



# Agricultural lease as a form of financial support for the expanded reproduction of the agro-industrial complex

## El arrendamiento agrícola como una forma de apoyo financiero para la reproducción ampliada del complejo agroindustrial

Zoya Shapiulakhovna BABAEVA [1](#); Marina Viktorovna POSTNOVA [2](#); Rustam Alievich YALMAEV [3](#); Zulfiya Nasurdinovna KASIMOVA [4](#); Gulzhan Saidbekovna ISBAGIEVA [5](#)

Received: 06/10/2017 • Approved: 20/10/2017

### Contents

- [1. Introduction](#)
  - [2. Methods of the research](#)
  - [3. Results of the study](#)
  - [4. Discussion of the results](#)
  - [5. Conclusion](#)
- [References](#)

#### ABSTRACT:

In the context of the development of the post-industrial economy (economy of a new type), the process of the financing (financial support) of reproduction of the material and technical base of enterprises in the agrarian sphere has undergone some significant changes. The main problem in the active technical modernization of fixed assets in the agricultural sector is a significant shortage of funds that could be allocated for ensuring this process. The theoretical bases for the financial support of the process of expanded reproduction of the agro-industrial complex are considered in this paper; the applicability of financial leasing as a tool of innovative development of agriculture, its merits and demerits, and the use of financial resources in the agro-industrial complex are analyzed. The paper also analyzes the leasing activity in the sphere of the agro-industrial complex in the Russian Federation; it proposes the prospects for its development taking into account the use of mechanisms of government support and the possibility for innovative

#### RESUMEN:

En el contexto del desarrollo de la economía postindustrial (economía de un nuevo tipo), el proceso de financiación (apoyo financiero) de la reproducción de la base material y técnica de las empresas en el ámbito agrario ha experimentado algunos cambios significativos. El problema principal en la modernización técnica activa de los activos fijos en el sector agrícola es la escasez significativa de fondos que podrían asignarse para garantizar este proceso. Las bases teóricas para el apoyo financiero del proceso de reproducción ampliada del complejo agroindustrial se consideran en este documento; se analiza la aplicabilidad del arrendamiento financiero como una herramienta de desarrollo innovador de la agricultura, sus méritos y deméritos, y el uso de recursos financieros en el complejo agroindustrial. El documento también analiza la actividad de arrendamiento en la esfera del complejo agroindustrial en la Federación de Rusia; propone las perspectivas para su desarrollo teniendo en cuenta el uso de mecanismos de apoyo gubernamental y la

leasing implementation.

**Keywords:** reproduction, expanded reproduction, absolutely intensive expanded reproduction, financing of reproduction, leasing, leasing relations in the agrarian sphere, leasing company, innovative leasing.

posibilidad de una implementación innovadora de leasing.

**Palabras clave:** reproducción, reproducción ampliada, reproducción expandida absolutamente intensiva, financiación de la reproducción, arrendamiento financiero, relaciones de arrendamiento en el ámbito agrario, empresa de leasing, arrendamiento innovador.

## 1. Introduction

By reproduction is meant the continuously repeated process of creation (cultivation, making) of a product all over again in order to achieve a certain result. Reproduction is an endless periodic process of making socially useful agricultural products, the realization of which makes it possible to replenish means of subsistence, to restore a person as a consumer of life goods and as a producer of agricultural products, and maintain and improve the production relations in the agro-industrial complex (Arzamastsev & Safiullin 2007). Proceeding from the quantitative indicators of output products, reproduction is divided into contracted, simple and expanded reproduction.

Contracted reproduction is characterized by regression, decline, degradation, economic losses and, as a result, a decline in the volume of output after each cycle of reproduction. As a result of such reproduction that is caused by economic, social, natural and other force majeure factors, a complete cessation of production activities is possible in the absence of external resources.

