Financial security of land relations’ development in the agricultural sphere

Introduction

The transition to the constant development concept of the agrarian-industrial sector in Ukraine requires to solve the range of problems, among them land relations adjustment, restoration of the natural land resources, which are applied in economic circulation, providing the competitive agricultural output, as well as improving the quality conditions of provision security in the county in general and in the peculiar districts. The urgency of these questions are fastened by the increasing of anthropogenic and mechanic level, the high level of arable agricultural lands, water resources consumption, air pollution and groundless cutting down of forest ranges.

Efforts, directed to the efficient solving of these problems, require the complex approach to the land exploitation regulations, consistent measures, targeted to keep, protect and restore the land resources, to coordinate the activity of all the parties involved. Besides, the efficiency of such a system depends on the effective financial resources accumulation of centralized and decentralized features for the nature protection and restoration operations.

The problems, listed above, have already become the priorities in scientific researches of national scholars, but eventually, the improvement of financial-economic mechanism of natural resources restoration takes place on the scale of its fiscal function only. Thus, there exists an urgent necessity to create the system of market relations in the sphere of land exploitation, which will combine harmonically ecological, social and economic factors of the constant development in the agricultural-industrial complex of Ukraine.

Research goals, tasks and methods

The research goal is the improvement of national ecological adjustment mechanism of land relations through taking into the grounds the necessity of the state ransom of the agricultural lands with their further transfer under the conditions of long-term leasing to the agricultural entrepreneurships.
To reach this goal, there was the range of theoretical, scientific-methodological and practical tasks posed and fulfilled:

1) to study the existing situation referring financial security of natural resources restoration;

2) to analyze the land exploitation level in the agricultural sphere and evaluate the effectiveness of existing land exploitation system;

3) to determine the directions of financial security improvements of land resources restoration in agricultural sphere;

4) to ground the advantages of the state ransom of agricultural lands and their further transfer to the agricultural entrepreneurships under the conditions of the long-term leasing.

The research object is aggregation of theoretical methodical and practical aspects referring the formation of the suitable conditions for land restoration in agricultural sphere.

To solve the tasks, posed in the article, general scientific and peculiar research methods were used: monographic method, critical analysis method and summarizing method, systematic approach, abstract-logical method.

Review of the existing situation of natural resources restoration financial security

Under the conditions of economic crisis in Ukraine the problem of nature protection operations financing is especially important, because while the financial system had been reformed and adjusted to the market conditions, the previous expenditure sources of nature protection needs had been lost, and existing ecological problems without effective solutions are getting worse.

Taking into consideration the actual fiscal cut on providing the ecological equilibrium, in 1992 according to the Law of Ukraine “On the environment protection” the system of environment protection funds was created on state and local levels.

Nowadays the Ministry of Environment protection of Ukraine has acknowledged the urgent necessity to improve the fund functioning from the point of their efficiency, profitability, openness and responsibility. Financial security of land exploitation in general supposes necessary nature protection expenditures financing, which are performed from personal costs of the business, which uses nature resources, credit and investment costs, costs, given as financial subsidy, or in the form of equipment, taken into the leasing for economical and ecological development of a business.

It is clear today, that the existing sources of nature protection and restoration operations financing are scarce, as well as the level of cost distribution between ecological foundations is ineffective. Therefore, nature protection, keeping and restoration financing takes places usually from state budget funds, where environ-
ment contamination charges, natural resources special use fees and penalty costs from those, who disturb the environment protection regulations, are accumulated.

According to Veklych, the intensifying tendency of the cash flows increase to the environment protection foundations at all budget level, firstly, is an evidence of the financial opportunities expansion in nature protection operations, secondly, regardless of the fluctuation character of its annual growth, shows the increasing amount of real sources of nature protection activity, simultaneously, it reveals an active fiscal function of up-to-date ecological taxation system, and its growing significance as a means of budget filling [Veklych 2009, p. 24]. But nevertheless, fiscal function being performed by ecological taxes, fees and payments does not provide the increasing efficiency of all financial ecological mechanism of rational nature exploitation and nature resources restoration, because costs, targeted to minimize the negative anthropogenic influence on environment are constantly characterized by insufficient performing of planned figures. Nowadays it is necessary to create such a mechanism of nature resources restoration, which is engaged into the economic circulation of nature exploiting businesses, due to which they are interested in the positive results of nature protection and restoration operations.

