Regional agriculture in the context of sustainable development: legal and social issues

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Abstract. This paper discusses the issues of sustainable development in agriculture from a regional perspective and particularly focuses on the social and legal aspects of the problem. The authors point out that sustainability of regional agriculture is affected by various national, geographical, and other factors as well as the mentality of the local population. In this study, sustainability of regional agriculture is defined as the way of ensuring optimal conditions for the preservation of the regional agricultural sector in the times of crisis, as well as the creation of an efficient socio-economic mechanism that guarantees the steady and eco-friendly development of agriculture. In this regard, the efforts of the regional business community and government support can be very effective at ensuring the sustainability of regional agricultural systems. In today's market economy, the government seeks to stimulate economic growth while also considering the interests of the rural population, which is impossible to achieve unless the regional agriculture is sustainable.

1. Introduction
Regional agriculture is an important sector of the national economy, which is highly relevant to both theoretical and empirical research on sustainable development.

It is well-known that regionalization is a consequence of globalization, which has become quite chaotic over recent decades. Since globalization may not always have a positive impact, it is crucial to ensure the stability and sustainability of the affected regions, including their regional agriculture. Despite the severity of the issue and its complex nature (e.g., impact on other related processes and sectors such as food security, agricultural machinery production, green energy, etc.), this area has been heavily understudied. Therefore, we believe there is a need for a comprehensive analysis of regional agriculture in the context of sustainable development, particularly from a legal and social perspective.
2. Materials and methods
This paper is based on the analysis of data obtained from existing periodical and monographic literature on regional agriculture and the issues of regionalization. As for the methodology, the authors adopted the approach, according to which the efficiency and productivity of regional agriculture is directly and positively affected by the measures aimed at ensuring sustainable development in the agricultural sector.

3. Results
A thorough literature review allowed the authors to confirm the idea that regional agriculture from a perspective of sustainable development is a promising area of theoretical and empirical research.

First, the sustainability of regional agriculture is an essential element of the sustainability of any regional system, since, historically, agriculture is considered a major (and in some countries, the largest) economic sector.

Second, the relevance of research on regional agriculture in the context of sustainable development is growing due to social transformations (including those caused by the dangerous epidemiological situation and other global issues) in recent years. Meanwhile, agriculture as a fundamental economic sector, tied to a specific region or area, is able to meet the needs of the local population for crops and livestock products, regardless of the changes in the global economy.

Third, deep economic problems in many countries are highlighting the importance of the sustainability of regional agriculture. This situation requires the development of existing policies and the implementation of new flexible strategies of economic regulation, such as the import substitution policy. Some scholars believe that the current economic crisis gave Russia an opportunity to boost the development of its agriculture, which seems to be a well-justified opinion. Thanks to the import substitution policy implemented by the Russian government, Russia managed to increase the agricultural output and raise the overall competitiveness of the sector [1].

Fourth, a consistent and effective development of regional agriculture in a sustainable way is impossible without having a suitable legal framework and necessary infrastructure. For example, the State Program for the Development of Agriculture and Regulation of the Markets for Agricultural Products, Raw Materials and Food has a distinct section named “Sustainable development of rural areas”. That section covers comprehensive infrastructure projects aimed at providing rural settlements with necessary social infrastructure, utilities, highways, etc. Similar projects are addressed in the Transport Strategy of the Russian Federation. The interaction of the strategic programs leads to a synergistic effect and contributes to a faster and more effective achievement of the national goals.

Another document designed to ensure the sustainable development of regional agriculture in Russia is the Strategy for Sustainable Development of Rural Areas in the Russian Federation until 2030.

Fifth, sustainability of regional agriculture is directly affected by the demographics and geography of the region.

Nowadays, it is not uncommon to see a declining population and decreasing production output in many agricultural regions. The negative factors can be attributed, on the one hand, to general economic problems (i.e., shortage of labor, poor transport infrastructure, etc.), and on the other hand, to specific natural conditions that play a crucial role in agriculture (i.e., the quality of soil, landscape features, the presence of mountains and swamps, extreme temperature fluctuations, etc.) [2].