Contracted reproduction was typical for the initial period of the agro-industrial complex reform in the 1990s. With the collapse of the USSR, some economic reforms in Russia led to dramatic changes in all sectors including some in the agro-industrial complex. As a result of these reforms, multistructurality was formed, which was represented by the population's farms, peasant (farm) holdings and employee-owned enterprises on the basis of various organizational and legal forms. At the same time, the inequivalency of the exchange between industry and agriculture has intensified to a greater extent than it was in the pre-reform period. The situation was made worse by a higher rate of retirement of fixed assets compared with their renovation. Investment activity in the agro-industrial complex was stopped. The majority of agricultural enterprises were forced to stop reproduction processes; they entered a deep crisis and strengthened the overall economic downfall of the country. The drop in the living standards of people reduced consumer demand and led to the deterioration in the level and quality of human nutrition and to the critical point of reducing agricultural production that could lead to a loss of food security in the country (Semkin 2011).

Simple reproduction is characterized by virtually unchanged production volumes, volumes of output and labor productivity which is typical for most private subsidiary farms.

Expanded reproduction is characterized by an increase in output and scale of production which is typical for advanced enterprises and regions of the agro-industrial complex of Russia (Dudin, Frolova, Abashidze, Miroshnichenko & Shikalova 2016).

The problem of the reproduction of material goods by main branches of agriculture takes place while creating and developing a single market for agricultural products in the Russian Federation, especially in the context of countersanctions and import substitution.

The civilized agricultural market is characterized by expanded reproduction which can be extensive and intensive. Methodologically, the ways of the expanded reproduction are divided; however, both of them can be used simultaneously (Gavrikov & Dudchenko 2011).

In case of extensive development, volumes of the used resources increase and the values of production parameters increase too while using the existing organizational technology. There is a growth in livestock population, cultivated areas, as well as in the number of workers, fixed and working capital. Extensive expanded reproduction attracts additional resources: land, labor,

and material ones without increasing labor productivity.

Intensive expanded reproduction ensures the growth of labor productivity due to scientific and technical progress and it is divided into absolutely intensive and relatively intensive expanded reproduction.

Absolutely intensive expanded reproduction involves all possible resources: low-cost and resource-saving technologies; high-performance machinery; technologies for increasing fertility; highly qualified staff, etc. Relatively intensive expanded reproduction can use only a part of the available resources (Batov, Dzhugkaeva, & Tambieva, 2011).

Proceeding from the conducted structuring of reproduction types, the agrarian and industrial complex of the Russian Federation is interested in the financing of absolutely intensive expanded reproduction. This type of financing, in our opinion, can be divided into: financing of the productivity factors of the agro-industrial complex; financing of the production factors of the agro-industrial complex; financing of the agrobiological features of the agro-industrial complex.

When financing the productivity factors, the agro-industrial complex should focus on the financing of: new knowledge in the field of agricultural production and information technologies; innovations and scientific and technical progress in the agro-industrial complex; motivation for work; advanced technical and technological equipment; reproduction of human capital.

When financing the factors of production, the agro-industrial complex should focus on investing: increase in the supply of land; labor; capital.

When financing agrobiological factors, the agro-industrial complex should focus on the financing of measures: for improvement of the environmental state; mitigation of natural climatic conditions; improvement of the fertility (quality) of land and increase in the productivity of animals.

One of the innovative development tools of agriculture and the use of financial resources in the agro-industrial complex on the investment basis is leasing which is the second largest in the world economy in terms of investment volume after a bank loan. It is one of the progressive methods of production logistics that provides users with a broad access to the advanced engineering and technology (Ravenscroft 1999). For many business entities, leasing operations in market countries have become dominant in the technical reequipment of the material and technical base of their production. According to the World Bank, leasing in the agricultural sector of many countries is more attractive for producers than a commercial loan. The use of agricultural leasing is no less relevant for developed markets than for emerging countries. For example, plant leasing for farms exceeds 10% of the country's entire leasing market in the US (Kashkin, 2006).

