

MINISTRY OF HIGHER AND SECONDARY SPECIALIZED EDUCATION CENTER OF VOCATIONAL EDUCATION MINISTRY OF WATER RESOURCES MINISTRY OF HOUSING AND COMMUNAL SERVICES MINISTRY OF EMPLOYMENT AND LABOR RELATIONS CHAMBER OF COMMERCE AND INDUSTRY OF UZBEKISTAN

NEWSLETTER



ON UZBEK-SWISS "SKILLS DEVELOPMENT PROJECT IN UZBEKISTAN" PHASE IV



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Uzbek-Swiss "Skills Development Project in Uzbekistan", Phase IV

Information on the project

Common goal

The project will contribute to the improvement and further development of the system of vocational education and training by introducing and strengthening a system approach to cooperation between stakeholders in the training, retraining and advanced training of water sector specialists under the "Demand-trainingjob placement" cycle.

Total amount

3.17 ml USA dollars

Period of implementation 2015-2018

Government's decision

Bilateral agreement signed on June 30, 2015 between the governments of the Republic of Uzbekistan and the Swiss Confederation on the implementation of the "Skills Development Project in Uzbekistan", Phase IV

Partner organizations

-Ministry of Higher and Secondary Specialized Education, Center of Vocational Education; -Ministry of Employment and

Labor Relations;

-Ministry of Water Resources;

-Ministry of Housing and Communal Services;

-Chamber of Commerce and Industry of Uzbekistan.

Investment targets

-5 pilot colleges of Samarkand and Syrdarya regions;

-7 regional vocational training centers at vocational colleges;

-Information and methodological service of the Center of Vocational Education;

-Centers of Vocational Education of the Ministry of Water Resources and the Ministry of Housing and Communal Services.

Implementation plan

The action plan for 2015-2018 for the implementation of the "Skills Development Project in Uzbekistan", Phase IV developed by the project and the Center of Vocational Education and coordinated with the Ministry of Employment and Labor Relations, the Ministry of Water Resources, the Ministry of Housing and Communal Services and the Chamber of Commerce and Industry of Uzbekistan was approved on July 18, 2016 by the Deputy Prime Minister of the Republic of Uzbekistan.

PILOT COLLEGES

-Mirzaabad VC of land reclamation;

-Gulistan construction VC; -Samarkand VC of computer technology and land reclamation;

-Bogishamal industrial VC; -Bulungur agricultural VC.



In order to improve and develop the system of vocational education and training of specialists in the water sector, in early 2016 a working group consisting of specialists from the Ministry of Labor, the CVE and the Ministry of Agriculture and Water Resources developed the Concept and tools for analyzing the labor market, determining the supply and demand for training, retraining and advanced training of specialists in the water management system, which was discussed and approved at the first meeting of the Project Steering Committee on May 11, 2016.

In order to determine, analyze and evaluate the demand and supply in the labor market in the field of water management, specialists with higher and secondary specialized education, in the context of industries and regions, collected materials in the following areas:

- from the Ministry of Agriculture and Water Resources, information was received on the need for specialists and on the sources of meeting the needs of all enterprises and facilities of 10 basin departments of irrigation systems of the republic;

- from the Ministry of Higher and Secondary Specialized Education, information was received on the training by 5 higher educational institutions of specialists in the field of water management, forecasts on training and employment of specialists for the sectors of water management;

- from the Center of VE, information was obtained on 82 vocational colleges involved in the training of specialists with secondary education in the field of "Water Management and Land Reclamation", on the forecasts of training at these colleges of specialists and their employment.

In line with the results of the research undertaken by the project on the labor market in the field of public utilities, the project developed an analytical



DEVELOPED DOCUMENTS

The project developed a Concept for a model of interaction between key ministries and agencies to ensure training of specialists for water management in line with its needs and demand in the labor market. report "The need for specialists for housing and public services and sources for its provision".

In order to study the labor market of the housing and communal services sector, specially designed questionnaires were used, with the help of which information was obtained from 188 vocational colleges on training of specialists in the "Construction and installation of engineering communications", and information was collected on the needs of enterprises and organizations of housing and communal services and information on training of personnel with higher education at the universities of the country.

Given the results of the study of the labor market in the water sector, the project developed a Concept for a model of interaction between key ministries and agencies to ensure training of specialists for the water sector in line with its needs and demand in the labor market.





