should be a shift in focus to measures to increase the value added of remittances for local communities, such as developing dedicated financial products, improving training and skills among migrant communities, and making migration more efficient while minimizing its social impact.

⁷³ UNCTAD (2016). Review of investment policy. Tajikistan.

⁷⁴ ADB (2020). Strengthening support for labor migration in Tajikistan. Evaluation and recommendations. Asian Development Bank. https://www.jica.go.jp/jica-ri/publication/booksandreports/I75nbg000019cedi-att/report_20200604.pdf

⁷⁵ https://www.jica.go.jp/jica-ri/publication/booksandreports/I75nbg000019cedi-att/report_20200604.pdf.

⁷⁶ UNCTAD (2016). Review of investment policy. Tajikistan.

⁷⁷ https://www.ilo.org/wcmsp5/groups/public/---europe/---ro-geneva/---sro-moscow/documents/publication/wcms_308938.pdf.

⁷⁸ WB (2019). Tajikistan Country Economic Memorandum. Development of Tajikistan's growth potential. Macroeconomics, trade and investment global practice, Europe and Central Asia region. World Bank Group, Washington DC.

⁷⁹ https://www.etf.europa.eu/sites/default/files/m/CB6806112A411877C12578EF0055A7C5_Migration%20survey_Tajikistan.pdf.

4.3. Attracting finance from development partners to implement the Green Economy Development Strategy of the Republic of Tajikistan for 2023-2037

The Green Economy Development Strategy in the Republic of Tajikistan for 2023–2037 consists of five stages to achieve the goals and objectives set by industry:

- the first and second stages (2023-2025 and 2026-2028) include activities in the field of wide popularization of information about the green economy, training and formation of economic and environmental thinking, implementation of the principles of implementing the green economy in regulatory legal acts, compliance with them in making management decisions and the beginning of the implementation of the standards of the green economy in the socio-economic sectors of the country, which requires public funding and attraction of funds from development partners;

- the third and fourth stages (2029-2031 and 2032-2034) include activities to introduce the principles of a green economy in industry, agriculture, transport and infrastructure, construction, housing and communal services, tourism, investment, environmental protection and reducing greenhouse gas emissions, as well as extending the strengthening of the institutional framework of the green economy in the country;

- the fifth stage (2035-2037) includes measures to develop a green economy, maintain, grow and sustainable use of natural capital and increase investment based on the principles of a green economy. At this stage, an emerging green investment market is being formed in the country.

Goals, objectives and milestones will be improved and strengthened in response to changing current situations and strategic priorities. At the same time, the success of implementing the idea of a green economy depends on the active position and motivation of each person, which requires the prompt provision of environmental knowledge and the improvement of cognitive and educational activities in the process of transition to a green economy.

The result of the implementation of the Green Economy Strategy calls for a comprehensive movement in support of sustainable development as a priority for civil society and for the identification of green economy issues as an important area of support for the public and private sectors.

The total amount of funds required for the implementation of the first stage of the Green Economy Development Strategy in the Republic of Tajikistan for 2023–2037 is 21,586.3 million Somoni, including 37.1 million Somoni from the state budget, 12,818.4 million Somoni from allocated funds from development partners and 8,730.8 million Somoni from private sector investments.

The assessment of resource requirements for the successful implementation of the Strategy is based on the prospects for economic development and population growth, which determines the resource potential of the country's economy, as well as the necessary volume and priority areas of measures to achieve the goals set in the long and medium term.

Foreign and domestic investments play an important role in financing this Strategy. To this end, in the process of implementing the Strategy, the initiatives of foreign and domestic investors investing in the principles of a green economy will be supported by the state.

An important source of green economy development in the country is investment support from international financial institutions and development partners, whose financial cooperation makes a key contribution to the implementation of the Green Economy Development Strategy in the Republic of Tajikistan for 2023-2037.

Therefore, in the process of implementing the Strategy, close and effective cooperation with financial institutions and development partners will be established.

The country's banks can play a key role in the process of introducing a green economy by providing soft loans. Given the introduction of green economy principles in Tajikistan, along with attracting foreign investment, the need for domestic financing is also significant.

Considering the development of the Strategy for the Development of the Green Economy in the Republic of Tajikistan for 2023-2037, relevant sectoral programs are being developed and implemented in which the annual financing of the green economy is carried out from all sources

(republican and local budgets, internal and external investments), which will contribute to the gradual development specified sectors.

Access to green bond and climate bond markets is important for Tajikistan to attract green investment funds, and in the near future such investments will be provided to support the government and stakeholders in the implementation of a package of green projects.

At the same time, to attract green financing in the global green investment markets, it is necessary to eliminate the following problems:

- lack of experience in entering the green bond markets and working in them;
- lack of experts to enter the global and regional green bond markets;
- imperfection of legislation in the field of green bonds;
- lack of a clear mechanism for attracting investments, taking into account the process of green economy.

In particular, the comprehensive training of specialists with knowledge and international experience in green bond market is of particular importance for attracting green financing.

In this regard, the main challenges for participation and the sector are:

- carrying out institutional reforms to attract green funds and institutionalization of green finance;
- participation in the global market of green bonds and green financing;
- attracting a wide range of public and private sector institutions to the green investment market;
- implementation of the possibility of using the share (quota) of greenhouse gas emissions of Tajikistan in the process of introducing modern principles of green financing;
- encourage the introduction of environmentally sound technologies in the public and private sectors;
- phased introduction of the principles of the green economy in the country's banking activities;
- phasing out environmentally harmful subsidies and taking steps to establish an environmental labeling system;
- formation of special financial instruments to attract investment in the green economy;
- attraction of investments for the development of renewable energy sources;
- creation of special funds for the implementation of green projects, including for the implementation of territorial programs for the development of the green economy.

