

PROJECT DOCUMENT
Republic of Belarus



Project Title: Developing youth innovation potential for Accelerated Sustainable Development in Belarus

Project Number: 00120101

срок реализации: 15.06.2023 - 14.06.2026

Implementing Partner: The Ministry of Education of the Republic of Belarus

Start Date: The date of registration of the project in the database of the international technical assistance projects and programmes

End Date: 36 months from the date of registration of the project

Project Appraisal Committee Meeting date:

Brief Description


National Strategy for Sustainable Development of the Republic of Belarus till 2035 is people-centered and puts a strong focus on digital transformation, innovations and quality education as drivers of economic growth. Transition to the digital economy calls for renewed content, structure, and organization of continuous education and training in the context of life-long learning There will be a further need in closer integration of production with science and the vocational education and training (VET) system, advancing a national qualification system, further development and implementation of occupational and educational standards as well as modernization of physical assets and learning environments. Efforts should be made to ensure that young people have flexible and adaptable skills required at modern workplaces and relevant competencies driven by technological changes.

The goal of the project is to improve conditions for young people to acquire new professional skills and competencies in the context of the digital transformation of the Belarusian economy.

Within the framework of the project, it is planned to develop or update 3 professional and educational standards, increase the capacity in the development and implementation of educational standards for VET managers, VET teaching staff and pilot sectors' employers. The project will increase the training potential of the pilot centers of competences and expand access to educational opportunities in accordance with the developed and updated educational standards. The project will contribute to the promotion of VET and to raising public awareness of the training programs and other educational opportunities in the VET system.

<p>Contributing Outcome (CPD):</p> <p>UNDP Country Programme Document for the Republic of Belarus (2021-2025): Output 1.3. Entrepreneurship, competition, innovation, decent jobs, and income diversification promoted, focusing on vulnerable groups and considering COVID-19 impact</p> <p>Indicative Output(s) with gender marker: GEN2</p>	Total resources required:	USD 6,400,000	
	Total resources allocated:	USD 6,400,000	
		UNDP TRAC:	-
		Donor (Government of the Russian Federation through the Russian Federation - UNDP Trust Fund for Development):	USD 2,000,000
		Government (parallel financing):	USD 4,400,000
		In-Kind:	-
	Project budget		USD 2,000,000
Unfunded:		-	

Agreed by (signatures):

UNDP	Implementing Partner
 <p>Alexandra Solovieva, UNDP Resident Representative in the Republic of Belarus</p>	 <p>Alexander Kadlubai Deputy Minister of Education of the Republic of Belarus</p>
Date: 28/12/2022	Date:

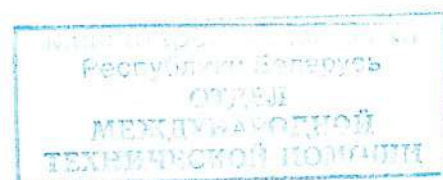


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LIST OF ABBREVIATIONS

AWP	Annual Work Plan
CIS	Commonwealth of Independent States
CO	Country Office
CPD	Country Programme Document
CSO	Civil Society Organization
EAEU	Eurasian Economic Union
EU	European Union
GEF	Global Environment Facility
HACT	Harmonized Approach to Cash Transfers
MAPS	Mainstreaming Acceleration and Policy Support
NDVI	Normalized difference vegetation index
NGO	Non-governmental organization
NIM	National Implementation Modality
PB	Project Board
RBM	Results-based Management
RIPO	Educational Institution “Republican Institute for Vocational Education”
SBAA	Standard Basic Assistance Agreement
SDGs	Sustainable Development Goals
SEA	Special measures for protection from sexual exploitation and sexual abuse
SESP	Social and Environmental Screening Procedure
SH	Sexual Harassment
SMEs	Small and Medium-Sized Enterprises
STEM	Science, Technology, Engineering and Math
TOR	Terms of reference
UN	United Nations
UNDP	United Nations Development Programme
VET	Vocational Education and Training (vocational-technical and secondary specialized education)
WSI	WorldSkills International



I. DEVELOPMENT CHALLENGE

In the 32 years following its independence, Belarus succeeded in securing economic growth. The economic proceeds from that growth also supported social development. Health and educational outcomes have improved significantly, and inequalities are low. With the Gini Index at 24.4 in 2020¹, Belarus falls into the group of countries with a low degree of income inequality. Belarus' Human Development Index (HDI) value for 2021 is 0.808 — which put the country in the very high human development category —positioning it at 60 out of 191 countries and territories. Between 1995 and 2021, Belarus' HDI value increased by 19% — from 0.679 to 0.808. Belarus is considered a country with relatively high levels of gender equality, ranking 29 in the 2021 UNDP Gender Inequality Index. 97.5% of Belarusian women have at least some general secondary education. However, there is still a significant gap in the women's participation to the workforce (women – 57.3%; men – 71.4%).²

Belarus's population in 2021 was 9 349 645 persons, absolute majority of which living in urban areas.³ The share of population over 65 years of age has increased from 13.9 % in 2014 to 15.7% in 2021 thus contributing to a significant decrease of those employed in the national economy. According to UN forecasts, by 2050, the number of country's inhabitants over 60 would amount to 35.8%.⁴ There has also been a sharp decline in the number of young people over the past 10 years, which poses a significant challenge to the supply side of the labor market in the long run. One of the possible ways to address this challenge is to set a favorable environment for young people to acquire modern and in-demand skills and knowledge and to transit from the economic growth, focused on resources and dependent on relatively low-cost labor and capital, to the growth, based on high-rate productivity and innovations.

The Government of Belarus sets a high priority on youth policy and fulfilment of young people aspirations. It seeks to ensure an inclusive character of employment policies and support to vulnerable groups, inter alia young people, women, and people with disabilities. The Government aims to encourage mobility of young specialists on the labor market, promote more active labor market policy measures and special programs for people with disabilities, assist broader categories of unemployed people, develop entrepreneurial skills of young people, and promote private entrepreneurship, especially in setting up small and medium-sized enterprises, which makes a significant contribution to the creation of new jobs. This approach is aligned with recommendations of the “Mainstreaming Acceleration and Policy Support” (MAPS) mission (took place in 2017) to Belarus, which has identified orientation on future generations as one of the accelerators for sustainable development of the country.

COVID-19 pandemic and its socio-economic implications have raised the sense of urgency and importance of action on future generations and other three accelerators - gender equality, green economy and digitalization, to recover better and keep pace with the UN Decade of Action ambition. This requires investments in human capital development including through establishing inclusive infrastructure and ensuring quality education. The efforts should be directed towards training educated and highly-qualified young people, which will give a boost for integrating Belarus into a new global knowledge economy. This implies strengthening those dimensions needed to fully meet the needs of an innovative knowledge society and economy in accordance with the principles of sustainable development.

National Strategy for Sustainable Development of the Republic of Belarus till 2035 is people-centered and puts a strong focus on digital transformation and innovations and quality education as drivers of economic growth. Transition to the digital economy calls for renewed content, structure and organization of education, continuous education and training in the context of life-long learning,

¹ Gini index – Belarus ([link](#))

² Human Development Report 2021-22 ([link](#))

³ Belarusian State Statistical Committee ([link](#))

⁴ UNFPA ([link](#))

closer integration of production with science and the VET system, advancing a national qualification system, further development and implementation of occupational and educational standards as well as modernization of physical assets and learning environments. This approach is provisioned by a number of policy documents - State Program "Digital Development of Belarus" for 2021–2025, Priority Areas of Scientific, Scientific-Technical and Innovation Activities for 2021–2025, State Program "Education and youth policy" for 2021–2025.

Despite the low unemployment rate in Belarus, a recent enterprise survey by the World Bank (BEEPS) showed that 11.9% of Belarusian enterprises believe that the main obstacle for their efficiency is the mismatch of the labor force supply and the labor market demand (for comparison: a similar indicator in European countries and Central Asia is 6.4%). In Belarus, 11% of SMEs and 23% of large enterprises identified skills gaps among the top business development shortcomings.

Being an export-oriented economy, Belarus puts a strong focus on the vocational education and training system (VET) to ensure a high quality of the workforce. At the beginning of the 2021/2022 academic year, the Belarusian VET system was represented by 123 vocational education institutions and 49 educational institutions of other levels implementing educational programs of vocational education; 110 institutions of secondary specialized education and 81 educational institutions of other levels implementing educational programs of secondary specialized education. 59.9 thousand people studied at the level of vocational education. At the level of secondary specialized education - 107.5 thousand people. The Ministry of Education governs the VET system through six education departments of regional executive committees and the Education Committee of Minsk City Executive Committee that oversee the functioning of education offices of district executive committees as well as educational institutions. At the national level, the Educational Institution "Republican Institute for Vocational Education" (RIPO) develops national educational standards and related scientific and methodological support of educational process, manages centers of competences and represents Belarus in international professional skill competitions.

The VET system of Belarus aspires to be in par with global trends in digitalization and transition to green economy. It prioritizes setting up centers of competences for the transfer of innovative technologies, including digital ones; introduction of online learning and personal learning systems; building capacities of education specialists, promoting digital literacy, setting inclusive education environment which will allow to effectively involve representatives of vulnerable groups into educational process.

Belarusian VET system puts efforts to ensure that graduates have flexible and adaptable skills required at modern workplaces and relevant competencies driven by technological change. The system supplies young cadre for the key sectors of the national economy – industry, agriculture and construction (taken together contribute 38.5% to Belarusian GDP)⁵, which progressively become digitally-savvy and gradually transition to green and circular economy in line with national priorities outlined in the National Action Plan on Green Economy 2021-2025 and other programme documents.

Belarus is underrepresented in the world market of high-tech construction products. In the **construction industry**, a significant gap is observed between theoretical foundations of technologies, technologies applied in scientific research, and use of technologies in production. For innovative development of the construction industry, it is necessary to develop human resources in accordance with modern occupational and educational standards, to devise a regulatory framework harmonized with international quality and energy efficiency standards, to develop an innovative infrastructure with BIM technologies, and to promote the transfer of technologies on creating digital twins of buildings.

⁵ Belarusian State Statistical Committee ([link](#))

The digitalization of construction industry in Belarus will be based on application of integrated management information systems and cloud computing. BIM technologies and digital twins created with their help will be used at all stages of the building's life cycle (preparation of design documentation, construction and operation). Introduction of IT technologies in construction requires the development of smart building management systems ("smart home"), which ensures the automatic operation of all life support systems for a building security. Special attention will be paid to the introduction of modern information technologies in the urban planning system, including via devising digital master plans for the cities' development. It is assumed that 3D printing technology will be widely used for modeling, visualization and manufacturing of both products' prototypes and real building objects and structures.

The strategic goal of creating comfortable and safe living conditions will be achieved i.a. through the implementation and scaling of the "Smart City" concept. In Belarus, a model concept for the development of "smart cities" was developed and approved. In 2019–2020, it was piloted in 11 cities identified as potential centers of economic growth. These cities will serve as platforms for priority digital transformation in accordance with the comprehensive plans for accelerated development.

The development of the construction industry requires continuous self-education of its workforce. The demand for specialists in the implementation of IT-informed solutions in design, management, production and business will increase significantly. Young people who graduated from vocational programs related to the development of additive technologies, BIM technologies, augmented and virtual reality technologies, technologies for creating energy-efficient buildings will benefit from expanded employment opportunities.

The resource center "EcoTechnoPark-Volma" is a leading intersectoral center of competencies in Belarus in the field of ecology, energy and energy efficiency. It combines an education center and a technology transfer center that include a laboratory "Modern construction technologies". On its territory, the Center presents demonstration models of energy-efficient residential buildings using "smart home" technologies and hybrid models of heat and power supply. Laboratories "Bioenergy", "Fundamentals of Energy", "Renewable Energy, Electrical Systems and Networks", "Smart House", "Housing and Utilities Using Renewable Energy Sources" are also based on the resource center "EcoTechnoPark-Volma".

In Belarus, **agriculture** is one of the most important spheres of production which ensures national food security and sustainability of the economy. The agricultural sector is represented by more than 1,350 agricultural organizations and 2,700 peasant farms with more than 400 thousand people employed. Agricultural production accounts for about 7% of the country's GDP. Crop production accounts for about 46.6% in the structure of the sector.

Despite a significant role assigned to the agro-industrial complex, the introduction of innovative strategies and management mechanisms in this area is constrained and slow-paced. Lack of qualified personnel and the interaction between enterprises and research and educational institutions, as well as insufficient financing of innovative projects in the regions hinder the development of the sector. The profitability of the agricultural production in Belarus is constantly decreasing. As a result, the motivation for agricultural production decreases, capital outflows to other sectors of the economy, the level of wages in rural areas decreases, the outflow of qualified personnel increases, and the prestige of education in agricultural specialties decreases.

Training of highly qualified personnel, use of productive equipment and energy-saving technologies, and the use of a balanced system of organic fertilizers will increase the efficiency of production in agriculture. Priority directions of sector's development include quality training of personnel and timely improvement of their qualifications; timely and cutting-edge research activities; effective and competent application of the research results in production; management of technological progress in agriculture through the system of scientific and educational institutions.

Agriculture is expected to transition to environmentally-friendly practices and rip the benefits of digitalization – digital analysis of the structure, composition and condition of soils, monitoring crops to increase yields and strengthen predictive analysis of crops; digital technologies for managing conservation farming (biologization of production); precision farming technology, including global positioning technology (GPS), geographic information systems (GIS), Yield Assessment Technologies (YMT), Variable Rate Technology and Earth remote sensing technology (ERS).

The laboratory “Innovative Greenhouse Technologies” is based on the resource center “EcoTechnoPark-Volma”. The elaborated plan of its development envisages the creation of conditions and opportunities for the transfer of knowledge and the formation of competencies for use of innovative technologies developed both in Belarus and abroad in the field of ecology, agriculture for experimental and industrial testing, as well as introducing scientific developments into production. The project will contribute to building an educational network between the laboratory “Innovative Greenhouse Technologies”, 80 VET institutions and 6 institutions of higher education that, as of 2021, provide training in the field of agriculture.

