AGRICULTURAL LAND IN THE CONTEXT OF THE THEORY OF PUBLIC GOODS – CRITICAL ANALYSIS

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ABSTRACT

The main purpose of this article is to present a critical point of view towards the application of the public goods concept to land and agriculture. The basic legal regulations forming the agricultural system in Poland and the assessment of the legitimacy of state interventions on the land market in the light of the theory of the Austrian school of economics are discussed. According to the criteria used in the theory of public goods, agricultural land is a typical private good. On the other hand, the issue of goods integrally connected with land such as agricultural landscape and quality of the natural environment is debatable. The following arguments are against the state intervention: the lack of the possibility to objectively identify social needs, the political and redistributive nature of state intervention, the existence of market mechanisms for financing public goods.

Key words: agricultural land, agricultural system, theory of public goods, Austrian school of economics

JEL codes: B53, H41, Q15

INTRODUCTION

As in other European countries, within the scope of the policy shaping the agricultural system in Poland, there is a model of agriculture based on family farms. For this purpose, the privileges are being created in access to agricultural land for this kind of farms. Thus, the access to land is not determined by the economic efficiency but by the legal status of the buyer. From an economic point of view, this means that the market allocation of land has been replaced by political decisions.

The problem of functioning of the agriculture in the conditions of market economy is often addressed in economic research. The mainstream of research in this field is dominated by the belief that in order to improve the economic efficiency of this sector, state intervention is necessary [Stiglitz 1987, Wilkin 2003]. One of the main reasons for this, is the specific nature of the land that is the basic factor used in agricultural production. It is believed that in the currently developed sustainable agriculture model, the land provides not only food and energy resources but also many other general social functions. These services have the character of public goods and the market mechanism usually does not ensure their optimal supply [Poczta 2010, Wilkin 2010, Zegar 2010, Czyżewski and Kuliński 2011]. On this basis, the land is treated as a specific public good and family farms are the best trustees of this good. Such a statement also appeared in the justification to the governmental draft law on suspending the sale of real estate of the State Treasury Agricultural Property Reserve and on the amendment of some acts [Rządowy projekt ustawy z dnia 4 marca 2016 r.] – „agricultural land should be treated as an unprofitable public good and as such should be subject to special legal regulations”.

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The economic discussion also includes critical opinions on the concept of public goods [Hoppe 1989, Holcombe 1997, Fijor 2011, Kwiatkowski 2013]. These economists, in turn, indicate the limited cognitive qualities of this theory, resulting from its selective and unsystematic approach to the study of reality. This sceptical position is characteristic primarily for representatives of the Austrian School of Economics. An analysis of the effects of state intervention in the economy constitutes an important and well developed part of the school’s achievements [von Mises 2000, Rothbard 2009, Huerta de Soto 2011].

The main goal of this article is to present a critical point of view towards the concept of public goods as well as its application to land and agriculture. The partial objective of the research was to present the basic systemic solutions affecting the functioning of the agricultural land market. The primary legal regulations shaping the agricultural system in Poland and their impact on the functioning of the agricultural land market were discussed. The final stage of the research was the assessment of the legitimacy of state intervention in the land market in the light of the theory of the Austrian School of Economics.

The study is of a theoretical nature. To accomplish the main objective, the literature of the subject was reviewed, the analysis was based on deductive reasoning and verbal logic. The assumptions and instruments of the policy shaping agricultural system were presented. For this purpose, source materials in the form of legal acts were used.

THE AGRICULTURAL SYSTEM IN POLAND AND THE RULES FOR TRANSFERS OF AGRICULTURAL LAND

In Poland, a family farm, as the basic form of farming in agriculture, was established in art. 23 of the Constitution of the Republic of Poland of April 2, 1997. In addition to the Constitution, the most important regulations shaping the agricultural system in Poland are: the Act of April 11, 2003 on shaping the agricultural system, the Act of October 19, 1991 on the management of agricultural property of the State Treasury and the Act of April 14, 2016 on suspension of sale of property from the Agricultural Property Stock of the State Treasury and the amendment to certain acts. According to these regulations, a family farm is a farm: (1) which is run by an individual farmer, (2) whose total area of agricultural land is not more than 300 ha. An individual farmer is considered to be an owner, perpetual usufructuary, independent possessor or lessee of agricultural properties whose total area of arable land does not exceed 300 ha, who has agricultural qualifications and has at least five years lived in the commune, where one of the agricultural properties belonging to the farm is located, and who ran the farm personally during that period.

