

THE IMPORTANCE OF ECOLOGICAL AGRICULTURE AND NUTRITIONAL BALANCE IN THE CONTEXT OF PROMOTING THE ONE HEALTH CONCEPT

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REVIEW

Abstract

The expansion of the global economy today exceeds the capacity of ecosystems, so that, as the pressure exerted on them increases year by year, more and more local ecosystems decay. A series of clear trends related to the environment shape the future of civilization: population growth, global temperature rise, the amplitude of thermal values in an annual or circadian cycle, the reduction or even exhaustion of water resources, the decrease of the area of agricultural land per person, the decline of the fishing industry, the decrease of forest areas and the disappearance of some species of animals and plants.

Keywords: ecological agriculture, nutritional balance, the "ONE HEALTH" concept, sustainable development

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INTRODUCTION

Ecological agriculture represents an alternative to classic farming systems (extensive, intensive, etc.) as a result of their poor functioning and the causes that determined the decrease in resistance and tolerance of plants to the attack of pathogens and pests, the deterioration of animal health, the degradation of soil quality and of the edaphic complex, and implicitly endangering human health. Ecological agriculture is based on the following principles for obtaining raw materials and food: long-term protection of soil fertility by maintaining organic matter levels, stimulation of biological activity and superficial agrotechnical interventions, indirect supply of fertilizing elements for cultivated species, using relatively insoluble nutrient sources that the plant reaches through the action of microorganisms in the soil, self-sufficiency of nitrogen, through the use of leguminous species that fix atmospheric nitrogen, as well as the effective use of organic materials, vegetable residues and manure, biological control of weeds, diseases and pests based mainly on crop rotations, natural predators, diversity, organic fertilization, resistant genetic varieties, and thermal and chemical interventions are as limited as possible, then the extensive growth, as free as possible of the animals, paying attention to their evolutionary adaptation, the behavioral needs and comfort of the animals, in

terms of their nutrition, shelter, growth, development and reproduction and a special attention given to the impact of the farming system on the environment and the conservation of biodiversity and natural habitats.

DISCUSSIONS

The concept of organic food, introduced relatively recently in the international circuit, has profound sanogenetic, trophic and socio-economic meanings. In general terms, ecological food refers to the consumption of diversified, clean, healthy products, free of residues, with a balanced content of bioactive substances and minerals.

Since contemporary man faces food imbalances that dramatically influence mortality (including in industrialized countries where the pathology of abundance proliferates), it is necessary to pay special attention to those food products that do not affect the health status of the population, regardless of the ecological zone where it occurs.

Nowadays, the establishment of adequate nutrition can only be achieved according to ecological criteria, since the natural environment, but also the anthropogenic, industrial one, strongly conditions nutrition, along with climatic, geographical and ethnic peculiarities. From this point of view, the differences regarding

nutrition are very wide, both on global ecological zones and within a national territory.

In this context, the ecological meaning of food is viewed through the lens of intervention in the economy of nature, by cultivating plants and raising animals in a special environment, which leads to a certain specificity of human nutrition. The control of some components of the ecosystems produced changes in the biological properties of plants and animals, resulting in a diversification of animal and vegetable foods. Over time, the anthropized biocenoses replaced the natural ones, potentially increasing the food of the world's population. This interposition of ecological factors with food represents one of the springs of food security.

Solving the problem of nutritional balance does not only require the need-intake agreement, but at the same time requires the fulfillment of the ecological requirement of food and its convergence with the toxic biotic factors of the environment. Thus, environmental degradation often has a direct, profound influence on nutritional status in developing countries. For example, in regions with a small amount of firewood available, food is insufficiently cooked, being dangerous for health (eg cassava, a staple food in some areas, must be well cooked to be consumed without danger). Fisheries resources are threatened with degradation, due to poor management, demographic pressure, water pollution and their diversion to urban areas, in industry and agriculture. The overexploitation of fish stocks in many regions of the world has quickly depleted the stock of this food, rich in proteins, indispensable for millions of inhabitants.

That is why nutritional food policies are combined with ecological policies that must be directed mainly to the causes that affect the health and nutrition of the population. From an ecological point of view, the food industry must adapt to the physiological food needs of the population, producing quantitatively and qualitatively balanced food. The substances used in industrial gastronomy must be chosen with particular care according to the requirements of modern man, but the general opinion is that, in order for the food to present sanogenetic resonances, its composition must not contain synthetic substances, chemical additives, which is possible through the use of biotechnology food.

Ensuring a healthy environment depends on the lifestyle, within which an

ecologically rational way of consumption must be promoted. That's why developed countries continuously reorient their way of production and consumption, in order to achieve economic and nutritional objectives without ecologically harming other nations.

The promotion of bio-food products is closely related to the alternative development of agriculture, to the choice between two options: ecological agriculture, applied on small areas in small family farms, based only on organic fertilizers, the rotation of crops and varieties genetically resistant to diseases, but without pesticides, respectively non-ecological agriculture, with the use of organo-mineral fertilizers, chemical and biochemical pesticides and other specific techniques applied in industrial farms, with great economic efficiency.

The importance of ecological food consists in the fact that it can ensure not only the supply of sufficient food products from a quantitative point of view, but also a rational, balanced diet, in order to maintain the physical and mental health of man.

CONCLUSIONS

Ecological or biological agriculture includes the entire range of scientific research (observations, measurements and experiments) and applied (analysis, design, administration) activities in the agricultural sector and the other branches or economic sectors that process and sell agricultural raw materials and agri-food products and put a special emphasis on the valorization and conservation or restoration of natural, technological, financial and human resources characteristic of local and zonal agro-ecosystems.

In the current context of the orientation of the common agricultural policy towards a natural agriculture, in which the concept of ecological or organic agriculture has a well-defined place (Strategy - From farm to consumer and Strategy for Biodiversity 2030, central pillars of the European Green Pact), it is mandatory increasing the efforts to popularize the principles and methods of ecological agriculture and to inform farmers and all those interested on a large scale, regarding the importance and the role of ecological technologies and last but not least recalling the economic advantages, as well as those that concern improving the environment in which we live. The objectives of ecological agriculture are subordinated, mainly to the sustainable development of agroecological systems.

The ecological production system, which prohibits the use of synthetic chemicals (fertilizers, pesticides, herbicides, etc.) and promotes respect for animal welfare, is a sustainable bio-economic solution. Taking into account the competitiveness of raw materials and ecological products, the agricultural potential and the ever-increasing demand for ecological foodstuffs in our country, an important factor is the continuation of the massive financing of the sector, financial resources being directed to the expansion of ecological production and at the same time of the storage and processing sector.

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