Belarus is ranked 47 out of 152 countries in the global Competitive Industrial Performance (CIP). According to the UNIDO, the **manufacturing sector** in Belarus is primarily resource-based (45.5%), while low-tech, medium-tech and high-tech technologies account for 15,5%, 35.5% and 3.1%, respectively. Development of digital economy, introduction of advanced production technologies and increasing the competitiveness of Belarusian industrial performance are among priorities of the State Program “Digital Development of Belarus” for 2021-2025 and State Program of innovative development of the Republic of Belarus for 2021-2025.

Digitalization of the industrial complex will be built through the introduction of control systems based on the Internet of Things concept, high-speed data processing, the creation of industrial robots, 3D printing technologies, and digital integration of engineering and design along value chains. In the field of mechanical engineering, it is planned to create intelligent control systems for quarry unmanned vehicles, organize the production of intelligent components for electromechanical power plants for automobiles, road construction equipment, urban electric transport. Successful digitalization of the industry will require training of highly qualified personnel, advancement of technological processes, modernization of industrial equipment, introduction of intelligent systems for managing production and business processes, including:

- creation of “digital twins” of technological and business processes, manufactured products;
- implementation of platform solutions for managing production, enterprise assets, ensuring the accumulation and processing of data in real time, using decision support systems, predictive and reporting analytics tools;
- development of modern tools for working with customers and suppliers, channels for promoting products and interacting with customers.

According to the official letter of the Deputy Minister of Industry - Chairman of the Sectoral Council of Qualifications under the Ministry of Industry of the Republic of Belarus dd. 27 April 2021, the development of an occupational standard for metrological support of production activities in mechanical engineering is initiated. Based on the occupational standard, an educational standard shall be prepared. The content of the training will ensure the development of in-depth knowledge and occupational competencies in using modern digital measuring instruments. Responding to the industry demand for qualified personnel, the College of Modern Technologies in Mechanical Engineering and Car Service plans to start training specialists in digital metrology.

The College of Modern Technologies in Mechanical Engineering and Car Service is equipped with 3 training workshops and 5 laboratories. They cover such areas of training and capacity building as electrical engineering and electronics, programming and adjustment of automated equipment, metal-cutting machinery, processing materials and tools.

The distribution of educational profiles in VET education confirms the relevance of the selected pilot sectors. In 2020/2021, the number of students for major “Mechanical engineering equipment and technologies” comprised 16.7% of the total number of students mastering educational programs of vocational-technical education, for major “Architecture and construction” – 12.3%, for major “Agriculture and forestry. Garden and park construction” – 11.8%

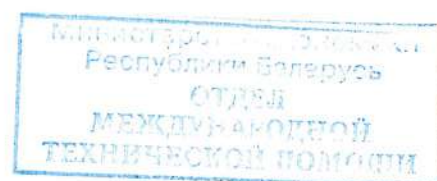
In 2020, the total number of trained personnel in VET institutions did not fully meet the labor market demands. Lack of qualified personnel with vocational education is especially observed in the profile “Agriculture and forestry. Garden and park construction” (state demand for 2020 was 9,062 people; graduation in 2020 was 2,728 people). As follows from the analysis of the state demand for 2021, the greatest number of highly qualified personnel is required in agriculture (35.6% of the total number of requested personnel at the level of vocational education). A consistently significant share in state demand is occupied by specialists in equipment (15.9%) and construction (11%). In addition, a consistent increase in the total number of in-demand personnel with secondary specialized education in the fields of “Agriculture and Forestry. Garden and park construction” (from 18% to 28%), “Engineering and technology” (from 22% to 29%), “Architecture and construction” (from 2% to 3%).

Since 2014, Belarus is an active member of the championship movement of professional skills at the international level, including WorldSkills International (WSI)⁶ movement that contributes to raising the prestige of vocational skills and development of vocational education by harmonizing practices and standards around the world and organizing and holding championships. RIPO in the national operator of the WSI in the country and organizer of republican professional skill competitions. Belarus’ membership in the WSI movement and participation in international contests of professional skills creates additional opportunities for promoting vocational education among young people, increasing the efficiency and quality standards of vocational education through improving the professional level of manufacturing training teachers and trainers. For national educational institutions, championship movement also offers a platform for establishing partnerships with enterprises and accessing best technologies and training standards.

In 2020, the WorldSkills championship was organized in Belarus for the fourth time. More than 320 competitors from all regions of Belarus demonstrated their skills in 47 occupational competencies in construction, production, engineering, ICT, transport and logistics, social and personal services, creative professions, and fashion. Persons with disabilities participated in the championship under four “Inclusion Skills” competencies: Fashion Technology, Web Design, Graphic Design, and System Administration.

The Future Skills project, implemented by the WorldSkills Russia movement, aims to training specialists in the professions that are highly likely to be in demand in the future job market. In 2019, Belarus participated in the Future Skills competition as part of the WorldSkills Kazan 2019 in the competencies “Building Information Model (BIM)”, “Quantum Technologies”, and “Industrial Design”. This initiative of the RIPO, supported by the Ministry of Education of the Republic of Belarus, allowed to test these competencies at the Republican championship of professional skills “WorldSkills Belarus” and establish a sustainable partnership between key country stakeholders in the development of these competencies.

⁶ In accordance with the decision taken by the international association WorldSkills International in February 2022, the membership of the Republic of Belarus and the Russian Federation in the international movement WorldSkills International was suspended, national teams cannot take part in international competitions organized by this association. At the same time, regional and republican competitions of professional skills continue to be held in the republic. The team of the Republic of Belarus takes part in professional skills competitions within the framework of the Eurasian cooperation, as well as in competitions organized by the Ministry of Education of the Russian Federation, Skills and Professions Development Agency, in a professional skills competition within the framework of the International Alliance for Cooperation in the Field of Vocational Education “Masters of the Silk Way”.



Along with that, both labour market and education system will benefit from **forecasting future occupations, needed skills and competencies** based on best international practices (e.g. International Labor Organization approach to anticipating skills for the future of work). In the framework of the UNDP initiative to support sustainable recovery from COVID-19 pandemic in Belarus, it is planned to commission mapping of future skills and future-proof professions to get insight into the current conditions and trends in the labor market. The mapping will consider different factors which might affect the labor market demands, including economic and trade tendencies, industries transformation, climate mitigation and adaptation, changes in supply chains. This will allow to identify labor demand and supply trends in context of COVID-19 and their impact on implementation of Belarus' development priorities in such areas as gender equality in economy, industry 4.0 and implementation of digital twin and smart factory technologies, green economy and digitalization of economy. The results of the mapping will be instrumental to further UNDP's and national partners' evidence-based programming in the medium- and long-term perspective with the aim of increasing labor market sustainability, tackle the mismatch between current and future skills, as well as reinforce job security for women and youth. The mapping is aligned with the national priority of developing an effective system of labor market prognosis (State Program "Labor Market and Increased Employability" for 2021–2025 led by the Ministry of Labor and Social Protection) and labor market orientation of education (State Program "Education and Youth Policy" for 2021–2025 led by the Ministry of Education).

Economic empowerment of youth through advancing VET education becomes relevant **in the context of the Eurasian Economic Union (EAEU)** which seeks to ensure free movement of goods, services, capital and labor within its borders, as well as implement coordinated, agreed or common policies concerning labor market and education system. According to the Strategic Priorities of Eurasian Economic Integration until 2025,⁷ innovation-driven development and modernization of member States' economies will define the development of the Union for the next 5 years.

Goals of the EAEU include development of a long-term strategic program for innovative development, strengthening cooperation in scientific, technical and innovation spheres; transitioning to a common policy in the field of industry, agriculture, energy, transport and others. **In the agricultural sector**, a balanced agricultural market of the Union will be developed based on a modern forecasting system for the development of the EAEU agro-industrial complex and in-depth international cooperation using effective systems for promoting agricultural products and food, including to the markets of third states. **In the industrial sector**, the Strategy prescribes harmonization of national policies, convergence of instruments and measures of state support, development of industrial cooperation and formation of regional production chains of added value, implementation of joint projects and localization of production, production of modern products that can meet the needs of the domestic market and ensure entering of EAEU members to the markets of third countries. One of the Eurasian integration priorities is to **increase energy saving and energy efficiency**. In this area, it is planned to combine efforts to devise and use new technologies and innovations, including green technologies and circular economy models.

In order to prevent the outflow of labor resources outside the Union, measures will be taken to promote integration of the knowledge-intensive sectors of the economy and expand the network of educational institutions in the implementation of educational programs. EAEU also pays special attention to **engaging youth in the processes of Eurasian integration**. Youth, which is the core of the emerging human capital, will take a significant place in developing integration processes and socially significant projects. In 2019, a Youth Council was established in the Eurasian Economic Commission.

The National Gender Equality Plan for 2021-2025 prioritizes **ensuring equal economic opportunities for men and women**. With dramatic shifts to the labor market due to technological progress, it is now needed to evaluate women's engagement in such types of economic activity as

⁷ The Strategic Priorities of Eurasian Economic Integration until 2025 ([link](#))

information technology and information service activities, professional, scientific and technical activities, research and scientific developments. In Belarus, the share of women students in engineering, manufacturing and construction is only 21.7%.⁸ The recent World Economic Forum's Jobs of the Future Report estimates that STEM (Science, Technology, Engineering, Math) skills will continue to rise, especially in cloud computing, big data, and e-commerce. People with skills in software engineering, development of non-humanoid robots, and Artificial Intelligence are particularly in demand.⁹ The International Monetary Fund has found that 180 million predominantly "women's" jobs have a 70 percent or higher probability of automation¹⁰, which will require new skills to adapt to new forms of work and working arrangements. It is also estimated that 90 percent of the world's future jobs will require tech skills.¹¹ STEM jobs have also better earning potential. Encouraging more women to participate in information technology and information service activities, professional, scientific and technical activities, research and scientific developments, as well as promoting equal pay for equal work could contribute to closing the income gap and improving quality of life for both women and men. Closing the gender gaps in these fields will have multiplier impacts on SDG 4 "Quality Education", SDG 5 "Gender Equality", SDG 8 "Decent Work", and SDG 10 "Inequalities".

The demand for skilled workers is growing and requires new solutions to tackle the mismatch of labor market demands and education system offer and tap into the great and yet not fully unlocked potential of women in STEM. There is a space to improve the way the economy and education sector interact – through systematic involvement of stakeholders and employers in the VET system development. The project will complement the Government's efforts to enhance the employment prospects of young men and women by ensuring greater synergy between the VET system supply and the needs of the modern labor market with focus on innovation in mechanical engineering, agriculture and construction. The project will also contribute to the increased attractiveness of VET for young people. Young Belarusians will benefit from expanded capabilities of the VET system, will be more adaptable to labour market requirements, nationally and internationally mobile, technologically competent and capable to implement innovation, and as a consequence significantly improve their prospects and outcomes on the modern labor market and in the global knowledge economy.

II. STRATEGY

The project will allow to consolidate and steer programming efforts around forward-looking development ideas bearing strong potential for accelerated, inclusive and better socio-economic development in Belarus. Its design and implementation strategy are premised on pursuing **digital solutions and innovations** as catalytic enablers in addressing the challenges caused by COVID-19 and meeting the priorities of Belarus' socio-economic development in the context of digital transformation of the economy. The Project is also based on **mainstreaming a human-centered approach** to ensure responsiveness of the project activities to the interests, priorities and needs of the young people and **mainstreaming gender-sensitive approach** to ensure support to women empowerment and leadership in digital-savvy industries. **Orientation on future** to forecast the factors and tendencies which will stipulate development in the near future at the global, national and local levels, including digitalization, orientation on the green economy, shifts in the economic vectors in the wake of COVID-19 outbreak also underpins the development of this project .

The project goal is aligned with the Output 1.3 of the UNDP Country Program Document for the Republic of Belarus (CPD) for 2021-2025: "Entrepreneurship, competition, innovation, decent jobs,

⁸ UNDP STEM4ALL Platform ([link](#))

⁹ World Economic Forum's Jobs of the Future Report 2020 ([link](#))

¹⁰ [Women, Technology and the Future of Work](#), International Monetary Fund Blog, 16 November 2018 [accessed 28 August 2020].

¹¹ [Science, Technology, Engineering, Mathematics \(STEM\)](#), Government of Western Australia, Department of Training and Workforce Development [accessed 28 August 2020].

and income diversification promoted, focusing on vulnerable groups and considering COVID-19 impact”.

The basis for the development of the project's activities are:

- Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1);
- National Strategy for Sustainable Development of the Republic of Belarus till 2035;
- State Program “Digital Development of Belarus” for 2021–2025;
- State Program “Education and Youth Policy” for 2021–2025;
- State Program “Labor Market and Increased Employability” for 2021–2025;
- State Program of innovative development of the Republic of Belarus for 2021-2025;
- State Program “Environmental Protection and Sustainable Use of Natural Resources” for 2021-2025;
- State program “Agrarian business” for 2021-2025;
- National Action Plan for Gender Equality in Belarus for 2021-2025.

The project is aimed at increasing VET teachers and trainers' qualification, upgrading VET centers of competences to provide inclusive and effective learning environment and engage youth in educational programs building on enhanced teaching and institutional capacities. Thus, the project will contribute to implementing **the State Program “Education and Youth Policy” for 2021–2025** which envisages improving the quality of training VET students, updating the content of educational programs, and equipping VET facilities in accordance with trends in technology development.

The State Program “Labor Market and Increased Employability” for 2021–2025 emphasizes the need to reduce the imbalance between demand and supply of the labor force in terms of professional qualifications. The project will complement the Government's efforts to enhance the employment prospects of young men and women by mapping future skills and future-proof professions in Belarus and ensuring greater synergy between the VET system supply and the needs of the modern labor market with focus on innovation in mechanical engineering, agriculture and construction.