The main measures of the sector:

- harmonization of banking and financial legislation with the principles of green economy;
- introduction of a system of bank financing in the direction of environmental protection and social protection;
- improvement of the regulatory framework for environmental insurance;
- development of guidelines for the classification of financial instruments as financial instruments aimed at financing green growth;
- participation of Tajik banks in the green investment markets;
- development of state investment projects in the field of green economy and their presentation to international financial institutions and business partners;
- creation of the Green Investment Fund with the attraction of foreign capital;
- introduction of a mechanism for selling a share (quota) of greenhouse gas emissions from Tajikistan to leading global companies;
- promotion and identification of the national brand of Tajikistan in the field of green economy;
- raising funds through the green bond mechanism for the construction of power plants and stations based on renewable energy sources;
- implementation of program budgeting in the field of green finance;
- operation of the Central Asian Stock Exchange in the global and regional green bond markets;

– creation of specialized public and private financial institutions (organizations) to finance green projects.

Deliverables in this area:

– normative legal acts and policy documents are brought into line with the principles of the green economy in green investments;

– the position of the Republic of Tajikistan in the global green investment markets will be strengthened;

– foreign direct investment will be attracted to the country for the implementation of green economy projects;

– specialists with knowledge and international experience in the field of the green bond market in the country will be trained on a specific basis.

CONCLUSIONS AND RECOMMENDATIONS

1. Implementation progress of Sustainable Development Goals will be associated with a set of interrelated actions. It is necessary to strengthen human and institutional capacity for effective implementation of SDGs and consistent transition to green development. In this regard, it will be important to complete the following:

- Disaggregate the data according to vulnerability criteria and providing access to this data. In the future, it will be important to test statistical tools and institutionalize key disaggregation criteria in all data collection, processing and publication activities. For SDGs, the following key disaggregation criteria are expected to be available: gender; age; location; disability status; socioeconomic status (e.g., consumption/income quintile);

- localization of SDG indicators;

- strengthening the monitoring and reporting process of SDGs implementation. National capacity is expected to be strengthened for policy coherence in sustainable development, given a triad of social, economic and environmental priorities, leading to policy decisions being generally mutually reinforcing and reflecting synergies;

- reducing duplication of development partner projects, strengthening the platform for dialogue with stakeholders, restoring and sustaining an open information management system for development assistance, which will in turn help to improve the coherence of development results;

- moving towards results-based budgeting and ensuring proper links between budgetary allocations and achievement of program objectives.

2. Transition to a green economy is gradual, multivariate and will be inclusive of interests of country's socio-economic development. The consolidated focus of action will include:

- formation of a national system for preliminary assessment and monitoring of the implementation of stimulus packages to ensure resilience to future challenges and shocks, as well as the green growth trajectory. Priority actions will need to focus on creating jobs and reducing inequalities. In doing so, they will need to promote intersectoral, interagency approaches and actions.

- provision of special support for retraining and training in sectors affected by the crisis and long-term decarbonisation, along with policy support such as revisiting the housing sector strategy to encourage mobility. The requirement to incorporate energy efficient solutions into government-supported affordable housing programs needs to be expanded across the construction industry to include all segments of the industry, including residential, commercial and industrial properties. Specialists of the relevant government authorities responsible for the construction sector, as well as construction and engineering companies, should be trained in green building technologies, products and services. It is also necessary to build the capacity of key personnel of transport and municipal authorities that develop the policy of state and road freight transport.

- formation of a practice of systematic assessment of the environmental assessment of investment projects, taking into account the needs and demands of vulnerable segments of the

population (children, persons with disabilities, women and the elderly), involving the public in decision-making and analysis of the impact of policy measures on distributional consequences.

- formation and promotion of a package of incentives from private and public actors to direct financial, technological, managerial and human resources to maintain natural resources and reduce pollution and carbon emissions. Efforts to encourage the private sector to adopt corporate and social responsibility, as well as environmental and social principles and management practices will be important.

3. Efforts towards stimulating green finance should be comprehensive. Public financial instruments can accelerate and increase the impact of private finance for green investment. For example, the public sector can devote resources to project preparation. In addition, public development institutions may provide partial loan guarantees, participate in loan syndications with private institutions, or act as anchor investors in green asset investments. Over time, the experience of state development institutions will help other actors, such as private sector investors and institutional investors, developers, to make the implementation of such projects more productive.

It will be crucial to conduct awareness-raising and outreach activities for institutional investors to inform them of the opportunities to improve their performance indicators and diversify risks via investment in green assets.

Attachment: Tajikistan's Progress on the SDGs

1. Introduction

This chapter provides an assessment of the progress made by Tajikistan on the sustainable development goals and targets based on the analysis conducted by the Ministry of Economic Development and Trade and the Agency on Statistics of Tajikistan in partnership with United Nations Economic and Social Commission for Asia and the Pacific (ESCAP).