Model of interaction of key ministries and agencies under the cycle "Demand-training-job placement" on the example of water management



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2. ELABORATION OF EDUCATIONAL-REGULATORY DOCUMENTS AND EDUCATIONAL MANUALS



All the specializations of these two pilot professions, based on the requirements of the Ministry of Labor and Social Protection of the Population, were unified and renamed as the working profes-

PILOT OCCUPATIONS

- Technician for operation and maintenance of hydrotechnical structures and pumping stations
- Technician-technologist for operation of public utilities



fessions and main positions of employees", developed in 2015. For the development of training and regulatory documents on pilot professions, 2 working groups were created, consisting of representatives from key ministries and agencies, teachers from pilot vocational colleges and employers.

The curriculum, in coordination with the line ministries and agencies, included the 60-hour practical work "Acquaintance with the profession at manufacturing enterprises" for first-year students. Sectoral educational standards, curricula and educational programs for pilot professions were approved by orders of the Ministry of Higher and Secondary Specialized Education as of April 6 and August 25, 2016. The project progress at pilot vocational colleges was monitored on a regular basis.

In particular, in June 2016, the effectiveness of the organization of introduction training at 5

> ДАСТАКИ ЁЙЛИ ПАЙВАНДЛАШ Жараёнида Ўқув тренажёрларидан ФО<u>йдаланиш</u>

pilot vocational colleges in Syrdarya and Samarkand regions was studied.

Leading specialists from the enterprises of the "Suvokava" production association of Gulistan and Samarkand cities. the Office of Energy and Communications of pumping stations, the Management of water irrigation systems in Syrdarya and Samarkand regions, the Partnership of private owners of housing "Ilgorkelazhak" in the city of Samarkand, the Office of the Irrigation System "Mirza Pai" and others participated in the survey. Packages of educational and regulatory documents on the pilot professions were developed and published. The packages include industry-specific educational standards, curricula and programs for pilot occupations. The packages were disseminated to all vocational colleges of the republic, which train personnel for the pilot professions.

A student logbook for practical work has been developed for





students of pilot VCs, as well as an improved version of an initial practice student logbook with a profession at pilot VC enterprises.

In all pilot VCs in February 2017, seminars were held on the organization of practical work and filling in of the student logbook during on-the-job training at the enterprise.

Together with the educational and methodological center «Kommunalukuv» of the Ministry of Housing and Communal Services, the needs for advanced training of specialists in the system of housing and communal services were studied.

Based on them, 5 modular training manuals were developed that meet the requirements of the ILO:

1. Quality control of drinking water and sewage,

2. Operation of water supply, sewage and wastewater treatment systems,

3. Provision of services for consumers in the field of drinking water supply and sanitation,

4. Modern pumps, pumping facilities and stations of the drinking water supply system,

5. Housing and building management.

Leading specialists of the communal services system, teachers of the Tashkent and Samarkand architectural and construction institutes and basic vocational colleges were involved in the development of textbooks.

In order to improve the policy

framework, training and regulatory documents of the advanced training system for specialists of key ministries and agencies, as a continuation of training after a vocational college, "Provisions on the procedure for training, retraining, advanced training of workers, managers, engineers and specialists in housing and communal services of the Republic of Uzbekistan as well as the «Regulations on the procedure for the development and requirements for the structure, content and design of advanced training and retraining of personnel in the housing and communal services system» were elaborated. Recommended by the International Labor Organization (ILO) and internationally recognized "Know about Business" modular manual for the use at educational institutions of the vocational education system has been adapted to national educational standards by representatives of the Chamber of Commerce and Industry of Uzbekistan and the Center of Vocational Education. A training seminar was held for teachers of «Basics of entrepreneurship and technology of employment» at vocational colleges, as well as specialists of regional departments of the Chamber of Commerce and Industry. More than 9000 start-up entrepreneurs were trained by certified trainers in organized courses «Know about Business». In order to effectively use the equipment in the educational

process, methodological manuals were created on the use of the excavator-loader simulator and the «Electro-gas welding» simulator in the educational process of vocational colleges and advanced training centers. Based on skills analysis, industry-specific educational standards and curricula were developed, using the modern modular approach, which enables the most effective use of the material and technical base of VCs and enterprises, as well as assigning qualification categories for the main working professions.



