THE ROLE OF LAND REFORMS IN SUSTAINABLE FOOD SECURITY

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Abstract

After the collapse of Soviet system, immediately after declaration of independence, former soviet republics, as well as former socialist countries in Eastern Europe decided to initiate land reforms within the framework of agrarian reform. The defined general objectives of land reforms were: to establish a fairer system of property and use rights, to create conditions for increasing of intensity and productivity of land use, to strengthen the rights of lessors and tenants, to grant land to those who wish to cultivate or otherwise use the land. However, the legislation and administrative systems of separate countries were different, so the objectives and tasks of land reform, as well as the measures and methods for implementing the land reform, were different. The aim of the article is to evaluate positive role of land reform which has led to more targeted and intensive use of land in agriculture and other sectors. The research summarises the studies published previously by the authors of the article and other researchers on the progress and results of land reform in Latvia, Lithuania and Poland. The issue of land use can be considered in several aspects, but in food security sphere more important, evaluating results of land reforms is aspect of assessing the land as natural resource.

Key words: agriculture production, land reform, market economy, sustainability, food security

Introduction

Change of political situation always causes the rearrangement of land ownership and land use forms within new socio-economic circumstances. After collapse of the Soviet Union in all former soviet republics, as well as in former socialist countries in Eastern Europe, started land reforms. Because the legislation and administrative systems of separate countries were different, the objectives and tasks of land reform, as well as the measures and methods for implementing the land reform, were different. However key objectives of land reforms in all countries were establishment of fairer distribution of ownership and land use rights and increase of intensity and productivity of land use. Restoration of traditional lifestyle in rural areas and achievement of high-quality agricultural products, as well as formation of urban and rural environment in interests of society was implemented for sustainable food security. Land reform has created the preconditions for initiative and action of landowners in market economy [18].

According to authors Aleknavicius, Hartvigsen, Parsova, Jankava et.al., land reforms over the last 30 years have had a significant impact on changes in ownership and land use, and in particular on land fragmentation [3; 5; 10; 14; 19]. Other measures are needed to reduce land fragmentation, such as land consolidation or other ways of optimizing the structure of land holdings [2; 6; 17]. The consequence of land reforms is a growing agricultural land market, which is affecting the economic growth of countries [4; 8; 9].

The aim of the article is to evaluate positive role of land reform which has led to more targeted and intensive use of land in agriculture and other sectors. The article also analyses the
shortcomings and problems encountered during the reform. This study aims to assess the results of land reforms in Latvia, Lithuania and Poland, and their impact on sustainable food security.

The topic on food security can be considered in several aspects, but evaluating results of land reform in land management sphere more important is aspect of assessing the land as natural resource. Research on use of land and land-related resources may cover several types of land use or may focus only on individual sectors or groups of sectors – agriculture and forestry, fishery, and others. In general, these studies can be used to find answers to questions about extent to which land resources are used according to their intended purpose, whether it is expedient or necessary to redistribute land between sectors of national economy, etc.

**Results and discussion**

**Consequences of land reforms.** Although procedural course of land reforms in different countries differed, all measures could be divided into four main directions, results of which are illustrated in Figure 1.

![Fig.1. Main measures in frame of land reforms [6]](image)

Land reform usually is one of the means of restructuring agriculture and main tasks of land reform in mentioned countries have been fulfilled [2; 8; 11].

Analysing land properties according to property status, it can be concluded that largest area of land was transferred to private ownership, and majority of the land is owned by natural persons (Table 1).

Table 1

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Latvia</th>
<th>Lithuania</th>
<th>Poland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owned by physical persons</td>
<td>51</td>
<td>75</td>
<td>58</td>
</tr>
<tr>
<td>Owned by legal persons</td>
<td>20</td>
<td>14</td>
<td>4</td>
</tr>
<tr>
<td>Owned by municipalities</td>
<td>2</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Owned by the state authorities</td>
<td>27</td>
<td>10</td>
<td>34</td>
</tr>
</tbody>
</table>

Source: author’s calculations based on date of information system of national land cadastres

Describing created quantitative or territorial aspects of land use, it should be noted that as result of land reform in rural areas instead of former large collective and state farms there were developed agricultural holdings, whose owners mainly were physical and legal persons.
In mentioned countries has been provided unified classification of land as integral part of real property, taking into account each land parcel as separate cadastral object. For each land parcel on the basis of territorial planning has been determined its intended use, which is registered in cadastral information system [7; 16].

The land, depending on its natural properties and long-term use, has been subdivided into types of land use as well (Table 2).

**The impact of land reforms on food security.** Main forms of business activities in rural area are peasant farms, individual (family) enterprises, joint-stock companies, limited liability companies, etc. [1; 12; 13; 15; 20]. Agricultural land is land designated for agricultural production. In mentioned countries in result of land reform has been developed effective agricultural production, amount of which is showed in Table 3.