The need for leasing for domestic agricultural enterprises is determined not only by the need for a dramatic change in innovation-based material and technical resources, but also by the difficult access of many agricultural producers to financial resources in order to invest in entrepreneurial activities. Therefore, the problem of studying of leasing activities in the agrarian sphere and justifying the directions for its further activation for financial support purposes of the expanded reproduction of the agroindustrial complex is of particular relevance.

---

## **2. Methods of the research**

Agrarian commodity producers are able to satisfy a considerable demand for credit resources due to the full utilization of the potential of the leasing services market. Leasing can be a good alternative to bank lending, since it makes it possible to significantly reduce the initial investment, and, therefore, opens up wide opportunities for the development of small and medium-sized businesses.

Financial leasing in the agrarian sphere is an advantageous form of activity for all participants in this type of investment (Table 1).

**Table 1**  
Fields of interest of participants in leasing relations in the agrarian sphere

| <b>Participants in agricultural leasing relations</b> | <b>General economic interests</b>   | <b>Specific interests</b>  |
|---|---|--|
| Producer  | Increase in sales of agricultural machinery and equipment                         | Sales of agricultural machinery in the market, alternative ways of selling agricultural machinery  |
| Leasing company                                       | Profit in the form of leasing margin or interest on leasing                       | Intermediation between participants in different markets, integration of their interests in one transaction, obtaining discounts from producers of agricultural technology |
| Leaseholder   | A release of the equity capital required for the purchase of fixed assets         | Increase or modernization of production facilities; there is no need for large non-recurrent investments of capital  |
| Bank of commerce                                      | Receiving new long-term sources of income in the form of interest and commissions | Product-line expansion, business development, related services   |
| Insurance carrier                                     | Increase in the volume of insurance benefits                                      | Attraction of new customers and bulk purchasers of insurance services  |
| Advice agency   | Receipts of income from consultations   | Gaining experience in leasing issues   |

Source: the author's research

At the same time, leasing has some certain drawbacks, namely: leasing payments related to financial leasing are paid during the whole agreement period, even if technological development makes leasing equipment morally obsolete; the complexity of the organization increases because of a large number of participants in the leasing deal; the degree of currency risk increases with an international multicurrency financial leasing. That risk moves from one participant to the other in the leasing transaction. Some hidden payments, for example, insurance of equipment can be the disadvantages of leasing activities.

