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Issue Article

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GREEN JOBS: CHALLENGES

Abstract: *The key element of environmentally sustainable economic and social development is considered to be progress towards a green economy that creates green jobs and improves the environmental safety of organizations aimed at greening production processes and workplaces. The implementation of these measures is impossible without the integration of social development and environmental protection programs together with efforts to ensure occupational safety. The article deals with the development of green jobs in Uzbekistan and abroad.*

Key words: *Green economy, sustainable development, green jobs, ecology, environment, natural resources.*

Language: *English*

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Introduction

In the 70s of the XX century. The Club of Rome formulated its views on ensuring social justice, including the rational distribution of natural resources among the population. Attempts to compare and analyze the problems of the labor market and environmental protection have been made since the early 1980s, when it became necessary to fully take into account and evaluate environmental, economic and social factors of sustainable development.

In 2008, the United Nations Environment Program (UNEP), the International Labor Organization (ILO), the International Trade Union Confederation (ITUC) and the International Employers' Organization (DOE) jointly launched the Green Jobs initiative. The goal is to ensure a fair transition to a green economy by providing workers, employers and governments with a space to negotiate policies effective in providing equal opportunities for green jobs. The United Nations Environment Program (UNEP), the International Labor Organization (ILO), the International Employers' Organization (IOE) and the International Trade Union Confederation (ITUC) are jointly implementing a campaign called "Green Jobs". This campaign supports the concerted efforts of Governments, employers and trade unions to develop and implement – in a climate–challenged world - environmentally sustainable and consistent policies, as well as effective programs aimed at creating green jobs and promoting decent work for all. The program of this campaign declares an "honest and fair transition", in which the necessary assistance is provided to victims of climate change and new opportunities are created, jointly used by employers, employees and their organizations, as well as other organizations and structures operating in the social sphere, and communities. New, comprehensive policy measures are required to develop viable enterprises, stimulate job creation, increase the level of education and training of employees, improve the functioning of the social security system and facilitate the transition process.

Research methods. When writing the article, the methods of synthesis and analysis of the studied materials on green jobs of foreign and Uzbek scientific publications, were used.

The discussion of the results. The 2008 UNEP/ILO/IOM/INC joint report broadly defines green jobs as any jobs that meet the principles of decent work that contribute to the conservation and quality restoration of the environment, whether in agriculture, industry, services or management.

The analysis shows that the implementation of the policy on the management of green employment

has its own characteristics in the context of individual types of economic activity, which should be taken into account when developing and implementing national strategies for socio-economic development. Along with a qualitative analysis of the relationship between the escalating environmental and climate problems and the labor market, appropriate quantitative assessments of changes in the labor market in the face of new global challenges are also needed.

In the specialized literature, green jobs are classified:

- as business jobs that produce goods or services that benefit the environment or preserve natural resources [1];

- Workplaces whose responsibilities include the implementation of the production processes of their enterprise. more environmentally friendly or use less natural resources [2];

- The Bureau of Labor Statistics divides "green" jobs into the following categories: water conservation, sustainable forestry, biofuels, geothermal energy, environmental restoration, sustainability, energy auditors, recycling, electric vehicles, solar energy and wind energy. These definitions include jobs that are aimed at the use or development of renewable forms of energy as well as at improving their efficiency [3].

The field of "green" jobs also includes education, training and public awareness. These jobs are aimed at ensuring compliance with regulatory requirements, supporting education and increasing public influence for the benefit of the environment. In the context of the transition to green jobs, the international labor community has focused on the disappearance of carbon-intensive jobs, communities will have the most effective opportunities in these other industries.

In this regard, tripartite social dialogue and collective bargaining are becoming important. It is necessary to pay due attention to the gender aspects of this transition in order to ensure equal opportunities for men and women when creating "green" jobs.

The transition to an environmentally sustainable economy has led to an increase in the number of "green" jobs – jobs of a new type that play a significant role in the greening of enterprises and the economy. The identification of green jobs and their assessment are a tool that contributes to understanding the relationship between environmental sustainability and the labor market [4,5].

Green jobs have been created in many sectors of the economy, from energy supply to waste processing and from agriculture and construction to transportation. Thanks to green workplaces and the use of high-tech strategies, it is possible to reduce the consumption of energy, raw materials and water, free the economy from carbon-containing substances and reduce greenhouse gas emissions, minimize any forms of pollution or reduce the amount of production waste, protect and restore the ecosystem and biological diversity.

Discution. Green workplaces play a crucial role in reducing the impact of economic activity on the environment. This reduction is consistent, and different types of work contribute to this in different ways. For example, the contribution of workers engaged in the production of cars with fuel-efficient or hybrid engines to reduce transport emissions will be lower than the contribution of those who work in the public transport system. In addition, what is considered fuel-efficient today will not be considered as such in ten years. Many types of work that are green in principle are not so in practice because of the harm caused to the environment by inappropriate activities. In addition, the facts show that green jobs do not automatically create prerequisites for decent work. For example, many of today's waste recycling jobs restore raw materials and thus help reduce the burden on the use of natural resources. But it uses a process that is often dirty, dangerous and difficult and which causes significant harm to the environment and human health. Employment in this industry takes the form of wage labor, and incomes remain at a very low level.