And finally, it is important to mention the role of legislative acts in shaping and regulating the agricultural sector. For example, Russia’s Federal Law of December 29, 2006 No. 264-FZ "On the Development of Agriculture" is aimed at ensuring food security in Russia as part of its national agricultural policy. Such regulations lie at the core of food security policies in most countries [3].

It is also worth mentioning the laws adopted by the member states of the Eurasian Economic Union in the area of regional agriculture development. The Eurasian Economic Union is an international organization for regional economic integration on the post-Soviet area, which was established by the Treaty on the Eurasian Economic Union in order to ensure sustainable development of the participating countries.
Scholars expect the members of the Eurasian Economic Union to create a single market for agricultural products, which, will require the unification of rules and regulations in this domain. The analysis of the Union’s legislation shows that the member states, following the majority of developed countries, are in the process of creating a uniform modern legal framework for agricultural markets, including organic agriculture. In this regard, it seems obvious that some national rules and regulations will require adaptation and modernization in order to be part of a common international legal framework of the Eurasian Union. However, first, it is necessary to clearly establish relevant laws of the Union, which will serve as reference for amending domestic agriculture law of the member states [4].

Undoubtedly, such integration will be beneficial to regional agriculture, since gaps in domestic law will be filled and compensated by the rules of the Eurasian Economic Union and vice versa. This integrative approach allows countries to not only leverage their national and regional characteristics, but also to follow a common strategy towards sustainable development.

4. Discussion
Sustainable development of regional agriculture is vitally important for any geographical area with a prominent agricultural sector in the economy. Particularly, it is the topic of major concern in developing and the least developed countries, for example, in Africa.

Thus, in 2010, at a conference in the capital of Namibia, the ministers of agriculture adopted the Windhoek Declaration, in which they called for a green revolution in Africa based on the principles of sustainable development, taking into account the specific features of the continent, different agricultural conditions and systems as well as socio-cultural context. The importance of that meeting stems from the fact that environmental damage can undermine human rights, which are protected by the Universal Declaration of Human Rights and other documents. One of the most vivid examples of this issue is reflected in the Human Right to Water and Sanitation. In 1999, the United Nations General Assembly declared that the rights to food and clean water are fundamental human rights, and their protection is a moral obligation for both national governments and the international community [5].

Nevertheless, the government’s support for the agricultural sector has largely been outside of the scope of multilateral agreements for a long time. In the post-war period, the discussions on creating world trade regulations primarily focused on reducing tariffs in order to stimulate international trade. However, it was obvious that the high amount of state subsidies to agriculture and other protectionist measures at that time could undo the positive effect of tariff reduction [6].

The example of the call for a green revolution in Africa mentioned above demonstrates to us another important aspect that fundamentally influences the sustainability of regional agriculture. That aspect is determined by the fact that regional agricultural institutions are often globally-oriented, and they usually follow international guidelines, failing to address local issues effectively and neglecting distinct regional features and characteristics, which appears ineffective and unacceptable. Such an approach essentially ignores or underestimates the rich managerial and agricultural experience accumulated at the regional level.

In the case of the African region, we should acknowledge the fact that international organizations do not always carefully examine the measures that used to be taken locally to ensure sustainability and resolve regional agricultural problems in the region [7]. Thus, we believe that historical experience should be fully considered.

The stability of the agricultural sector directly affects the stability of other economic sectors and social systems. Agriculture is one of the fundamental sectors of the economy, which supports the viability of a state in multiple ways. The significance and value of agriculture to society should be examined from different dimensions such as economic, social, environmental and political aspects [8].

Moreover, agriculture can serve as a good example of interregional interaction and cooperation. Thus, Russia occupies a prominent place in the global food market, particularly, with regard to two
kinds of commodities. The first of them is wheat. In 2015-2016, Russia, for the first time in recent history, became the world's largest exporter of wheat (about 30 million tons) (figure 1).