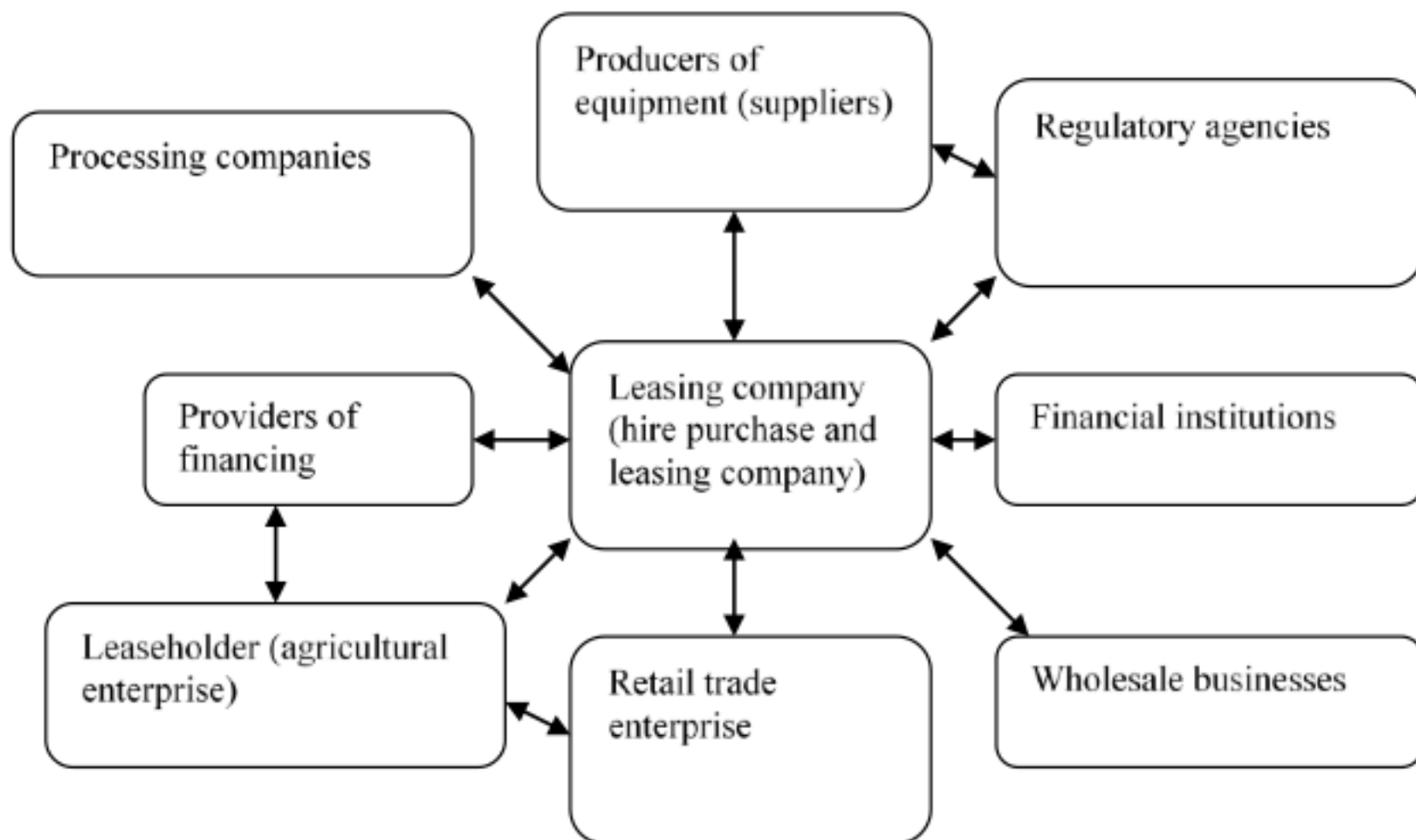
In recent years, the use of leasing in the agricultural sector of Russia has a positive trend. Thus, the cost of the existing agreements on financial leasing concluded with agricultural enterprises in 2016 amounted to 1,462 billion rubles which is more than 2 times more than in 2010 (730 billion rubles) (Kuban Is Number One in Leasing in the Agricultural Sector of Russia, 2016).

The development of leasing in the agrarian sphere of Russia dates back to the mid-1990s. The domestic experience shows that agricultural leasing is successful when it is realized in some form supported or initiated by the government, or organized by firms that are trying to gain a foothold in the new market.

In the process of the formation of leasing relations in the agrarian sphere of Russia, the following scheme of interaction between participants in financial leasing was developed (Figure 1).

**Fig. 1**

Scheme of interaction between participants of agricultural leasing in Russia



Leaseholders (producers of agricultural machinery and agricultural enterprises), together with the leasing company that organizes and implements financial leasing, form a kind of the main vertical of financial leasing. At the same time, a leasing company concludes a contract of sale with the farming machinery manufacturer, then a leasing agreement with a leaseholder, the agricultural commodity producer. The relationship between the manufacturer and the leaseholder is built on the basis of an agreement for maintenance service of agricultural machinery purchased through the leasing company. Investors and financial institutions provide financing for leasing operations; state regulatory bodies can provide the centralized budgetary financing, and solve issues related to the provision of benefits to the lessor and the lessee.

