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## SOCIAL AND ETHICAL PRINCIPLES OF ORGANIC AGRICULTURE

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The results of research of the expediency of replacement the agrochemical concept of agriculture for agrobiological were uttered. The organic farming, where the production philosophy is caring for the ground, obtaining ecologically safe food products, which is one of the main factors of human health, is subservient to this to the greatest extent.

**Keywords:** ecology, organic farming, agrobiological concept, healthy food products, environmental priorities.

**Setting of the problem.** Human is a part of nature and at the same time takes an active part in its life as a producer and as a consumer. Therefore, humanity must be directly interested in the saving and increase of soil fertility, and agricultural practices should be not only the focus of a narrow circle of professional interest, but also become a priority of universal and cultural life of the people.

Nowadays when air, water and land are polluted by products of human activity and despite all efforts environmental situation continues to degrade, people are increasingly begin to think about the environmental impact on their health. And it's not unfounded anxiety: now more than 90% of people of working age sicken and when they reach retirement limit they have the whole "bouquet" of diseases. The mortality of people of working age (from 20 to 50), namely in their prime, had increased by 2.2 times and it is higher than in countries of Western Europe in 3.4 times.

Analysis of recent research and publications, where solution of the problem is started, shows that negative dynamics of events can cause the fact that today's grandchildren will live for 8-11 years less than their grandparents. Nowadays, 85% of pupils have substantive variations in health indicators, and from 60 to 80% of boys – also have different limitations in suitability for military service. The life expectancy of Ukrainian people over the past two decades has reduced by three years. All this is largely due to the environmental situation, the negative impact of humans on which is obvious. There is no time to wait for better times conducive to solving this problem because in such circumstances "bright tomorrow" may not occur [4].

Now the presence of substances, which are harmful to human health, in air, water, soil and food products often reaches critical limits. And although agrochemicals, in total of harmful substances to human's health, take non-conductive place, but they directly affect the quality of food products, and therefore they are especially dangerous. Ukrainians are forced to eat foods that can cause irreparable damage to their lives and health.

**The objective of research:** to substantiate the necessity of widespread introduction of organic farming as an important factor in obtaining ecologically safe food products.

*Task:* to substantiate the interrelationship between human health and food products.

Results of research. The only way out of a prevailing crisis situation should be a replacement the agrochemical concept of agriculture for agrobiological concept - one that is consistent with the laws of Nature. These laws are simple: plants absorb and concentrate the energy of the sun, partially transmit it to animals. Dead plants and animals and its excretions get into the ground and are got as a food for soil microorganisms. Soil microorganisms recycle and re-transmit accumulated in soil organic matter and minerals to the plants. Missing components they obtain from the air and ground minerals, using all the same solar energy accumulated by the plants. This cycle has been going on for millions of years - it is the guaranty of the life extension on the Earth. And if we do not want to interrupt this process of life, then we must follow the laws of the Nature and use them wisely.

Earth is the only living organism that is always self-cultivates. In the soil layer depth of 30 cm to 1 m<sup>2</sup> of prairie there about 2 kg of bacteria, actinomycetes and fungi live; there are also about 100 g of ciliates and other protozoa; about 50 g of nematodes, mites, springtails; about 100 g of cockles and about 500 g of vertebrates. This whole "crowd" lives because of consumption about 10 kg of organics per season. This population is unique in the Universe because plants, animals, fungi and microbes that thrive in the home generated for themselves, this is the subsistent soil, the best attributes of which can be stored only in the natural system technologies [2].

Therefore, the production philosophy of the agricultural sector should become caring for the ground, creation of optimal living conditions for soil biota, what will provide obtaining ecologically safe food products [1, 5, 6]. The most important and the urgent objective on this way will become care for the person and his health, and then - getting a profit.

Today on the food market there are many proposals for a healthy eating. But does the only one way of solving the problem of a healthy eating exist? Yes, it exists, and as everything genius, it is simple: it is necessary to grow raw materials in a clean environment and also to recycle and to pack it in ecologically safe way.

Why is exactly this decision no alternative? The answer to this question is also simple: the products created by nature, without using unnatural substances, the most completely and balancedly contain all materials, which are necessary for functioning of the human organism. In this case, we can say "Made by Nature" - and it will more fully characterize the quality of the product.

Organic agriculture now is the only production system that supports and improves condition of soils and ecosystems, and therefore – of people. It is based on natural processes, biodiversity, it excludes the methods of menage with adverse effects, connects traditions, innovations and scientific achievements in order to obtain the maximum good from natural resources spreading harmonious relations and ensuring a high quality of life for all those involved in this system.