Features characterising the territory, population and land use (on 01.01.2019)

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Latvia</th>
<th>Lithuania</th>
<th>Poland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Territory of country, million ha</td>
<td>6.5</td>
<td>6.5</td>
<td>30.7</td>
</tr>
<tr>
<td>Population, million people</td>
<td>1.9</td>
<td>2.8</td>
<td>38.0</td>
</tr>
<tr>
<td>Population density, inhabitants per km²</td>
<td>29.5</td>
<td>42.8</td>
<td>123.0</td>
</tr>
<tr>
<td>Farmland, million ha (on 01.01.2016)</td>
<td>1.9</td>
<td>2.9</td>
<td>14.4</td>
</tr>
<tr>
<td>Share of farmland in land area, % (on 01.01.2016)</td>
<td>30.5</td>
<td>46.7</td>
<td>46.9</td>
</tr>
<tr>
<td>Organic farming as a share of the UAA, % (on 01.01.2018)</td>
<td>14.5</td>
<td>8.1</td>
<td>3.3</td>
</tr>
</tbody>
</table>

Breakdown of land according to the groups of intended use of land, %

| Agricultural land                                      | 58.1   | 63.7      | 60.0   |
| Forestry land and specially protected natural territories| 35.4   | 31.0      | 35.5   |
| Land of water objects                                  | 0.2    | 0.1       | 2.1    |
| Land of residential construction                       | 0.9    |           |        |
| Land for development of commercial, public and industrial objects | 1.1    | 4.9       | 5.5    |
| Land for transport and engineering infrastructure, mineral extraction territories, etc. | 2.5    |           |        |
| Land for conservation                                  | X      | 0.3       | X      |

Breakdown of land according to the types of land use, %

| Agricultural land                                      | 36.0   | 52.2      | 60.0   |
| Forests                                               | 47.9   | 33.1      | 30.2   |
| Shrubs (and trees)*                                    | 1.6    | 3.0*      | 0.4    |
| Swamps                                                 | 3.4    | 1.5       | X      |
| Land of water objects                                  | 3.8    | 4.1       | 2.1    |
| Land under yards and buildings                         | 1.6    | 3.7       | 1.1    |
| Land under roads                                       | 2.1    | 1.6       | 2.1    |
| Other non-agricultural land                            | 3.6    | 0.7       | 4.5    |

Source: data of cadastral information systems, Agriculture, forestry and fishery statistics, 2020 edition

As these countries participate both in EU and common world market of agricultural products, prices of products in these countries are quite similar and are gradually increasing (Table 4). Over the past 10 years, grain prices have risen about 1.5 times.

Table 3

Agricultural production (thousand tonnes), including share (%) of EU-27 in 2019

<table>
<thead>
<tr>
<th>Production</th>
<th>Latvia</th>
<th>Lithuania</th>
<th>Poland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cereals (including rice)</td>
<td>total</td>
<td>%</td>
<td>total</td>
</tr>
</tbody>
</table>
EU common agricultural policy aims to level conditions of agricultural production in all individual EU countries.

Table 4
Average grower prices in Latvia, Lithuania and Poland (EUR /t), %

<table>
<thead>
<tr>
<th>Production</th>
<th>Latvia</th>
<th>Lithuania</th>
<th>Poland</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2009</td>
<td>2010</td>
<td>2009</td>
</tr>
<tr>
<td>Food wheat</td>
<td>137</td>
<td>126</td>
<td>98</td>
</tr>
<tr>
<td>Feed wheat</td>
<td>114</td>
<td>111</td>
<td>106</td>
</tr>
<tr>
<td>Feed barley</td>
<td>110</td>
<td>90</td>
<td>93</td>
</tr>
<tr>
<td>Food rye</td>
<td>0</td>
<td>0</td>
<td>82</td>
</tr>
<tr>
<td>Food wheat</td>
<td>175.05</td>
<td>184.99</td>
<td>170.58</td>
</tr>
<tr>
<td>Feed wheat</td>
<td>151.89</td>
<td>174.17</td>
<td>155.52</td>
</tr>
<tr>
<td>Feed barley</td>
<td>144.13</td>
<td>151.25</td>
<td>145.16</td>
</tr>
<tr>
<td>Food rye</td>
<td>125.00</td>
<td>129.39</td>
<td>133.35</td>
</tr>
</tbody>
</table>

Source: Agriculture, forestry and fishery statistics, 2020 edition. EUROSTAT; European Commission; Lietuvos žemės..., 2010; Lithuanian agriculture..., 2021

Conclusions, proposals, recommendations

During land reform have been created perspective and economically effective agricultural holdings for food security both on national and world market. Individual farms and holdings are different in terms of personal and used land area.