In practice, these jobs reduce energy and raw material consumption; limit the release of pollutants; minimize waste and pollution; preserve and restore ecosystems; allow businesses and communities to adapt to climate change. Green workplaces play a special role in achieving the Sustainable Development Goals, as they cover minorities, women, youth and the poor. Rio+20 requires that minorities receive proper education and training to be able to become part of the green workforce.

Rio+20 mentions equivalent green jobs and decent jobs, but they are not equivalent, although they may be correlated. The ILO defines decent work "as opportunities for women and men to achieve decent and productive work in conditions of freedom, equality, security and human dignity." Decent jobs have income standards, equal opportunities and respect for human rights, which green jobs don't have. The social sphere in green workplaces is much weaker. Thus, although green jobs are linked to the environment and the economy... decent jobs are connected with society and economy.

Rio+20 is shaping a green economy as a way to create decent jobs through new technologies and sustainable consumption and production structures1. In this regard, it is clear to the COONUS that green jobs will be revolutionary because they will definitely change the market: "The transition to a green economy is likely to entail major changes in the nature of jobs." [6-10]/

1) Employees will have the necessary skills acquired through education or training;

2) Employees will have the necessary social protection, for example, old-age pensions or accident insurance;

3) Employees will have access to medical care;

4) Women and men should have equal access to opportunities to acquire work skills;

5) Employees will enjoy basic rights in the field of work. Technologies are replacing outdated ones, old jobs are disappearing, and new jobs are emerging, green jobs.

Russia, as well as the whole world, faces the task of modernizing the economy, the ultimate goal of which is to improve the living conditions of every person today and ensure favorable conditions for future generations. In the Russian Federation, the principles of the green economy began to be implemented with a change in legislation since 2009. The law on energy saving has been adopted, amendments have been made to the laws of environmental expertise, industrial safety, environmental protection, etc.

For Russia, the very concept of "green economy" is new, and it is not actually used in official documents. Nevertheless, the country's goals for the next 10-20 years largely correlate with the goals of the transition to a green economy [4,5,6].

Let's name at least a few basic documents adopted in the Russian Federation recently, directly related to the "greening" of the economy. These are: "Climate Doctrine" (2009); Action Plan for the "Climate Doctrine"; Decree of the President of the Russian Federation dated September 30, 2013 No. 752 "On reducing Greenhouse Gas emissions"; Decree of the Government of the Russian Federation dated April 2, 2014 No. 504-r "On approval of the Action Plan to ensure by 2020 reduction of greenhouse gas emissions to no more than 75 percent of the volume of these emissions in 1990"; Decree of the President of the Russian Federation "On Improving Energy and Environmental Efficiency" (2008); Law "On Energy Efficiency" (2009); Energy security Doctrine approved by the President of the Russian Federation on November 29, 2012; Energy Strategy of the Russian Federation until 2035; Water Strategy of the Russian Federation until 2020; State Program for the Development of Agriculture and regulation of agricultural products, raw materials and food markets for 2013-2020.; the forecast of scientific and technological development of the Russian Federation for the period up to 2030, approved by the Government of the Russian Federation on January 3, 2014, and many others.

In Russia, environmental monitoring and methods for calculating fees for negative environmental impacts are based on maximum permissible concentrations (MPC), while the standards are calculated on the basis of mathematical models. In addition, we have set ourselves such conditions that it is practically impossible to implement them: for example, in Europe, only 10 to 60 indicators are controlled, and in our country, according to the accepted regulatory requirements, more than 2000 substances should be controlled. Russia is beginning to move towards green technologies in construction, chemistry, and energy. According to the World Health Organization, over one hundred thousand chemicals and 200 biological factors, about 50 physical and almost 20 ergonomic conditions, types of physical activity, many psychological and social problems can become harmful factors and increase the risk of accidents, diseases or stress reactions, cause dissatisfaction with work and disrupt well-being, and, consequently,, affect the health of workers at the facilities of the economy. Poor health and reduced ability to work can cause economic losses of up to 10-20% of GDP. Most of these problems should be solved both in the interests of the health and well-being of workers and in the interests of the economy.

According to the World Bank, for example, 2/3 of the lost working years due to occupational disability can be prevented by occupational health and safety programs. Consider the development of the green economy in foreign countries.

For example, in Mexico, it is planned to build energy-efficient buildings, it is planned to reduce carbon emissions by half by 2050, and a program is being introduced to assist households to replace old household appliances with new models with higher energy efficiency [11-13].

According to the International Renewable Energy Agency (IRENA), there were 934,000 renewable energy jobs in Brazil in 2016, which is the second largest in the world. Although Brazil is the world leader in liquid biofuels with 845,000 jobs, it also has 41,000 jobs in solar energy, 36,000 jobs in wind power and 12,000 jobs in small hydropower. A report prepared by IRENA in 2018 showed that Brazil has the largest workforce engaged in liquid biofuels - 893,000 people in the renewable energy industry.