Ecologically safe food products are produced from agricultural products grown by organic farming techniques that do not use synthetic agricultural chemicals, genetically modified organisms and shallow tillage is conducted. Such products are not harmful to the human body because there are no nitrates and pesticide residues in vegetables, and there are no carcinogens in sausage and ham, and there are no artificial flavor enhancers, dyes and preservatives in yogurt and cheese. They are rich in vitamins, minerals and biologically active substances. Therefore, these products are a source of health, energy and liveliness. Thereby organic farming, which is the basis of the creation of such products, becomes significant spread.

Organic production technologies are directed to improve the ecological condition of the environment, to improve the competitiveness of domestic agricultural products. However, the development of organic production has important socio-economic value, insofar as creates favorable conditions for the development of rural areas, significantly it improves employment and welfare, it ensures sustainable development of rural areas, it strengthens the state's economy and, therefore, it is a state program.

It is time for a new agronomic thinking with environmental priorities, the era of human existence, which does not reject the intensification of the industry, but it provides the most consistency with the laws of Nature. Crop and livestock production obtained without using of agrochemicals is not only health of us and our children, but also the health of the environment and soils. This is the production, with which we can enter foreign markets and to be optimistic about the future.

One of the possible ways of implementing environmental management is local solutions to global problems. This means that every agrarian is able to locally solve the global environmental problem of saving the planet at his farm.

Almost forty years of successful experience in PE "Agroecology" proved that with increasing soil fertility the introduction of organic farming makes it possible to achieve crops at intensive farming, but herewith to grow products ecologically safe for human health. Healthy land is a healthy person. Simon Svyrydonovych Antonets is convinced that organic farming in the years can provide the whole population of Ukraine with high quality food products. This requires a better understanding of the laws of agriculture, a finding new ways of obtaining high crops of quality products, a deeper cognition of relationship between the earth, plants, animals, humans and space.

In modern conditions a social and ethical concept of organic farming should be the foundation of all farms because it is an important precondition for improving production.

The world market needs active involvement of the agricultural potential of Ukraine to the global economy. Considering the soil and climatic conditions and favorable geographical location in the centre of Europe and ancient agricultural traditions, Ukraine has great opportunities of the wide organic agricultural production and of the export of its products.

Annually the output of Ukrainian ecologically safe products increases by 15-20%. The market of organic products (in spite of borders) remains one of the most interesting food markets, which is growing today and will grow in the future.

**Conclusions.** We can confidently and optimistically predict that in the next 3-4 years Ukraine will have all chances to enter the club of first "ten" of the world organic manufacturers. In particular, to this will facilitate an implementation of the State target Programme of Ukrainian village's development till 2015, which is planned to increase the area of agricultural lands certified according to organic standards, by 5% in 2015 and by 7% in 2020, against 0 7% in 2010.

Healthy Nation is one of the main guarantees for the further society progress. A healthy nation in Ukraine will be only under the condition of high-quality ecologically safe and healthy eating and only technologies in organic farming can provide raw materials for this. Therefore the organic farming, which is one of the most important factors in ensuring a healthy lifestyle, will greatly affect the intellect and creativity of every person and the whole nation.

The widespread introduction of organic farming must become one of the priorities of the state agricultural policy in the near future, and that is the ability of current generation of Ukrainians. There is an experience, and there are science workings, but we also need a desire and decisive actions of country leaders, and active and purposeful participation of the state with no force and guidelines, but through state economic incentives and subsidies that should be based on a legal basis. Farmers, who are on the path of greening their farmers, need system support that will always operate, and not as one-time budget handouts.

A widespread using of organic farming, production of ecologically safe products on its basis, saving and increasing of Ukrainian black soils fertility should be raised to the rank of state programs, and then everyone wins: the state, the nation, present and future generations of Ukrainians.

## **REFERENCES**

- 1. Бентежний талант хлібороба: штрихи до портрета агроеколога Семена Антонця / Укладачі Самородов В.М., Поспєлов С.В; наук. ред. В.М. Самородов. Полтава: Дивоствіт, 2010. 236 с.
- 2. Гржимек Б. Братья наши меньшие (Unsere Brüder mit den Krallen). 1961
- 3. Довбан К.И. Зеленое удобрение в современном земледелии. Мн: Белорусская наука, 2009. 404 с.
- 4. Електронний ресурс. Режим доступу: <a href="http://www.organic.ua">http://www.organic.ua</a>

- 5. Органічне землеробство: з досвіду ПП «Агроекологія» Шишацького району Полтавської області / Антонець С.С., Антонець А.С., Писаренко В.М. [та ін.] Полтава: Камелот, 2010. 198 с.
- 6. Писаренко В.В., Писаренко П.В., Писаренко В.М. [та ін.]Еколого-економічна ефективність використання сидератів Вісник ПДАА, 2012, № 3.- С. 122 126.