Section 2 provides an overview of the progress⁸⁰, drawing attention to areas that require prioritization for the achievement of the 2030 Agenda. Section 3 discusses the availability of SDG data in Tajikistan and highlights data gaps for monitoring SDG progress. This analysis uses national data on SDG indicators relevant to Tajikistan and applies ESCAP methodology (see Annex I for details) to assess progress against nationally set target values. The indicators and respective target values used are listed in Annex II.

2. Overview

The assessment shows that Tajikistan is making progress on most of the sustainable development goals (SDGs). But certain areas need concentrated attention to accelerate progress or reverse current trends (Figure 1).



Figure 1 - Snapshot of SDG progress in Tajikistan, 2022

Tajikistan has made good progress since 2015 on sustainable cities and communities (Goal 11). This progress was mainly driven by the adoption and implementation of national and local disaster risk reduction strategies, reducing the impact of natural disasters on people's lives, as well as improvements in urban particulate matter. Attention needs to be given to reduce the economic loss

⁸⁰ Preliminary results are available at: <https://public.tableau.com/app/profile/unescap.statistics.division/viz/SDG-TJK-2023/Story>

attributed to disasters to better achieve this goal. Tajikistan is also nearly on track to achieve its 2030 targets for no poverty (Goal 1) and reduced inequalities (Goal 10). Although progress on peace, justice and strong institutions (Goal 16) is also significant, only less than one-third of indicators are used for assessing goals 16 and life below water (Goal 14) and more data is needed to provide more accurate picture of progress of these goals.

The country needs to reverse negative trends for affordable and clean energy (Goal 7) and industry, innovation and infrastructure (Goal 9). For Goal 7, data shows that the share of renewable energy in total final energy consumption and the installed renewable energy generating capacity has steadily decreased over the years, while energy intensity continued to increase. For Goal 9, the proportion of small-scale industries with access to finance has continuously decreased since 2016 while carbon dioxide emissions per value added kept increasing. Very few indicators on life below water (Goal 14) also show that country is moving on a wrong direction. The regressing trend in Goal 14 was mainly driven by the lack of frameworks which protects the access rights for small-scale fisheries.



Figure 2 - Dashboard of SDG target achievements by 2030

At the current pace, Tajikistan risks missing 70 percent of the 84 targets that could be measured in this assessment (figure 2). based on existing data, the only goals without regressing trends are good health and well-being (Goal 3) and gender equality (Goal 5). The assessment has identified specific areas requiring urgent attention such as improving social protection, practicing sustainable and resilient agriculture, provision of inclusive educational facilities, protection of water-related ecosystems, improving water-use and energy efficiency, ensuring labor rights and safe working

environment, investing in sustainable industries, more efficient use of natural resources, better climate-related policies, and diversified and sustainable financing for development.

It is crucial to prioritize data production on almost half of the SDG targets that could not be measured due to lack of data.

3. Data Availability

Tajikistan's data availability in the Global SDG Database⁸¹ has shown a remarkable improvement, with an increase of 37 indicators with sufficient data from 2019 to 2022, as illustrated in Figure 3.

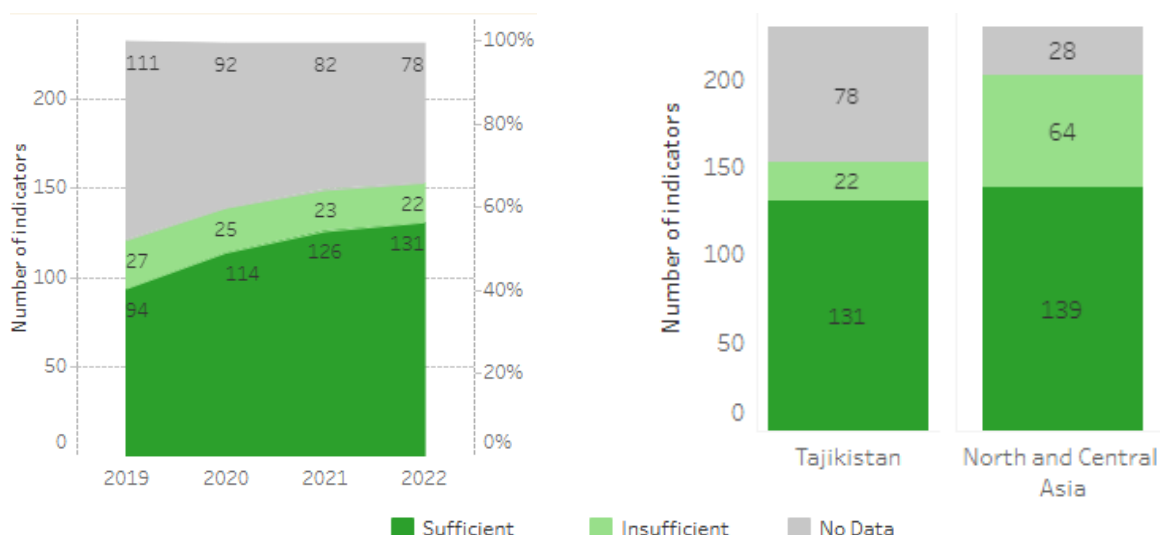


Figure 3 – SDG data availability in Tajikistan (2019-2022)⁸² **Figure 4 – Tajikistan vs. subregion data availability in 2022**

Despite some progress, Tajikistan still lags slightly behind the average SDG data availability in the North and Central Asia subregion. Specifically, there are 78 indicators for which no data is available for Tajikistan, compared to 28 in the subregion, as shown in the figure 4.

