# Chapter 5

# FORMING A NEW ENERGY SECURITY PARADIGM AND ENVIRONMENTAL SECURITY DURING MARTIAL LAW

## Mariia Bahorka

ORCID: https://orcid.org/0000-0002-8500-0362 Doctor of Economics, Professor Iryna Kadyrus ORCID: https://orcid.org/0000-0002-5024-6549

Candidate of Economic Sciences, Associate Professor

# Nataliy Yurchenko

ORCID: https://orcid.org/0000-0002-3156-6790 Candidate of Economic Sciences, Associate Professor Marketing Department Dnipro State Agrarian and Economic University (Dnipro, Ukraine) DIRECTIONS OF
MARKETING
STRATEGY
DEVELOPMENT FOR
AGRICULTURAL
PRODUCTION
ECOLOGIZATION IN
UKRAINE

#### **Abstract**

The article explored the ecologization strategy, presented its objectives in the field of agriculture, the basic categories of strategic directions and implementation of ecologization marketing strategies.

It is determined that marketing strategy of ecologization of agrarian production is a strategy of innovative development that can solve problems of economic growth, increase of competitiveness of agrarian industry, provide high quality of life, national security, environmental protection and high technical level of agricultural production in Ukraine.

Algorithm of environmental marketing strategies in agricultural production is developed, environmental, economic and environmental and economic tools to implement them are determined.

**Keywords:** ecologization marketing strategy, natural resource potential, agricultural production.

### Introduction

The ecological situation in Ukraine in recent years has deteriorated so much that now both the economic status of business entities and food security of the country depend on it. One of the most important components of the economic security in the agrarian sector is the provision of its ecological and economic components in the agro-food market. In its turn, provision of the economic security of agrarian production cannot be separated from the environmental basics of the production sector.

The output of domestic agricultural products on the European market today acquires a new socio-economic content, and it is necessary to change the priorities in the system of agrarian relations. That is why today there is a process of reconsidering the role of economic and environmental priorities and the obvious advantage is given to the environmentally safe development of the agrarian production. The priority place in the agrarian system should be taken by the environmental quality criterion at the national level, and the need for greening the agrarian production. It is beyond any doubt and requires an immediate search for radical ways for its global implementation.

Particularly relevant issue of rational and sustainable use of natural resources is presented in the agricultural sector, which is the most sensitive contact zone in the system of mutual economic and environmental interests of humanity. For many years in agriculture destructive effect on the environment increased.

This necessitated fundamentally new vision capabilities ensuring the environmental and economic balance in the agribusiness.

Today ecological improvement of economic activity is an important; it suggests the ecological balance between the consumption of natural resources, agriculture and possibility of recovery of environment.

Problems in the field of agriculture and improvement of its competitiveness can be addressed through effective strategies and mechanisms for innovation. Such innovation strategy, in our opinion, should be the ecologization marketing strategy of agriculture that ensures high quality of life, national security, environmental

protection and high technical level of agricultural production in Ukraine. This marketing strategy is capable of ensuring principle of unity for economic and ecological processes in the management of agricultural production and promote radical restructuring of the relationship of the production process from the environment.

However, the problem of implementation of environmental marketing in agricultural production is still insufficiently investigated both in theoretical and practical aspects. There is a need to deepen theoretical research and methodologies associated with the formation of environmental marketing strategies as a component of ecological and economic mechanism of agricultural production.

### **Materials and Methods**

The basis of the formation of a marketing strategy for the ecologization of agrarian production is the systematic approach, which is based on the existence of implementation mechanisms that ensure system consistency, its purposefulness; interdependence; interdependence and complexity of its elements determines the integrity of the system; all tasks that execute individual elements of the system are interconnected; system elements and their associated actions have a certain subordination that builds hierarchy; the system changes under the influence of specific factors, which determines its dynamism; the ability of the system to adapt to the variability of the external environment, while not losing its own individuality. The base for the methodological approaches while developing the innovative model of greening the production of the agrarian enterprise were methods of economic and strategic analysis, due to them diagnostics, and estimation of ecological and economic potential of the field were made; potential opportunities connected with strategic tasks were determined.

#### **Results and Discussion**

Despite the potential of natural resources, favorable climatic conditions, as a result of certain socio-political and environmental factors there is the decrease in agricultural production and a significant deterioration of its quality (Hromushyna, 2008, pp. 55–58).

Ecological and economic crisis in the agricultural sector, in our opinion, can be caused by the following problems:

- degradation, pollution and land exhaustion;
- loss of natural and assimilative capacity of natural resource potential of agricultural production;
  - imperfection of the standardization of agricultural products;
  - imbalance between the production process and the environment;
- lack of government regulation, regulatory and legislative framework of ecological and economic relations entities;
- non-compliance with modern requirements and technical base for the development of new technologies for the production of agricultural crops;
- lack of understanding in society priorities of environmental preservation and sustainable development benefits.