The recent years are characterized by increase of natural resources use intensity; it is especially significant in agriculture. Taking into consideration the numerous ecological problems in agricultural sector, quality of foodstuffs, provision security, questions of the ecological security must become the priorities in the system of the national security of Ukraine.

Table 1
Cost flows to environment protection foundations of all budget levels in 2000–2007

<table>
<thead>
<tr>
<th>Year</th>
<th>Flows to the foundations of all levels mln hrv</th>
<th>Rate to the previous year, %</th>
<th>State environment protection foundation, mln hrv</th>
<th>Autonomous Republic of Crimea foundation and local funds, mln hrv</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>123.7</td>
<td>–</td>
<td>37.4</td>
<td>86.3</td>
</tr>
<tr>
<td>2001</td>
<td>187.2</td>
<td>151.3</td>
<td>56.6</td>
<td>130.6</td>
</tr>
<tr>
<td>2002</td>
<td>188.8</td>
<td>100.9</td>
<td>65.9</td>
<td>122.9</td>
</tr>
<tr>
<td>2003</td>
<td>269.3</td>
<td>142.6</td>
<td>81.0</td>
<td>188.3</td>
</tr>
<tr>
<td>2004</td>
<td>319.4</td>
<td>118.6</td>
<td>95.9</td>
<td>223.5</td>
</tr>
<tr>
<td>2005</td>
<td>414.9</td>
<td>129.9</td>
<td>124.5</td>
<td>290.4</td>
</tr>
<tr>
<td>2006</td>
<td>795.0</td>
<td>191.6</td>
<td>516.8</td>
<td>278.3</td>
</tr>
<tr>
<td>2007</td>
<td>1088.1</td>
<td>136.9</td>
<td>707.2</td>
<td>380.8</td>
</tr>
</tbody>
</table>

Source: Information from the State treasury of Ukraine; Veklych 2009.
Paying the special attention to the financial-economical mechanism of land exploitation in agriculture, it must be pointed out, that its efficient and full-scale functioning is impossible at present. Moreover, some actions of the local authorities are sometimes controversial to its creation.

During the last decade, the agricultural output in our country is increasing, in plant – production especially. As it is obvious from the data of Table 2, there is a declining tendency among agricultural arable areas during 1995–2007. But unsuitable agricultural areas are excluded from circulation because of the high contamination level, degradation and other results of inefficient land exploitation.

Thus, additional burden is increasing pro hectare, resulting in the growing exploitation intensity of lands, left in agricultural circulation. It enables to increase enterprises’ profits and to fill the income part of state budget. Along with it, the quality of land resources is not improving, because of inefficient structure of sown lands.

So, the relative amount of areas, planted with grain and legumes, is increasing, because their production let enterprises provide the plant – production profitability. Taking into consideration these factors, Ukrainian enterprises enlarge the areas occupied with technical crops, such as sunflower, for instance, regardless the fact that this crop exhausts considerably the soil. On the contrary, the amount of areas, planted with forage crops are getting smaller almost at 24%, it results in decrease of animal husbandry sector, especially cattle – raising, that’s why enterprises don’t have own organic dung for restoration of land resources quality.

In general, ecologically unsuitable condition of agricultural input is presupposed by insufficient degree of land relation’s directions studies. The absence of scientifically grounded and precisely formulated strategy of their market transformation makes it impossible to maintain the principles of social, economic and ecological development in agriculture.