Territories of agricultural holdings are uncompact, fields are territorially dispersed. Redistribution of land parcels between landowners takes place, agricultural holdings are becoming larger and are restructured in a spontaneous manner, most often at initiative of land buyers and lessees.
After completion of the land reforms, largest proportion (about 60%) in analysed countries makes agricultural land. Farms use about 75% of this land in Lithuania and Poland, and about 52% in Latvia. Latvia is more specialized in organic farming as well.

The analysed countries play an important role in the European Union agricultural market. These three countries are producing about 12.5% of EU grain harvest and even 13.2% of root crop. Contribution of these countries to livestock farming is very significant. These countries supply about 20.6% of poultry meat produced in all EU countries. Of these countries, Poland accounts for the largest share of production.

References


DAVAMLI ƏRZAQ TƏHLÜKƏSİZLİYININ TƏMİN EDILMƏSİNDƏ TORPAQ İSLAHATININ ROLU

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³Böyük Vitautas Universiteti, Kaunas, Litva

Xülasə

Sovet sisteminin dağılmasından və müstəqillik elan edildikdən darhal sonra keçmiş sovet respublikaları, ehləs də Şərq Avropann keçmiş sosialist ölkələri aqrar islahat çərçivəsində torpaq islahatkarına başlamaq qarşının qoldular. Torpaq islahatının müəyyən edilmiş ümumi məqsədləri bunlar idi: daha adətən mühüm və istifadə hüquqları sistemi yaratmaq, torpaqdan istifadənin intensivliyi və məhsuldarlıq artırmak üçün şərait yaratmaq, icarə verənlər və icarəçilərin hüquqlarını gücləndirmək, əkin və digər məqsədlər üçün torpaqdan istifadə etmək istəyənlərə torpaq vermək. Bununla bərabər, müxtəlif ölkələrin qanunvericiliyi və inzibati sistemləri bir-birindən fərqlidirlər. Buna görə də, torpaq islahatının məqsəd və vəziyyəti, torpaq islahatının aparılması tədbirləri və üsulları fərqlidirlər. Məqalənin məqsədi torpaq islahatının keçmiş təsərrüfatında və digər sahələrdə daha məqsədli və intensiv istifadəsi səbəb olunan məqsədli torpaq islahatının nəticələrinin qiymətləndirilməsidir. Tədqiqat işində məqalə müəllifer və digər tədqiqatçılar tərəfindən Latviya, Litva və Polşada torpaq islahatının gedişi və nəticələri ilə bağlı nəşr olunmuş məlumatları əməliyyətdir. Torpaq istifadəsi bir neçə aspektən mənəvi, etsəni və digər tədbiqətçilər tərəfindən inkişaf etmiş sənədlərin xüsusiyyətlərini, sektorun inkişafı, torpaq təhlükəsizliyinin sahəsində torpaq islahatının nəticələrinin qiymətləndirilməsinin daha vacib tədarük tədbirinə sərəvət kimi qiymətləndirilməsidir.

Açar sözər: kənd tasərrüfatı istehsalı, torpaq islahatı, bazar iqtisadiyyat, davamlılıq, ərzaq təhlükəsizliyi

РОЛЬ ЗЕМЕЛЬНЫХ РЕФОРМ В УСТОЙЧИВОЙ ПРОДОВОЛЬСТВЕННОЙ БЕЗОПАСНОСТИ

Велта Парсова¹, Кристина Куровская², Вирджиния Гурскене³
После распада советской системы, сразу после провозглашения независимости, бывшие советские республики, а также бывшие социалистические страны Восточной Европы решили провести земельную реформу в рамках аграрной реформы. Общими целями земельной реформы были определены: установить более справедливую систему прав собственности и пользования, создать условия для повышения интенсивности и продуктивности землепользования, усилить права арендодателей и арендаторов, предоставить землю желающим возделывать или иным образом использовать землю. Однако законодательство и административные системы отдельных стран были разными, поэтому цели и задачи земельной реформы, а также меры и методы осуществления земельной реформы были разными. Цель статьи - оценить положительную роль земельной реформы, которая привела к более целенаправленному и интенсивному использованию земли в сельском хозяйстве и других отраслях. Исследование обобщает ранее опубликованные авторами статьи и другими исследователями исследования о ходе и результатах земельной реформы в Латвии, Литве и Польше. Вопрос землепользования можно рассматривать в нескольких аспектах, но в сфере продовольственной безопасности более важным, оценивающим результаты земельной реформы, является аспект оценки земли как природного ресурса.

Ключевые слова: сельскохозяйственное производство, земельная реформа, рыночная экономика, устойчивость, продовольственная безопасность.