In recent years the market environment, in which economic actors operate is changing significantly: growing its degree of uncertainty, there are unmeasured risk factors (Bochko, 2007, p. 280).

Marketing in the agricultural sector and the development of environmentally oriented marketing meet the requirements of social responsibility agricultural production, development of economic management mechanism on environmental and economic grounds, and is an integral part of environmental and ecosystem management in the agriculture (Voronetska, 2011, pp. 112–115).

In our opinion, adaptation of marketing processes based on environmental requirements is essential for the effective implementation of marketing in agriculture. Thus, it is not just a one-time use innovation to achieve instant benefits but the continuous, detailed planned strategic innovative development, which is based on methods of ecological and economic management. Just through environmentally oriented marketing strategy the contradiction between the economic interests of producers and preservation of the environment, that is ensuring of environmentally safe life conditions, can be solved (Kalinichenko, 2014).

The emergence of environmental marketing is the result of increasing consumer demands for quality and environmentally cleanliness of the products they buy, its impact on human health and environment (Mishenin and Yarova, 2009, p. 55).

With forming of ecologization strategies for agriculture production, we propose use of the key strategic categories: mission statement, goals and objectives; strategic analysis of macro and micro factors; choice of priority strategic directions, forming tools for the implementation of this strategy; assessment and monitoring its implementation.

The process of developing a ecologization marketing strategy should be began with identification of key industry issues: economic, political, social, technological and environmental, which need strategic analysis.

Formation of the mission and goals has to be made only after a detailed analysis of strategic problems occurring in the industry and its external surroundings.

The main purpose of the ecologization strategy mission is to ensure sustainable development of the agricultural sector that respects the balance between the economic system and the natural environment.

Formulating goals, marketing objectives and environmental objectives should be done at the national, regional level and at the entity level.

The main purpose of environmental marketing at national and regional levels is to create conditions for economic entities in which they are interested in maintaining and restored natural resources while implementing innovative approaches in their work (Minkova, Kalinichenko & Galych, 2016).

We have attempted to summarize the positive and negative factors motivating agricultural producers regarding the use of environmental marketing (Table 5.1).

At the entity level environmental marketing main goal is to develop economic organization and economic mechanism of agricultural enterprise using its main components: planning, promotion (motivation), organization management, control and so on. It is necessary to orient production to meet the environmental needs of consumers (Melnyk & Egorova, 2014, pp. 114–117).

The objective of environmental marketing for agricultural producers is assistance to reducing the burden on the environment in the planning, coordination and control of all management operations.

Environmental marketing has to become a link between company, market, and society. It should follow up public opinion and market conditions concerning to the protection of environment (Voronetska, 2011, pp. 112–113).

Table 5.1 Factors of positive and negative motivation for agricultural enterprises to adopt environmental marketing strategies

Factors of positive motivation	Factors of negative motivation	
Cost savings due to conservation of resources	Imperfect legislation concerning to rules and regulations for production of "clean" products	
Reduced costs for risks of environmental charges	Lack of clearly defined development strategy with appropriate information and legal support	
Improved natural resource and market potential.	Lack of state support for producers of ecologically safe products and control system links all product life cycle	
Improving the overall image of the company	Lack of economic instruments to encourage the production of ecologically clean products	
High competitiveness of environmentally safe products	Risks of crop losses and lack of Compensation associated with the production of ecologically clean products	
The emergence of new environmental needs (need for environmental safety), environmental interests and culture of the population	Speculative price premium processing enterprises and traders, because of which agricultural producers of organic products loses a significant amount of money as a result of its implementation, and the bulk of the profits remain in the sector of processing and trade  Too high prices for environmentally safe products in trading networks of Ukraine deprive consumers of the opportunity to buy these products	
	In fact, lack of the infrastructure ecologically clean products market	

Source: autors' study

We believe a significant role in the elimination of negative factors in the market belongs to the state.

The effectiveness of state regulation of agriculture in the market depends on the criteria that were formed for a long time and that can be divided by priority (Table 5.2).

Component part of formation of ecologization marketing strategy is analysis of macro- and micro-surroundings, analytical assessment of its parameters and adjustment of marketing strategy in accordance with the dynamic changes in the environment (Kudenko, 2012, pp. 126–128).

Table 5.2 Criteria for effective state regulation of agricultural production

Types of criteria	or agreement production	
of state	Essence and efficiency features	
regulation		
Self-sufficiency of food	Self-sufficiency ratio is defined as the ratio of total volume of domestic food production to the volume of its domestic consumption. To support sovereignty state is to reduce dependence on imported food, especially for those products that can be produced on its territory.	
Trends related to population income	Criterion takes into account the trend of slowdown in revenue growth of agricultural enterprises in relation to other economic sectors. It is one of the criteria for support of agricultural production of the state. State regulation is intended to support the current level of prices.	
Development of the social sphere	Recognizes the trend of decline in the share of the agricultural sector in national economies of the developed countries and Ukraine in particular.  This is reflected in the disappearance of entire rural landscapes. It is one of the criteria which points to the need of state support for Ukrainian village, because it allows to keep rural way of life.	
Environmental criteria	The most important criterion for state intervention in the development of agricultural production. Factors of negative effects are becoming increasingly visible environmental degradation indexes. Negative externalities should be regulated by the state.	