The project builds on UNDP's strong expert and institutional capacity as well as **embraces lessons learned from other international technical assistance projects** in the area of vocational education. The project “Employment and Vocational Education and Training in Belarus” funded by EU (2018-2021) provided international expert support in developing regulatory framework for improving the national qualifications system in Belarus, setting up sectoral qualifications councils (currently there are 15 councils), facilitated development of occupational and educational standards, contributed to the development of the draft National Strategy for the Development of Lifelong Learning, the concept of quality assurance and effective financing mechanisms for the VET system and respective training for the VET system's specialists. The project was implemented in all regions of Belarus and Minsk. Within the framework of the project, the laboratories of two centers of competences were launched and fully equipped and five existing centers based at RIPO colleges were retrofitted with equipment. One of the key lessons learned from the project is that international and national experts should share the leading role to make sustainable advancements in the country.

The project “Developing youth innovation potential for Accelerated Sustainable Development in Belarus” envisages building youth's digital skills, identifying new forward-looking competencies that will be in demand in the “labor market of tomorrow” and modernisation of VET facilities' infrastructure required for acquiring them. The project will build the capacity of VET teachers and experts in applying foresight technologies and identifying new promising competencies, developing educational standards and designing and delivering educational programmes based on them. The project will resort to both “bottom-up” (scaling up locally found competencies at the national level) and “up-bottom” (expanding innovations and expertise from leading institutions and centers of competencies to VET teachers and managers at the local level) approaches to develop VET

ensuring coherent innovation cycle in education. This will increase the quality of VET and expand employment opportunities for young people.

The project will contribute to strengthening a national network of VET institutions, and national VET system in Belarus will be its beneficiary. Special attention will be paid to expanding professional skill competitions instruments in the Belarusian regions, organizing regional events to develop professional skill competitions and deploying experts for training teams in the regions of Belarus. Building capacity of regional educational institutions as well as engaging experts and youth organizations will significantly expand opportunities in education and employment for young people residing in small and medium-sized towns and rural areas.

The project will prioritize leveraging national and CIS expertise for stronger sustainability of achieved results. The project will also support professional skill competitions and facilitate development of EAEU and CIS networks of VET institutions. The international network of VET centers of excellence will facilitate both professional and students' exchanges, advancing educational standards based on best regional practices and integrating solutions devised during joint initiatives, e.g. international professional skill competitions, in the educational process. As a result, young men and women will be better prepared to work in the labour market of the EAEU.

The connection between labor market demands, introduction of advanced production technologies, corresponding to the concept of "Industry 4.0" and the educational process will be strengthened. Project envisages systemic engagement of major employers in the pilot sectors. Centers of competencies equipped and upgraded under the project will work with enterprises (state owned enterprises and private companies, including SMEs) to demonstrate the added value of introducing new equipment and facilities in the production as well as to act as demonstration and research platforms for the creation and implementation of "digital twins" of technological and business processes in the field of construction, industry and agriculture. Centers of competencies will connect young professionals with potential future employers and provide young people with opportunities to develop in-demand and practical skills.

In the framework of the project, 2 centers of competencies will receive equipment, supplies and required training support including learning materials and handbooks, training of key personnel, manufacturing training teachers and instructors how to work and teach on new equipment. Staff of centers of competences will be engaged into activities of the project. The project will also review, adapt and implement new educational standards and programs, upgrade skills of teachers and trainers and develop relevant teaching materials and learning modes using the enhanced capacities of pilot centers of competencies.

Digital metrology: An efficient economy requires continuous development of quality assurance infrastructure. The ability to obtain valid data based on high-precision measurements is one of the main prerequisites for effective quality assurance infrastructure. In order to improve the quality of manufactured gear at Belarusian enterprises in the context of the digitalization of economy, an occupational standard "Digital metrology" is being developed. Within the timeframe of the project, an educational standard for digital metrology will be developed on the basis of an occupational standard. As a result, relevant educational programs will be amended to train new specialists for the industrial sector with in-depth knowledge and skills in digital metrology.

A new laboratory "Digital metrology" on the basis of the College of Modern Technologies in Mechanical Engineering and Car Service will allow students to acquire knowledge and skills on the normalization of the accuracy of manufacturing machine gear in mechanical engineering, technical measurements and control of the accuracy of the geometric parameters of machine parts. Students will learn to use the standards of the Unified System of Tolerances and Fits, calculate the parameters of tolerances and fits, choose and apply measuring instruments for their intended purpose, calibrate them, decipher the accuracy standards indicated on the schematics of machine gear, develop and fill out control cards, maintain modern measuring instruments, develop recommendations for the

prevention of possible defects. The created laboratory will allow students to form an understanding of the complete logical chain from the design of the technological process of manufacturing parts on automated equipment to quality control of the finished product.

Innovative construction: The resource center “EcoTechnoPark-Volma” offers a complex of energy-efficient buildings for training, retraining and advanced training of personnel in the field of innovative construction, energy-saving technologies and use of renewable energy sources. The resource center “EcoTechnoPark-Volma” is comprised of an energy-efficient demonstration house made of prefabricated timber frame structures; an energy-efficient demonstration house with an electric heating system; an energy-efficient demonstration house with a hybrid heating system; a demonstration residential building with the use of non-welded joints of reinforced concrete structures and products.

These facilities are combined into a common centralized educational and industrial intelligent system of heat and power supply, distribution and energy management “Smart District”, which involves the use of heat and energy-saving equipment that meets modern global requirements, provides experimental research and cost calculations and at the same time is an effective solution for the environment.

The resource center “EcoTechnoPark-Volma” combines functional education and environmental awareness and provides programs on practice, advanced training, supplementary education for adults, internships for VET students, employees of private companies, VET teachers, higher-education teaching personnel, government employees in the field of energy, energy efficiency, ecology, application of “green” technologies. The center of competencies will become an example of a lifelong learning center catering to the needs of different types and categories of learners. The center will also provide training and guidance for learners who want to become entrepreneurs.

New equipment for the laboratory “GIS-technologies for Construction and Agriculture (precision farming)” provided in the framework of the project will allow students to acquire knowledge and skills in geodesy, construction and precision farming. The implementation of precision farming technologies will require the creation of an electronic field map, the development of a satellite navigation system, the pilot operation of agricultural machinery equipped with touch sensors, modern on-board computers and other technical means. The new equipment provided within the project will allow learners to gain knowledge and skills in the development of field maps (the use of methods of Earth remote sensing technology), ultra-low-volume (ULV) spraying and the use of plant protection products, evaluation of seed germination quality, calculation of NDVI indices (multispectral survey), obtaining NDVI maps; control of pests, diseases, weeds and dangerous plants; application of liquid fertilizers; electronic maintenance for the management of agricultural enterprises, assessment of the volume and quality of field work performed. The applied modern GIS-technologies will be aimed at improving qualification of specialists, including in the construction industry and geodesy. The equipment of the laboratory will allow you to master the technologies of 3D-modeling of buildings, performing various types of geodetic survey, videography of the terrain. The introduction of geographic information systems will facilitate the transition to the practical application of information modeling technologies for urban planning units and urban spaces (the creation of “digital twins” of cities that allow to effectively model the development of an urban area and manage various areas of city life).



Agriculture: The project is planned to support the laboratory “Innovative Greenhouse Technologies” based on the resource center “EcoTechnoPark-Volma”. The implementation of the concept of this laboratory will require equipping a greenhouse of the 5th generation with 4 climatic sections, including a transition with decontamination. The new equipment provided within the project will allow learners to gain knowledge and skills in design and maintenance of greenhouses of the 5th generation, vegetable growing of protected soil, maintaining a microclimate for growing plants, heating systems, air conditioning, lighting and watering plants.

In the framework of the project, new educational programs and standards on digital crop production technologies will be developed and delivered. A network of 80 VET and specialized educational institutions as well as 6 institutions of higher education delivering training in the field of “smart agriculture” will benefit from the equipped center of competencies.



Expanding digital skills’ training for mechanical engineering, construction and agriculture into the VET system will improve the employability of young people and adults by improving the quality of vocational education in the context of lifelong learning and the needs of the modern labor market. This approach is anchored in **the State Program “Digital Development of Belarus” for 2021–2025** which emphasizes the necessity to improve the quality of the educational process and to prepare young people for life and work in the digital economy.

The project will also complement the Government’s efforts in building gender equitable society. In line with **the National Action Plan for Gender Equality in Belarus for 2021-2025**, the project will promote women’s economic empowerment, contribute to women’s leadership and increase the number of women employed in such types of economic activity as information technology and information service activities, professional, scientific and technical activities, research and scientific developments.


In 2018, UNDP in partnership with UNICEF and the National Statistical Committee developed **the National Platform for Reporting Indicators of SDGs** to improve the tracking of Belarus’ progress on the way to achieve SDGs. UNDP supported the nationalization of SDGs in Belarus. As a result, 225 indicators were recognized as relevant for the Republic of Belarus: 131 global indicators were appropriated directly, 94 indicators were replaced and/or supplemented by proxies. The table below represents the project contribution to SDGs.

SDG	Target	Indicator	Project contribution										
<p>Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture</p> 	<p>2.3 By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment</p>	<p>2.3.1. Volume of production per labour unit by classes of farming enterprise size</p> <table border="1"> <thead> <tr> <th>Baseline</th> <th>Target</th> </tr> </thead> <tbody> <tr> <td>2019</td> <td>Data set unavailable</td> </tr> <tr> <td>19.1</td> <td></td> </tr> </tbody> </table>	Baseline	Target	2019	Data set unavailable	19.1		<p>The project will build youth's capacity in applying innovative technologies for better agricultural productivity such as working with electronic field map, a satellite navigation system, biotechnical greenhouse crop production, greenhouses of the 5th generation. Project activities will support the areas of innovative greenhouses technologies and organic and precision farming within the resource center "EcoTechnoPark-Volma".</p>				
Baseline	Target												
2019	Data set unavailable												
19.1													
<p>Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all</p> 	<p>4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university</p>	<p>4.3.1. Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex</p> <table border="1"> <thead> <tr> <th>Baseline</th> <th>Target</th> </tr> </thead> <tbody> <tr> <td>2020</td> <td>Data set unavailable</td> </tr> <tr> <td>General for youth 15-24 years: 66.9</td> <td></td> </tr> <tr> <td>Women: 67.7</td> <td></td> </tr> <tr> <td>Men: 66.2</td> <td></td> </tr> </tbody> </table>	Baseline	Target	2020	Data set unavailable	General for youth 15-24 years: 66.9		Women: 67.7		Men: 66.2		<p>The project is planned to support relevant national educational policies and VET institutions, upgrade educational institutions, enhance manufacturing training teachers' and trainers' qualifications, facilitate exchange and application of best practices in VET. Project will also focus on raising the profile of VET in the context of digital transformation of the economy. Thus, the project will contribute to attracting young people into VET system and increase youth participation rate in formal education.</p>
Baseline	Target												
2020	Data set unavailable												
General for youth 15-24 years: 66.9													
Women: 67.7													
Men: 66.2													
	<p>4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship</p>	<p>4.4.1. Percentage of youth/adults with information and communications technology (ICT) skills, by type of skill</p> <table border="1"> <thead> <tr> <th>Baseline</th> <th>Target</th> </tr> </thead> <tbody> <tr> <td>2019</td> <td>Data set unavailable</td> </tr> <tr> <td>General for youth 15-24 years in "Search, download, install and configure software": 51.8</td> <td></td> </tr> <tr> <td>Women: 44.2</td> <td></td> </tr> <tr> <td>Men: 58.8</td> <td></td> </tr> </tbody> </table>	Baseline	Target	2019	Data set unavailable	General for youth 15-24 years in "Search, download, install and configure software": 51.8		Women: 44.2		Men: 58.8		<p>The project will specifically focus on developing VET educational standards and programmes for supply of personnel to digital-savvy industries (mechanical engineering, construction and agriculture). Young people will acquire both "hard" skills and "soft" skills increasing their overall digital literacy. Educational standards will be based on occupational standards developed as a result of a thorough analysis of the labour market demands thus increasing employment opportunities for VET graduates.</p>
Baseline	Target												
2019	Data set unavailable												
General for youth 15-24 years in "Search, download, install and configure software": 51.8													
Women: 44.2													
Men: 58.8													
	<p>4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a</p>	<p>4.7.1. Extent to which (i) global citizenship education and (ii) education for sustainable development are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment</p> <table border="1"> <thead> <tr> <th>Baseline</th> <th>Target</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> </tbody> </table>	Baseline	Target			<p>The project will provide youth with knowledge and skills needed to promote sustainable development. The project is aligned with the National Strategy for Sustainable Development of the Republic of Belarus till 2035 which puts strong emphasis on people-centered</p>						
Baseline	Target												



