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THE POSSIBILITY OF PRODUCTION OF NON TRADITIONAL ENERGY BASED ON THE NATURAL RESOURCES

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Abstract. *Possibilities of taking electricity from Mirzachul oasis natural resources (water, wind, oxygen) (A case study of Mirzachul oasis) will be analyzed. Moreover, suggestions and recommendations will be given based on rational use of energy resources.*

Key words: *sun radiation, natural resources, hydrocarbon resources, wind energy, water energy, wind speed.*

I.INTRODUCTION. After the Republic of Uzbekistan was independence, radical reforms were carried out in the rational use of nature. Nowadays, in the Republic protection of the environment and there is a state program for the national use of the natural resources for 2017-2021, and roadmaps for its implementation have been developed and reflected in a number of work done so far. All scientific and practical activities in the field of rational use and protection of nature are organized on the basis of this program. The work of the program based: "It is necessary to change the natural conditions in the regions with a purposeful, scientifically grounded approach to ensure efficient and integrated use of natural resources." In order to use natural resources of the regions, it is important to learn them in a scientific way and to use technologies that are not environmentally friendly. We have focused our research on the possibilities of generating environmentally friendly non-traditional energy from the wind, water and solar radiation of the Mirzachul oasis. The aim of our research is to develop the regions economy and supply it with electricity.Research and implementation of alternative energy generation opportunities will save natural hydrocarbon resources (gas, coal, oil) and at the same time reduce CO2 emissions into the environment, which will partly reduce air pollution.

II.THE MAIN PART. Currently, 90% of the Republic's electricity is produced at thermal electric stations. During their operation large quantities of carbon dioxide and several toxic gases are released. The Republic is a member of a number of international organizations in the field of environmental pollution prevention, including the Kyoto Protocol, which aims to optimize the environmental situation through the gradual reduction of carbon

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dioxide emissions, and the use of energy-less polluting energy resources. Thus, it is important to use renewable energy resources. This determines the relevance of water, wind and solar radiation resources available in our country. Alternative energy will be the main source of energy in the world in the future. So it is in important issue of today. For example, during the operation, the wind power station does not require any fuel, and 1 MW of SPS will produce no more toxic gas in the environment by saving about 29,000 tonnes of coal or 92,000 barrels of oil in 20 years.

Wind energy sources in Uzbekistan have a capacity of 520,000 MW and 1 billion megawatt/hour of electricity. Unlike other energy producers, they do not pollute the environment with harmful emissions. Such 1 MW power plants reduces carbon dioxide (CO2) emissions by 1,800 tons, sulfur dioxide (CO2) by 9 tons, and nitrogen oxide by 4 tons. By 2050, the world will reduce its annual CO2 emissions by 1.5 billion tons due to the use of wind energy. They can compete with other renewable energies.The most importantly, there are a lot of energy in the nature for the WES, and experts say that the wind energy source is more than 100 times the water available in all rivers on the planet. It should be noted that the wind speeds at 7-14 km above the ground surface are 10-15 times higher than those at the ground level, and the velocities of these streams are virtually unchanged throughout the year. In the future, their scientific study and use will give them hope for a great future in wind energy.

The Republic of Uzbekistan, including the Mirzachul oasis, is not only rich in sun, but also wind and hydro resources. To study wind energy resources, it is necessary to collect data from meteorological stations located in the region, to study hydroelectric rivers and streams, and to analyze the possibility of generating electricity from them. This enriches the potential for alternative energy generation.

Existing meteorological stations in the region (9 meteorological stations) are not sufficient, they do not cover all areas of the oasis. In addition, at meteorological stations, the wind speed and direction are measured at 10 meters. Buildings and tall trees in populated areas to some degree prevent the wind speed. That is why it is important to carry out additional observation at 20-40 meters in populated areas. Depending on the location of the area, the proximity of the watersheds, local winds form, but in certain seasons, in certain seasons (in the areas adjacent to the Lake Aydarkul of Farish district, in the Baliklug and Pistalitogs, in the Lake Jilliguli, on the LakeArnasai).there are long winds. Winds in such locations can be studied by expedition or semi-stationary measurements. The data obtained in the regions should be summarized and processed based on statistical analysis. Based on the results, the regions are characterized by rapid and constant wind, moderate wind, moderate wind, and so on. Prof. O.Rahmatullaev and leaderships Samarkand State University of thefaculty of geography and ecologic researches for the studying and mapping of wind resources since 2014. We would like to apply the experience gained in this research to the Mirzachul oasis. First of all, we propose to create wind maps and use wind maps, analyzing wind speed, direction and dynamics of the existing meteorological stations and meteorological stations located in and near the Jizzakh and Syrdarya regions.

The wind speeds up to 3 meters per second and starts to generate effective electricity. According to meteorological stations, the average annual wind speed in the Jizzakh and Syrdarya regions is 3.0 m/s. During spring

and summer at an altitude of 10 meters above the ground, the average monthly velocity is several times higher than the average annual average, with wind speeds of 30-40 meters higher. Research on wind resources in Uzbekistan, conducted by GEONET in Germany, also highlights that Jizzakh and Syrdarya regions are rich in wind energy. This is due to the fact that the valley is driven by mountain winds from the surrounding mountains and by the constant "Bekabad"blizzard from the Ferghana Valley.