3. TRAINING ORGANIZATION AT TRAINING CENTERS

To implement the concept improving the system of of advanced training and retraining of specialists in pilot professions, appropriate measures were taken. The working group carried out a number of activities on advanced training of teachers-masters of professional training and teachers of vocational colleges as well as water and public utilities specialists at training centers for advanced training and retraining, at Regional vocational training centers at vocational colleges. at the Tashkent institute of irrigation and agricultural mechanization engineers at the Ministry of Housing and Communal Services.

MAIN FACTS

More than **9 00**

start-up entrepreneurs were trained in the "Know about Business" courses. On March 1, 2016, a joint order was adopted by the Center of VE of the Ministry of Higher and Secondary Specialized Education and the Ministry of Agriculture and Water Resources of the Republic of Uzbekistan "On the organization of advanced training courses for water management specialists in 2016 at basic vocational colleges". In order to provide methodological support for courses, on March 10, 2016, a practical workshop was organized for directors and teachers of 31 VCs and those responsible for conducting training courses. At these courses, modular curricula and manuals in 4 areas developed under the project were used:

- Improving the ameliorative state of irrigated lands and exercising control over them,

- Operation of modern reclamation technology,

- Operation of reservoirs,

- Operation of pumping stations, irrigation and drainage wells. In line with the order, weekly

advanced training courses were

held in 6 areas at the VCs. At these courses, modular curricula and manuals in 4 areas were used. They were elaborated under the project jointly with CSSVE, the Ministry of Agriculture and Water Resources, Tashkent institute of irrigation and agricultural mechanization engineers, as well as qualified specialists of water management enterprises. More than 4,500 managers of a water users association, hydraulic engineers, engineers-technicians, and operators of water facilities undertook training at advanced training courses.

According to the action plan, advanced training courses for "industrial irrigation and amelioration" specialists were held at the Tashkent institute of irrigation and agricultural mechanization engineers.

The advanced training courses improved the skills of 49 masters of practical training.

In order to increase the work experience of the masters of practical training, courses











MAIN FACTS

The project conducted 32 trainings and workshops

About **1000** people developed their capacities in workshops.

on specialties were organized for 18-hour courses at the enterprises of Tashkent Plant "Agregat", Tashkent Plant "Suvsanoatmash", "Uzsuvloyiha", "Uzmeliomashliz-Subsidiary ing Service", also Kuyi-Chirchik college of transport and services. For the first time, on the basis of the training laboratory of the Tashkent institute of irrigation and agricultural mechanization engineers. 42-hour practical courses were organized aimed at improving the professional skills of masters-teachers of practical training at which students of the relevant profession learned to directly perform elements of professional activity at individual workplaces.

Over the past period, the project conducted 32 training workshops on the following topics:

- Development and improvement of sectoral educational standards and curricula for pilot professions.

- Methodical provision and effective implementation of advanced training courses for water management specialists at basic vocational colleges.

- Improvement of the educational process at the pilot VCs and regional training centers.

- Introduction into the process of teaching subjects and practical educational programs based on modular curricula.

- Organization and practical training for students of 2 courses of pilot groups.

- Using the excavator loader simulator based on the Minsk Tractor Plant (MTP) in the educational process.

- Improving the regulatory framework for the system of retraining and advanced training of housing and communal services personnel.

- The use of the training simulator «Electrogas welding» in the training process.

- Presentation of the information system (IS) «Registration and monitoring of vocational training and job placement» and others. Specialists from line ministries and agencies participated in these events. In general, at the seminars about 1,000 people improved their skills.

Pursuant to the order of the Center of SSVE as of January 19, 2016, a new version of the Regulation "On the Regional Vocational Training Center at the Vocational College" was developed, approved by a joint resolution of the Ministry of Labor and Social Protection of the Population, the Chamber of Commerce, the Council of the Federation of Trade Unions of Uzbekistan, as well as the Ministry of Higher and Secondary Specialized Education of the Republic of Uzbekistan.

In February and March 2017, a jointly agreed resolution was adopted by the territorial departments of the SSVE Center, the Main Labor Department, the Council of the Federation of Trade Unions and the regional departments of the Chamber of Commerce and Industry of the Republic of Uzbekistan to establish regional vocational training centers at vocational colleges Syrdarya and Samarkand in regions. In line with this resolution, Regional Vocational Training Centers were established on the basis of the Mirzaabad VC of land reclamation, Gulistan construction VC, Samarkand VC of computer technology and land reclamation, Bogishamal VC of industry and Bulungur agricultural VC.