When organizing agricultural leasing, some innovative approaches can be distinguished: leasing with the leading role of the producer of agricultural machinery and equipment; leasing transaction within the agro-industrial group and the formation of a regional agricultural holding with a leasing company, supply service, repair and technical and agro-service structures. In the first scheme, domestic producers of agricultural machinery and equipment have the leading role in agricultural leasing, who are interested in preserving and expanding the sales markets for their products. They can act as founders of leasing companies and transfer their agrotechnics as a share capital payment which will subsequently be leased. It is possible to include some processing enterprises to the number of founders after the same pattern and, in addition, they can participate in a leasing transaction partially paying leasing payments. It is also possible for leaseholders, agricultural commodity producers, to participate in the creation of a leasing company. They could have certain advantages in leasing property (Chen & Jiao 2014).

Initially, there were several types of leasing companies in Russia that occupied a certain niche in the market of agricultural leasing services with their own specific activities. All of them could be divided into two groups: companies of commercial leasing and leasing structures formed with the participation of the government.

However, given that currently the lion's share of the agricultural leasing market (94% of the market) is occupied by Rosagroleasing JSC (99.9994% of shares belong to the Russian Federation), we will focus on the results of its activities.

### 3. Results of the study

Today, in the sphere of agro-industrial complex, Rosagroleasing is the main operator in the market of providing equipment to agricultural producers in the context of financial leasing and acting as the main intermediary in this scheme. Rosagroleasing occupied 94% of the market in the segment of agricultural leasing in 2016 and was in the top ten leasing companies in the country. The company is rather diversified; it has branches in all regions of the country, works with 84 suppliers of domestic agricultural machinery and has more than 5,000 units in the range of the supplied equipment (Brief Information on the Results of Rosagroleasing's Activities in 2016, 2017).

During the period of 2013-2015, 10% of tractors and 15% of combine harvesters were purchased with the help of Rosagroleasing.

**Table 2**  
The supply pattern of agricultural machinery of  
Rosagroleasing for the period of 2013-2015

| Year  | Tractors,<br>units | Combine<br>harvester,<br>units | Other<br>agricultural<br>machinery,<br>units | Motor<br>vehicles,<br>units | Total, units | For an<br>overall<br>amount of<br>(million<br>rubles) |
|-------|--------------------|--------------------------------|--|-----------------------------|--------------|---|
| 2013  | 1456               | 609                            | 1,946  | 635                         | 4,646        | 9,742.39  |
| 2014  | 1800               | 696                            | 1,538  | 726                         | 4,760        | 12,354.83   |
| 2015  | 803                | 1,076                          | 1,691  | 502                         | 4,072        | 12,051.50   |
| 2016  | 1058               | 1,356                          | 2,456  | 1,281                       | 6,151        | 19,658.32   |
| Total | 5,117              | 3,737                          | 7,631  | 3,144                       | 19,629       | 53,807.04   |

Source: Brief Information on the Results  
of Rosagroleasing's Activities in 2016, 2017

During 2013-2016 years, agricultural machinery and equipment were supplied for agricultural commodity producers in the context of the federal financial leasing in the number of 19,629 units for an overall amount of 53,807.04 million rubles, including: tractors – 5,117 units, combine harvesters – 3,737 units; other agricultural machinery – 3,144 units.

Rosagroleasing supplied various types of equipment for an overall amount of 19.66 billion rubles in 2016 which is almost 10 billion rubles more than in 2013.

In addition to agricultural machinery, Rosagroleasing acts as an intermediary in the supply of livestock equipment and breeding animals (see Table 3, 4)

**Table 3**  
The supply pattern of livestock equipment  
of Rosagroleasing, cattle stall

| Leasing subject | Total | including |      |      |
|-----------------|-------|-----------|------|------|
|                 |       | 2014      | 2015 | 2016 |
|                 |       |           |      |      |

|                           |           |          |        |        |
|---------------------------|-----------|----------|--------|--------|
| Total, cattle stall       | 949,191   | 85,620   | 65,049 | 74,132 |
| including for cattle      | 317,816   | 31,645   | 34,459 | 10,102 |
| Gross sum, million rubles | 16,648.86 | 1,729.72 | 815.56 | 940.25 |

Source: Brief Information on the Results of Rosagroleasing's Activities in 2016, 2017