Table 2
Dynamics of agricultural lands and arable areas 1995–2007

<table>
<thead>
<tr>
<th>Year</th>
<th>Agricultural lands, thousands ha</th>
<th>Arable areas, thousands ha</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In Ukraine</td>
<td>In Sumy region</td>
</tr>
<tr>
<td>1995</td>
<td>40772.6</td>
<td>1689.9</td>
</tr>
<tr>
<td>2000</td>
<td>38421.4</td>
<td>1547.0</td>
</tr>
<tr>
<td>2003</td>
<td>37638.2</td>
<td>1465.2</td>
</tr>
<tr>
<td>2004</td>
<td>37321.7</td>
<td>1456.2</td>
</tr>
<tr>
<td>2005</td>
<td>37039.4</td>
<td>1444.0</td>
</tr>
<tr>
<td>2006</td>
<td>36801.5</td>
<td>1434.0</td>
</tr>
<tr>
<td>2007</td>
<td>36754.7</td>
<td>1447.3</td>
</tr>
</tbody>
</table>

Nowadays native agricultural enterprises do not pay attention to ecological component of their production and that is why their development may be considered to be:

- Regressive according to the change character of qualitative resource parameters which they use in their activity;
- Extensive according to the level of resource providing of development;
- Most of agricultural enterprises are characterized by unsteady, saying with other words, unbalanced development the sign of which is worsening of enterprise financial stability and paying capacity, loss of financial balance;
- Besides agricultural enterprises unreasonably use natural resources which are drawn to economic turnover, norms unsubstantiated scientifically and so on.

Further development of Ukrainian agriculture requires creating certain condition of social – economic output progress, which will be oriented to nature resources potential protection and restoration, as well as achievement of stable development of national economy.

**Improvement directions of land resources restoration in agriculture**

Intensification of provision security problem in the region, as well as foodstuffs quality, requires solutions of natural resources restoration problem. Regarding it, ecological security of producers is considered to be the guaranty of high quality foodstuffs. So, it is evident that the proposal regarding use of organic production system is necessary in the activity of regional agricultural enterprises.

At present agricultural sector is characterized by the new division of agricultural lands with their simultaneous privatization as a result of land reform. It helped to get the right of ownership on the land plot to members of collective agricultural enterprises, cooperatives, stockholder societies, as well as pensioners, who have worked at these enterprises before and are still members of the enterprises of different form of ownership. The goal of land reforms was aimed to create and operate the market of land relations, but the appropriate measures have not been applied yet.

Taking into consideration the impossible purchase of necessary agricultural areas for further activity, agricultural enterprises have to take into leasing the plots of agricultural lands.

To the mind of leading Ukrainian scientists, in particular prof. dr. M. Malik and prof. dr. O. Shpykuljak, unreasonable land use is resulted from ineffective and non-market institutional relations between owners of capital-land and entrepreneurs-lease holders. This problem confirms the opinion that institution of agrarian entrepreneurship has not become economically responsible yet.
According to the data of State committee of Ukraine in land resources owners of land shares handed lands in lease on the total sum of 5 milliards hrn. Most of lease agreements were concluded for a period up to 5 years. It allows certifying absence of interest from the side of leasers in preservation of qualitative characteristics of given resource, resumption of soil fertility while using its potential maximally. So, most entrepreneurs work in agrarian sphere temporarily and do not see perspective in such activity.

Lease relations foresee that land owners receive rental fee but average volume of rental fee is 292.5 hrn. for 1 hectare per year that does not make it possible to fulfill measures concerning land improvement. Besides, we should stress that greater part of it, in particular 70.5 %, consists of produce, goods and services that is natural dimension but not monetary. It fully brings to nothing such attempts.

Besides, the conditions of short – term leasing and reorganizing processes, which characterize the agricultural sector, do not enable land owners to control the quality of land resources, which are in leasing. The situation under review results in the increase of land resources exploitation intensity and their productivity loss. Application of such financial mechanisms as insurance of agricultural lands quality, introduction of strict requirements referring the maintenance of land resources quality on a definite level in the agreement of leasing would allow solving the problem of land degradation and creating the preconditions for its restoration. But at present the realization of these mechanisms is just a scientific project.

It is worth of mentioning separately that not only productive function has to be leading in the development of entrepreneurship but also the social one. Unfortunately, market economy can not automatically regulate all social and economical processes in favor of society and citizens itself. It does not provide equitable distribution of incomes and it does not aim to environmental protection. Business is not interested in capital investing into branches which does not make profits but which are vitally necessary for the state.

