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MOTIVATIONAL ENVIRONMENT AND TOOLS OF GREENING THE AGRICULTURAL LAND USE

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Introduction. Promoting the rural development was proclaimed in Ukraine with the development of a number of strategic documents, particularly, “Single comprehensive strategy to develop agriculture and rural areas in 2015-2020 years” [1]. Achieving of set targets involves changing the state agricultural policy approach from sectoral to spatial and territorial, so the policy of sustainable rural development becomes a part of the national regional policy. It also presupposes the promoting of greening and socialization of rural development processes to replace the industrialization of agriculture.

The main results of the study. Rural development foundations are laid, primarily, in the economic sector, in particular by: the diversifying of economic activities and methods of resource use (within the sector); diversification of forms and types of economic activities in spatial terms (within the administrative unit); implementation and development of integrative, synergistic relationships at different hierarchical levels of management (between different types of crops, industries and activities within the production unit, institutions and business entities, industries, sectors, etc.) [13; 14]. This determines the special role of economic structures, that directly operate at rural areas, in sustainable rural development. Whereas agricultural production presents the link of people and nature interaction, entities are responsible for rural development as users of natural resources in rural areas [14], and therefore appear as the main actors of greening the business processes.

The statistics analysis shows that the current state of agriculture in Ukraine and its resource base, particularly land resources, meets the goals and objectives of environmental management and sustainable economic development insufficiently. Specifically, large areas of agricultural land (42731,5 thousand. ha – 70,8% of the country's land at the beginning of 2015 [3]), inherited from Soviet times, are characterized by irrational structure from an environmental standpoint. Of no less importance is the fact that land areas, which help to

restore topsoil and have ecological significance, have been decreased from 2001 year to 2014 year, namely: fallows by 191,8 thousand. ha, pastures by 76 thousand. ha and perennials by 31,5 thousand. ha [10].

The structure of unduly cultivated farmland can't be considered environmentally acceptable too. For instance, corn crops increased 3.4 times (to 17.2% of the total cultivated area), sunflower by 1.8 times (to 19.3%), rape by 4.12 times (to 3.2%), soybeans by 27.8 times (to 6.6%), during the 2000-2014 years. For the same period, lea areas decreased 3.9 times and have reached in the structure of sowing areas only 3% in 2014, the perennial crops have decreased 2.7 times to 4.1% [10]. The above mentioned shows the formation of extensive, predatory way of land use to provide the large-scale, export-led production of grain and industrial crops.

The problem of deteriorating of farmland quality is particularly acute in this context. The results of eight round of agrochemical examination of Ukraine soil (hold during 2006-2010 years) indicate that soils have lost a significant portion of humus and the most fertile black soils have turned into a middle-fertility and continues to deteriorate [6, p. 14]. The main problems of the soil quality, pointed out in 2001, have not been resolved yet, and even have been exacerbated, namely: the loss of humus, the erosion extension, the reduction of nutrients and trace elements, the oxidation and alkalization of soils and others [5].

Insufficient treatment of fertilizers and soil dressing technology violations are commonplace. For instance, 18% of the crops remain untreated in 2014 even with the increase of used quantity of chemical fertilizers. It should be noted that organic fertilizers treatment have direct impact on the formation of humus layer, but it had been manured only 2% of crops with the amount of 0.5 kg / ha [Statistics, 2015] for the minimum norm of 10 kg /ha during 2010-2013 years. It means that the recommended ratio between the organic and mineral fertilizers is not observed, so such problems as attenuation of soil formation and subsequent loss of humus will expand. Insufficient organic fertilizing may be offset by other means, including an increase in the perennial crops, but this measure is not hold, according to data on the structure of agricultural land and crops.

All this affect the effectiveness and efficiency of agricultural production, of course. The real yield of major crops was within the natural capacity [6], and even was lower for certain crops (sunflower, winter wheat) in 2010 [10]. Taking into account the increase in yield of major crops to the effective level in 2014, we need to pay attention to the fact that the yield of

sunflower crops didn't reach the natural level of 2010, even in 2014. At the same time, sunflower sown areas occupy 19,3% of agricultural lands [10]. This suggests that 19.3% of agricultural land is used inefficiently and extremely irrational from the future generations interests standpoint.

It should be pointed out that the above phenomena and processes take place under the conditions of the Moratorium on sale of agricultural land, set by transitional provisions of Land Code of Ukraine adopted in 2001 [2] and subsequent amendments thereto. So we can conclude, that Ukrainian system of land lease is to some extent contrary to the principles of rational land use, goals of preserving the quality of natural resources and also protection of public and private property. It has been formed and established as a result of administrative control and regulation in the sphere of land relations.