<p>Goal 5: Achieve gender equality and empower all women and girls</p> 	<p>culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development</p> <p>5.a Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws</p>	<p>Data set unavailable</p>	<p>development and digital transformation of the economy.</p> <p>The project will promote gender equality principles in VET and facilitate engagement of women in STEM professions. The project will promote education in the field of agriculture and build capacity of men and women in applying digital and innovative tools to enhance their employment and progression opportunities in the sector.</p>																								
<p>Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all</p> 	<p>8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors</p> <p>8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services</p> <p>8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value</p>	<table border="1"> <tr> <td colspan="2">5.a.1 Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex; and (b) share of women among owners or rights-bearers of agricultural land, by type of tenure</td> </tr> <tr> <td>Baseline</td> <td>Target</td> </tr> <tr> <td>2019 a) women: 39% men: 32.9 b) women: 56.4</td> <td>Data set unavailable</td> </tr> </table> <table border="1"> <tr> <td colspan="2">8.2.1. Annual growth rate of real GDP per employed person (percent)</td> </tr> <tr> <td>Baseline</td> <td>Target</td> </tr> <tr> <td>2020 99.5</td> <td>2025 104.8</td> </tr> </table> <table border="1"> <tr> <td colspan="2">8.3.1. Proportion of informal employment in total employment, by sector and sex (percent)</td> </tr> <tr> <td>Baseline</td> <td>Target</td> </tr> <tr> <td>2020 General: 8.6 Women: 6.3 Men: 11.1</td> <td>Data set unavailable</td> </tr> </table> <table border="1"> <tr> <td colspan="2">8.5.2. Unemployment rate, by sex, age and persons with disabilities</td> </tr> <tr> <td>Baseline</td> <td>Target</td> </tr> <tr> <td>2020 General: 4 20-24: 10.8 25-29: 3.7</td> <td>2020 5</td> </tr> </table>	5.a.1 Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex; and (b) share of women among owners or rights-bearers of agricultural land, by type of tenure		Baseline	Target	2019 a) women: 39% men: 32.9 b) women: 56.4	Data set unavailable	8.2.1. Annual growth rate of real GDP per employed person (percent)		Baseline	Target	2020 99.5	2025 104.8	8.3.1. Proportion of informal employment in total employment, by sector and sex (percent)		Baseline	Target	2020 General: 8.6 Women: 6.3 Men: 11.1	Data set unavailable	8.5.2. Unemployment rate, by sex, age and persons with disabilities		Baseline	Target	2020 General: 4 20-24: 10.8 25-29: 3.7	2020 5	<p>In the context of overall depopulation and aging population in Belarus, the project contributes to delivering on national priorities in intensification of education and labour through applying innovative and digital solutions, increasing youth participation and contribution to the value chains.</p> <p>The project will commission mapping of future skills and future-proof professions to get insight into the current conditions and trends in the labour market. Integration of these insights into the project activities and beyond will support productive activities, decent job creation, entrepreneurship, creativity and innovation.</p> <p>In the framework of the project, new occupational and education standards will be developed to ensure labour-market orientation of education thus increasing young people access to decent jobs and productive employment in formal sector.</p>
5.a.1 Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex; and (b) share of women among owners or rights-bearers of agricultural land, by type of tenure																											
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2019 a) women: 39% men: 32.9 b) women: 56.4	Data set unavailable																										
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МІНСКІ ЦЭНТРАЛЬНЫ ІНСТЫТУТ
ТЭХНАЛІЯў І ІНФОРМАЦЫЌ

<p>Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels</p> 	<p>8.6 By 2020, substantially reduce the proportion of youth not in employment, education or training</p>	<p>8.6.1. Proportion of youth (aged 15-24 years) not in education, employment or training (percent)</p> <table border="1"> <thead> <tr> <th>Baseline</th> <th>Target</th> </tr> </thead> <tbody> <tr> <td>2020 General: 6.8 Women: 5.8 Men: 7.8</td> <td>Data set unavailable</td> </tr> </tbody> </table>	Baseline	Target	2020 General: 6.8 Women: 5.8 Men: 7.8	Data set unavailable	<p>The project will support VET system in Belarus and contribute to raising the profile of VET in the context of digital transformation of the economy. The project will contribute to attracting youth into VET system and reduce the proportion of youth not in employment, education or training.</p>
Baseline	Target						
2020 General: 6.8 Women: 5.8 Men: 7.8	Data set unavailable						
	<p>16.6 Develop effective, accountable and transparent institutions at all levels</p>	<p>16.6.1. Primary government expenditures as a proportion of original approved budget, by sector (or by budget codes or similar) (percent)</p> <table border="1"> <thead> <tr> <th>Baseline</th> <th>Target</th> </tr> </thead> <tbody> <tr> <td>2019 Education: 3.8</td> <td>Data set unavailable</td> </tr> </tbody> </table>	Baseline	Target	2019 Education: 3.8	Data set unavailable	<p>The project complements the Government's financial resources required to achieve development results defined in budget-funded State Program "Digital Development of Belarus" for 2021–2025 and State Program "Education and youth policy" for 2021–2025</p>
Baseline	Target						
2019 Education: 3.8	Data set unavailable						

Below is a diagram of **Theory of Change**, linking the achievements of the SDGs and outcomes through the project's planned activities. If necessary, the Theory of Change will be regularly reviewed and updated.



Theory of Change:

Impact	<p>SDG 8: "Promote inclusive and sustainable economic growth, employment and decent work for all"</p> <p>UNDP Strategic Plan Impact: People's choices expanded for a fairer, sustainable future, to build the world envisioned by Agenda 2030 with planet and people in balance.</p>			
Strategic Outcome	<p>UNDP Strategic Plan Outcome: No-one left behind, centring on equitable access to opportunities and a rights-based approach to human agency and human development.</p> <p>CPD Output 1.3: Entrepreneurship, competition, innovation, decent jobs, and income diversification promoted, focusing on vulnerable groups and considering COVID-19 impact.</p>			
Project Outcome	<p>Youth economic empowerment is increased through the development of capacities needed for successful long-term participation in the labor market in the context of the digital transformation of Belarusian economy.</p>			
Outputs	<p>Future professional skills and future-proof professions are determined for better youth employment opportunities and job security through forecasting labor market demands and forward-looking opportunities, including in the COVID-19 context and digital transformation of branches of economy.</p>	<p>Qualifications of manufacturing training teachers and trainers are enhanced to ensure the application of innovative methods and technologies for better VET, meeting the demands of the labour market in digitally skilled workforce.</p>	<p>VET centers of competencies are upgraded to provide an inclusive and effective educational environment facilitating the development of young people's knowledge and skills for employment in digital-savvy industries (mechanical engineering, construction and agriculture).</p>	<p>Youth are engaged in educational programs for future skills and future-proof professions building on enhanced teaching and institutional capacities and the international network of VET centers of excellence and best educational initiatives (e.g. initiatives on professional skill competitions).</p>
Activities	<p>Activity 1.1 Forecast the labor market demand and conduct a comprehensive study on introduction of new professions in the pilot sectors and development of the skillset for the productive employment.</p> <p>Activity 1.2 Building skills and competencies of the VET system's managers and teaching staff on developing and introducing occupational and educational standards.</p> <p>Activity 1.3 Development of occupational and educational standards to better connect young people to new job opportunities in the context of digital transformation of the economy.</p>	<p>Activity 2.1 Development of training programs (advanced training, internships) for teachers and masters of manufacturing training.</p> <p>Activity 2.2 Implementation of training programs (advanced training, internships) for teachers and masters of manufacturing training.</p>	<p>Activity 3.1 Formulation of development strategies for pilot centers of competencies.</p> <p>Activity 3.2 Enhancement of the centers' of competencies technical capacity.</p> <p>Activity 3.3 Capacity building of the teaching and centers' of competencies staff on working with the new equipment and introducing it in the educational process.</p>	<p>Activity 4.1 Development of the international network of VET centers of excellence in the EAEU and CIS countries.</p> <p>Activity 4.2 Development of the national network of VET centers of competencies.</p> <p>Activity 4.3 Raising the profile of VET and public awareness of VET system's training programs and other educational opportunities.</p>
Basic assumptions	<ul style="list-style-type: none"> Throughout the project implementation period and within five years after its closure, SDGs implementation will be the priority for the Government of the Republic of Belarus. Throughout the project implementation period and within five years after its closure, the gap between the demands of the labor market and the results of training will be closed, the empowerment of youth in mastering in-demand skills and professions will remain one of the priorities of Belarus' development in ensuring employment and increasing labor productivity. COVID-19 pandemic does not impede project implementation. Development priorities identified for the pilot sectors remain valid. Project stakeholders demonstrate commitment to the achievement of planned project results. All parties involved have sufficient capacity to implement the project. VET system managers of educational process and teaching staff remain motivated to improve competencies and qualifications and, as a result, motivated to participate in the activities of the project and subsequently apply the obtained knowledge in practice. 			
Risks	<ul style="list-style-type: none"> Decrease in the growth rate of the economy, the growth rate of production of goods (works, services) in pilot sectors of the economy. Lack of parallel financing. Operational restrictions (travel, public events) related to epidemiological situation in the country and worldwide. Limited involvement of stakeholders in project implementation. New and/or additional requirements to the developed with the project occupational and educational standards, methodological materials. 			

III. RESULTS AND PARTNERSHIPS

Expected Results

The goal of the project is to improve conditions for young people to acquire new professional skills and competencies in the context of the digital transformation of the Belarusian economy. The goal will be achieved through scientific and methodological, infrastructural and organizational support of the VET system.

- Output 1: Future professional skills and future-proof professions are determined for better youth employment opportunities and job security through forecasting labor market demands and forward-looking opportunities, including in the COVID-19 context and digital transformation of branches of economy.
- Output 2: Qualifications of manufacturing training teachers and trainers are enhanced to ensure the application of innovative methods and technologies for better VET, meeting the demands of the labour market in digitally skilled workforce.
- Output 3: VET centers of competencies are upgraded to provide an inclusive and effective educational environment facilitating the development of young people's knowledge and skills for employment in digital-savvy industries (mechanical engineering, construction and agriculture).
- Output 4: Youth are engaged in educational programs for future skills and future-proof professions building on enhanced teaching and institutional capacities and the international network of VET centers of excellence and best educational initiatives (e.g. initiatives on professional skill competitions).
- Output 5: Effective project management.

Anticipated medium-term project results

Over 400 VET managers, VET teaching staff and pilot sectors' employers will increase their capacity in formulating and delivering educational standards. Over 200 young men and women per year will get access to educational opportunities under devised and updated educational standards. Over 400 VET learners will receive targeted trainings, participate in exchange programmes and professional skill competitions as well as associated events. The project will increase training capacity of the pilot centers of competencies by more than 20%. Students from over 6 institutions included in the international network of VET centers of excellence and from over 10 institutions included in the country network of educational institutions will benefit from project activities. The detailed project results matrix is presented in Section V.

Anticipated long-term project impact

The anticipated impact to which the project contributes is a reduced unemployment rate among youth, along with the enhanced access of youth to VET demanded at the labor market. To monitor the impact-level results, the following indicators and targets can be used:

Indicators	2021	2022	2023	2024	2025
The unemployment rate among the population aged 16 – 30 years (State Program "Labor Market and Increased Employability" for 2021–2025)	6.7	6.6	6.5	6.4	6.3

Indicators	2021	2022	2023	2024	2025
The share of employees who have completed the vocational training, in the total number of employees (State Program "Labor Market and Increased Employability" for 2021–2025)	11	13	15	16	17
Proportion of young people who study, work and acquire vocational skills, of the total population aged 15 to 24 (State Program "Education and Youth Policy" for 2021–2025)	91.7	92.2	92.7	93.2	94.0

Outputs and activities

OUTPUT 1. FUTURE PROFESSIONAL SKILLS AND FUTURE-PROOF PROFESSIONS ARE DETERMINED FOR BETTER YOUTH EMPLOYMENT OPPORTUNITIES AND JOB SECURITY THROUGH FORECASTING LABOR MARKET DEMANDS AND FORWARD-LOOKING OPPORTUNITIES, INCLUDING IN THE COVID-19 CONTEXT AND DIGITAL TRANSFORMATION OF BRANCHES OF ECONOMY

Activity 1.1 Forecast the labor market demand and conduct a comprehensive study on introduction of new professions in the pilot sectors and development of the skillset for the productive employment

In the framework of the project, a comprehensive study will be conducted to explore the international experience in developing a skillset, including digital skills, for the productive employment and teaching future-proof professions in the pilot sectors (mechanical engineering, construction, and agriculture). The experience of EAEU countries in introduction of new professions, qualifications and respective occupational and educational standards is planned to be explored. The project will specifically explore the outcomes and lessons learned of the "Programme to strengthen the system of secondary vocational education and employment markets in the CIS, Asia and the Middle East" implemented by the Russian Federation and ILO. The study will focus on analyses of demands of the Belarusian labor market and on zooming in EAEU labor market trends. Gender disaggregated data and gender analysis will inform the study of mechanical engineering, construction and agriculture sectors' development and elaboration of respective educational and occupational standards.

The project will take advantage of best practices in developing methods and applying foresight technologies for predicting and evaluating future competency requirements, establishing a communication platform and a remote training system for VET system's managers. The study will be conducted through involving international expertise based on peer-to-peer learning and knowledge sharing with the Russian Federation and other countries. The study results will be duly presented to the Ministry of Education, the Ministry of Labour and Social Protection, managers of VET institutions, and other relevant stakeholders.

In the framework of the project, there will be developed a list of forecasted qualifications to be introduced into the training system/updated in pilot sectors through occupational and educational standards devised based on the mapping of future skills, future-proof professions and study of the international experience in the area of development of a skillset for the productive employment.

Activity 1.2 Building skills and competencies of the VET system's managers¹² and teaching staff on developing and introducing occupational and educational standards

¹² Managers in VET system are Directors of educational institutions, Deputy Directors of educational institutions, Managers of centers of competencies (as per the Resolution by the Ministry of Labor and Social

Mapping of future skills and future-proof professions and study of the international experience in the area of development of a skillset for the productive employment will serve as a basis of a comprehensive capacity building programme for VET managers, VET teaching staff and major employers representing 3 pilot sectors: mechanical engineering, construction and agriculture. It will cover such topics as applying sectoral approaches to skillset prognosis (based on the Russian Federation expertise), improving VET quality and relevance, applying innovative instruments and methods, such as foresight technology, for predicting and evaluating future requirements for competencies and necessary skillsets.

VET managers, VET teaching staff and major employers (private and state-owned), who are engaged in the development of occupational and educational standards through participation in Sectoral Councils of Qualifications, will be trained to formulate occupational and educational standards. The project will also build capacity of VET managers, VET teaching staff and major employers representing pilot sectors in applying innovative methods and approaches to education, including digital didactics in VET system, design of training programs for distance learning, methods for creating educational content for the development of digital and other skills.

The occupational standards developed during the project will be the basis for designing new and updating existing educational programs. Updating/upgrading the content of education will contribute to better training of the qualified personnel for working in the context of digital economy and prompt introduction of modern technologies into the technological process, for example, in such companies as OJSC "Mapid", LLC "Modern Concrete Structures", group of companies "A-100", Republican Scientific Technical Center for Pricing in Construction, Private company "Glavtelecom", LLC "Vistar management" and other.

Activity 1.3 Development of occupational and educational standards to better connect young people to new job opportunities in the context of digital transformation of the economy

VET managers, VET teaching staff and major employers will participate in introducing/updating occupational and educational standards in 3 pilot sectors (mechanical engineering, construction and agriculture) based on the list of forecasted qualifications (activity 1.1.)