Paying attention to this fact prof. dr. О. Shpychak stresses that in case of taking down moratorium on land selling it is necessary to establish minimal price level for the state to redeem and consign it in lease to effective proprietors.

It must be stressed that there are people in countryside, such as pensioners, handicapped persons, and some others, who are not eager to be engaged in agricultural production.

Basing on the opinions of leading ukrainian scientists and taking into consideration existing offer of agricultural lands and impossibility of fulfilling measures on their fertility restoration not by their owners and leaseholders we believe fulfillment of radical measures to be necessary. Such measure is land return into state property.
So, there is a supply of agricultural lands, but regardless the existing moratorium, the state only, represented by local authorities, is able to purchase land plots. According to it, agricultural lands can be exploited by agricultural enterprises under the conditions of long-term leasing only, and the function of lease giver can be performed by the local authorities only. The proposal about long-term leasing of agricultural lands is targeted, first of all, to stimulate agricultural enterprises to apply in their activity the scientifically grounded methods of land cultivation, to take measures directed to the improvement of land resources quality, especially restoration of their productivity.

The process of taking lands into leasing should be a matter of competitive tender. The choice of such form of tender is preconditioned by the fact, that criteria of choosing a winner are not connected only with price. The reasonable additional criterion is thought to be the introduction of designed project to perform soil protection and restoration operations at leased areas.

Taking into consideration the necessity to create an organization on the level of a region, which will be able to prepare the documentation for competition, to evaluate the competition proposals, even from the point of environment protection, to prepare a technical certificate of plots, to provide the laboratory researches, to perform control and consulting, aimed to provide land resources restoration and agricultural production transition to organic methods. Out of budget foundation of agricultural lands restoration can take the function for the realization of projects, listed above.

Taking into consideration the fact that land resources appear to be the national wealth and state is responsible for their quality and aims to preserve and reproduce them, let examine the set of goals out of budget natural resources reproduction fund concerning quality improvement of land resources in the region (Fig. 1).

Fulfillment of general goal aims to reach goals of spiritual, social and material character which form first range goals.

- creation of secure, ecological acceptable environment for next generations;
- meeting the needs of region in production and consumption of environmentally clean produce;
- implementation of regional complex programs of soil-protective and restoring character.

Every mentioned goal may be divided into several tighter aims, solving of which will create favorable conditions for fulfillment of first range tasks.

It is necessary to review the scheme of conducting the competition. The competition documentation is designed to conduct the open competitive tender, dedicated to long-term leasing of certain agricultural land plots, and is appointed by the customer, who orders competition. Participants of competition must be
Improvement of quality of land resources

- Implementation of regional complex programs of soil-protective and restoring character
- Meeting the needs of region in production and consumption of environmentally clean produce (Food safety)
- Creation of secure, ecological acceptable environment for next generations

- Creation of data base of qualitative characteristics of regional land and ecological passports of nature users
- Inspection of land resources usage in the region
- Marking the environmentally clean produce of regional agro-producers by fund logotype
- Fulfilment of environmental protection measures at enterprises under conditions of joint financing
- Providing quality of living and health protection
- Ensuring gene pool preservation

- Monitoring of qualitative parameters of regional agricultural lands
- Laboratories creation and qualified personnel attraction
- Mechanism of land transferring into use through the system of competition tenders with the further confirmation of the entitlements right
- System improvement of administrative and criminal amenability for quality worsening of leased lands
- Dissolution of lease agreements in the conditions of land resources quality worsening

Figure 1
Tree of the out of budget natural resources reproduction fund
corresponding to the qualification requirements, which are determined by competition documentation in every peculiar occasion, also to apply the competition proposals in writing and to send them to the official addresses of those who order the competition.

Participant determines the rent, which he is eager to pay according to the agreement, together with expenditures on nature protection and restoration, which are planned for realization to improve the nature resources quality, as well as agricultural lands. When competition value is being calculated, one must sum up price of long-term leasing subject, monetary evaluation and quality of agricultural land plot, also all the expenditures, connected with performing the responsibilities of a participant to fulfill the agreement, as well as the environment protection expenditures.