![Russia's wheat exports in 2014-2016](image)

**Figure 1.** Russia’s wheat exports in 2014-2016, thousand tons [9].

And Russia’s wheat exports have been the largest in the world for three years in a row. Russia mainly exports wheat to the countries of the Middle East and North Africa. The second market, in which Russia has taken a leading position in the world, is fish and seafood. In 2014, Russia was ranked 15th in the world by the volume of seafood exports [10].

The example above demonstrates the interaction among various agricultural sectors in different countries/regions, since they typically specialize in some kinds of agricultural activities and then trade with other countries or regions selling what they have grown and purchasing what was grown by others. In this respect, it seems interesting to examine the collapse of the USSR, which led to the bankruptcy and closure of the vast majority of successful agricultural enterprises. Some German and American scholars published a study entitled "Rapid land use change after socio-economic disturbances: the collapse of the Soviet Union versus Chernobyl". The result of the study was that the collapse of the Soviet Union had such a negative impact on the fertility of the Ukrainian and Belarusian agricultural lands and the general development of agriculture that it was comparable to the Chernobyl accident. That conclusion was made by the authors based on the analysis of satellite images of Ukraine and Belarus from 1980 until recent years. Since 1992, only a very small share of the abandoned land has been recultivated and restored, that is why numerous arable fields have become infested with weeds, trees and bushes. Once those areas are covered by forest, it will be very difficult and costly to make the soil fertile and suitable for growing crops again [11].

The sustainability of regional agriculture requires a mechanism for protecting the social, financial, and other rights of the main parties involved in the agricultural sector, such as amateur and professional farmers, as well as large agricultural enterprises and corporations. Indeed, it is also vitally important that there is no discrimination on the grounds of nationality, ethnicity and religion in the agricultural sector. In this respect, the most understudied issue is the relationship between the local population and foreigners, who come to the country to work in the agricultural sector. A good example may be the relationship between Russia and China. Despite the warm political and economic relations between the two countries in recent years, some Russians, who live in the eastern regions close to the
Chinese border, dislike it when the Chinese farmers and agricultural companies do business in Russia calling it the “Chinese expansion”. But as Chinese agricultural companies themselves say, the reason is that they simply do not have enough land in their country, but have plenty of people. Thus, they have to do business in the neighboring countries in order to increase production, primarily the output of soybeans [12]. We believe that such situations may potentially cause serious ethnic tensions and cultural conflicts [13]. Therefore, that issue requires further consideration and investigation.

5. Conclusion

Nowadays, the agricultural industry has become much safer and considerably more automated than it used to be. For example, the industry is increasingly using low-toxic fertilizers and less harmful pest control products. The industry also develops new production technologies, and regularly updates and improves the existing ways of production, which increases production efficiency and substantially reduces the demand for manual labor in the sector [14].

Despite the fact that the demographic factor may have a less obvious role in ensuring the sustainability of regional agriculture, compared to the socio-economic factors, it may actually have a significant negative impact on sustainability. For instance, the exodus of the population, engaged in agriculture, from a certain region may be associated not only with a lack of jobs, but also with cultural and ethnic conflicts as well as environmental degradation.

In such a case, the economic factors exacerbate social issues, which leads to even greater instability, since migrant workers are eventually going to settle down in new areas and start their families, thus, further aggravating the existing social, economic and demographic problems.

A systematic analysis of such a complex issue as the sustainability of regional agriculture may be conducted in two distinct approaches taken by researchers. The scholars that adopted the first approach attempt to describe such systems in abstract terms, which often means providing a purely external description of the phenomenon, as well as making suggestions on the system’s optimization in order to increase its efficiency. The second approach focuses on the close relationship between the systematic analysis and decision-making, which explicitly highlights the existence of the optimal choice among several possible alternatives.

Such options for solving regional agricultural problems should be assessed from a long-term perspective. We also believe that, when developing national programs for supporting agriculture, policymakers should consider a wide variety of objective and subjective factors, which may have an impact on that sector.

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