Data availability proves to be more challenging under certain SDGs. Quality education (Goal 4), gender equality (Goal 5), sustainable cities and communities (Goal 11), responsible consumption and production (Goal 12), climate action (Goal 13) and life below water (Goal 14) have 50 per cent or more indicators with no data.

Annex I- Progress Assessment Methodology

Selection of indicators

The indicators used in this assessment were jointly selected by Ministry of Economic Development and Trade and the Agency on Statistics of Tajikistan in consultation with United Nations ESCAP based on the following criteria:

- Availability of two or more data points since 2010;
- Ability to set a quantitative target value.

Target setting

The target values used for each indicator have been drawn from the following sources:

- Targets for 2030 in Tajikistan's national documents;

⁸¹ DESA, Global SDG Database: <https://unstats.un.org/sdgs/dataportal>

⁸² ESCAP, Asia-Pacific SDG Gateway: <https://data.unescap.org/data-analysis/sdg-data-availability>

- Targets directly from the SDG framework;
- Regional benchmarks based on top performance of countries in Asia-Pacific⁸³.

Progress assessment methodology

To measure progress towards the sustainable development goals, ESCAP developed the Current Status Index. It measures progress in relation to a baseline and a target value, designed to answer two questions:

- How much progress have we made?
- Are the SDG targets going to be achieved by 2030?

The index is calculated for each time series. Progress at each indicator is measured as the average of progress over all these series (sub-indicators). These are then averaged at the SDG target and, subsequently, at goal levels, using equal weights. The accuracy of the results becomes more robust as the number of indicators and availability of data increases.

To account for disparities in progress among different groups within the population and to recognize the 2030 Agenda's spirit of leaving no one behind, disaggregated data is incorporated into the assessment wherever available. A disadvantaged group is identified for each indicator as the population group furthest away from the target value. Progress is then measured as the average of progress in the disadvantaged group and the reference population.

More information on the methodology is available at the Asia-Pacific SDG Gateway on the following address: <https://data.unescap.org/resource-guides/progress-assessment-methodology>.

Annex II- List of indicators

Indicator Code	Indicator Name	Indicator Unit	Baseline	Latest Value	Target	Target source
1.1.1	Proportion of the population living below the international poverty line of less than \$1.90 PPP	%	4.8 (2015)	2.3 (2022)	0	SDG Framework
1.1.1	Proportion of the population living below the international poverty line of less than \$3.20 PPP	%	20.3 (2015)	11.5 (2022)	5.2	Regional benchmark
1.1.1	Proportion of the population living below the international poverty line of less than \$3.20 PPP	%	54.2 (2015)	39.6 (2022)	26.7	Regional benchmark
1.2.1	Proportion of population living below the national poverty line	%	31.0 (2015)	22.5 (2022)	15.0	Regional benchmark
1.2.P2	Proportion of children aged 0-15 living in poverty in all its dimensions according to national definitions	%	35.0 (2015)	34.0 (2016)	15.0	Regional benchmark
1.2.P2	Proportion of population aged 15+ living in poverty in all its dimensions according to national definitions	%	31.0 (2015)	30.0 (2016)	15.0	Regional benchmark
1.3.P1	Proportion of population covered by social protection systems	%	11.8 (2015)	8.3 (2020)	100	SDG Framework

⁸³ <https://data.unescap.org/resource-guides/progress-assessment-methodology>

Indicator Code	Indicator Name	Indicator Unit	Baseline	Latest Value	Target	Target source
1.4.1	Proportion of population living in households with access to electricity	%	99.1 (2012)	99.3 (2017)	100	SDG Framework
1.4.1	Proportion of population living in households with safely managed sanitation services	%	94.2 (2012)	97.0 (2017)	100	SDG Framework
1.4.1	Proportion of population living in households with basic drinking water services	%	76.0 (2015)	82.0 (2020)	100	SDG Framework
1.5.1	Number of dead, missing persons attributed to disasters per 100,000 people	Number	0.41 (2015)	0.09 (2020)	0	SDG Framework
1.5.1	Number of directly affected persons attributed to disasters per 100,000 people	Number	141.2 (2015)	21.9 (2020)	0	SDG Framework
1.5.3	Score of adoption and implementation of national DRR strategies in line with the Sendai Framework	Index	0.2 (2015)	1 (2020)	1	SDG Framework
1.5.4	Percentage of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies	%	50.8 (2015)	100 (2020)	100	SDG Framework
1.a.1	Total official development assistance grants from all donors that focus on poverty reduction	%	39.2 (2019)	114.1 (2022)	65.2	Regional benchmark
1.a.2	Proportion of total government spending on essential services, education	%	18.2 (2019)	18.3 (2022)	26.0	Regional benchmark
1.a.2	Proportion of total government spending on essential services, health	%	7.5 (2019)	7.6 (2022)	14.0	Regional benchmark
1.a.2	Proportion of total government spending on essential services, social protection	%	14.8 (2019)	12.6 (2022)	20.0	Regional benchmark
2.1.P1	Proportion of the country's population living below the national extreme (food) poverty line	%	15.7 (2015)	10.7 (2019)	0	SDG Framework
2.2.1	Prevalence of stunting among children under 5 years of age	%	26.2 (2012)	17.5 (2017)	11.8	Regional benchmark
2.2.2	Prevalence of malnutrition among children under 5 years of age	%	12.1 (2012)	8.9 (2017)	6.0	Regional benchmark
2.2.2	Prevalence of wasting among children under 5 years of age	%	9.9 (2012)	5.6 (2017)	4.9	Regional benchmark
2.2.2	Prevalence of overweight among children under 5 years of age	%	6.8 (2012)	3.3 (2017)	5.0	Regional benchmark
2.2.3	Prevalence of anemia among women aged 15–49 years	%	32.0 (2015)	35.2 (2019)	23.5	Regional benchmark