The project will promote the participatory approach to improving the national qualification system. It will support the organization of Sectoral Councils of Qualifications' meetings dedicated to the development and update of occupational and educational standards in 3 pilot sectors (mechanical engineering, construction and agriculture). In Belarus, Sectoral Councils of Qualifications determine main directions for the future development of the relevant sectors of the economy; coordinate government agencies, employers, trade unions, scientific and educational organizations to improve regulatory and administrative frameworks of the national qualification system and participate in forecasting the need for qualified personnel in relevant sectors of the economy.

Special attention will be paid to the inclusive nature of the new standards to ensure equal access to VET and equal quality of VET for women and men, residents of cities and remote areas enabling them to participate in the labor market effectively.

OUTPUT 2. QUALIFICATIONS OF MANUFACTURING TRAINING TEACHERS AND TRAINERS ARE ENHANCED TO ENSURE THE APPLICATION OF INNOVATIVE METHODS AND TECHNOLOGIES FOR BETTER VET, MEETING THE DEMANDS OF THE LABOUR MARKET IN DIGITALLY SKILLED WORKFORCE

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Activity 2.1 Development of training programs (advanced training, internships) for teachers and masters of manufacturing training

Based on the knowledge and experience gained through implementation of Output 1 and leveraging best international and national expertise, advanced training programs will be developed targeting the teaching staff of VET institutions. The activity envisages the capacity building of VET teachers in designing and delivering educational material which is required to teach young people future-proof professions in 3 pilot sectors (mechanical engineering, construction and agriculture). VET teachers will improve their capacity in application of innovative instruments for better VET, introduction of innovative technologies and digital didactics into the VET system, development of digital skills, gender mainstreaming and implementing the newly developed educational standards.

Advanced training programmes will be developed for VET teachers and experts engaged in organizing the national professional skills championships and training national teams for participation in international professional skills championships. Leading educational institutions and centers of competencies from the Russian Federation, Armenia, Kazakhstan, Uzbekistan (see Section “Partnerships”) will also participate in designing capacity-building programmes.

Advanced training programs will include the “training of trainers” component to ensure the multiplying effect of the capacity building activities.

Activity 2.2 Implementation of training programs (advanced training, internships) for teachers and masters of manufacturing training

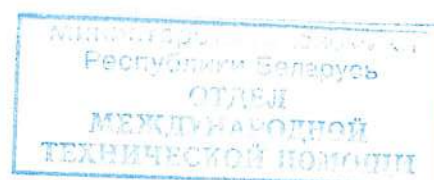
The activity aims at implementing developed advanced training programs. Teaching staff and managers (representatives of 3 pilot sectors) will undergo training in the leading VET institutions and centers of competencies of the EAEU and CIS partner countries (see Section “Partnership”). The destination of the study tours will be determined upon developing training programmes and identifying priority thematic areas of each study visit. The training programmes’ participants will gain knowledge and skills that can be further used in their respective institutions through peer-to-peer knowledge sharing thus multiplying the obtained knowledge and ensuring the sustainability of the training programs’ results.

The capacity building activities will include the support in organizing professional skills championship and preparatory training events. Study visits and exchange programs for the VET teaching staff and students representing pilot sectors will be organized to exchange experience in the preparation of national youth teams for professional skills championships, organization of joint (on-site and online) trainings for participants and experts of national team. The project will contribute to the organization of the national professional skills championship through provision of technical expertise, support to communication and outreach activities as well as logistic arrangements. The following promising competencies in the 3 pilot sectors are expected to be included in the national professional skills championship: Industry 4.0, GIS analytics, Digital farming, Agricultural biotechnology. Teams are expected to participate in the national championship in either on-site or online format.

The enhanced capacity and gained experience will enable the Belarusian team to achieve better results in international championships.

OUTPUT 3. VET CENTERS OF COMPETENCIES ARE UPGRADED TO PROVIDE AN INCLUSIVE AND EFFECTIVE EDUCATIONAL ENVIRONMENT FACILITATING THE DEVELOPMENT OF YOUNG PEOPLE’S KNOWLEDGE AND SKILLS FOR EMPLOYMENT IN DIGITAL-SAVVY INDUSTRIES (MECHANICAL ENGINEERING, CONSTRUCTION AND AGRICULTURE)

Activity 3.1 Formulation of development strategies for pilot centers of competencies



The centers of competencies provide access to scarce and high-cost resources such as cutting-edge equipment, conditions for the qualitative development and implementation of training programs and acquisition of practical skills to work on modern equipment. Centers of competencies supplement the educational process in colleges, universities and other educational institutions.

Core objectives of centers of competencies include:

- creating conditions for obtaining skills to work on modern equipment required primarily for the training of specialists for high-tech, science-intensive, export-oriented and import-substituting industries;
- development, approbation and implementation of innovative training technologies;
- testing of training simulators, laboratory equipment, and teaching aids;
- providing consumers with informational materials, collecting a library of modern technical literature;
- providing consulting, marketing and analytical services, supporting the organization of thematic conferences and seminars.

Capacity of the existing centers of competencies established in Belarus will be leveraged to provide inclusive and effective learning environment focused on building practice-oriented skills in pilot sectors:

1. For mechanical engineering – the College of Modern Technologies in Mechanical Engineering and Car Service;
2. For construction and agriculture – resource center “EcoTechnoPark-Volma”.

The two selected centers of competencies (the College of Modern Technologies in Mechanical Engineering and Car Service and the resource center “EcoTechnoPark-Volma”) train students and specialists from around the country. The project will support the capacity strengthening of the two centers of competencies by establishing new laboratories – the laboratory of Digital Metrology and the laboratory “GIS-technologies for Construction and Agriculture (precision farming)” – and enhancing existing laboratory “Innovative Greenhouse Technologies”.

The pilot centers of competencies serve three core objectives:

- training students and upskilling teaching staff – training youth studying at VET institutions and higher education institutions (as a part of the educational process and programs of industrial practice) and teaching staff (upskilling);
- training pilot sectors’ specialists – upskilling and reskilling of real sector workers by using the innovative equipment demonstration sites and approaches (i.a. at the request of the private sector (state enterprises, private companies, including SMEs);
- conducting applied scientific research – approbation of scientific findings, transfer of technologies to the manufacturing sector and expansion of opportunities for the use of new technologies.

Since 2018, the center of competencies based at the College of Modern Technologies in Mechanical Engineering and Car Service has been training specialists in the following fields: “Machine-building technological equipment”, “Automation of technological processes, production and management”, “Industry 4.0”.

The center of competencies already includes the following training workshops and laboratories:

- Training workshop for lathes and milling machines with PM DMG;
- Training workshop for lathes with PM (HAAS);
- Training workshop for lathes with PM Sinumerik and Fanuc;
- Laboratory of electrical engineering and electronics, electric drive and electrical automation, reliability and diagnostics of technological equipment, automation, the main components of electronic devices;
- Laboratory for programming and adjustment of automated equipment, adjustment of robotic technological complexes;



- Laboratory of drives of technological equipment (metal-cutting machines), hydraulic drives and hydropneumatic automation, flexible production systems, control systems for automated equipment, automation of production processes, metal-cutting machines, programming in the CAD/CAM environment;
- Laboratory for automation of production processes in mechanical engineering, integrated control systems for automated equipment, programmable logic controllers, industrial sensors, flexible production systems, technology for assembling automated equipment, automated production preparation (Official certified training center FESTO (FACT) for Industry 4.0 technologies and mechatronics);
- Laboratory for processing materials and tools.

The center of competencies based at the College of Modern Technologies in Mechanical Engineering and Car Service trains personnel for at least 7¹³ enterprises of the Belarus' manufacturing sector and educates students of at least 19¹⁴ educational institutions.

The resource center "EcoTechnoPark-Volma" is a leading resource center in Belarus in the field of ecology, energy and energy efficiency. It was established to increase functional literacy and environmental awareness of various categories of the population, provide the sectors of the socio-economic complex with highly qualified specialists in the field of energy, energy efficiency, ecology, application and dissemination of green technologies.

As of today, the center of competencies includes a complex of energy-efficient buildings for training, retraining and advanced training of personnel in the field of innovative construction, scientific and innovative entrepreneurship in the field of energy conservation and application of renewable energy sources, including:

- an energy-efficient house made of prefabricated timber frame structures;
- an energy-efficient demonstration house with an electric heating system;
- an energy-efficient demonstration house with a hybrid heating system;
- a demonstration residential building made with the use of non-welded joints of reinforced concrete structures and products;
- training and production base "Technologies of power distribution with a centralized control system "Smart District", including the laboratory "Automation for the management of communal building systems" (project executor Schneider Elektrik Bel).

The resource center "EcoTechnoPark-Volma" trains students of at least 30¹⁵ educational institutions.

¹³ OJSC "MTW", OJSC "MZKT", OJSC "Peleng", LLC "LeanGroup", OJSC "Stroytekhprogress", OJSC "MMW named after S.I. Vavilov - managing company of "BelOMO" holding, UPE "Niva".

¹⁴ Minsk State Automotive College named after Academician M.S. Vysotsky, Belarusian National Technical University, Gomel State Vocational and Technical College of Electrical Engineering, Minsk State Machine-Building College, Grodno State College of Engineering, Technology and Design, Baranovichi State Professional Lyceum of Mechanical Engineering, Technological college of Grodno State University named after J. Kupala, Borisov State College, Zhodino State Polytechnic College, Mogilev State Polytechnic College, Minsk State Professional Lyceum No. 3 of Mechanical Engineering, Polytechnic College, Molodechno State Polytechnic College, Bobruisk State Motor Transport College, Vitebsk State Technological College, Bobruisk State Motor Transport College, Gomel State Automotive College, Lida College, Orsha State Mechanical and Economic College.

¹⁵ Gomel State Professional Technological Lyceum, Minsk State Vocational and Technical College of Assembly and Hoisting-and-Transport Works, Rogachev State Vocational and Technical College of Builders, Minsk State Vocational Lyceum No. 7 of Construction, Beloozersk State Vocational Technical College of Electrical Engineering, Vitebsk State Professional Lyceum No. 5 of Instrument Engineering, Kopyl State College, Zhodino State Polytechnic College, Dobrush State Professional Polytechnic Lyceum, Novopolotsk State Polytechnic College, Gomel State Polytechnic College, Borisov State Construction Professional Lyceum, Gomel State Vocational and Technical College of Electrical Engineering, Soligorsk State College, Molodechno State Polytechnic College, Minsk State Professional Lyceum No. 5 of Transport Construction, Minsk State Vocational College of Construction and Utilities, Minsk State Vocational Lyceum No. 12 of Construction, Belarusian National Technical University, Polotsk State University, Gomel State University named after Francysk Skaryna, Baranovichi State University, Vitebsk State Technological University, Belarusian State University, Brest State Technical University, Vitebsk State University named after P.M. Masherov, Maryinogorsk Agricultural and Technical College, Molodechno State Polytechnic College, Novogrudok State Agrarian College, Zhirovichi State Agrarian Technical College.

In the framework the project, the development strategy for each of the pilot resource centers will be prepared or updated. The development of the strategies will be guided by the following considerations: orientation on the labor market demand in specialists with digital skills, implementation of the new educational standards, delivery of the new educational programs, means of equipping young people with a skillset for the productive employment as well as enabling equal access to VET for the women and men, vulnerable groups and residents of rural areas. To ensure the participative approach, the representatives of the private sector (state enterprises, private companies, including SMEs) will be also engaged in the strategies' development as they represent both the potential clients of the centers' of competencies services for education and upskilling of their employees and the demand side of the labor force being interested in well-trained young employees.

Activity 3.2 Enhancement of the centers' of competencies technical capacity

The project will support equipping the pilot sites with the necessary goods, works and services.

A laboratory "Digital Metrology" will be established on the basis of the center of competencies of the College of Modern Technologies in Mechanical engineering and Car Service (pilot site representing the mechanical engineering sector). The new laboratory will allow students to acquire knowledge and skills in standardization of accuracy in the manufacture of machine parts in mechanical engineering, technical measurements and control of the accuracy of the geometric parameters of machine parts. Students will learn how to apply the standards of the Unified System of Tolerances and Landings, calculate the parameters of tolerances and landings, choose control and measuring instruments and devices, use them for their intended purpose, decipher the accuracy standards indicated on the drawings of machine parts. They will also learn how to design and fill out control cards.

The established laboratory will increase the number of students studying at the college's center of competencies and will cover at least 950 students of specialized educational institutions (additional 200 students in comparison to the current number of students) per year. The laboratory "Digital Metrology" will provide new opportunities: for adults – to get additional education in the context of the life-long learning, for young people – to develop in-demand skills and get access to practice-oriented education.

Based on the resource center "EcoTechnoPark-Volma", a laboratory (construction pilot site) will be established and the laboratory "Innovative Greenhouse Technologies" (agriculture pilot site) will be upgraded.

Technologies that will be used within the laboratory "GIS-technologies for Construction and Agriculture (precision farming)" include:

- building a planned-high-rise base;
- UAV survey (mandatory use of multispectral survey);
- photogrammetric processing of survey materials;
- orthophoto-map creation;
- building a digital terrain model with the ability to visualize a 3D model;
- creation of special maps (maps of seed germination based on the NDVI index, maps of agrochemical survey, etc.);
- spraying and application of plant protection products based on ULV method;
- assessment of the quality of seed germination;
- control of pests, diseases, weeds and dangerous plants;
- application of liquid fertilizers, spraying of fruit trees using ULV method;

- electronic service for managing agricultural enterprises, assessing the volume and quality of completed field work.

Technologies that will be used within the laboratory “Innovative Greenhouse Technologies” will include:

- equipment for a 5th generation greenhouse with 4 climatic sections, including a transition with decontamination.

The laboratories will provide training services including training in piloting UAVs-related technologies in geodesy, industry and agriculture.

Newly established and upgraded laboratories will also provide an opportunity to train students and employees of enterprises. The following organizations will benefit from the strengthened capacities of the recourse centers: 1) SMEs that enroll their employees to develop innovative skills in digital metrology, agriculture and construction within the programs of additional adult education, advanced training and internships; 2) institutions of vocational-technical, secondary specialized and higher education training specialists in relevant fields (for example, Belarusian State Agrarian Technical University, Belarusian State Agricultural Academy, Grodno State Agrarian University).