As part of the policy of shaping the desired agricultural system, the state conducts interventions including: (1) improving the area structure of agricultural holdings, (2) preventing excessive concentration of agricultural property, (3) ensuring that agricultural activities are carried out on farms by persons with appropriate qualifications. These activities are carried out in the form of a ban on the purchase of agricultural properties by persons who are not individual farmers. This limitation applies to all agricultural properties with an area of 1.0 ha, excluding properties designated for spatial development plans for purposes other than agricultural. Acquisition of agricultural land by a person who is not an individual farmer requires special consent. The obligation to run a farm personally for five years is also imposed on the buyer. Currently, control over the land market is carried out on behalf of the State by the National Support Centre for Agriculture (until 2016 called Agricultural Property Agency). For this purpose, NSCA was equipped with such rights as the right of pre-emption and repurchase. The right of pre-emption consists in the fact that in the situations specified in the law, NSCA has the right to enter into the transaction and purchase the agricultural property at a price and on the terms specified earlier by the seller and the buyer. The right of repurchase has similar consequences as the right of pre-emption. It allows NSCA to acquire an agricultural property in the case of contracts transferring ownership other than a sale agreement, such as, for example, a donation, making contribution-in-kind of an agricultural property to a commercial company, divisional agreements, and property exchange. By executing the right of pre-emption and repurchase, NSCA may prevent the purchase
of agricultural properties by natural persons who are not private farmers, and by legal persons.

Summarizing the above, it can be concluded that currently the agricultural land market in Poland is under strong influence of the state policy. The most important consequences of these regulations should certainly include a drastic reduction in demand for land by limiting the circle of potential buyers only to individual farmers. Another important phenomenon, which in turn affects the supply of land, is the suspension of the privatization of state land.

THE LAND IN THE CONTEXT OF THE PUBLIC GOODS THEORY

Nowadays, a fundamental argument in favour of interventionism in agriculture is the economic theory of public goods. This concept is at the same time one of the basic elements of the market failure theory. According to this, there is no possibility of achieving economic efficiency in the conditions of market order. The essence of this theory comes down to the statement that socially desirable goods that meet such features as non-rivalry and non-excludability from consumption will be insufficiently supplied by the market. Therefore, the supply of these goods should be left to the state. These goods are the opposite of private goods.

The economic concept of public good was formulated by Samuelson [1954], who considered the lack of competition in consumption to be the basic criterion distinguishing public goods. In the following years, this theory was developed and modified as a result of which many definitions and classifications were obtained depending on the level of publication [Daniłowska 2014]. First of all, it is indicated that besides the pure public goods, there is a wide group of “intermediate” goods that only partially meet the criteria of non-rivalry in consumption and non-excludability. The scope of these goods is variable and depends on the number of consumers, the territorial scope of the market, the level of economic development and available technologies. It was also claimed that the features of public goods are also found in private goods which generate positive external effect for society. These goods are called desirable social goods or merit goods [Musgrave 1957, Wilkin 2010].

The theory of public goods has also found a widespread application in sciences in the aspect of rural and agricultural development. It is emphasized that apart from traditional functions in the form of production of food raw materials, agriculture is a provider of many public goods. The most commonly mentioned are: agricultural landscape, biodiversity, water quality and availability, soil functionality, climate stability, air quality, resistance to floods and fires, rural areas vitality, food safety, animal welfare and health [Cooper et al. 2009]. In turn, due to the fact that the main factor of production in agriculture is land, it is treated as a fundamental public good and, therefore should be subjected to special regulations.

According to critics of the theory of public goods, it contains a series of errors and inaccuracies. The economists of the Austrian school of economics certainly belong to the greatest opponents of this theory. The school bases its research method on a few fundamental pillars such as subjectivism and methodological individualism, emphasizing the importance of knowledge limitation and uncertainty in the management process as well as rejecting quantitative methods. Subjectivism and methodological individualism express the belief that only individual human beings act in a way that they engage in conscious actions to achieve selected goals. Human preferences are subjective in nature and, in consequence, the value of market goods is the result of personal valuation and individual choices. The theory of the Austrian school assumes that a human being always acts in conditions of limited knowledge and uncertainty, and the most effective mechanism for knowledge acquisition is the free market. The prices of consumer goods reveal the most urgent unmet needs, while prices of economic resources inform about the availability of production factors. Then entrepreneurs searching for profit are motivated to meet the needs of consumers in the best way simultaneously minimizing resource consumption. This process is most efficient when protection of individual property and individual freedoms are ensured, hence any extortion of cooperation through the system of orders and prohibitions limits the productivity of society and undermines the moral foundations of society. The economists of this school are also characterized by a sceptical approach to quantitative methods and mathematical modeling.
They believe that economic knowledge can only be collected by verbal explanations of cause and effect relationships. On the basis of a priori true statements (like the fact that a human acts), their logical implications are formulated.