Indicator Code	Indicator Name	Indicator Unit	Baseline	Latest Value	Target	Target source
2.3.P1	Volume of agricultural production per production unit	mil somoni	6967.3 (2015)	15046 (2021)	20901.9	Regional benchmark
2.4.P1	Share of dekhon farms	%	83.1 (2015)	81 (2020)	90	National target
2.5.1	Plant breeds for which sufficient genetic resources are stored	Number	4461 (2016)	4775 (2021)	6525	Regional benchmark
2.a.1	Agriculture Orientation Index	Index	0.03 (2015)	0.032 (2019)	1	Regional benchmark
2.a.2	Total official development assistance inflows to agriculture	mil somoni	106.4 (2015)	170.7 (2020)	212.8	Regional benchmark
2.c.1	Indicator of food price anomalies	Index	-0.064 (2015)	0.681 (2020)	0	Regional benchmark
3.1.1	Maternal mortality rate per 100,000 live births	%	28.4 (2015)	26.7 (2020)	20	National target
3.1.2	Proportion of births attended by skilled health personnel	%	98.0 (2015)	99.8 (2021)	100	SDG Framework
3.2.1	Under-five mortality rate per 1,000 live births	Number	43 (2015)	33 (2017)	25	Regional benchmark
3.2.1	Infant mortality rate per 1,000 live births	Number	34 (2015)	27 (2017)	14.2	Regional benchmark
3.2.2	Neonatal mortality rate per 1,000 live births	Number	19 (2015)	13 (2017)	12	Regional benchmark
3.3.1	Number of new HIV infections per 1,000 people	Number	13.6 (2015)	9.4 (2021)	0	SDG Framework
3.3.2	Tuberculosis incidence per 100,000 population	Number	60.4 (2015)	38.6 (2021)	0	SDG Framework
3.3.3	Malaria incidence per 1,000 population	Number	0 (2015)	0 (2020)	0	SDG Framework
3.3.4	Incidence of hepatitis B per 100,000 population	Number	2.7 (2015)	1.9 (2020)	0	SDG Framework
3.4.1	Mortality from cardiovascular disease, cancer, diabetes, chronic respiratory disease per 100,000 population	Number	190.3 (2015)	194.5 (2021)	126.9	Regional benchmark
3.4.2	Suicide mortality per 100,000 population	Number	2.6 (2015)	1.7 (2021)	1.3	Regional benchmark

Indicator Code	Indicator Name	Indicator Unit	Baseline	Latest Value	Target	Target source
3.5.P1	Number of patients diagnosed with alcoholism and alcoholic psychosis per 100,000 population	Number	72 (2015)	65 (2020)	50	National target
3.5.P1	Number of patients diagnosed with drug addiction and substance abuse per 100,000 population	Number	85.6 (2015)	53.8 (2020)	40	National target
3.5.2	Alcohol per capita consumption among population aged 15+ years	Liters per annum	0.89 (2015)	0.88 (2019)	0.5	Regional benchmark
3.6.1	Road traffic deaths per 100,000 population	Number	5.3 (2015)	4.2 (2022)	1.6	Regional benchmark
3.7.1	Proportion of women of reproductive age (15-49 years) whose family planning needs are met with modern methods	%	51 (2015)	52.2 (2017)	100	SDG Framework
3.7.P2	Birth rate among adolescent girls (aged 15 to 19)	%	46.4 (2015)	34.4 (2021)	20.7	National target
3.9.3	Mortality due to unintentional poisoning	%	0 (2019)	0 (2022)	0	Nationally set target
3.a.1	Prevalence of tobacco use among persons aged 15+ years	%	0.3 (2012)	0.5 (2017)	0.17	Regional benchmark
3.b.1	Percentage of the target population covered by all vaccines included in their national program	%	88.7 (2012)	87.0 (2017)	100	SDG Framework
3.c.1	Number of doctors per 10,000 people	Number	20.8 (2015)	20.5 (2021)	23	Regional benchmark
3.c.1	Number of paramedical personnel per 10,000 people	Number	53.8 (2015)	59.4 (2021)	75	Regional benchmark
3.d.P1	Life expectancy	Years	20.8 (2015)	75.1 (2019)	80	Regional benchmark
3.c.P1	Expenditures of the consolidated budgets for health care as a share of GDP	%	2.0 (2015)	2.9 (2021)	4	National target
4.1.P2	Completion rate (primary education, lower secondary education, upper secondary education)	%	90.8 (2015)	92.4 (2020)	100	SDG Framework
4.2.P2	Participation in organized learning (one year before official entry age), by sex	%	8.7 (2015)	9.9 (2021)	50	National target
4.3.1	Participation rate of adults and youth in formal and non-formal education and training in the last 12 months per 10,000 population	Number	176.5 (2015)	245.9 (2020)	427	Regional benchmark
4.3.1	Number of students in secondary vocational educational institutions per 10,000 population	Number	68.9 (2015)	97.7 (2020)	167	Regional benchmark