The establishment and upgrading of laboratories on the basis of existing centers of competencies will significantly expand the list of practical skills that can be acquired through training and attract more students and specialists. The estimated number of students per year who will gain the access to new training, knowledge and skills through the enhancement of the laboratories is over 600 (200 students increase compared to current number).

The equipment and technologies supplied to the laboratories will be built into the existing infrastructure of centers competencies and complement the created model of modern digital production in the corresponding pilot sector. In particular, it is planned to introduce software and tools for managing the life cycle of products of manufacturing enterprises, which will include such solutions as “product digital twin”, “production digital twin”, “product service digital twin”, software systems for intelligent processing of sensor data, received from technological equipment involved in the production process, and a number of others. In a complex, such a solution will display the processes of managing production processes aimed at increasing labor productivity and reducing production costs.

Goods, works and services will be procured following the requests of the pilot sites with justification for their acquisition. Requests from the pilot sites will be reviewed and approved by the Project Board. UNDP will conduct procurement of goods, works and services for further transfer to the pilot sites.

All goods, works and services to be procured by UNDP shall comply with the principles of sustainable development by using designs, methodologies, and technical requirements that make efficient use of resources and energy, protect people and ecological systems, maintain and improve the quality of life of the community and benefit their needs. If deemed necessary, the technical and economic justifications will be developed before launching the procurement process to establish whether the proposed solution is viable, investment is justified and to identify the most advantageous method of implementation. The Social and Environmental Screening Procedure and project quality assurance will be updated if deemed relevant to ensure all associated risks and proper management actions are incorporated into the project. The proper capacity assessment will take place as per the prevailing UNDP policies and procedures. Procurement of goods, works and services for the pilot sites will be planned, designed and constructed so as to be:

- accessible to persons with disabilities;
- gender responsive approach to the different needs and constraints of women and men. The design must remove barriers to access and use of works, equipment and related services by women, as well as enhance women's safe access and use.

Activity 3.3 Capacity building of the teaching and centers' of competencies staff on working with the new equipment and introducing it in the educational process

Following the upgrading of equipment of the pilot centers of competencies, the capacity building for teachers and masters of the manufacturing training will be conducted. Firstly, the centers' of competencies specialists and teaching staff will be trained to work with the new equipment and, afterwards, capacity building activities will be conducted to integrate practicing on the new equipment in the educational process, including in the development of the educational documentation. Relevant educational documentation will be prepared with the support of national and international specialists. Occupational safety and health components will be also incorporated accordingly in the capacity building activities. The respective guidelines and standard operating procedures can be developed as a part of educational documentation.

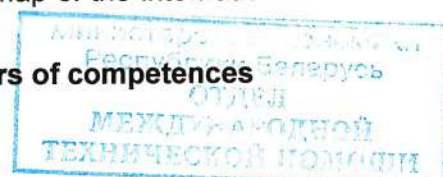
OUTPUT 4. YOUTH ARE ENGAGED IN EDUCATIONAL PROGRAMS FOR FUTURE SKILLS AND FUTURE-PROOF PROFESSIONS BUILDING ON ENHANCED TEACHING AND INSTITUTIONAL CAPACITIES AND THE INTERNATIONAL NETWORK OF VET CENTERS OF EXCELLENCE AND BEST EDUCATIONAL INITIATIVES (E.G. INITIATIVES ON PROFESSIONAL SKILL COMPETITIONS)

Activity 4.1 Development of the international network of VET centers of excellence in the EAEU and CIS countries

The project will facilitate the establishment of an international network of VET centers of excellence in the EAEU and CIS countries. RIPO as the Basic Organization of the CIS Member States for vocational training, retraining, advanced training of personnel in the VET system will seek to build partnerships with other Basics Organizations of the CIS member states (for example: in agriculture - Russian State Agrarian University - Moscow Timiryazev Agricultural Academy; in geodesy and cartography - Moscow State University of Geodesy and Cartography to build the core of the network). The network will also include such organizations as Skills and Professions Development Agency, interregional competency centers (such as College of S.P. Korolev; Ural Polytechnic College), specialized competency centers (such as Kuzbass College of Architecture, Geodesy and Construction; Krasnoyarsk Industrial and Metallurgical College; Krasnoyarsk Technical School of Industrial Service; Moscow State Educational Complex), Association of development and popularization of working professions "WorldSkills Uzbekistan", State Agency for Vocational Education under the Ministry of Education of the Republic of Azerbaijan, National Centre for Vocational Education and Training Development (NCVETD) in Armenia, NJSC "Talap" in Kazakhstan.

The network will help to connect young men and women across EAEU and CIS states, encourage professional exchanges, expand interaction of educational institutions in the implementation of educational programs and contribute to integration of knowledge-intensive sectors of the EAEU member states' economies. The activity will include developing the concept of an international network of VET centers of excellence. The list of VET institutions as per pilot sectors will be compiled to be included in the international network, and the strategic roadmap of the international network functioning will be developed.

Activity 4.2 Development of the national network of VET centers of competences



To ensure knowledge exchange and accumulation of best VET practices within the country, an in-country network of VET centers of competences will be launched being closely connected to the international network (Activity 4.1.). Mapping of the stakeholders will be conducted and the network's roadmap, entailing i.a. joint implementation of training programs, including in the rural areas, will be developed.

The national network of VET centers of competences will facilitate piloting of educational programs using the upgraded equipment of the pilot centers of competencies. As a result, approbation of training programs for various categories of youth will be conducted. Proposals for training various categories of young men and women in digital skills following various educational trajectories will be developed.

The project will support the contest of ideas that will be developed jointly by students and the teaching staff of VET institutions. Ideas will feature start-up or scientific developments that are premised on the digital skills' introduction in the real sectors of the economy that are expected to be approbated at the newly equipped pilot resource centers, or have an income generating potential, or be transferrable to the practical implementation. The contest of ideas will allow young people to pilot the acquired digital competencies and skills taking advantage of the enhanced capacities of the resource centers (Output 3). The winners of the competition will be awarded with the study visit to further build their capacities in practical application of the developed ideas in the selected sector.

Activity 4.3 Raising the profile of VET and public awareness of VET system's training programs and other educational opportunities

In 2020, VET institutions' total number of trained personnel did not fully meet the labor market demands. A significant lack of qualified personnel with vocational education is observed in many sectors of the Belarusian economy. The project will work on promotion of VET education. The project will conduct publicity and media campaigns to raise the profile of the VET system and public awareness of its training programs and other educational opportunities, highlight success stories of young people with vocational education. Communication activities will also cover the promotion of the centers of competencies equipped in the framework of the project.

The project will develop a comprehensive communication strategy clearly outlining key messages and formulating key messages at the level of outputs and activities. Communication and advocacy work will help to raise the prestige of occupations that require VET. Target audience will include young men and women, their parents, adult population and private companies, including SMEs and state-owned enterprises. The project's communication strategy will also target the underrepresentation of women in digital-savvy occupations that require VET and promote gender equality in the field of education and at the labor market. The project will support the empowerment of women and girls through targeted gender-specific campaigns and mainstream gender across all its communication activities.

Communication campaigns will comprise development of media products, including visual and audio, and organization of activities attracting the interest and attention of the general public towards VET. Activities will be designed as coherent interlinked communications and media packages. An effective use of social media will accompany the project implementation throughout its lifetime.

Another promising direction of work towards raising the profile of VET and bridging the gap in the labor market is the career guidance that can help young men and women decide on their education and future occupation. One of the RIPO's priorities is the creation of the Coordination Center for Career Guidance by 2024. The regulatory framework contributing to this work consists of:

- Concept of the development of the education system of the Republic of Belarus until 2030. Its core objectives include improvement of the forms and methods of vocational guidance work and increasing the attractiveness of vocational education.

- Development strategy of the state youth policy of the Republic of Belarus until 2030. Youth employment is one of the priority areas of the strategy with emphasis on the development of an effective career guidance system for selection of specialties/professions for young people.

The following results have been achieved to date:

- A career guidance program is being developed, 4 methodologies in digital format are finalized;
- An interactive guide to the VET system in Belarus;
- Annual monitoring of vocational guidance effectiveness in institutions of vocational-technical and secondary specialized education is organized.

Support within the project will include capacity building of the Coordination Center for Career Guidance personnel. It is planned to achieve the following results:

- The content of career guidance services for the different groups of beneficiaries (young men and women, adults, persons with special needs) is developed;
- Template recommendations for various categories of beneficiaries are developed;
- A digital guide to specialties (a hierarchical list of specialties with their description) is developed;
- Description of the competencies of future-proof professions, enhanced competencies of the existing professions is prepared;
- Electronic versions of profессиograms are prepared.

Thus, the project's activities will supplement the Government efforts in raising the profile of VET system and attracting young men and women to such types of economic activity as information technology and information service activities, professional, scientific and technical activities, research and scientific developments.

OUTPUT 5. EFFECTIVE PROJECT MANAGEMENT

The section describes human, material, technical and time resources required to achieve the expected project outputs. Core project staff will include Project Manager and Administrative and Finance Assistant. Preliminary terms of reference of the key management positions are presented in Annex 4. The Project Team will be also supported by specialized expertise of Procurement Specialist, Communication Specialist and Thematic Coordinator on capacity building and other expert support in line with the project work plan. In addition to the project team specialists of UNDP Country Office in Belarus will support project implementation (Section IV contains detailed information to this end).

Recruitment of project staff, selection of responsible parties and procurement will be executed in compliance with UNDP policies and procedures. It is planned to provide the office with technical and material support, including computers, monitors, multi-functional device, office supplies and other consumables to ensure reasonable working conditions for the project staff. At the end of the project, all the assets acquired under the project will be transferred to the final recipients as per the decision of the Project Board. To accommodate the project staff, UNDP will rent office premises, approved by the Ministry of Foreign Affairs of the Republic of Belarus in compliance with the national legislation.

The project time framework is 36 months from the date of registration of the project in the database of the international technical assistance projects and programmes.

Resources Required to Achieve the Expected Results

Given the nature of the project, key inputs required to achieve the expected results will mostly consist of payments to experts and consultants to provide analytical and technical support for project, travel

expenses, meeting and workshop costs, study tours, and contractual services to support project activities.

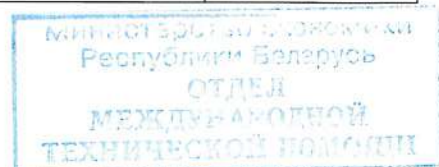
Costs related to the equipment acquisition, material and technical support to the pilot sites will be also significant expenditure items from the project budget. The detailed budget description is provided under Section VII. Section IV elaborates on project management arrangements and the associated costs.

The project annual work plans will be developed with a corresponding financial allocation at the beginning of each year of project implementation. During the project implementation, the effectiveness of the project activities will be ensured through interaction with other projects, coordination, joint work planning and active participation of stakeholders.

Partnerships

Engagement of line ministries, educational institutions and VET centers of excellence, professional unions and employers' organizations through participation in Sectoral Councils of Qualifications and advisory support will ensure effective introducing/updating of occupational and educational standards in pilot sectors. The project will harness best international expertise and innovative methodologies in forecasting future-proof professions and developing occupational and educational standards thus contributing to closing the gap between education and labour markets and increasing the employability of young people in Belarus.

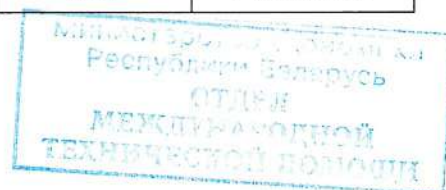
Partnership	Type	Geographical coverage
Line ministries of the Republic of Belarus participating in Sectoral Councils of Qualifications: Ministry of Industry, the Ministry of Architecture and Construction, the Ministry of Economy, the Ministry of Labor and Social Protection, the Ministry of Education, the Ministry of Communications and Informatization, the Ministry of Housing and Communal Services, the Ministry of Agriculture and Food.	Government agency	Belarus
Union of Constructors of the Republic of Belarus represents the interests of construction enterprises in Sectoral Councils of Qualifications and assists in disseminating experience, advanced technologies and progressive methods in the field of construction.	NGO	Belarus
Republican Union of Employers «BelUE» represents the interests of employers in Sectoral Councils of Qualifications, raises the professional level of managers of industrial enterprises, employers, specialists and entrepreneurs, and establishes partnerships between employers and managers of industrial enterprises.	NGO	Belarus
Agricultural Association "Agrarian Education, Science and Production" aims to create an environment conducive to the effective interaction of various educational institutions, research organizations and industrial enterprises to improve the quality of training of specialists in agriculture.	NGO	Belarus
Federation of Trade Unions of Belarus, including the Belarusian Trade Union of Agroindustrial Workers, the Belarusian Trade Union of Workers of Construction and Construction Materials	NGO	Belarus



Partnership	Type	Geographical coverage
Industry, the Belarusian Trade Union of Industrial Sectors Workers "BELPROFMASH".		
College of Modern Technologies in Mechanical Engineering and Car Service (Belarus), SAPEI SO "Ural Polytechnic College - ICC" and the State Budgetary Professional Educational Institution "Moscow State Educational Complex" (the Russian Federation) will be engaged in developing an educational standard "Digital metrology".	Educational institution	the Russian Federation, Republic of Belarus
Institute for the Development of Vocational Education (the Russian Federation). In 2021, RIPO and the Institute for the Development of Vocational Education have signed a Partnership Agreement.	Educational and research institution	the Russian Federation, Republic of Belarus
The International Labour Organization's expertise will be engaged for defining the methods and foresight technologies for predicting and evaluating future competency requirements in construction, machine engineering and agriculture in Belarus. Results, lessons learned and best practices of the Programme to strengthen the system of primary and secondary professional education and collaboration in the development of the employment markets in the CIS, Asia and the Middle East will be evaluated and, where appropriate, integrated in the course of implementation of the project activities.	International organization	-

National and foreign VET institutions, research centers and innovation hubs will participate in the development and delivery (on-site and online) of the training programmes for VET teachers. VET teachers will benefit from best expertise in the application of innovative instruments for better VET, introduction of innovative technologies and digital didactics into the vocational education system, development of youth' digital skills, and implementation of educational standards. Established partnership with research institutions will also allow to use the capacities of upgraded centers of competencies for applied scientific research in pilot sectors with further transfer of devised technologies into the production cycle. Cooperation with foreign centers of competencies and educational institutions will significantly expand the potential number of students benefitting from updated educational programmes (online training) and online academic exchanges. The project will facilitate building of partnerships between research institutions and youth organizations to promote VET among young people and engage them in scientific research.