-----

**Table 4**  
The supply pattern of breeding animals of Rosagroleasing, animal units

| Leasing subject            | Total     | including |          |          |
|----------------------------|-----------|-----------|----------|----------|
|                            |           | 2014      | 2015     | 2016     |
| Cattle, animal units       | 303,853   | 12,142    | 9,499    | 4,523    |
| Small cattle, animal units | 257,554   | 29,220    | 2,350    | 4,650    |
| Swine, animal units        | 52,997    | 71        | 12,121   | 10,132   |
| Horse, animal units        | 3,399     | 200       |          |          |
| Deer, animal units         | 7,463     |           |          |          |
| Total, animal units        | 625,476   | 41,633    | 23,970   | 19,305   |
| Gross sum, million rubles  | 30,140.33 | 1,867.55  | 2,062.47 | 1,214.88 |

Source: Brief Information on the Results of Rosagroleasing's Activities in 2016, 2017

## 4. Discussion of the results

The government support of agricultural commodity producers should be based on the development of a more sophisticated mechanism for allocating budgetary funds. The full development of leasing in the agrarian sector should function based on the principles of market competition involving both state and commercial leasing companies. In order to intensify cooperation with agrarian enterprises, the government should encourage private leasing companies by partially compensating the leasing rate of interest at a level that is the size of the Central Bank's discount rate; by way of partially compensating the value of the leased asset after upfront payment by the lessee at the rate that is equivalent to the advance payment but not more than 30%.

Also, for the effectiveness of the government support for the agrarian sector, it is enough to partially attract interest of potential buyers of agricultural machinery to invest their own funds, thereby ramping up the equipment market not at the expense of the budget, as was formerly the case, but at the expense of private capital.

The most acceptable mechanism of the government support for technical supply of agricultural producers can be the mechanism of compensation of the leasing unit value. With the help of

this mechanism, the agricultural commodity producer determines the object of leasing from the supplier and applies to the leasing company. In case of leasing approval, a financial leasing agreement is concluded (for the amount that makes up the difference between the value of the leased asset and the double amount of the advance payment) and the commodity producer pays a certain down payment to the leasing company. After receiving the advance, the leasing company provides relevant information to the relevant state structures, which in turn transfer the payment to the leasing company in the amount of the advance payment paid by the agricultural commodity producer.

This way will help to increase the demand of agricultural producers for fixed assets and to replenish budget with additional taxes and fees. At the same time, this way will provide the material and technical base for the agricultural producers for the period of 5-10 years (in case of short-term preferential loans – only one year). This in turn will contribute to lowering the prime cost and increasing the efficiency of agricultural production. As a result, government intervention in the development of the leasing market in the agricultural sector is excluded, and therefore the market for leasing services will be filled with significant amounts of private capital.

It should also be noted that a significant difference between agriculture and other sectors of the economy is the fact that biological assets (plants and animals) participate in the production process and they are also provided with appropriate technologies.

One of the big problems of agriculture today is the further development of animal husbandry, given that animals are a specific leasing unit. Similarly, the widespread use of seeds of imported breeding is problematic in the context of presence of worthy items of domestic breeders. Therefore, it is natural to consider the leasing of biological assets and equipment leasing separately, because it is more appropriate to the structure of the innovative needs of agricultural enterprises (purchase of machinery and equipment, research and development, purchase of software and the industrial design). This factor significantly expands the scope of leasing combining it with intellectual production assets, if we take into account the subject matter of innovation.

Innovative leasing is now developing and expanding its effect on new units of the transaction, that is, the leasing of intellectual property. In line with this idea, R. Crawford, an American economist, brings up the problem of expanding the sphere of leasing of intellectual property as a key element of the development strategy for leasing (Zhukov 2007).