Winds coming from the northwest and north of the Mirzachul oasis are more powerful. Northwest winds account for 43% of all winds in the Chardara River. The south-east of the region is characterized by strong winter southeast winds. The average wind strength is 2.6-3.8 m/s in Pakhtakor, 3.4-3.2 m/s in Jizzakh, 2.3-3.6 m/s in Mirzachul, 3.3-3.8 m/s in Havas. The local wind typical of Mirzachul is the Bekabad wind. The wind of Bekabad mostly falls in winter and the wind speed reaches 30-40 m/s. In summer the wind speed does not exceed 15-20 m/s. Mountain winds blowing into the oasis are also characteristic and are characterized by constant blowing in some mountainous areas of the oasis.Based on the data collected, a map of the economic efficiency of wind resources of the Mirzachul oasis is made and mapped. The Mirzachul oasis is living to more than 1.5 million people, mostly in rural areas. Energy needs of the population of the region and the use of wind energy are important for the supply of agricultural enterprises in the area, and their construction is not costly and expensive. Due to these features, the use of wind energy in the region is promising.

Most people in the Mirzachul oasis live in the valley, steppe and desert areas. They cut down for fuel the natural forests, shrubs and trees in the mountains of Morguzar, Nurata and the shrubs along the Aydarkul, dark, sakhaul and other bushes. As a result, the soils are washed out on the slopes, the spring and river waters are depleted, the floods intensify, and soil erosion intensifies in the plain areas. To prevent these negative processes, it is important to provide fuel to the local population. The quicker and wider the use of wind and solar energy in the countryside, the greater the environmental demand would be if we were to meet the population's demand for energy. Next, the use of wind and water energy to cut down fuel consumption is dramatically reduced and there is stability in nature.

The use of wind energy opens up opportunities for groundwater extraction and development of non-irrigated agriculture in mountainous plains, remote pasture and irrigated agriculture. The development of wind energy will create great opportunities for new jobs. More than 600,000 people work in the wind energy industry around the world. According to statistics, the total amount of fossil fuels in the world is only 130 years for human needs, and the need for more widespread use of non-traditional types of energy is inevitable. The creation of wind power plants will also have a positive impact on the employment rate and will create new jobs.

There are many wind resources in the plain and in the foothills of the region. In the plains, there is a tendency for winds to exceed 5 m/s. Therefore, wind speeds that run at this speed are idle here (less than 30% of the time). Most of the rural areas of Pakhtakor, Arnasay, Dustlik, Mirzachul, Zafarabad and Forish are located in the northern part of the region. In the foothills, the average wind speed is 2,6-3,5 m / s. Therefore, wind energy facilities are remote in most of the foothills; running idle. The exception is the separate mountainous terrain (at intervals of

Jilliguli, Gallaorol, Baliklog and Pistalitogs at speeds of 5-6 m/s), which are located at the exit from the hills. Placing solar panels in these areas can help prevent power outages.

Wind energy is mainly due to two factors: wind speed and blade length. With wind speeds of up to 2 m / s, the blades begin to spin faster and produce less electricity. At this speed, 3.0 m long blades 0.01 kW and 4.0 m blades provide 0.02 kW of energy. When the blades are 7 m in diameter, winds of 3m/s and 4m/sec provide 0.23 kW and 0.56 kW of electricity respectively. In the Sangzor valley of the Mirzachul oasis, the average wind speed of the year is not less than 3-5 m / sec at the Bulungur Metrological Stations located near Bakhmal, Fallaorol, and Bahorikor. So wind generators can be installed in all areas and villages of the Sangzor Valley, where they can generate a large amount of electricity. However, some days may be longer than days without wind. In this case, the use of solar energy combined with wind energy can be quite effective.Currently, there are 6 meteorological stations and stations in Jizzakh region and 10 in Syrdarya region. The wind speed and direction at these stations and posts are measured at 10 meters. According to the project plan, we will create 4 new posts, all of which will be measured at a wind speed of 40 meters and determine the intensity of solar radiation. In addition, we use manual anemometers to measure the wind speed from time to time and, if automatic recorders are used, several more stationary posts can be created.

The database will be the basis for scientific evaluation of the region's electricity and wind and solar radiation resources. The data are made by the wind and solar radiation resource maps of the Mirzachul oasis. The velocity, directional, and electrical energy of the maps are clearly indicated on the maps, in colors, charts, figures and figures. In addition, maps show the intensity of solar radiation and seasonal variations. Created maps are a scientific basis for the installation of wind and solar systems, but are also important in the distribution of energy to the population.

III.CONCLUSION. Addressing the above mentioned issues is an urgent task, which will play an important role in the economic growth of the country. It is important that after independence the state paid special attention to the development of non-traditional energy resources, as well as all other spheres, and developed legal and regulatory documents and roadmap for the development of the industry. In addition, the provision of tax and tax incentives for economic incentives for non-traditional energy users will lead to a more dynamic development of the industry in the future, which will play a key role in ensuring environmental sustainability in reducing energy pollution.

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