Indicator Code	Indicator Name	Indicator Unit	Baseline	Latest Value	Target	Target source
4.5.P1	Equity indices for all education-related indicators	Index	0.88 (2015)	0.96 (2020)	1	SDG Framework
4.a.P1	Proportion of schools provided with a) electricity; b) access to the Internet for educational purposes; c) computers for educational purposes; d) adapted infrastructure and materials for students with disabilities; e) basic sources of drinking water; f) separate minimally equipped toilets; and g) basic handwashing facilities	%	0.15 (2015)	0.1 (2020)	1.5	National target
4.b.1	Scholarships provided by official development assistance	%	15.6 (2015)	18.3 (2021)	31.0	Regional benchmark
4.c.1	Proportion of teachers with higher education	%	70 (2015)	75 (2020)	100	SDG Framework
5.1.1	Presence or absence of a regulatory framework to promote and ensure equality and non-discrimination on the basis of sex	0 (No) or 1 (Yes)	1 (2015)	1 (2020)	1	SDG Framework
5.2.1	Proportion of ever-partnered women and girls aged 15+ years who experienced physical, sexual or psychological violence by a current or former intimate partner in the past 12 months	%	24.4 (2015)	24.1 (2017)	15	National target
5.5.P1	Proportion of seats held by women in national parliaments and lower houses or unicameral parliaments	%	19.0 (2015)	26.98 (2021)	37	National target
5.5.P1	Proportion of seats held by women in upper chambers	%	6.3 (2015)	27.8 (2021)	35	National target
5.5.P2	Proportion of women in leadership positions in civil service	%	18.3 (2015)	19.1 (2020)	50	SDG Framework
5.5.P2	Proportion of women-employers	%	12.4 (2015)	21.3 (2016)	30	National target
5.5.P2	Average monthly nominal wages of women and men (women's wages in % to men's wages)	%	61.1 (2015)	64.0 (2019)	75	National target
5.6.1	Women who make their own informed decisions regarding contraceptive use (% of female aged 15-49)	%	86.2 (2012)	82.9 (2017)	100	SDG Framework
5.6.1	Women who make their own informed decisions regarding reproductive healthcare (% of female aged 15-49)	%	60.2 (2012)	53.9	100	SDG Framework
5.6.1	Women who make their own informed decisions regarding sexual relations (% of female aged 15-49)	%	70.4 (2012)	60.3	100	SDG Framework

Indicator Code	Indicator Name	Indicator Unit	Baseline	Latest Value	Target	Target source
5.a.P2	Legal framework (including customary law) guarantees women's equal rights to land ownership and/or control	0 (No) or 1 (Yes)	1 (2015)	1 (2022)	1	National target
5.b.P1	Proportion of people (households) with a mobile phone	%	93.3 (2012)	96.3 (2017)	100	National target
5.c.1	Mechanisms in place to track and publish public spending on gender equality and women's empowerment	0 (No) or 1 (Yes)	1 (2015)	1 (2022)	1	National target
6.1.1	Proportion of population using safely managed drinking water services	%	52 (2015)	55 (2020)	80	National target
6.2.1	Proportion of population using safely managed sanitation services	%	94.2 (2012)	97 (2017)	100	SDG Framework
6.2.1	Proportion of population using handwashing facilities with soap and water	%	78.5 (2012)	76.5 (2017)	100	SDG Framework
6.3.1	Share of safely treated wastewater	%	69.1 (2016)	70.5 (2020)	100	SDG Framework
6.4.1	Water use efficiency	USD/M3	0.76 (2015)	0.92 (2019)	2.2	Regional benchmark
6.4.2	Level of water stress: freshwater withdrawal as a proportion of available freshwater resources	%	10.3 (2015)	12.3 (2021)	9.3	National target
6.6.1	Change in the extent of water-related ecosystems over time	%	0.45 (2015)	1.27 (2021)	0	SDG Framework
6.b.1	Local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management	10 (clearly defined), 5 (not clearly defined), 0 (N/A)	10 (2015)	10 (2020)	10	SDG Framework
7.1.1	Share of population (households) with access to electricity	%	99.1 (2012)	100 (2020)	100	SDG Framework
7.1.2	Percentage of the population using mostly clean fuels and technologies	%	70.8 (2012)	80.5 (2017)	100	SDG Framework
7.2.1	Share of renewable energy in total final energy consumption	%	53.8 (2015)	42.6 (2021)	60	National target
7.3.1	Energy intensity level of primary energy	Megajoules per unit of GDP	4.57 (2015)	4.84 (2019)	2	Regional benchmark
7.b.1	Installed renewable energy generating capacity per capita	Watts	595.35 (2015)	552.88 (2020)	3112	Regional benchmark
8.1.1	Annual growth rate of real GDP per capita	%	103.5 (2015)	105.1 (2021)	107.8	Regional benchmark