An important part of the Austrian school of economics output is a critical analysis of the effects of state intervention. Ludwig von Mises [2000] defined interventionism as a set of procedures hindering the functioning of the market economy. In his opinion, it interferes with production and limits the ability to satisfy the needs as it forces producers and owners of means of production to use them in a different way than they would use under market pressure. It is a disruption of economic rationality, which is undoubtedly the result of the poverty in society. According to Austrian economists, the theory of public goods is also not a justification for state intervention. At the same time, it should be noted that the fact of specific nature of some goods itself does not raise controversy. Austrian economists argue that both consumer goods and capital goods are heterogeneous and that their economic functioning is difficult to be captured in the form of universal schemes. The exaggerated emphasis of this fact raises objections and draws improper conclusions such as the need to replace the market production with public production.

Table 1 presents the list of the most important critical remarks regarding the theory of public goods.

First of all, it should be noted that since human needs are subjective in nature, the optimal production structure cannot be determined in advance. Thus, there are no objective grounds to claim that a given method of resource allocation better fulfills social goals than another. Referring this to agriculture, there are two competitive ways of land resources usage that are often mentioned in modern economic research. The first is to use land as a factor in production of food and food commodities. The second is the supply of services by agriculture and rural areas based on natural ecosystems, of which the land is a part, e.g. agrotourism, rural landscape, etc. As it can be seen, settling the issue which of the above goods produce more and which less depends on individual consumer preferences. And the preferences, in turn, depend on many factors including the income situation of buyers. Low-income consumers who spend a substantial part of the budget on food may be more interested in a greater supply of food than in developing other services within the agricultural sector. In turn, affluent consumers with sufficiently satisfied food needs will be more inclined to appreciate the values of the natural environment and more often will look for related services. It can be observed that it is impossible to clearly and indisputably indicate what the optimal structure of production should be from the social point of view. Because of the fact that each consumer assesses the usefulness of particular goods in marginal conditions and according to the individual preferences, learning the level of satisfaction from its consumption is not available to other people. Thus, this undermines the main con-

| The main statements of the public goods theory | Critical remarks |
|-----------------------------------------------|------------------|
| Public goods are socially desirable            | human needs are subjective, changeable, hidden, |
|                                               | lack of opportunities to learn and aggregate social needs |
| Public goods are specific (non-rivalry and non-excludability) and generate positive external effects | the lack of rivalry in consumption is apparent, |
|                                               | exclusion from consumption is a function of entrepreneurship, |
|                                               | the actual inability to exclude from consumption results from the lack of property rights, |
|                                               | the external effects are common and have a subjective character |
| Market production is insufficient, state intervention is necessary | too simplified and static image of the market, ignoring the complexity and dynamics of market processes, omitting the entrepreneurial function, |
|                                               | the actual efficiency of the public sector is not taken into account, |
|                                               | the state is a tool of group interests |

Source: own work based on Hoppe [1989], Holcombe [1997], Kwiatkowski [2013].
clusion from the theory of public goods that market production will not be socially optimal and that state intervention is necessary to improve this situation. This is due to the fact that it is impossible to compare whether production increased as a result of state intervention is more beneficial than with drawn production that would be delivered on the free market. Therefore, any arbitrary claims regarding the resource allocation desired by society are in fact an extrapolation of individual or group preferences to the whole society and not a real reflection of social needs. For this reason, supporters of the free market argue that the only effective way to aggregate social preferences is the market process, which is not only about the exchange of existing goods but also serves as a transfer of information and determines future directions of development.

Taking this idea further, we encounter additional doubts which arise from the theory of public goods, for example: a) what should be the area and economic structure of farms? b) what should be developed – agriculture or non-agricultural business in rural areas? c) what rural landscape is more valuable: traditional or modern? These are the key problems determining the directions of development of agriculture and rural areas, for which economics, as a science, cannot give the answer, because all claims will always have a normative character resulting from subjective human assessments. As L. von Mises [2007] said, “economics is a theoretical science and refrains from value judgments. It is not its role to indicate people what goals to pursue”.

Similarly, there is no satisfactory answer to the question: where does the belief that family farms best serve the public come from? And if there is no scientific basis to claim that, then the model of agriculture based on family farms should rather be regarded as a political concept pursuing the interests of specific social groups and not a scientifically developed social program. In case of the policy shaping the agricultural system, the social group that benefits from this policy are undoubtedly individual farmers because they are privileged with access to land. The next social group benefiting from this are the officials and politicians who are equipped with the means necessary to conduct this policy and the scope of their authority is increased.

