# "GREEN ECONOMY AND SUSTAINABLE AGRICULTURAL DEVELOPMENT

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***Abstract***: *The article deals with the problem of transformation of agriculture. The main directions of development of sustainable agriculture are given. Advantages and disadvantages of organic agriculture are analyzed.*

***Keywords:*** *green economy, sustainable development, agriculture, sustainable agriculture.*

One of the most important areas of the "green" economy is sustainable agriculture, which in modern conditions is increasingly becoming "organic". Currently, agriculture does not fully meet the modern requirements of the global world. The agricultural production system is extremely wasteful. In this regard, a new trend in modern agriculture - the development of organic agriculture and livestock breeding becomes relevant.

Disadvantages of existing types of agriculture In developed countries, agriculture has recently been transformed into an industrialized process of food production, dominated either by large, highly productive capitalist farms with machinery and little manual labor, or by farms contracted to large MNCs (e.g., Nestle contracts with 600,000 farms). These farms provide food for the population of developed countries in abundance.

The industrialized system of agricultural production is wasteful, for example, in England up to 40% of vegetables on the bed are left unharvested because they look unmarketable, and 50% of food goes directly to waste (usually due to expiring shelf life in supermarkets). Developing countries are predominantly characterized by low-productivity extensive agriculture based on manual labor, which results in a constant increase in agricultural land while forests are shrinking. It does not provide the population of these countries with enough food (about 1 billion people go hungry). At the same time, 40% of the world's population is provided with means of subsistence precisely at the expense of agriculture and food production. Thus, modern agriculture does not provide the world with sufficient food and has a negative impact on the environment.

Challenges and main directions of sustainable agriculture development For the development of a green economy it is necessary to increase the productivity of agriculture, to make it sustainable. Sustainable Agriculture (SARD - Sustainable Agricultural Rural Development) is agriculture that produces high quality and healthy food, maintaining a balance of renewable and non-renewable resources, while minimizing possible damage to ecosystems. "The main objective of sustainable agriculture and rural development," states the definition adopted by the FAO agribusiness session, "is to increase food production in a

sustainable manner and to ensure food security"

Sustainable agriculture is based on social justice, i.e. to overcome poverty, it provides fair remuneration for farmers and agricultural workers, preserves village society and rural lifestyle, and respects ethical rules for the treatment of animals and the natural environment

In accordance with the principles of the green economy, the current ratio of prices for manufactured goods, raw materials and food products is distorted by the

laws of the free market, the dominance of TNCs (for example, Wal-Mart in the U.S. controls directly or indirectly 40% of food products sold, artificially lowering prices based on the principle of "low prices - high turnover"), the inability to attract capital (500 million small farms in the world exist without access to monetary resources), the historically established balance of economic and political forces between the developed countries, and the inability to attract capital. The world price for agricultural products is unfair - it does not take into account the costs of restoring nature and balancing crop and livestock production. It is necessary to reconsider the principles of correlation of prices for agricultural products and industrial goods. One of the sources necessary for agriculture to transition to sustainable development is state subsidies. According to UNEP, 1% of the world GDP is spent on subsidizing unsustainable agriculture by governments (e.g. purchase of pesticides or mineral fertilizers), when just the opposite is needed - the priority in subsidies should be given to "green" technologies.

The formation and development of sustainable agriculture requires special crediting of "green" projects in agriculture and forestry, which will be aimed at the preservation of natural biodiversity, along with the cultivation of monocultures on relatively large areas, maintenance of natural landscapes - forests, meadows, wastelands, swamps.

Livestock, feed and fertilizer should be considered as a single equilibrium system. For example, balanced livestock production involves keeping approximately one head of cattle per hectare of forage crop area, which creates a balance of feed and fertilizer, and the animals are provided with fresh air.

Thus, sustainable agriculture maintains a balance between the goals of increasing food production and consumption and the goals of environmental conservation.

Advantages and disadvantages of organic agriculture. Recently, the increase in production of organic agriculture is 20-30% per year. Its main difference is that it does not involve the intensive use of mineral fertilizers (usually only 50% of nitrogen is consumed by cultivated plants, and the rest of it simply pollutes nature) and pesticides-herbicides. Instead, a proper crop rotation system with obligatory participation of leguminous crops, use of organic fertilizers obtained on the given farm, as well as mineral fertilizers of natural type are suggested. The use of synthetic plant growth stimulants and genetically modified seeds is not allowed. "It must be understood that modern "organic" agriculture is not a backward production that promotes only manual cultivation of land, nomadic animal husbandry and other elements of subsistence farming. It is based on a scientific,

systematic approach, in accordance with which intensive technologies are developed, based on hydraulic reclamation, agroforestry, crop rotation, biological methods of pest control, precision seeding technology and various methods of minimizing tillage". It is wrong to think that "green" economy is against chemistry as a science, on the contrary, it is only with the help of scientific methods of farming that it is possible to radically increase labor productivity and achieve growth in production. However, uncontrolled and illiterate use of chemistry and genetics is extremely dangerous for both people and nature. For example, DDT is absolutely prohibited for pest control

in agriculture, as it is extremely toxic and harmful to people, but DDT is an excellent means of controlling mosquitoes - carriers of malaria, so in some cases it is impossible to do without it. Organic farming suggests that mechanical weeding can be used instead of herbicides (enemies of weeds). However, the risks to human health that exist in organic farming are still high, because when organic fertilizers are used instead of mineral fertilizers, vegetables become more of a source of salmonellosis. Organic farming also assumes that antibiotics given to sick animals will not enter the food. One of the problems with organic farming is its low productivity (minus 30-50%), but this is offset by the much higher price of organic produce (plus 20%-50%). At the same time, organic farming does not reduce, but increases employment of people in agriculture, which is extremely important for developing countries.

An important part of this process is the certification of organic products, because often under the slogan "Farmer's product" is sold an ordinary industrial product, but produced by a different technology. Organic agriculture exists all over the world, but it is Uzbekistan that has huge advantages in its development - huge territory, absence of fields polluted with mineral fertilizers, large tracts of land in state ownership.

Thus, Uzbekistan can painlessly make the transition to organic farming, which will increase the competitiveness of products in the world market, will contribute to overcoming the raw material orientation of the economy of Uzbekistan, will solve many important problems of socio-economic and environmental development of Uzbekistan.

Conclusions

1. Organic farming involves the production of agricultural products and their consumption in one area. In the global world, transportation of food products is expensive. This raises the question: "Why not localize food production on a given territory for given consumers?". It is not a question of abandoning the division of labor in agriculture in the global world (there is no point in trying to grow dates in northern countries), but the production of milk or meat may well be localized.

2. Organic farming offers the freshest product and the fastest way to get the product to the consumer. For this purpose, special organic stores or departments in supermarkets are created.

3. Organic products are healthier (especially for children, pregnant women). The demand for them is growing every year, which encourages the development of organic

food production. However, it is not possible to do without state support, here, as well as in organic agriculture, subsidies are needed.

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