Agricultural production in Japan is an example of the extended integration of high technology into agriculture. This country is a leader in biotechnology that cultivates rice using special mini machines in combine harvesters, mechanical planting devices, with the help of vinyl protective coverings and by spraying from helicopters (High Technologies for Agriculture). Computers placed in bio-farms control and regulate light, humidity and temperature. In order to determine if plants need watering or special treatment against insects, Japanese farmers use specially equipped remote-controlled cameras to help determine the temperature, moisture content in the soil and the duration of the day's light. Various plant cultures are grown with the use of artificial light. Such technologies completely exclude the problems of plant diseases, pests and unfavorable weather conditions. Special coverings in Israel that can regulate light, heating and ventilation allow growing more than 3 million roses or 300 tons of tomatoes in 1 hectare of greenhouse areas per season and quadrupling the yields in the open ground.

Today, the concept of consistency steps forward; it obliges enterprises to take special responsibility when planning technological projects. The main idea is the utilization of advanced technologies, scientific developments while using the experience in various spheres of human life; the choice of the best and acceptable solutions with their further implementation and development in the settlement are also important. In particular, enterprises should produce goods using local renewable natural materials or waste products (secondary raw materials) with the help of environmentally friendly technologies.



Based on the foregoing, it is advisable to consider the most effective use of innovative leasing from the environmental and economic point of view in the form of sustainable ecovillage or ecopolice which ensures maximum use of all types of natural resources: low-temperature heat of the earth, air and storage reservoirs (heat pumps); alternative energy sources (solar energy, biomass, wind, water and others); non-hydrocarbon types of motor fuel (biogas, air, electricity); new modes of transport; innovative technologies of agriculture; safe disposal of waste; wastewater treatment systems (biological, resonant, mechanical); technologies in construction and infrastructure development.

An extended version of technology leasing will make it possible to form an electronic agriculture (e-agriculture) (Karpova 2007). It involves the development of a concept, design, evaluation and application of innovative ways of using information and communication technologies (ICTs) with a primary focus on agricultural enterprises of various types.

In addition, to stimulate demand, it is necessary to increase the level of purchasing power and improve the general policy of the government in the sphere of consumption, because a favorable non-agricultural policy is vital for the prosperity of agriculture. A stable innovative development of agricultural production is possible only together with a change in the socio-demographic situation in rural areas, overcoming the depopulation with financial support for farm families.

The advantage of leasing in agriculture is that it includes various forms of governmental regulation. By way of leasing, it is possible to overcome the monopolism of producers of agricultural machinery by using other sources of equipment.

---

## 5. Conclusion

Thus, for further development of leasing in the agrarian sector, it is necessary to implement the following:

- to improve the regulatory and legal framework for leasing operations, in particular, in terms of formation of international leasing institution, creation of favorable terms of taxation, loans, and depreciation;
- to ensure the simultaneous functioning of the state and private leasing operators in the market. It will facilitate the continuous process of updating fixed assets in farms with different income levels;
- to diversify the sources of leasing financing, to increase the amount of private capital along with the government one;
- to increase the financing of programs for partial compensation of the cost of sophisticated agricultural equipment and ways for financial leasing of domestic agricultural machinery;
- to reform the system of government support for technical supply of agricultural producers through the mechanism of compensating the cost of the leased asset;
- to use the way of granting tax exemptions for international leasing operations with the aim of importing the high-tech equipment into Ukraine.

The proposed ways will contribute to increasing the demand of agricultural producers for the services of leasing companies, filling the market for agricultural leasing services with private capital, and, consequently, improving the investment environment in the agrarian sector.

---

## References

Arzamastsev, A.D., & Safiullin, M.A. (2007). Upravleniye protsessami rasshirennogo vosproizvodstva v APK [Process Management of Expanded Reproduction in the Agricultural Sector]. *Regionologiya*, 2.

Batov, G.H., Dzhugkaeva, L.M., & Tambieva, Dzh.A. (2011). Spetsifika upravleniya vosproizvodstvennym protsessom v selskom khozyaystve [Specificity of Management of the

Reproduction Process in Agriculture]. *Ekonomika i upravleniye*, 12(85), 154-157.