Limitations of private land owners rights realization (74.65% of agricultural land is embraced by private ownership), particularly, restrictions to sale land and to use it as collateral caused the formation of a special national system of land lease. This system has absorbed the whole range of previously accumulated interrelated socio-economic problems of rural areas and not only doesn't contributed to their solution, but also led to further complications. This was the root cause of the aforementioned negative environmental phenomena and processes. Actually, one can identify the characteristics that distinguish the existing system of agricultural land use in Ukraine, namely [5]:

- there is no alternative forms of land disposal for the landowner;
- landlord's dependence from tenant as well as the inability of owners to realize their rights fully;
- dictate of land user in setting the terms of the lease;
- the lack of financial resources for development, modernization of production and the proper implementation of measures to rationalize land use, due to the low efficiency of agricultural commodity production and low investment attractiveness caused by unresolved property relations;
- very low rents;
- the loss of land value as a property in terms of owner.

These features are crucial in terms of motivation of environmentally balanced agro-industrial activities. They determine the range of factors that form motivational environment of greening the agricultural land use, as well as the tools of implementing these processes.

Consumers are regarded as one of the main components of the motivational environment in the process of greening business. Their impact is realized through growth and expansion of markets of environmentally friendly and organic products in the agricultural sector. The national market of environmentally friendly and organic agricultural production is currently at the stage of formation, that is positive, but is not sufficient in terms of implementation of an integrated and comprehensive greening processes in Ukraine agriculture. The Law of Ukraine "On the production and turnover of organic agricultural products and raw materials" [7] has been adopted only recently - in September 2013, and some of the mechanisms that are essential for full implementation of Law provisions are still under legal settlement. In particular, the resolution "On approval of the assessment of the suitability of land (soil) and the establishment of zones of organic products and raw materials quality criteria of land (soil), their suitability for the production of organic products and raw materials, suitability for the production of certain crops" [9] is still being at the design stage. It should be noted also that the law stipulates promotion of the domestic market for organic products and the meeting consumer demand for a range of organic products (art. 5, p. 1, § 3 [7]), but there are not defined any mechanisms to provide these actions. So, consumers influence on greening the agricultural production is quite small.

Other component of the motivational environment is presented by agricultural producers which use the leased land. They are mainly concentrated on the profit that can be obtained in a discrete period of time (for the lease period) and don't have a stable economic incentives for the conservation and restoration of leased plots soil fertility, as the latter are not owned by them. Business structures in agriculture, in particular, agricultural holdings, try to minimize production costs and investments, and this leads to the failure of crop rotation, fertilizer treatment violations, the non-compliance of woodlands, the limitations of livestock production, deterioration of rural infrastructure, which needs substantial improvement as it is.

Do landowners have sufficient impact on implementation of processes of greening the agricultural land use in terms of the current system of land relations in Ukraine? Fifteen-year domination of the Moratorium on land sales has led to the concentration of land as a productive resource in the ownership of the least economically active part of the rural population – pensioners, which do not have sufficient financial resources and knowledge about the mechanisms of ecological and economic land evaluation. The information asymmetry, the lack of elaborated institutional and legal framework to control the tenants land management

practices, and the actual lack of farmers access to agrochemical laboratories services make impossible full realization of landowners rights, particularly, in terms of the protection and preservation of the property (the qualitative characteristics of the land as natural resource, as well as agricultural production base, are crucial to the economic assessment).

Implementation of administrative regulation of land relations is simultaneously accompanied with passive state participation in the process of monitoring of production activities on leased land about the compliance to the principles of sustainable land use. The certain attempts to simplify the business regulation policy look pretty risky from an environmental point of view in this context. In particular, the warranties of the tenant to preserve the quality of land resources and rational use of lands have been excluded by legislature from the list of essential terms of the lease agreements recently [8]. It makes rural people more vulnerable against the backdrop of mismanagement of tenants.

One of the main functions of the state should be the protection of landowners rights with the aim to save their property under the administrative regulation of land relations, in particular, by promoting the introduction of environmentally friendly methods of agricultural production on leased lands. Therefore, the state should create instruments to control the level of environmental suitability of business processes, and ensure their compulsory use within the Moratorium duration, at least. The environmental audit is highlighted as one of the most effective among these tools.

Environmental audit of agricultural land use and land protection represents, in our view, organizational and economic system of independent monitoring and controlling of production and environmental activities, financial and economic state of different types of enterprises in relation to the level of environmental regulation of land use. The following interrelated factors affect the form of an environmental audit of agricultural land use, namely: the development of free market economy, land ownership, the environmental business culture and environmental awareness of consumers as potential buyers of agricultural products. Concurrently, the scope and role of environmental audit are quite multifaceted [4]:

- the environmental audit as management tool provides environmental security of company;

- the environmental audit as a tool of the state environmental safety improves efficiency and ecological management of territories, if it is viewed on a national scale, within the implemented “state system of environmental audit”;

- the environmental audit is a tool to ensure the prevention and limitation of environmental accidents in the company, which is under the environmental audit procedure;

- the environmental audit is an element of environmental insurance. In this case, the results of the audit will affect the “economics” of the process of environmental insurance, by influencing on insurance premiums and tariffs;

- the environmental audit is a new trend in the market of environmental services, i.e. a new area for business, which is also very important in terms of the development of the rural economy.