Partnership	Type	Geographical coverage
The Skolkovo Innovation Center (the Russian Federation). In 2020, RIPO in partnership with the Skolkovo Innovation Center piloted a training program for VET managers in Belarus. In 2021, in the framework of the project "Employment, Vocational Education and Training in Belarus", sessions on technology foresight for competencies in the fields "Mechanical Engineering", "Construction", "Agriculture", "Communications and Informatization" were organized.	Educational and research institution	the Russian Federation
Institute for the Development of Vocational Education (the Russian Federation). In 2021, RIPO and the Institute for the	Educational and	the Russian Federation



Partnership	Type	Geographical coverage
<p>Development of Vocational Education have signed a Partnership Agreement and developed 2 roadmaps for in-depth partnership:</p> <ul style="list-style-type: none"> — Roadmap for developing and approving joint VET programs for high-tech industries specialists; — Roadmap for developing and implementing joint educational programs of advanced training for VET teachers in the field of organization of early career guidance, pre-vocational and vocational training of schoolchildren in VET institutions of the Russian Federation and Republic of Belarus on the basis of the best domestic and foreign practices. 	research institution	
<p>Partnership agreements were signed between RIPO and Gusevsky Polytechnic College (the Russian Federation), state educational institution of secondary vocational education of Moscow region "College of Information Technologies, Economics and Management" (the Russian Federation) to share best practices and build capacity of VET teachers in the field of industry and mechanical engineering.</p>	Educational and research institution	the Russian Federation
<p>In the framework of the partnership agreement with the Interregional Competence Center - Technical School named after S.P. Korolev (the Russian Federation) events are organized to improve the capacities of teachers and students in the field of innovative construction.</p>	Educational and research institution	the Russian Federation
<p>In the field of agriculture, contacts were established with the Greenhouse Plant LipetskAgro (Dankov, the Russian Federation), the Center of digital farming of the Krasnoyarsk Region (the Russian Federation), the Center for Remote Satellite Monitoring of the Krasnodar Region (Krasnodar, the Russian Federation) to explore further partnership in the framework of the project.</p>	Educational and research institution	the Russian Federation
<p>Belarusian State Agricultural Academy and RIPO have signed an Agreement on Cooperation in operating the resource center "EcoTechnoPark-Volma". In the framework of the project, it is planned to jointly improve the scientific and methodological support of educational programs; develop and implement joint research programs; implement educational programs through internships, advanced training, practical, experimental and scientific work, with the subsequent introduction of the results of scientific research and development into the educational programs; conduct joint research; organize joint scientific and cultural events (conferences, seminars, etc.).</p>	Educational and research institution	Republic of Belarus
<p>Polesie State University (PolesSU). RIPO and the Science and Technology Park "Technopark "Polesie" based at the PolesSU signed a partnership agreement. Students of PolesSU underwent technological and pre-diploma practice in the field of garden and park construction and landscape design. Further activities of PolesSU and RIPO involve conducting scientific</p>	Educational and research institution	Republic of Belarus

Partnership	Type	Geographical coverage
research and supporting innovative projects using joint resources.		
Center for LED and Optoelectronic Technologies of the National Academy of Sciences of Belarus. The Center is a co-executor of activities within functioning of the sectoral laboratory "Innovative greenhouse technologies". Cooperation within the framework of this project involves research and development of LED systems for supplementary lighting of plants for indoor vegetable growing, including in the field of closed photoculture, development and production of training stands analogous to existing greenhouse equipment for research activities. In addition, the Center developed a concept of lighting equipment for the greenhouse complex for experimental and industrial approbation, which will be produced and integrated into the general concept of the 5th generation greenhouse.	Educational and research institution	Republic of Belarus
Smilovichi State Agrarian College, Zhirovichi Agrarian and Technical College, Polesie State Agrarian College have established centers of competencies on their premises where students from Minsk, Grodno and Brest regions are trained. Cooperation with these centers of competencies within the framework of the project will significantly expand the potential number of beneficiaries through on-site and online training.	Educational and research institution	Republic of Belarus
The Republican Students Union and the Belarusian Republican Youth Union will be engaged to ensure effective outreach to the young people, their participation in planning and implementation of project activities to increase the attractiveness of vocational education, including the championship movement of professional skills.	NGO	Republic of Belarus

The Project will build on partnerships with national operators of the professional skills competitions in CIS countries. Professional skills competitions operators will exchange experience in preparing national youth teams for championships and organize joint (on-site and online learning) trainings for participants and experts of national teams. The network of WorldSkills operators will also support the WorldSkills championship in Belarus in 2023. Organization of training skill camps to prepare teams for international championships in partnership with the private sector will contribute to better performance of young people in vocational skills.

Partnership	Type	Geographical coverage
Skills and Professions Development Agency. In 2017, WorldSkills Eurasia was established by Belarus, Kazakhstan, Russia and Armenia to promote the development of human capital, economic growth, and support development of competencies for the competitive economies of countries. Events are organized annually to build capacity of teachers, students and competitors of WorldSkills national teams, international open competitions of vocational skills are	Educational and research institution	the Russian Federation

Partnership	Type	Geographical coverage
organized according to international standards of professional skills.		
RIPO and LLC "Copter Express Technologies" (the Russian Federation) signed a partnership agreement to exchange experience, organize joint events aimed at developing competencies of VET teachers, experts and industrial training masters, coaches of teams competing in international championships of professional skills and organize training camps to prepare teams for international championships under WorldSkills standards.	Private company	the Russian Federation
<p>Partner organizations within the framework of participation in the competitions WorldSkills Eurasia:</p> <ol style="list-style-type: none"> 1. Association of development and popularization of working professions (WorldSkills Uzbekistan); 2. The State Agency for Vocational Education under the Ministry of Education of the Republic of Azerbaijan; 3. National Center for Vocational Education and Training Development (NCVETD); 4. Non-commercial Joint Stock Company "Talap". 	<p>NGO</p> <p>Government agency</p> <p>Governmental Organization</p> <p>Governmental Organization</p>	<p>Uzbekistan</p> <p>Azerbaijan</p> <p>Armenia</p> <p>Kazakhstan</p>

The project will facilitate the establishment of an international network of VET centers of excellence, Basic Organizations, national professional skills competitions operators and other relevant stakeholders. Members of the network will organize study visits and exchange programs for the VET institutions teaching staff and students, share best practices in developing and implementing educational standards, conduct joint capacity building activities and raise the profile of working professions. Mapping of the stakeholders will be conducted in the framework of the project as well as the development of a roadmap for the network functioning. A tentative list of network members is provided below:

Partnership	Type	Geographical coverage
<p>Skills and Professions Development Agency as well as:</p> <p>interregional centers of competences:</p> <ol style="list-style-type: none"> 1. Technical School named after S.P. Korolev; 2. State Autonomous Professional Educational Institution of the Sverdlovsk region "Ural Polytechnic College"; <p>specialized centers of competences:</p> <ol style="list-style-type: none"> 1. Kuzbass College of Architecture, Geodesy and Construction; 2. Krasnoyarsk Industrial and Metallurgical College; 3. Krasnoyarsk Technical School of Industrial Service; 4. Moscow State Educational Complex; 5. Federal State Autonomous Educational Institution of Higher Education "National University in the field of Nuclear Research" – specialization "Operation of unmanned aircraft systems"; 	Educational and research institution	the Russian Federation

Partnership	Type	Geographical coverage
6. Siberian State University of Geosystems and Technologies; 7. Povolzhsky State College.		
The CIS Basic Organization for training, advanced training and retraining of personnel in the field of agricultural education based at the Russian State Agrarian University - Moscow Agricultural Academy named after K. A. Timiryazev.	Educational and research institution	the Russian Federation / CIS
The CIS Basic Organization for training personnel in the field of geodesy, cartography, cadastre and remote sensing of the Earth based at the Moscow State University of Geodesy and Cartography.	Educational and research institution	the Russian Federation / CIS
Partner organizations within the framework of participation in the WorldSkills Eurasia competitions ¹⁷ : 1. Association of development and popularization of working professions (WorldSkills Uzbekistan); 2. The State Agency for Vocational Education under the Ministry of Education of the Republic of Azerbaijan; 3. National Center for Vocational Education and Training Development (NCVETD); 4. Non-commercial Joint Stock Company "Talap".	NGO Government agency Governmental Organization Governmental Organization	Uzbekistan Azerbaijan Armenia Kazakhstan

National and international media will be engaged in communications and media campaigns to ensure effective outreach of project activities, raise the profile of the VET system and public awareness on its training programs and other educational opportunities targeting young men and women, their parents, adult population and private companies, including SMEs.

Partnership	Type	Geographical coverage
Internet project <i>Rabcor.by</i> (focused on industrial sector workers), online media <i>1prof.by</i> (focused on highlighting news of the labour market and business), online platform <i>Onliner.by</i> (largest media platform in the country) and other national and international media, including operating in social networks; influencers and opinion leaders will be engaged to promote VET and implement project's communication strategy.	Media	Republic of Belarus

UNDP in Belarus will apply multi-dimensional, inclusive and participatory approaches to implementation of the project, strengthening and deepening already established partnerships as

¹⁷ Taking into account the macro-regional cooperation of the countries of the Eurasian space, which was based on the Declaration on the establishment of macro-regional cooperation of the countries of the Eurasian space signed on the initiative of the Russian Federation, the Republic of Armenia, the Republic of Belarus, the Republic of Kazakhstan of August 25, 2017, Astana, the Republic of Kazakhstan, as well as the Agreement on cooperation between the national training agencies of the above countries dated August 25, 2017, Astana, the Republic of Kazakhstan, as well as the Agreement on cooperation in the field of promoting employment of the population of the member states of the Commonwealth of Independent States dated May 28, 2021 (entered into force on January 28, 2022), in 2022 it is planned to hold the Distributed Eurasian Championship, in which the team of the Republic of Belarus, the Russian Federation and the countries of the Eurasian space will take part.

well as building new ones. The project will strategically align the action with other projects and programmes rolled out by UNDP, other UN agencies, national and international partners.

The Project will build on the experience of UNDP implemented and funded by the Russian Federation projects “Assisting the Government of the Republic of Belarus in Accession to the World Trade Organization” and “Promotion of employment and self-employment of the population in small and medium-sized towns in the Republic of Belarus”. The project will also tap into experience of GEF-funded program on Green and Smart Cities, establish needed links with the project “Support to Economic Development at the Local Level in the Republic of Belarus” which aims to increase employment, stimulate local initiatives and strengthen support infrastructure and financial mechanisms for SMEs and entrepreneurship development in Belarusian regions. The project will also explore partnerships with ILO and options for links with the Russian Federation-funded “Implementation of a vocational training strategy G20” second phase initiative, where Belarus has become a member of the project consortium partners in 2019.

The project will also build on the results achieved by the EU-funded project “Employment and Vocational Education and Training in Belarus”. It was aimed at adapting the VET system in Belarus to the needs of the modern labor market. With the project, 2 centers of competencies have been equipped: Resource center “EcoTechnoPark-Volma” and the center of competencies for Inclusive Vocational Education for the Service Sector on the basis of the Minsk State College of Electronics.

Risks and Assumptions

The strategy and the action plan of the project are based on the following assumptions:

- 1) Throughout the project implementation period and within five years after its closure, SDGs implementation will be the priority for the Government of the Republic of Belarus.
- 2) Throughout the project implementation period and within five years after its closure, the gap between the demands of the labor market and the results of training will be closed, the empowerment of youth in mastering in-demand skills and professions will remain one of the priorities of Belarus' development in ensuring employment and increasing labor productivity.
- 3) COVID-19 pandemic does not impede project implementation.
- 4) Development priorities identified for the pilot sectors remain valid.
- 5) Project stakeholders demonstrate commitment to the achievement of planned project results.
- 6) All parties involved have sufficient capacity to implement the project.
- 7) VET system managers and teaching staff remain motivated to improve competencies and qualifications and, as a result, motivated to participate in the activities of the project and subsequently apply the obtained knowledge in practice.

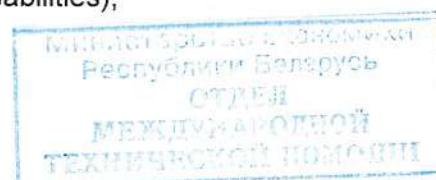
In order to contribute to a project's success, actions will be undertaken to identify, assess, prioritize and mitigate risks. Risk treatment and mitigation measures will be considered, and an appropriate risk management plan will be developed and implemented. The Risk Register will be maintained and updated as needed for the duration of the project, no less than once a year during implementation.

Risks will be identified using prevailing UNDP policies and procedures (Enterprise Risk Management) and relevant risk tools such as the HACT, Social and Environmental Screening Procedure, Private Sector Due Diligence, Theory of Change, Procurement Risk Radar, etc. The initial risk analysis and management plan is provided in Annex 3.

Stakeholder Engagement

Project target groups:

- Primary: youth, women, vulnerable groups (people with disabilities);



- Instrumental: educational institutions, central and regional authorities and government officials, public associations, private sector, media, women and youth groups and organizations, UN agencies, donors.

Feedback from the target groups will be regularly collected and analyzed to inform decision-making and project's lessons learned. The Project's strategy emphasizes the importance of engaging a broad circle of stakeholders for sustainability of the results and successful project delivery. Early engagement of key stakeholders will also mitigate potential risks.