The next pillar of the theory of public goods is the specificity of goods, which due to such characteristics as non-rivalry and non-excludability cannot be effectively supplied by the market system. First of all, it should be noted that land perceived as a part of the earth’s surface, is undoubtedly a scarce good and, therefore in the context of the theory of public goods is a typical competitive good. In order to resolve the conflict of who should benefit from this scarce good, the spatial borders of the property are determined and property rights are assigned. Hence, the agricultural land like the land in general should definitely be considered as a private good. However, a much more problematic issue is related to the existence of various goods integrally associated with agricultural land such as agricultural landscape, quality of the environment, rural areas vitality, food safety, etc. Proponents of the theory of public goods express their doubts that the open nature of these goods together with the inability to enforce payment for their usage may cause individual owners of resources to be deprived of economic incentives to provide this type of goods (the free-rider problem). It is indicated that these goods have the character of externalities, where the externalization of benefits does not allow effective delivery by the market mechanism. It should be noted that this statement is difficult to justify for several fundamental reasons.

The first one results from the above mentioned subjective theory of values, so whether these goods are goods at all. Similar conclusions will be reached, if we consider them as a sign of externalities. For some consumers, these will be positive external effects, for others negative and for some neutral. Another issue worth highlighting is that externalities are a common phenomenon also noticeable in case of typical private goods, e.g. the aesthetics of private houses and gardens affect the appearance of the whole area. What is more, a profound and systematic approach to this issue allows to notice that the actions of some people influence the situation of other people, which is in fact the essence of social life. Social cooperation in direct terms usually has an equivalent character (exchange system). However, in indirect terms, a whole series of events that generate economic and social progress can be observed, where some incur costs while others benefit. Such phenomena certainly include any investment activity or any progress in production methods (technical, organizational, biological). This progress due to
the effect of imitation is spreading and contributing to the growth of general well-being. Goods produced using more and more efficient production methods in the long run become cheaper and more easily available to the average consumer. Thus, a massive external effect might be observed whereby the most entrepreneurial individuals save, invest and bear the risk of a production venture and the benefits in the form of an increase in the average standard of living are related to the whole society. At the same time, it is important to highlight that the fastest economic growth occurred in systems where the main role was played by the market mechanisms. And that means that the inability to internalize social benefits was not a barrier to initiate and disseminate pro-social behaviour. In turn, in the systems with central management where the dominant role in the economy was played by the state, there has always been an economic decline and deterioration of the living conditions by society. Therefore, if any conclusion for an economic policy can be drawn from this, then it is completely opposite to what the theory of public goods postulates, i.e. that social welfare grows faster if the state resigns from an active role in the economy. This also applies to the issue of food safety. Since the market system has always led to the abundance of goods, it would be difficult to explain that this principle does not apply to food. Similarly, it refers to welfare and health of animals. In fact, the living conditions of farm animals are closely related to the living conditions of people. Thus, if the market system is effective in improving housing and human health, then animal welfare and health are also improved in a natural way.

An interesting explanation of how the market system deals with the “free-rider problem” is the concept of entrepreneurship developed by the Austrian school of economics. Entrepreneurship is understood as the ability to discover mismatches in the real world and to create new solutions to eliminate these inconveniences. So, if there are unmet and adequately strong social needs and at the same time the appropriate resources are available and the only problem is the inability to enforce the payment for the service, then the solution of the problem will be only a matter of time and human creativity. In these conditions, technical or organizational progress is almost unavoidable. As stated by J. Huerta de Soto [2011] „from the point of view of the dynamic theory of the entrepreneurial function, every situation in which some «public» good appears, is an opportunity to discover and eliminate this situation with the help of entrepreneurial creativity. Hence, from the dynamic perspective of unimpeded realization of entrepreneurial processes, the collection of «public» goods tends to become an empty set”. In practice, these activities may be of a very different nature. Some may rely on direct payments and search for more effective ways to eliminate non-payers. Other ways relate to maintaining the open nature of goods and financing operations from the sale of associated goods. An example of this second type of activities may be the rural landscape and agrotourism services.

Particular attention must be given to the issue of environmental protection. Proponents of the theory of public goods argue that the state of natural resources, their biodiversity and reproducibility are a good that can be overexploited and degraded under the conditions of the market system. Negative externalities of economic activity pose a threat to these resources, therefore state policy should also be extended to activities in the field of environmental protection. From the perspective of the theory of the market economy, the situation is different. In the market system, as a result of voluntary exchanges, both product prices as well as prices of production factors are formed. Thus, each resource owner will be interested not only in the current income from business activity, but also in maintaining and multiplying the capital value of resources. The capital value of resources is the sum of discounted future income, so in the long run the resource holder will strive to maintain resources in good condition because it will guarantee high current income in the future. Thus, the phenomenon of overexploitation can occur only in the absence of real ownership power. Users of no-one’s resources will be interested only in current incomes. In this situation, a degradation of resources takes place, e.g. excessive exploitation of common pastures, exhaustion of soils in state farms, massive deforestation of state forests that are leased, pollution of rivers, lakes and seas.

