

learning. Didactics is a developing field that expands its theory by combining research and teaching. Innovative solutions are needed to meet challenge and respond to the challenges of learning and teaching in digital age with intensive use of information and communication technologies. One of these solutions is based on application of engineering methodology to study teaching and learning processes.

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**FERGHANA VALLEY, INDEPENDENCE AND DEVELOPMENT OF RURAL
INFRASTRUCTURE**

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Abstract: the article analyzes the Fergana Valley Village Infrastructure Development for years of independence on the basis of archives.

Keywords: action strategies, rural, housing, land, natural gas and drinking water.

Today, leading politicians and experts of the world are assessing the new stage of socio-economic development of the country. Indeed, the idea that "The public institutions should serve the people, not the people's public institutions" has become the main subject of state policy in our country today.

Dear Head of State Shavkat Miromonovich Mirziyoev, in his address to the Oliy Majlis on December 22, 2017, said, "We all should not forget the fact that the only source of the law and the author must be literally people"[1].

In recent years, a number of Decrees and Decrees have been issued by the President of the Republic of Uzbekistan to develop the country, improve the lives of people and further improve their living conditions.

In particular, in the five priority directions of the development of the Republic of Uzbekistan for 2017-2021, the Action Plan identifies concrete tasks for the next five years. The fourth direction of the strategy of action is directly directed to the social sphere, which includes employment, real income growth, social protection, health care, medical care, increase of women's socio-political activity in society, creation of cheap and nanny houses, promoting livelihoods, promoting education and science, and improving youth policy[2].

It outlines a number of challenges for the rural population to achieve decent living, livelihoods, rural infrastructure development, and construction of exemplary cheap housing units.

If we analyze the work carried out in these directions in the past period, the population of the Republic of Uzbekistan in 1989 was 19,780.0 thousand, of which 59.3% lived in rural areas[3].

By 2010 the population of the republic reached 29123,4 thousand people. During this period, 14,226.0 thousand people lived in rural areas. The population of the Republic is 31575.3 thousand in 2015 and 15869.7 thousand live in rural areas[4]. Of course, provision of housing to the population is one of the most important and priority tasks. And as of 1989, only the rising part of the population was provided with a perfectly furnished home in Uzbekistan. "In rural areas, there are 240,000 families. More than 1.8 million yards are needed for housing and agricultural production"[5].

This situation could have been observed throughout the country, including in the densely populated Ferghana Valley. As it is known, on August 17, 1989, at the Government meeting of the Republic of Uzbekistan, the issue of allocation of land and individual plots for the population was discussed, and an average of 25 hectares of land was allocated to each rural resident.

In 1990-1992, the Andijan region received land plots for more than 106,000 houses[6]. In accordance with the Decree of the President of the Republic of Uzbekistan I.Karimov January 11, 1991, on January 1, 1992, in addition to the population of Andijan region, 8749 hectares were allocated for further development of private households and improvement of housing. Of these, 39,134 new families have been allocated to expand 4,123 hectares of land and 4626 ha of land to 69,214 households.

In all areas, except for Shahrihan and Boz districts, the assignments for land allocation have been fully met[7].

According to statistical data, 1219.8 thousand square meters of housing was built and commissioned in rural areas of Uzbekistan in January-March 2009[8].

It is well known that the implementation of the programs on eliminating the gap between rural and urban areas, improving the social conditions in the villages and providing them with drinking water and natural gas is of a political significance. The decree of the President of the Republic of Uzbekistan of July 28, 1990 played a great role in eliminating the plight of the villages. It was tasked with supplying the rural population with gas and drinking water. In 1992 alone 432 cubic meters of gas pipelines were laid in Farghona region. 18,660 households were gasified. However, in all the cases except for Yozyovon, Rishtan and Ferghana districts were allowed to slow down.

There were 1164 villages in Ferghana region, of which only 420 had access to gas and drinking water. The situation in this area was particularly worrying in Besharyk, Tallar and Uchkuprik districts[9].

The Resolution of the Cabinet of Ministers of the Republic of Uzbekistan of May 21, 1996 "On the Development Program of Rural Social Infrastructure of the Republic of Uzbekistan till 2000" became another important document confirming the strong social policy pursued by the Government.

This program served as a plan to substantiate important tasks that should be taken to improve the living standards of the rural population by 2000.

The program aims at shaping a decent life style for the population on the basis of further improvement of rural life, trade, public catering, public education, medical, cultural, community service, housing construction and communication.

The Andijan Regional Program for the Development of Rural Social Infrastructure for the period up to 2000 has been developed and approved by the regional governor's office.

According to the program, in 1996-1997 30 rural bridges, 12 thousand 200 secondary schools, hospitals for 160 places, 881 thousand square meters of housing, 763 km of gas, 119 km of water networks, less than 20 thousand square meters of trade , Catering for 13 thousand places and 155 domestic service objects were commissioned. 42 rural doctors' outpatient clinics, medical aid stations were transformed into rural health centers[10].

Of course, as a result of population growth in rural areas, their needs for drinking water also increase. During the first six months of 2007, 89.8 km of new drinking water supply networks, 48.94 km of drinking water supply networks, 28 wells, 32 wells, 30 new pumps were repaired in 103 rural settlements of Ferghana region and 22 major pumps were repaired.

In the first half of the year, the plan to improve drinking water supply in 42 settlements has been fully implemented. Additionally, drinking water supply has been resumed in 54 villages in addition to 12 additional ones. The Ipoeka Bank allocated 300 million soums for these purposes, 142 water pipes were installed and 43,71 km of drinking water pipelines were assembled[11].

In conclusion, it is possible to say that in the years of independence, the country has increased the employment of population, social protection of citizens and their health, development of transport, engineering-communication and social infrastructure, improvement of gas supply, improvement of quality of social services to vulnerable groups, Improving the status of public life in the country, reforming the healthcare system, ensuring the accessibility of pre-school education institutions, legal education, to improve the quality of secondary and higher education, along with a number of activities such as the construction of housing in rural areas a lot of work has been done.

President of the Republic of Uzbekistan Shavkat Mirziyoev dwelled on the work carried out in our country in his appeal to the Oliy Majlis on December 22, 2017, "Taking into account the needs and aspirations of our people, we started to implement this year the project on construction of cheap housing on preferential mortgages. In the cities and villages, more than 3,5 million square meters of typical houses and multi-storey houses have been built. If we compare this number to previous years, we see that 20 times more than in 2007, 3,5 times more than in 2010, when compared to 2010, and 2 times more than in 2014"[12].

He also dwelled upon the work being done in the five key priorities of the Republic of Uzbekistan for 2017-2021: "2018 - Year of Support for Innovative Entrepreneurship, Innovative Ideas and Technologies". "The population, especially young families, taking into account the needs of the citizens, we are consistently continuing to work on building cheap and high quality housing. To this end, specific plans have been developed to increase the scale of construction of typical and affordable housing by 2018 by 1,5 times compared to the current year"[13].

Indeed, these reforms are a clear indication that human interests are superior to everything in our country.

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Problems of modeling of new generation vaccine against a flu virus

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Abstract: We have done comparison of hemagglutinin amino acid sequences of a flu virus type A. The conservative and unique fragments of hemagglutinin were revealed. Beside the fragments, it was found that they are inherent for flu virus only. The information can be used for synthesis peptides with expected functions. Probably, this will be useful for production a universal vaccine against a flu virus.