- The project will work closely with the members of the Sectoral Councils of Qualifications including the Ministry of Economy, the Ministry of Labor and Social Protection, the Ministry of Education and other line ministries.
- One of the key stakeholders for the project are public associations aimed at empowering youth and women. The project will actively engage them in promoting and raising the profile of VET through joint activities. The project will also facilitate building of partnerships between research institutions and youth organizations to promote VET among young people and engage them in scientific research.
- The project outputs and planned activities will promote international cooperation in VET development and improve national architecture of VET system. Through international and national networks, partnerships will be established among VET institutions, VET centers of excellence, Basic Organizations, national professional skills competitions operators and other stakeholders.
- Professional skills competitions will serve as a platform for connecting Belarusian VET students with participants of international championships and facilitating knowledge exchanges. National professional skills competitions operators will exchange experience in the preparation of national youth teams for international championships, organize joint capacity-building activities.

All project activities are designed to actively engage stakeholders on different levels. Project stakeholders will be informed about the progress and results throughout various communication channels such as project public events (conferences, roundtables, press-conferences, etc), UNDP's social media channels, and through media (press-conferences, interviews, blog posts, etc). UNDP's Stakeholder Response Mechanism will be used to supplement proactive stakeholder engagement by UNDP and its Implementing Partner throughout the project cycle. Despite the project is categorized as Low risk through the SESP (see Annex 2), if project-affected people raise concerns and/or grievances regarding the project's social and/or environmental performance during implementation, project-level (Project Board) and/or national grievance mechanisms will be utilized. In addition, UNDP's Stakeholder Response Mechanism¹⁸ is available to project stakeholders as a supplemental means of redress for concerns that have not been resolved through standard project management procedures.

South-South and Triangular Cooperation (SSC/TrC)

Not applicable.

Knowledge

Multiple knowledge products will be produced in the framework of the project, including **studies**, **reports**, and training materials. In the framework of the Activity 1.1., a study will be prepared on development of a skillset, including digital skills, for the productive employment and teaching future-proof professions in the pilot sectors. It will focus on analyses of demands of Belarusian labor market and EAEU labor market trends. Gender disaggregated data and gender analysis will inform the study of mechanical engineering, construction and agriculture sectors' development and elaboration

¹⁸ Social and Environmental Compliance Review and Stakeholder Response Mechanism



of respective educational and occupational standards. The study results (as a report) will be shared with the Ministry of Education, Ministry of Labor and Social Protection, managers of VET institutions and other relevant stakeholders.

With a specific focus on building capacities of key stakeholders and ensuring sustainability of results, the project will target key stakeholders through training activities using a variety of channels and platforms, including online tools. In the framework of Output 2, advanced **training programs** will be developed and delivered for the teaching staff of VET institutions. Programs will envisage capacity building of VET teachers in developing and delivering educational material which is required to prepare young people for future-proof professions in 3 pilot sectors (mechanical engineering, construction, and agriculture). VET teachers will increase capacity in application of innovative instruments for better VET, introduction of innovative technologies and digital didactics into the VET system, development of digital skills, gender mainstreaming and implementing the newly developed educational standards.

Since the project will facilitate the establishment of an international network of VET centers of excellence and improve national architecture of VET system, special attention is given to the development of **strategic documents and roadmaps**. The development strategy for each of the pilot centers of competencies is planned to be prepared. The development of the strategies will be guided by the following considerations: orientation on the labor market demand in specialists with digital skills, implementation of the new educational standards, delivery of the new educational programs, means for equipping young people with a skillset for the productive employment as well as enabling equal access to VET for the women and men, vulnerable groups and residents of rural areas. In the framework of the Activity 4.1., a roadmap of the international network of VET centers of excellence will be developed. The network will help to connect young men and women across EAEU and CIS states, encourage professional exchanges, expand interaction of educational institutions in the implementation of educational programs and contribute to integration of knowledge-intensive sectors of the EAEU member state' economies. In the framework of the Activity 4.2., mapping of the stakeholders will be conducted and the roadmap for activities of the network of the VET centers of excellence at the national level will be developed.

The project's communication activities entail a significant number of **communication and visibility** activities of the project. The overall objective for the Communication Plan is to promote the VET system and raise public awareness of its training programs and other educational opportunities. Communication campaigns will comprise development of media products, including visual and audio, and organization of activities attracting the interest and attention of the general public towards VET. Special focus of the communication campaigns will be on strengthening the role of women in in such types of economic activity as information technology and information service activities, professional, scientific and technical activities, research and scientific developments. The communication strategy will outline specific actions focused on communicating project objectives, activities, and outcomes. Whilst ensuring adherence to UNDP's communication and visibility guidelines, the Project will warrant full compliance to the Donors' guidelines.

Sustainability and Scaling Up

The project will be implemented under the National Implementation Modality with the support of the UNDP Country Office. The Ministry of Education of the Republic of Belarus will act as the Implementing Partner of the project assuming the full responsibility and accountability for the effective use of resources and the delivery of outputs (Sections III and VIII contain further details). Along with the support provided by UNDP Country Office in project implementation, the project will use the national capacities and monitoring systems in parallel. Where applicable, the Implementing Partner and/or the responsible parties of the project will undergo the capacity assessment and will be further monitored, capacitated and assessed. The project is designed in a way that any result achieved will be embedded in the national system and scaled up. The developed materials will be further used in the educational process; knowledge gained within the capacity building programme

will be further shared through the peer-to-peer learning; equipment and other facilities procured under the project will be taken on balance and further maintained by the beneficiaries out of its own budget; technologies introduced in the centers of competencies can be further extended to related industries; the developed partnerships will provide the access to the constant knowledge exchange.

The sustainability and scaling up of the project results is planned to be achieved through the following:

- Being exposed to the best practices, international experience and participating in the subsequent capacity building activities, the project stakeholders will be able to further apply the acquired knowledge in forecasting future skills and future-proof professions, developing the respective occupational and educational standards and programmes, and working towards narrowing the gap in demand and supply at the labor market.
- In the framework of the project, new occupational and educational standards will be developed, new qualifications will be introduced, and additional training programs in VET institutions in the selected areas will be launched.
- The development of new programs for advanced training of VET teaching staff will increase the coverage of teachers and masters who are undergoing advanced training and internships in the selected areas. The teachers trained under the project will share knowledge with colleagues to multiply the effects of the project training activities.
- Upgrading the laboratories at the centers of competencies will strengthen the existing network of educational institutions and expand the access of young men and women from all Belarusian regions, including from the rural areas, to high-tech equipment for high-quality practice-oriented learning. The enhanced laboratories will be further supported through the Government financing.
- The developed programs of additional education for adults will attract personnel from SMEs which in turn will contribute to the introduction of new technologies and innovations into the real sector.
- Through the project communication activities, the profile of the VET system and awareness on its training programs and opportunities will be raised contributing to the increased number of VET students and better meeting the needs of the labour market.
- Professional skills competitions serve as a partnership platform for different stakeholders engaged in the development of VET. Joint efforts of the VET system and the private sector will allow to build a community of teaching staff and experts in the most demanded and up-to-date professions and attract resources from the private sector to support further development of VET.
- The enhanced capacity and gained experience will enable the Belarusian team to further achieve better results in international championships.
- Technologies introduced in the centers of competencies can be extended to related industries. For example, the established laboratory “GIS-technologies for Construction and Agriculture (precision farming)” may become the basis for the development and testing of technologies for the use of UAVs in the industrial sector, namely: multispectral television and lidar surveying, inspection of point, extended and area objects, monitoring air pollution, dosimetry control.
- Support of the Coordination Center for Career Guidance will contribute to wider application of the project’s results by expanding the list of specialties, categories of applicants (youth, adults, women, persons with disabilities), customization of career guidance programs.
- Through the developed networks and partnerships, the project stakeholders will have better access to the best practices, knowledge exchange, new developments and trends in the VET system.

Another aspect demonstrating the sustainability of the project results is the state parallel financing of the project. The development of the network and the organization of training in the centers of competencies of educational institutions in the 2021/2022 academic year is regulated by the Order of the Minister of Education of the Republic of Belarus No. 622 of 02.09.2021.

The Government constantly allocates resources for the development of centers of competencies. In 2018-2021, according to the estimated assignments, approximately US\$ 5.9 mln dollars were allocated from the State Program "Education and Youth Policy", US\$ 1.37 mln from the State Investment Program, US\$ 2.1 mln from the Innovation Fund of the Minsk Regional Executive Committee, US\$ 610k from the Republican Centralized Innovation Fund, US\$ 95k from the Innovation Fund of the Minsk City Executive Committee, US\$ 1.19 mln – EU technical assistance.

For the period from 2022 to 2025, the estimated allocations for the development of centers of competencies and training activities amount to approximately US\$ 3.27 mln from the State Program "Education and Youth Policy", US\$ 343k from the State Investment Program, US\$ 580k from the Innovation Fund of the Minsk Regional Executive Committee.

The Government constantly allocates state funding to support professional skills competitions, training learners, students and teachers to participate in international championships. In 2018-2021, around US\$ 650k were allocated for the training of highly qualified specialists within the framework of the development of professional skills competitions, holding republican competitions and participation in international competitions. For the period from 2022 to 2025, it is planned to allocate about US\$ 670k, which demonstrates the continued commitment and feasibility of providing the estimated amount of government parallel financing for the project.

IV. PROJECT MANAGEMENT

Cost Efficiency and Effectiveness

Project management is built on the principles of Results-based Management (RBM). The implementation management mechanisms, in particular the resource management system and monitoring and evaluation system are coordinated with the expected results at all project levels and constitute a single integrated structure. The project is designed in a way to deliver maximum possible results against the available resources. The cost efficiency and effectiveness of the project is based on best practices and lessons learned from previous projects. The project team will work closely with project partners and stakeholders and will ensure cooperation and synergy of ongoing activities with other projects. Cost efficiency and effectiveness of the project will be also ensured through joint operations whenever possible (joint monitoring visits, shared office premises and project staff and/or consultancy services).

The project complements the state support in the development of the VET system, centers of competencies and professional skills competitions. The total government parallel funding is estimated at US\$ 4.4 mln during the project implementation. Joint efforts will contribute towards multiplying the efficiency and effectiveness of the investments.

RIPO is the leading national institution in the field of VET development in Belarus. RIPO coordinates the development of innovative infrastructure of the VET institutions in Belarus. At present, there are 51 centers of competencies for 9 sectors of the economy based on vocational education institutions. RIPO provides organizational and methodological support for the activities of centers of competencies and develops a schedule for training students in centers of competencies annually. The training is based on the principles of network interaction between educational institutions which provides an opportunity for a wide coverage of students from different regions of Belarus. Students can master new technologies, advanced technologies, production techniques and labor methods; in its turn, teachers can undertake internships across various Belarusian educational institutions. Educational institutions that send students to study in centers of competencies make changes and amendments to their curricula of manufacturing training, taking into account the topics studied in the center of competencies and thus providing timely updates to the content of educational programs.

As RIPO is uniquely positioned in terms of competencies, capacity, legitimacy and access to the project's beneficiaries it will act as the Responsible party for several project activities. RIPO is expected to implement part of project activities as defined in Section VII. If deemed applicable, the HACT micro assessment of RIPO will be performed before the start of programme activities. The required assurance activities will be undertaken in line with the prevailing UNDP policies and procedures (Section VIII contains detailed information).

Project Management

The project team will manage the project from the office located in Minsk.

The project management system consists of three levels:

1. Strategic management;
2. Operational management and coordination;
3. Monitoring and evaluation system (Section VI of the project document).

The project will be implemented under the National Implementation Modality with the support of the UNDP Country Office according to UNDP rules and procedures. UNDP can provide support to the implementation of the project under national implementation modality only upon the request of the Implementing Partner. The parties agreed that the project document duly registered with the Ministry of Economy of the Republic of Belarus, containing Annex 1 "Provision of UNDP Country Office Support Services in Implementation of the Project" and multi-year work plan with distribution of activities and financial resources breakdown by year (Section VII), constitutes a request for provision of UNDP services.

The project's day-to-day management and implementation will be carried out by the Project Team. The core project team will be composed of Project Manager, Administrative and Finance Assistant. Project Manager will be primarily responsible for the daily project management and decision-making, coordination of the project's activities, maintaining relationships with the project's stakeholders, partnership building and supervision of the project team. Administrative and Finance Assistant will provide administrative and logistical support, work on the recruitment processes, ensure proper accounting, financial monitoring and reporting. Preliminary terms of reference of the key management positions are presented in Annex 4. The Project Team will be also supported by specialized expertise of Procurement Specialist, Communication Specialist and Thematic Coordinator on capacity building. All Project Team positions will be filled based on UNDP rules and procedures. The detailed Terms of Reference will be developed for each position with the description of required qualifications, competencies, duties and responsibilities. UNDP will pay special attention to ensure gender balance within the Project Team and provide equal opportunities for men and women in the selection process.

In addition to the project team, program specialists of UNDP Country Office in Belarus - Programme Analyst supported by Programme Associate - will be responsible for operational control and quality assurance of the project implementation, operationalization of the linkages with other similar initiatives and projects, implementation and oversight of the project activities. Along with program specialists' services, UNDP Country Office will provide administrative support performed by Procurement Analyst, Finance Associate, ICT Associate, Administrative and HR Associate (listed in Annex 1) in line with the corporate rules and regulations.

Expenses for the services of the abovementioned personnel, as well as administrative services provided by UNDP Country Office, will be recovered in the amount not exceeding the limits, set in the budget for this category of expenses (according to Section VII). Cost for the services of UNDP Programme Analyst and Programme Associate will be reimbursed in accordance with Option B (Annex 1). Cost for the administrative services of UNDP Country Office will be reimbursed in accordance with Option A (Annex 1). UNDP Resident Representative will oversee the functions of these specialists according to their terms of reference.



The UNDP in Belarus will maintain the oversight and management of the overall project budget, as well as will be responsible for monitoring project implementation and timely reporting of the progress to the donor. In addition, UNDP will maintain co-ordination and networking with other ongoing initiatives and institutions in the country.

Project audits will be conducted according to UNDP Financial Regulations and Rules and applicable Audit policies.