In August 15-19, 2017 at the Institute for advanced training and retraining of the System of Secondary Specialized, Vocational Education, together with the Uzbek Association of Teachers of English, a 42-hour course "Basic Level in English of Teachers -TFT-1" was organized to improve the qualification of English teachers at pilot VCs. The training workshop was attended by 23 English teachers of 12 pilot VCs. At the Sectoral Center for training and retraining and advanced training the Tashkent institute of

irrigation and agricultural mechanization engineers, as well as at the Republican Training and Methodological Center «Uzkomof the munukuvtashkilotchi» Agency «Uzkommunkhizmat» (now the training and methodical center «Kommunalukuv»), workshops were held "Automation of pumping stations of water supply systems", "Drinking water supply system of buildings", "Reinforcement for water supply of buildings" and "Sodium hypochlorite production equipment". Events were attended by teachers of special subjects, trainers, employers and employees of the pilot VCs and staff of the project - a total of 40 people.

Together with the SDC project "Water Resources Management in Uzbekistan", advanced courses were organized to improve the skills of specialists of irrigation system departments on the "Use of information and computer technologies in the irrigation and amelioration system", based on educational and methodological materials developed under the project. Courses were organized from June 12-22, 2017 in the Republic of Karakalpakstan and in 11 regions. The courses were attended by 122 specialists, who at the end received certificates. In order to introduce the inter-sectoral information system into practice, in August 2018, together with specialists from the Center of VE and "Micros Development", a training seminar was held on the topic "Registration and Monitoring of Vocational Training and Job placement". At the seminar, specialists from 14 territorial departments of vocational education familiarized themselves with the principles of managing IS and its functionality, as well as gained the necessary practical skills in the information system. On August 28, 2018, the order No. 144 of the Center of VE "On the Implementation of the Information System" was issued and the administration group of the

"Registration and Monitoring of Vocational Training and Job placement" Information System was created under the leadership of the first deputy of the Center of VE.

On September 27, 2018, a training workshop was held in Tashkent for senior officials of the territorial departments of vocational education on the use of the information system. The seminar was attended by specialists of the Center of Vocational Education and responsible employees of the Institute for Innovative Development of vocational education personnel training and retraining, responsible specialists of the information system of VE territorial departments and responsible specialists of "Micros Development" for the development of an information system.

On September 28, 2018, a training seminar was held at the "Kommunalukuv" Training Center of the Ministry of Housing and Communal Services on the topic "Improving the regulatory framework for the system of retraining and advanced training of housing and utilities personnel".

On October 12, 2018, training workshops were held at the Mirzaabad vocational college of hvdro-melioration and on October 15 at the Samarkand vocational college of computer technologies and hydro-melioration on the topic "Using an excavator loader trainer based on MTP in the educational process". During the seminars, 41 industrial training masters from pilot vocational colleges, teachers in the specialties were trained to use the "Backhoe loader simulator" in the educational process. On November 27, 2018, the presentation of the information system «Registration and Monitoring of Vocational Training and Job placement» was held. The presentation was attended by the Ambassador of the Swiss Confederation in Uzbekistan,

Mr. Olivier Chave, project director













During the reporting period, on the basis of special curricula and programs, training, retraining and advanced training courses were organized for temporarily unemployed persons, specialists of enterprises, as well as for teachers and trainers of practical courses at 12 regional vocational training centers at VCs in Andijan, Namangan, Syrdarya, Samarkand, Fergana and Tashkent regions. During the reporting period, more than 8,600 people participated in the training courses.

Mr. Wolfgang Hellwig, First Deputy Minister of Higher and Secondary Specialized Education of Uzbekistan, Director of the Center of Vocational Education Mr. M.Kholmukhamedov, responsible officials of the Center of Vocational Training, representatives of partner ministries and agencies, as well as directors of pilot vocational colleges. On December 17, 2018 training seminars on the topic: "Using an electric-gas welding simulator in the educational process" were held at the Bogishamol industrial VC and on December 19 at the Gulistan construction VC.



4. EQUIPMENT PROVIDED FOR PILOT INSTITUTIONS

For the successful implementation of the project, the material and technical base of the pilot VCs plays an important role. To this end, the project undertook a number of activities on the organization and equipment of modern classrooms in the pilot VCs. In the 5 pilot VCs working group offices, seminar-training halls, an information resource center and computer laboratories, equipped with modern furniture and office equipment were set up. In addition, training laboratories "Automatic water pumping stations" were organized in the Bulungur agricultural VC, Samarkand VC of computer technologies and land reclamation, also Mirzaabad VC on land reclamation, and the Bogishamol industrial and Gulistan construction VCs, equipped with the most modern training stands, as well as an installation for the production of sodium hypochlorite.

