

ГЕОГРАФИЧЕСКИЕ НАУКИ

ECONOMIC SOCIAL AND ECOLOGICAL SIGNIFICANCE OF USE ALTERNATIVE ENERGY

(A case study of Mirzachul valley)

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ABSTRACT. Nowadays, the use of organic fertilizers in all areas of energy conserves environmentally greenhouse gas emissions. As a result, global climate change is territorial. In order to prevent this negative process the world community takes a number of measures. In order to prevent this negative process, the world community takes a number measures. In addressing this urgent problem, the leadership of the Republic has given serious attention to the issue of adopting the 4512 Decree on March 1 2013 on measures to further develop alternative sources of energy. The essence and of the decree is not only economic, political, historical and ecological.

Key words. Solar energy, wind energy, hydropower, bioenergy, greenhouse, wind resources, mountainous areas.

Introduction. Renewable energy sources are of major importance in the conservation and rational use of natural energy resources as these energy sources are characterized by ecologically clean. The following sources of alternative energy resources are available in the Republic.

- Solar energy
- Wind energy
- Hydropower
- Biomass energy

Taking into consideration the geographical location and rationality of the sun and wind resources in our research work we want emphasize the characteristics of wind energy. Western Europe, Britain, Germany, France, Denmark, Netherlands, The United States and others have been using wind energy for many years in industrial and agricultural spheres. Winds in the global cause the total circulation of the atmosphere to constantly activate the air masses and this process is periodically repeated. Energy is the source of energy by using wind power. The wind changes as a result of the intensity of sunlight and changes in different geographic widths. Geographical location and relief structure of our republic air masses create constant horizontal movements. But the fact that the wind movement is not the same for all the regions does not allow the use of wind energy anywhere. Therefore, the study of wind strength, direction and coloration of the wind is of scientific practical significance and it is important to create wind geographical distribution maps. The uneven distribution of the wind in all regions of our republic depends on the relief. Characteristics as well as the mountain winds in the mountainous regions. The use of wind energy is of high economic importance and wind power generators are twice as expensive as traditional generators. Current studies on the use of wind energy determining the direction and direction of the wind force are the creation of large wind generators and their use as energy sources and connecting them to existing energy grids.

Main part of the paper. A number of research works on the use of wind energy in our country are un-

der way Samarkand scientists professor A. Raxmatullayev on the scientific of the wind resources of Samarkand region are underway and they have developed maps, maps and maps for the winds and developed proposals for their future use. In addition, a number of works are underway in the country to use wind energy. However, this does not happen at the level of demand because in Europe, more than 10-15 % of all energy produced by wind is in wind power. The largest wind power plant was installed in Tashkent region in Charvoq water reservoir. Wind power installation with a capacity of 750 kw was carried out with South Korean Dojin So LTD. Anemometers and other control measuring devices have been installed on the wind turbine tower at a height of 40 m. Wind energy production annually produces 1,2,3 million kilowatt hours of electricity, saving up to 700,000 cubic meters of natural gas. According to the Institute of Uzhydromet, the average wind speed in the wind farms is 4.6 m\sec and 6.6-7.1 m/sec in the winter.

The specified wind speeds ensure stable wind turbine operation. The increase in the use of wind energy in our country day by day is a good result. Because wind installations do not occupy large areas, secondly it is desirable to assemble the wind generator energy in special accumulators, taking into account that in the territory of pasture live took breeding livestock households in the Kyzyl-Kum area do not constantly wind the demand for electricity. The main part of generated electricity cost is the initial of constructing of SHW. The foundations of the SHES tower are typically underground. It will give an opportunity to continue to growing locally grown agricultural products. Therefore, allocation for SHES doesn't influence a signification impact on crop yield. In addition, during the exploitation the SHES does not require any fuel. For example, SHW with a capacity of 1 MW sows economize about 29,000 tons of coal or 92,000 barely of oil in 20 years. Unlike other energy producers, they do not pollute the environment through harmful emissions. Such a SHW with a capacity of 1 MW prevents the atmospheric contamination of carbon dioxide emissions per year by 1800 tons

suffer oxide gas by 9 tons nitrogen oxide by 4 tons. Another advantage of the SHWP is that they can compete with other renewable energy sources under certain conditions.

Results. Most importantly, the wind that is the source of energy for the SHEWS is never ending. As experts say wind, energy is 100 times more than the resources of all rivers on the planet. The wind velocities at the altitudes of 7-4 m above the ground earth are 10-15 times higher than ground level and the velocity of this flow varies almost throughout the year. As a result, it can serve as a source of steady wind energy.

As it is seen above, there are a number of problems associated with the implementation and implementation of scientific research methods in wind energy development in the world. The primary problem is the wind's instability. This instability is manifested by the rapid change in wind direction and speed. This creates the possibility of changing the power of the SHES. In this case, it is impossible to transmit energy to a specific power in a relatively local area of the SHW it is advisable to use battery batteries to ensure the stable and stable operation of the SHES network. They pay the electricity generated by SHES and transfer them to consumption at regular intervals ensuring that the supply continues uninterrupted. Experts estimate that the total potential of wind energy in our country is equal about 2.2 million tons of oil equivalent. However, the potential for wind energy in particular including the Ustyurt and Bekabot is not fully implemented. It is also estimated to be 10 meters high. In fact, it should be 25 to 100 meters high. In general, scientific research of the winds of constant wind energy are of great importance for the further development of our economy in meeting the energy needs of the republic.

We have envisaged number of work on the use of wind energy in the Jizzakh region, which has an urgent task in our research. Plains and foothills of the Mirzachul oasis have rich wind resources. In the plain area, the winds are usually more than 5m/sec. Most of the rural districts of Pakhtakor, Arnasoy, Dustlik, Mirzachul, Zafarobod and Forish villages of the region provide plains and allow wind power statues to operate smoothly. In the foothills of the Jizzakh province, the wind speeds are 3-3.5 m/sec, which allows wind energy to be used. When the wind speeds up to 3 m/sec the rotation of the windmill creates optimal electricity. In windy and mountainous areas, the wind speeds are 5-6 m/sec in separate parts of the mountainous regions, which results in doubling wind energy. The wind patterns between the mountain and the plains are charac-

terized by frequent repetitions of strong winds. Therefore, the Jizzakh region requires a scientific study of the geographical distribution of the wind to effectively use wind energy the creation of maps based on its velocity study and the use of wind energy in each region.

Conclusion. Whenever a scientifically detailed study of the direction and the speed of the winds it will be possible to increase the efficiency of its use. This in turn affects the development of the economy and at the same time plays an important role in muting the populations electricity needs. In summary, the use of wind energy requires little cost on the other hand it is characterized by ecologically pure and regenerative. Taking into account the fact that wind energy in developed countries of the world is currently about 5-20% of total energy use it is desirable to increase the use of wind energy in our country in the future. In this way while sat is flying the needs of the population level it is best to use energy generated on the basis of wind energy generating facilities in areas where there is no potential for some directly supply. Given the large number of mountainous and foothill areas in Jizzakh province these areas are important for the efficient use of wind energy.

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