Indicator Code	Indicator Name	Indicator Unit	Baseline	Latest Value	Target	Target source
8.2.1	Annual growth rate of real GDP per person employed	%	103.6 (2015)	108.2 (2021)	105.25	Regional benchmark
8.3.1	Share of informal employment in non-agricultural sectors	%	53.6 (2009)	29.4 (2016)	19.0	Regional benchmark
8.5.P1	Average salary of men and women per month	somoni	970.4 (2015)	1625.3 (2021)	2500	National target
8.5.P1	Share of wages of women to men	%	61.1 (2015)	67.9 (2021)	100	National target
8.5.2	Unemployment rate	%	11.5 (2009)	6.9 (2016)	3.0	Regional benchmark
8.5.2	Youth unemployment rate	%	16.7 (2009)	11.4 (2016)	3.0	Regional benchmark
8.6.1	Proportion of young people (aged 15-24) who are not working, studying or acquiring professional skills	%	29.3 (2016)	29.0 (2021)	19.6	Regional benchmark
8.8.1	Fatal and non-fatal occupational injuries per 10,000 employees	Number	1.7 (2015)	0.7 (2020)	0.7	Regional benchmark
8.8.P1	Fatalities per 10,000 employees	Number	0.6 (2015)	0.2 (2020)	0	SDG Framework
8.8.2	Level observance by the state of labor rights	%	97.7 (2019)	91.8 (2022)	100	SDG Framework
8.10.1	Number of branches of commercial banks per 100,000 adults	Number	6.4 (2015)	4.9 (2022)	10	National target
8.10.1	Number of ATMs per 100,000 adults	Number	14.1 (2016)	27.2 (2022)	50	National target
8.10.P2	Number of opened bank accounts for clients	Number	2904500 (2015)	5006082 (2020)	6000000	National target
8.10.2	Percentage of adults aged 15+ with a bank account	%	52.5 (2015)	97.8 (2021)	100	SDG Framework
9.1.P2	Transportation of passengers by railway	mil people	0.4 (2015)	0.4 (2021)	0.7	National target
9.1.P2	Transportation of passengers by automobile	mil people	553.1 (2015)	726.8 (2021)	800	National target
9.1.P2	Transportation of passengers by air	mil people	0.8 (2015)	0.4 (2021)	1	National target

Indicator Code	Indicator Name	Indicator Unit	Baseline	Latest Value	Target	Target source
9.1.P2	Transportation of passengers by urban electric	mil people	10.2 (2015)	19.2 (2021)	25	National target
9.1.P2	Transportation of goods by railway	mil tons	6.1 (2015)	5.7 (2021)	7	National target
9.1.P2	Transportation of goods by automobile	mil tons	68.3 (2015)	88.9 (2021)	93	National target
9.2.1	Manufacturing value added as a percentage of GDP	%	8.7 (2015)	15.9 (2021)	20	Regional benchmark
9.2.2	Employment in manufacturing as a percentage of total employment	%	2.5 (2015)	3.4 (2020)	5	Regional benchmark
9.3.2	Proportion of small-scale industries with a loan or line of credit	%	23.2 (2016)	7.5 (2021)	38.3	Regional benchmark
9.4.1	CO2 emissions per value added	per value added	11837 (2019)	13196 (2022)	7838.2	Regional benchmark
9.5.1	Share of spending on research and development in GDP	%	0.15 (2015)	0.10 (2020)	0.3	Regional benchmark
9.5.2	Number of researchers (full-time equivalent) per million inhabitants	Number	433 (2015)	454 (2021)	600	National target
9.b.1	Proportion of medium and high-tech industry value added in total value added	%	2.19 (2015)	2.65 (2019)	3.6	National target
10.1.P1	Growth rates of household expenditure of the total population	%	103.8 (2015)	136.2 (2020)	150	National target
10.2.1	Proportion of people living below 50 per cent of median income	%	24.0 (2015)	25.1 (2021)	9.6	Regional benchmark
10.4.1	Share of income of workers in GDP	%	17.2 (2015)	14.2 (2021)	21.0	Regional benchmark
10.7.4	Share of refugees in total population by country of origin	%	0.023 (2019)	0.016 (2022)	0	National target
10.a.1	Proportion of tariff lines applied to imports with zero-tariff	%	52.36 (2015)	71.76 (2020)	77	Regional benchmark
10.b.1	Total resource flows for development (official development assistance, foreign direct investment and other flows)	mil USD	470.62 (2015)	855.17 (2020)	900	Regional benchmark
11.5.1	Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population	Number	0.41 (2015)	0.09 (2020)	0	SDG Framework

Indicator Code	Indicator Name	Indicator Unit	Baseline	Latest Value	Target	Target source
11.5.2	Direct economic losses from disasters as a percentage of GDP	%	0.041 (2019)	0.036 (2022)	0	SDG Framework
11.5.3	Number of damage to critical infrastructure	Number	22 (2019)	33 (2022)	0	SDG Framework
11.6.2	Annual mean concentration of PM2.5, urban	Microgram per m3	66.06 (2015)	56.13 (2019)	48.1	Regional benchmark
11.b.1	Adoption and implementation of national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015–2030	Index	0.2 (2015)	1 (2020)	1	SDG Framework
11.b.2	Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies	%	50.8 (2015)	100 (2020)	100	SDG Framework
12.2.1	Total material footprint	kg per USD	3.99 (2015)	3.82 (2017)	2.6	Regional benchmark
12.2.2	Domestic material consumption intensity	kg per USD	4.02 (2015)	5.26 (2019)2	2.9	Regional benchmark
12.4.P1	Compliance with Stockholm Convention on Persistent Organic Pollutants	0 (No), 1 (Yes)	1 (2016)	1 (2022)	1	National target
12.4.P2	Hazardous waste generation per capita	kg per capita	0.22 (2019)	0.25 (2022)	0.1	National target
12.5.P1	National recycling rate	tons	453671.3 (2019)	539590.6 (2022)	1265399	National target
12.a.1	Installed renewable energy-generating capacity per capita	watts	595.4 (2015)	552.9 (2020)	3112	Regional benchmark
12.c.1	Amount of fossil-fuel subsidies	% of GDP	6.34 (2015)	5.68 (2020)	0	SDG Framework
13.1.1	Number of dead, missing and directly affected by disasters per 100,000 people	Number	0.41 (2015)	0.09 (2020)	0	SDG Framework
13.1.2	Adoption and implementation of national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015–2030	Index	0.2 (2015)	1 (2020)	1	SDG Framework
13.1.3	Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies	%	50.8 (2015)	100 (2020)	100	SDG Framework