Competition proposal must be accompanied with a document, which confirms the ensuring in the form of a deposit, given by participant, amount of which depends on the parameters of an agricultural land plot, and is the subject of the competition.

Plenipotentiary representatives of all the participants are invited to take part in the procedure of opening the competition proposals; they must have their passports and assignments, which enable them to take part in the procedure of opening the competition proposals, as well as the participants. To provide open and transparent competition procedures, there may be present the representatives of mass media.

While opening all the competition proposals, they check all the necessary documentation, and whether their arrangement is correct. Absence of any information, documents, foreseen by the competition documentation, drawbacks in documents arrangement and information of competition proposals are taken into the report, and are the grounds for the further rejection of such a competition proposal. A customer evaluates and compares the proposals, which were not rejected and determined as inappropriate to the requirements, and defines the best competition proposal, when the special attention is paid to the completeness of program design referring the land resources quality and financial plan referring the financing of these operations. Winner of the competitive tender is determined the participant, whose competitive proposal is thought to be the best as a result of competitive proposal evaluation.

Competitive ensuring can be placed on the deposit account of the bank, which keeps financial resources of an out of budget foundation, and thus becomes the additional income source for the agricultural enterprise, which becomes the winner of the competitive tender. Under the conditions of an appropriate performing of all the points determined by the agreement, referring the restoration of land plot productivity, costs will be returned to the enterprise. Besides, the out of budget foundation can partially finance designed nature protection operations.
Competitive tender is necessary, if there are several persons, willing to conduct economic activity at peculiar land plot, but there can be certain situations, according to which a land plot is transmitted into the long-term leasing to the agricultural enterprise, on the territory of which this land plot is situated. Such transition becomes possible under the conditions of performing the detailed analysis of activity of this enterprise, from the point of its financial condition as well as maintain of principles of its balanced ecological – economic development that foresees the realization of nature protection programs.

Table 3
Financial evaluation of agricultural lands capitalization efficiency on the regional level

<table>
<thead>
<tr>
<th>Determinant</th>
<th>2011 year</th>
<th>2012 year</th>
<th>2013 year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural lands aggregate area, thousands, ha</td>
<td>1703.5</td>
<td>1680.9</td>
<td>1600.4</td>
</tr>
<tr>
<td>Capitalized value of Sumy region land resources, thousands, hrv.</td>
<td>33520</td>
<td>98730</td>
<td>451600</td>
</tr>
<tr>
<td>Amount of loans that can be received under the mortgage of land plots or property rights on them, thousands, hrv</td>
<td>33400</td>
<td>125000</td>
<td>848555</td>
</tr>
<tr>
<td>State fee for the identification of civil law agreements and real estate rights registration, thousands, hrv</td>
<td>3.4</td>
<td>20.1</td>
<td>204.0</td>
</tr>
<tr>
<td>Possible increase of costs flow to budget from rent payments, land and fixed agricultural tax, thousands, hrv</td>
<td>676.68</td>
<td>3008.9</td>
<td>12523</td>
</tr>
<tr>
<td>Value Added Tax at the early stages of agricultural products processing and sale, thousands, hrv.</td>
<td>1252.5</td>
<td>6416.8</td>
<td>50100</td>
</tr>
<tr>
<td>Arable land funds, %</td>
<td>71.5</td>
<td>70.3</td>
<td>66.5</td>
</tr>
<tr>
<td>Woodeness, %</td>
<td>17.4</td>
<td>17.9</td>
<td>21.2</td>
</tr>
<tr>
<td>Land protection operations:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>agro technical measures (thousands, hrv)</td>
<td>102.1</td>
<td>235.4</td>
<td>1724.4</td>
</tr>
<tr>
<td>hydro technical measures (km)</td>
<td>7.8</td>
<td>27.4</td>
<td>110.0</td>
</tr>
<tr>
<td>forestry conservation (thousands, hrv)</td>
<td>5.9</td>
<td>12.1</td>
<td>40.9</td>
</tr>
<tr>
<td>Protective woods creation (ha)</td>
<td>89.4</td>
<td>209.4</td>
<td>1187</td>
</tr>
<tr>
<td>Necessary costs for the realization of protection and efficient land resources exploitation program, thousands, hrv.</td>
<td>951134</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Possible financing from the costs of, thousands, hrv.:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. state budget</td>
<td>102082</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. local budget</td>
<td>19050</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. landowners and landholders;</td>
<td>110001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. foundations, such as nature resources restoration foundation</td>
<td>720001</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Own forecast calculations.
Long-term leasing agreement can be broken off under the conditions of deteriorating the land resources quality, in this case the competition ensuring is not returned, but on the contrary, is directed to work out and finance operations of agricultural lands restoration.