In 2011, "green" employment accounted for 3.1 million jobs or 2.4% of total employment in 2010 and 3.4 million jobs.

China produces the largest number of photovoltaic equipment in the world and is the world's largest installation market. China accounted for about two-thirds of employment in photovoltaic systems worldwide or about 2.2 million jobs in 2018. As for the total number of jobs in the renewable energy sector as a whole, there were 3.8 million jobs in China in 2017.

Germany is the leading state in the installation of photovoltaic capacity. So far, it has not been overtaken by China, the USA, India and Japan. In 2018, 332,000 people worked in the renewable energy sector in Germany.

In 2016, Japan ranked third in the list of the largest employers in the field of solar panels with 377,100 workers, based on direct and indirect labor. In terms of renewable energy, Japan has 3,000 jobs in liquid biofuels, 5,000 jobs in wind power, 700 jobs in solar cooling and heating, and 2,000 jobs in

geothermal energy. In 2018, Japan's economic slowdown meant that employment in the solar photovoltaic industry fell from 302,000 in 2016 to about 272,000 jobs in 2017.

In the USA, "Green goods and services" in 2010, 3.1 million jobs in the United States, which is 2.4 percent of all wages in the United States. There were 2.3 million GGS jobs in the private sector and 860,000 GGS jobs in the public sector.

Data for 2010 show that "green" jobs in the USA continue to grow rapidly. Currently, an energy revolution is taking place in the United States - from coal-fired power plants to renewable energy sources. Most of these additives come from three main sources: solar energy (9.5 GW), natural gas (8 GW) and wind (6.8 GW). Together, these three sources account for 93% of the total number added. The shift from fossil fuels to renewable energy sources will be reflected by employment in the US, as workers will abandon jobs such as coal mining in favor of green jobs. This is evidenced by a report published on April 17, 2017 by the Bureau of Land Management, which states that wind turbine maintenance specialists are currently and are projected to remain the fastest growing profession in the United States in the period from 2017 to 2024, an increase of 108%. The United States provides for an 80% reduction in harmful emissions by 2050: 65% of the energy consumed by the country and 35% of the heat will be produced with the help of solar installations.

China expects to receive 15% (now 9%) of electricity from renewable sources by 2020, and reduce the carbon capacity of the economy by 45%.

The key problem that determines the need for Uzbekistan's transition to a "green" economy is that the current "brown" model of the economy limits the country's ability to ensure sustainable long-term development, which creates risks and problems for current and future generations. In particular, most of the development strategies implemented in the country over the past decades have encouraged the rapid accumulation of physical, financial and human capital due to the depletion of natural capital.

Conclusion.

Despite the fact that the current development model has made it possible to ensure high rates of economic growth and increase the welfare of the country's population, there are negative consequences of the functioning of this system. These include environmental problems (the problem of the Aral Sea; climate change, land desertification, loss of biodiversity); depletion of water resources and degradation of land quality due to irrational use of land and water resources; depletion of energy resources due to the high energy intensity of the production process and insufficient use of renewable energy sources.

It is necessary to adopt programs and implement a global "green" course. Large amounts of money allocated for the purposes of "greening" can be used to achieve a "critical mass" of investments and employment, which will allow launching a "green" model of development. The adoption and implementation of plans for the "greening" of the main sectors of the economy will simultaneously coordinate efforts in both directions and reduce possible structural costs and make it possible to lay the foundations for a new "green" economy.

Evidence suggests that "green" sectors, such as building refurbishment and renewable energy, can become an important factor in reviving the global economy, while at the same time solving the problems of environmental crises and providing greater returns on capital compared to the model of "polluting development" or the growth of consumer spending. Preserving jobs and creating new ones, maintaining and increasing the level of income through investments in "green" sectors is very important both for ensuring social stability and for restoring aggregate demand in order to revive and sustain the development of the economy. Many "green" sectors provide more jobs per unit of investment or greater final demand in this sector compared to less "green" alternatives.

The National Workforce Training Council and the AED have published the report Going Green: Vital Role of Community College in Building Sustainable Future and Green Workforce, which explores workforce education on the transition to renewable and clean energy sources.

The capacity of the nuclear industry is also growing and contributing to the green jobs sector. In July 2020, the World Nuclear Association published a report entitled "Employment in the Nuclear Energy and Wind Energy Sectors". Overall, the report showed that a 100 GW nuclear fleet would employ perhaps more than three times as many workers as a wind fleet of the same capacity. These statistics highlight the growing opportunities for creating "green" jobs in the nuclear industry. Green jobs are attractive options because they directly solve the problem of the climate crisis, as well as provide competitive wages and good benefits. Nuclear power, in particular, can create thousands of highly skilled long-term jobs at the local level. There are many different jobs in the solar industry. SEIA supports a resource for those looking for solar jobs, for example, the coal industry, which is in decline, can protect its workers by retraining them to work in the solar industry.

With regard to the forest sector, a Team of Specialists (GS) of the Food and Agriculture Organizations of the United Nations (FAO) and the United Nations Economic Commission for Europe (ECE) identified potential "green" jobs in the forest sector. The GS has identified 19 areas of activity with a list of 30 examples of work in forestry.

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