A number of activities were undertaken to strengthen the material and technical base of the "Kommunalukuv" Republican Training Center of the Ministry of Housing and Communal Services. The training center includes: a hall for seminar-training, an office for occupational health and safety, a laboratory for water supply and sewage systems, a laboratory for the automation of pumping stations and energy saving, an information resource center and a computer room, as well as an office for the working group. Laboratory and training rooms are equipped with the most modern training stands, such as "Water supply and water

purification system", "Automatic equipment of pump stations of water supply systems" and "Testing valves and stop valves", as well as a facility for the production of sodium hypochlorite. All classrooms are effectively used for advanced training courses for public utilities specialists.

To date, more than 1,300 authorities of water supply and sewage utilities enterprises, engineers and technicians in the operation of water supply facilities, operators of chlorination plants, chairmen and employees of the houseowner's associations, employees of the subscriber service, etc., have completed advanced training courses, in all 16 specializations.

The classrooms of the Branch Center for Retraining and Advanced Training of Teachers at the Tashkent Institute of Irrigation and Agricultural Mechanization Engineers are equipped with computers and office furniture. Internet systems WI-FI, interac-

internet systems WI-FI, interactive boards in 7 classrooms at all pilot colleges of the project were installed. A textbook "Using the ESPRIT electronic board in the educational process at the Centers for advanced training and vocational colleges" has been elaborated. On the basis of this manual, trainings were organized for teachers of pilot colleges of the project and the "Uzkommunkhizmat" training center.















Information Resource Center, equipped with the most modern facilities was set up at the Information Resource Center of the Center of VE.

In order to put the information system "Registration and Monitoring of Vocational Training and Job placement" into practice, 2 servers were provided for the operation of the information system and in September 2018 were installed at the Center of VE.

Two pilot colleges of the project, Mirzaabad VC of land reclamation, and Samarkand VC of computer technologies and land reclamation, were equipped with simulators "Backhoe loader simulator".

In 5 pilot colleges of the project, electric and gas-welding equipment, as well as an electric arc welding training simulator, were commissioned. For the effective use of the supplied modern equipment, training seminars were organized for teachers of the training center, masters of practical training of basic vocational colleges, as well as for specialists from the industry.









MAIN FACTS

Under the project phase IV, pilot institutions are equipped with training and laboratory equipment in the amount of US

\$ 1,000,000



5. SUSTAINIBILITY OF PROJECT RESULTS



In order to ensure the sustainability of the project results, action plans were developed and approved in line with the established procedure to facilitate project implementation and introduce innovative project experience into the educational process in conjunction with the Information and Methodological Support Service of the Center of VE (approved on February 6, 2017), the Training and Methodological Center «Kommunalukuv» of the Ministry of Housing and Communal Services (approved on March 31, 2017) and the Center for retraining and advanced training of personnel at Tashkent institute of irrigation and agricultural mechanization engineers (TIIAME) (approved on March 10, 2017).

To this end, working groups for the dissemination of innovative project experiences have been set up in all the above mentioned organizations (Service Order as of January 20, 2017).

Trainings are organized to disseminate the results of the project for trainees of advanced training of VC teachers of special disciplines and masters of practical training.

On April 25 (for teachers of special disciplines), on May 22 (for masters of practical training) and on June 16 (for teachers of special disciplines) in 2017, leading specialists of the CVE and the staff of the project conducted training at the Center for Retraining and Advanced Training of Personnel at TIIAME to evaluate the obtained innovative results of the project. The courses were conducted by VE Center specialists, managers and project experts. Upon completion of the advanced training courses, all 35 teachers and 31

masters were given CDs with electronic manuals on "Water Management and Land Reclamation" elaborated by the project. The electronic versions of textbooks developed under the project have been transferred to the Chamber of Commerce and Industry of the Republic of Uzbekistan for the use by small businesses and entrepreneurship.

In order to ensure sustainability and disseminate experience and results of the project, all the resources of the "Skills Development Project in Uzbekistan" are available on the official website of the Center of VE:

www.markaz.uz under the heading «Useful links» and on the website www.innovatsiva.simplex.uz.









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