Chen, J.L., & Jiao, W.-S. (2014). TRIZ Innovative Design Method for Eco-leasing Type Product Service Systems. *Procedia CIRP*, 15, 391-394.

Dudin, M.N., Frolova, E.E., Abashidze, A.Kh., Miroshnichenko, O.I., & Shikalova, E.V. (2016). Pioneering Development of Italian National Agroindustrial Complex in the Context of Ensuring Food Security. *Quality – Access to Success*, 17(154), 65-70.

Gavrikov, M.S., & Dudchenko, O.N. (2011). Vosproizvodstvo i obsluzhivaniye elementov materialno-tekhnicheskoy bazy regionalnogo selskogo khozyaystva [Reproduction and Maintenance of Elements of the Material and Technical Basis of Regional Agriculture]. *Regionalnaya ekonomika: teoriya i praktika*, 16(199).

Karpova, T.S. (2007). Nekotoryye aspekty upravleniya intellektualnoy sobstvennostyu v Rossii [Some Management Aspects of Intellectual Property in Russia]. *Sovremennyye problemy nauki i obrazovaniya*, 6, 64-67.

Kashkin, V. (2006). Lizing v APK Rossii [Leasing in the Agricultural Sector in Russia]. *Tekhnologii lizinga i investitsii*, 1(14), 18-25.

*Kratkaya informatsiya o rezultatakh deyatelnosti AO "Rosagrolizing" v 2016 godu* [Brief Information on the Results of Rosagroleasing's Activities in 2016]. (2017). Retrieved May 11, 2017, from <https://www.rosagroleasing.ru/smi/analytics/>.

*Kuban lideruet po prirostu agrolizinga v Rossii* [Kuban Is Number One in Leasing in the Agricultural Sector of Russia]. (2016, November 30). Retrieved May 11, 2017, from <http://kuban.rbcplus.ru/news/584519ea7a8aa93db94e47a8>.

Ravenscroft, N. (1999). 'Post-Feudalism' and the Changing Structure of Agricultural Leasing. *Land Use Policy*, 16(4), 247-257.

Semkin, A. (2011). Printsipy formirovaniya i funktsionirovaniya sistemy upravleniya agropromyshlennym kompleksom [Principles of the Formation and Functioning of the Management System of the Agro-Industrial Complex]. *Mezhdunarodnyy selskokhozyaystvennyy zhurnal*, 2.

*Vysokie tekhnologii dlya selskogo khozyaystva* [High Technologies for Agriculture]. Retrieved May 11, 2017, from <http://www.nts-lib.ru/media/index1394.html>.

Zhukov, A.P. (2007). *Povysheniye ekonomicheskoy effektivnosti lizinga v protsesse obnovleniya osnovnykh fondov promyshlennosti Rossiyskoy Federatsii: avtoref. dis. ... kand. ekon. nauk* [Increasing the Economic Efficiency of Leasing in Updating the Fixed Assets of Industry in the Russian Federation (Ph.D. Thesis Abstract)]. Moscow. (p. 25).

- 
1. Dagestan State University, 367025, Republic of Dagestan, Makhachkala, ul. M.Hajiyev, 43 A. E-mail: [bzsh@ro.ru](mailto:bzsh@ro.ru)
  2. Ulyanovsk State Agricultural Academy named after P. A. Stolypin, Ulyanovsk, Russian Federation, 432017, Ulyanovsk Region, Ulyanovsk, New crown boulevard, 1
  3. Chechen State University, 364093, Grozny, Sheripova str., 32
  4. Dagestan State University of National Economy, 367025, Russia, Republic of Dagestan, Makhachkala, ul. Ataeva, 5
  5. Dagestan State University of National Economy, 367025, Russia, Republic of Dagestan, Makhachkala, ul. Ataeva, 5

---

Revista ESPACIOS. ISSN 0798 1015  
Vol. 38 (Nº 62) Year 2017

[Índice]

[In case you find any errors on this site, please send e-mail to [webmaster](mailto:webmaster)]