If all the leasing agreement conditions will be fulfilled, the enterprise will be given the right of emthitevsys, it means the right to use alien land for agricultural production. Taking into account, that the subject of land mortgage can be the right of long-term leasing, the introduction of suggested mechanism will let agricultural enterprises engage additional financial resources due to mortgage of rights on agricultural lands leasing.

There can be studied out the efficiency of introducing such a mechanism on the regional level, for example, making forecast calculations on the level of Sumy region.

It is evident from the data of Table 3, that the providing of circulation at least 30% from the total agricultural area of Sumy region in 2015 will allow to reduce the quantity of arable lands at 5% and to increase the woodenness of unsuitable for agriculture lands at 4%. In its turn, it will influence the increasing efficiency of land funds exploitation of the region.

At the macroeconomic level land capitalization will allow to increase the gross national product of the country and to provide state budget growth.

Conclusions

The following conclusions can be made on the basis of this research:
1. At present, all the nature protection operations are financed as a rule by the state budget, while financial-economic mechanism of nature exploitation provides only the fiscal function. Recently the growing tendency has been observed of income budget part, as well as on the account of ecological taxes, fees and payments, but nature protection expenditures were not covered even in the amount of sums been planned.
2. There is an increasing intensity of land use in agriculture. This position is characterized by high level of arable and exhausted land resources, taking into consideration the concept of permanent development, adopted by Ukraine, practical development in agriculture is transition to organic agricultural production. Unfortunately, the present mechanism of land exploitation is not able to provide the efficient realization of methods on land resources protection, keeping and restoration.
3. One of the possible ways to solve the problem of efficient realization the nature protection, keeping and restoration policy is the returning of land from private ownership into state ownership. The regional organization, which takes the defined functions, can become an out of budget foundation of nature resources restoration in agriculture.

4. The use of suggested mechanism at the regional level will allow to increase the efficiency of land resources exploitation in Sumy region, and also, due to land capitalization, to increase the gross national product and to provide state budget growth. It states that the projects depicted above will let improve the condition of agrarian industrial complex at regional level and impact the organic agricultural development in the region.

**Literature**


**Streszczenie**

Zabezpieczenie finansowe działań na rzecz ochrony przyrody dzisiaj wymaga głębokich zmian. Szczególnych zmian potrzebuje istniejący mechanizm użytkowania ziemi w rolnictwie. Jednym z możliwych kierunków rozwoju przemysłu rolno-spożywczego jest jego przejście na system organicznej produkcji rolniczej, wymagającej zapewnienia ochrony, zachowania i odtworzenia zasobów ziemi. W tym aspekcie racjonalne jest przywrócenie państwu prawa własności do użytkowników rolnych. Państwo powinno dbać o zachowanie bogactwa narodowego, którym jest ziemia. Dalsza działalność producentów rolnych może
odbywać się na ziemiach otrzymanych w dzierżawę długoterminową. Przy tym jednym z podstawowych wymogów wobec dzierżawcy jest odtworzenie zasobów ziemi, odnowa żywności gleb, przeprowadzenie działań na rzecz ochrony przyrody. W przyszłości prawo dzierżawy może być przekształcone na prawo emfiteuzy. Kapitalizacja użytków rolnych umożliwi poprawę sytuację przemysłu rolno-spożywczego, pozwoli rozwiązać problem bezpieczeństwa żywnościowego oraz nadać impuls do rozwoju organicznej produkcji rolniczej w regionie.