Indicator Code	Indicator Name	Indicator Unit	Baseline	Latest Value	Target	Target source
13.2.2	Greenhouse gas emissions from agriculture	thousand tons of CO2 equivalent	6463.2 (2015)	6864.4 (2019)	6463.2	SDG Framework
14.6.1	Extent to which legal/ policy/ institutional frameworks are applied to recognize and protect access rights of small-scale fisheries	1=lowest to 5=highest	4 (2019)	2 (2022)	5	SDG Framework
15.1.1	Forest area as a percentage of total land area	%	3 (2015)	3 (2020)	3.5	Regional benchmark
15.1.P1	Total forest fund area (including forests transferred for long-term use)	mil ha	1.34 (2015)	1.33 (2019)	1.56	Regional benchmark
15.1.P1	Forested area under the jurisdiction of the forestry authorities	thousand ha	421.8 (2015)	421.8 (2019)	492.1	Regional benchmark
15.1.P1	Total stock of forest plantations	mil ha	5.11 (2015)	5.10 (2019)	5.96	Regional benchmark
15.1.2	Important sites for fresh water biodiversity	%	30.5 (2015)	30.5 (2021)	75.5	Regional benchmark
15.4.1	Important sites for mountain biodiversity	%	16.8 (2015)	16.8 (2021)	42.9	Regional benchmark
15.5.1	Red List Index	Index	0.99 (2015)	0.99 (2022)	1	SDG Framework
15.7.P1	Number of wild animals that are poached or trafficked among species traded	Number	3 (2019)	1 (2022)	0	National target
15.9.P1	Adoption and implementation of national biodiversity strategy and action plan in line with Aichi Biodiversity Target 2 of the Strategic Plan for Biodiversity 2011-2020 or similar	0 (No), 1 (Yes)	1 (2015)	1 (2022)	1	National target
15.a.1	Official development assistance for biodiversity	mil USD	0.54 (2015)	4.62 (2020)	1.08	Regional benchmark
15.a.P1	Amount of official development assistance allocated to the conservation and sustainable use of biodiversity	USD	828930.4 (2019)	268046.3 (2022)	1378076.06	Regional benchmark
16.1.1	Number victims of intentional homicide per 100,000 people	Number	1.12 (2015)	0.31 (2020)	0.4	Regional benchmark
16.2.2	Number of victims of human trafficking per 100,000 persons	Number	39 (2015)	22 (2017)	0	SDG Framework
16.5.P1	Persons who had at least one contact with a public official in the previous 12 months and who paid a bribe to a	Number	95 (2015)	31 (2021)	0	SDG Framework

Indicator Code	Indicator Name	Indicator Unit	Baseline	Latest Value	Target	Target source
	public official or from whom that public official demanded a bribe					
16.5.P2	Businesses that had at least one contact with a government official in the previous 12 months and that paid a bribe to a government official or from which that government official demanded a bribe	Number	0 (2015)	4 (2020)	0	SDG Framework
17.1.1	Total government revenue as a percentage of GDP	%	25.0 (2015)	20.9 (2020)	38.0	Regional benchmark
17.1.2	Share of national budget funded by domestic taxes	%	66.3 (2015)	66.2 (2021)	82.4	Regional benchmark
17.3.1	FDI inflows	% of GDP	7.28 (2015)	2.61 (2019)	10.9	Regional benchmark
17.4.P1	Debt service as a proportion of exports of goods and services	%	101.1 (2015)	21.2 (2022)	22.2	Regional benchmark
17.6.1	Number of fixed broadband Internet subscriptions per 100 population	Number	0.07 (2015)	0.06 (2020)	1	Regional benchmark
17.6.2	Number of wireless broadband Internet access subscribers per 100 population	Number	33.3 (2015)	27.2 (2016)	100	Regional benchmark
17.9.1	Dollar value of financial and technical assistance	mil USD	76.7 (2015)	97.2 (2020)	153.3	Regional benchmark
17.13.P1	Macroeconomic dashboard: Gross domestic product at constant prices	%	106.0 (2015)	109.4 (2021)	108	National target
17.13.P1	Macroeconomic dashboard: Export of goods and services (in constant prices	%	100.0 (2015)	155.4 (2021)	160	National target
17.13.P1	Macroeconomic dashboard: Consumer price index	%	105.7 (2015)	109.0 (2021)	105	National target
17.13.P1	Macroeconomic dashboard: Unemployment rate	%	2.3 (2015)	2.1 (2021)	2	National target
17.18.P2	Adoption of national statistical legislation in line with the Fundamental Principles of Official Statistics	0 (No), 1 (Yes)	1 (2015)	1 (2022)	1	National target
17.19.P2	Country conducted at least one population and housing census in the past 10 years	0 (No), 1 (Yes)	1 (2015)	1 (2022)	1	National target