Source: autors' study based on Zastrozhnikova, 2013

From the above information be noted that there is quite a lot of negative factors motivating agricultural producers of ecologically clean products, the main of which is the inefficient functioning of the market of environmentally safe products and its slow development in Ukraine (Danylyshyn & Lubchenko, 2008).

Economic management methods in the ecologization of nature management should include the creation of economic conditions that would encourage land users to achieve better results in their work.

The state should perform important functions to stimulate agricultural growth, social protection, rise of quality of life. This priority role of state regulation of agriculture in any case does not reduce the importance of market self-regulation. Mechanisms of state actions should focus on supporting private initiatives aimed at the development of new technologies, stimulate innovative activity in rural areas (Shkuratov, 2012, pp. 10–12).

Table 5.3 **Economic management methods of agricultural production** 

Economic incentives	Economic sanctions	
Providing favorable short- and long- term loans to implement projects of ecologically safe and economically effective technologies	introduction of compensation for losses related to the impact on the environment	
Partial or complete exemption from income tax in the case of funds for the purchase of ecologically safe fixed assets	Increase and differentiation of the range of payment systems for the irrational nature management, above-limit usage of natural resources, and environmental pollution to uneconomical levels for the agricultural entities	
Preferential taxation and crediting for agricultural enterprises producing ecologically safe products and environmentally friendly production	differentiation of the land tax depending on its quality of locality	
Ecological adaptation of tax and price systems	Constant evaluation of the quality of soil and products to collection of appropriate penalties for improper use of land and the production of low-quality products	
Encouraging employees of enterprises producing ecologically clean products and compliance with environmental legislation (soil fertility, quality standards of production, improvement of environmental parameters)	Comparison of the factors of positive (gain on disposal of waste benefits tax credit benefits, price increments) and negative motivation (payment for excessive use of natural resources, fees for	
Development of the possible variants for refund of damages related to crop shortfalls in the production of ecologically safe products	excess pollution, waste disposal fees, fines, additional tax) expressed in environmental costs	

Source: authors' study based on Hromushyna, 2008

Economic instruments include promotional leverage, the use of preferential taxation and credit, and price incentives of environmental activities.

Environmental management tool provides certification and labeling of ecological products, which prove that them comply with the identified facility specific regulations. The process of certification and standardization should be conducted according to international standards, adapted to the conditions of Ukraine (Sadchenko, 2002).

Ecological and economic tools, in our opinion, are the part of an environmental marketing and include:

- ✓ Production of ecologically safe agro products and its environmental positioning;
  - ✓ Pricing taking into account environmental costs;
- ✓ Development of ecologically safe products market, which is based on international standards for ecological agricultural production;
  - ✓ Distribution of ecologically safe food products;
- ✓ Establishment of Information and Communication promoting agrarian food products.

Formation of strategy of environmental marketing in the agricultural sector, in our opinion, is the integration of all administrative functions that also contribute to the ecologization of agricultural production, allocation, planning and forecasting of business initiatives for investment basis, which is linked to production, formation and stimulate demand for ecosafety agro products, and agricultural products and ecosystem services.

## Conclusions and recommendations for further research

Marketing is a tool for environmental management and can be implemented by forming appropriate environmentally focused strategies, which can ensure the principle of unity of economic and ecological processes in the management of agricultural production and promote radical restructuring of relations of production with the environment.

Environmental marketing involves environmental awareness; formation of environmental needs, social responsibility, marketing strategy, marketing management, environmentally focused market

research, environmental and economic tools of marketing management in manufacturing environmentally safe agricultural products (product, price, distribution, promotion system).

In forming of the ecologization marketing strategy for agriculture key strategic categories are to be used: mission statement, goals and objectives; strategic analysis of macro and micro factors; choice of priority strategic directions, forming tools for the implementation of this strategy; assessment and monitoring of its implementation.

Combination of environmental, economic instruments at state regulation of environmental and economic components is important in implementing of the ecologization marketing strategy for agricultural production.

State policy on ecologization of the agricultural sector should be aimed not only at solving global environmental problems but also on current issues concerning to the transition of the national agriculture to manufacturing of ecologically safe products.

Implementation of environmental marketing in practice will help to identify new market niches, empower diversification of agricultural enterprises. The production of environmentally friendly and safe products can generate additional revenue, because these products are of higher quality. Environmental marketing can act as an effective instrument for economic development mechanism and to be the basis for environmental security of the national economy.

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