Areas of the environmental audit of agricultural land may include the following substantive spheres of ecological and economic analysis and evaluation, namely:

- the study of the structure of certain types of land and sown crops;
- the analysis of land use for the intended purpose;
- the analysis of projects of soil nutrition with phosphorus and potassium;
- the study of soil quality indicators;
- the research of level and salinity of groundwater;
- the assessment of the biotic potential or biological productivity of land;
- the analysis of soil resistance to the anthropogenic impact;
- the investigation of natural and anthropogenic processes;
- the analysis of pesticides contamination of agricultural land;
- the analysis of projects of fertilization and status of warehouses for storage of fertilizers and pesticides on the farm;
- the study of the status of an antierosion hydraulic structures and protective plantations;
- the analysis of the conditions of removal, storage and application of topsoil;
- the assessment of land restoration projects;
- the justification of measures that lead to the deterioration of land;
- the justification of measures to control weeds, and others.

The researchers suggest to use the environmental audit as a voluntary tool to provide an effective environmental policy, environmental management, sustainable economic development of a company [12]. The voluntary environmental audit has more positive incentives for conducting as it shows the high level of environmental culture of enterprise, environmental responsibility, potentially environmental safety management. To encourage voluntary forms of environmental audit the network of consulting and auditing firms and expand public system of

environmental standards and environmental labeling should be formed. However, in Ukraine aforementioned prerequisites of effective forms of voluntary environmental audit development are not realized. So focusing only on the voluntary environmental audit will lead to the fact that this environmental management tool will have low influence. Setting the mandatory environmental audit for the certain functional areas and problematic situations is the most appropriate from this point of view. Under the current law, the mandatory environmental audit is carried out in the following cases: bankruptcy; privatization and concession of state and municipal property; the transfer or purchase of a state or municipal property; long-term lease of state or municipal property; creation of joint ventures on the basis of state and municipal ownership; environmental insurance of facilities; termination of production sharing agreements in accordance with the law; in other cases provided by law. Such limitation of environmental audits cases reduces its effectiveness as a tool for environmental management and does not allow to achieve the main goal of the audit, because the majority of companies that cause the most damage to the environment, have been already privatized.

One should recognize the need to fix the mandatory requirements for conduction of an environmental audit of agricultural land at the end (prolongation) of land lease agreements, given the critical importance of quality indicators of land resources, especially in the context of changes in agricultural markets related to the acquisition of Ukraine warranties under the Cooperation Agreement with the EU [11]. It is appropriate to carry out the environmental audit procedures with respect to the manufacturer (enterprise activities), territories (initiated by local governments), region (optional) and also rapid audit, situational audit, according to the classification of environmental audit types [4]. Environmental audit (periodic and final) may also be written as a mandatory element of standard lease agreements with the definition of the mechanisms of compensation of landowner losses.

It is advisable to use economic and legal motivational tools in order to expand the environmental audit processes without "formalization". These tools may include, particularly, mechanisms, tools and methodical providing of agriculture state support policy, such as the introduction of the grant (project) principle of financing with the priority of environment-friendly production processes and products (mandatory environmental audit conducting is dictated in this case by the need to attest the conformity of production system with environmental standards).

Certain educational measures need to be implemented due to their potential to generate sufficient motivation for the introduction of environmentally responsible manufacturing processes in agriculture with the environmental audit as control, analytical and information management tool. Among them are: implementation of advocacy and consulting work among the population, and developing the educational projects for small and medium enterprises in agriculture with the study of the basics environmental entrepreneurship and the use of software for planning, accounting, control and analysis of ecological production processes, as well as education projects for representatives of local governments regarding external financing and technical assistance (e.g. Tacis, USAID projects) in the area of environmental protection and social activity, promotion of innovation, civil society development, promotion of places and administration, etc.

Conclusions. Agricultural producers should significantly increase the level of socio-environmental and economic responsibility to the rural communities, especially under the implementation of the land and administrative reforms in Ukraine. However, the current system of land relations in the agricultural sector is not conducive to the formation of powerful motivational factors for business units to increase the level of socio-environmental and economic efficiency of production processes and resource use. This determines the need for active participation of the state in the process of greening agricultural production, particularly agricultural land use. The environmental audit is an effective tool to implement greening land use processes in this context: as organizational and economic system, to plan, to promote and to organize the green agrarian business; as it provides the process of monitoring of relationship of environmental performance with end financial and economic results of production. The procedure of environmental audit takes into account the territorial and sectoral nature of resource use and appropriate legal framework and thus improves the relationship between resource users, environmental authorities and population. It also helps to save resources in the process of collection, analysis and assessment of information to make decisions about intensification and development of production processes with the aim to ensure ecological acceptability of production.

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