The issue of solving social problems caused by negative externalities based on property rights deserves more profound analysis. Strict compliance with property rights means not only the exclusive use of
the resource by the owner but also the prohibition of any nuisances, i.e. burdens from the owners of other resources. In this way, it guarantees the inviolability of the physical boundaries of the real estate and at the same time protects goods integrally connected with the land, such as soil, groundwater and air. As it is highlighted by the free market economists, the currently observed a massive problem of air pollution is the result of long-term negation of property rights by the state legal system. In the period of industrialization, the development of industry was prioritized in the economic policy of governments. Industrialization of the economy has become a “social” goal, which means that all demands for stopping the emission of industrial pollution requested by local residents were rejected by the courts as incompatible with the “common good” policy. As a result, this has led to the spread of harmful production technologies and the ban on nuisances has in practice become a dead law [Rothbard 1982, Block 2016]. Negative effects of state interference are also observed in agriculture. As W. Kwaśnicki [2010] indicates, long-term subsidizing of agriculture in highly developed countries has led to a deterioration of the natural environment and food quality. Subsidies for production were an economic encouragement to use intensive, environmentally harmful production methods. On the other hand, deriving a large part of the income from outside the market has made the agricultural producers independent of the consumers’ decisions. Buyers’ voluntary spending is a basic element of the market system as it is the only effective way to demonstrate consumer preferences. When state subsidies replace consumer spending to some extent, the producers motivation to satisfy consumers’ needs was effectively weakened. This situation has been further deteriorated by the state policy in regard to food safety. As part of this policy, strict requirements in the production and consumption of food have been introduced. As a result, the possibilities of food production by fragmented farms have been drastically reduced and the function of food processing has been taken over by the food industry. Strong barriers to enter the food processing market have brought agriculture into the role of a raw materials producer and have activated a mechanism for transfer of value added from agriculture to industry and trade [Maśniak 2017].

CONCLUSIONS

According to the criteria used in the theory of public goods, agricultural land is a typical private good – in social conditions property rights are assigned to it and it is used with the exclusion of other people. However, more questionable is the issue of all goods that are integrally connected with land such as agricultural landscape, quality of the natural environment, vitality of rural areas, food safety, etc. These goods are indeed open in their characteristics and generate numerous external effects. However, this does not lead to the conclusion that the state should be responsible for providing these goods to the society. This is due to the following reasons:

− Objective identification of social needs is not possible. The claims about the optimal structure of production will be always subjective. This also applies to agriculture and the way of land utilization.

− The postulates about the necessity of state interference in the sphere of agriculture are of a political rather than a scientific nature. The state is a tool for realizing group interests. Beneficiaries of the policy forming the agricultural system are family farms owners and the political and clerical class.

− The market system has developed mechanisms for financing goods with diversified characteristics, including those with the features of public goods. Direct payment for goods and services is not the only way to finance production. The pricing system and entrepreneurship coordinate social needs with available resources.

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ZIEMIA ROLNICA W KONTEKŚCIE TEORII DÓBR PUBLICZNYCH – ANALIZA KRYTYCZNA

STRESZCZENIE

Głównym celem artykułu jest przedstawianie krytycznego stanowiska wobec zastosowania koncepcji dóbr publicznych do ziemi i rolnictwa. Omówione zostały podstawowe regulacje prawne kształtujące ustrój rolny w Polsce oraz ocena zasadności interwencji podejmowanych przez państwo na rynku ziemi w świetle teorii austriackiej szkoły ekonomii. Według kryteriów stosowanych w teorii dóbr publicznych ziemia rolnicza jest typowym dobrem prywatnym. Dyskusyjna jest natomiast kwestia takich dóbr integralnie z ziemią związanych jak krajobraz rolniczy i jakość środowiska naturalnego. Przeciwno interwencji państwa przemawiają takie względy jak: brak możliwości obiektywnej identyfikacji potrzeb społecznych, polityczny i redystrybucyjny charakter interwencjonizmu państwowego, istnienie rynkowych mechanizmów finansowania dóbr publicznych.

Słowa kluczowe: ziemia rolnicza, ustrój rolny, teoria dóbr publicznych, austriacka szkoła ekonomii