ACTA SCIENTIARUM POLONORUM *Oeconomia 12 (4) 2013, 31–40*

PUBLIC GOODS AND INTRINSIC LAND PRODUCTIVITY – DELIBERATIONS IN THE CONTEXT OF THE PARADIGM OF SUSTAINABLE AGRICULTURE[1]

Bazyli Czyżewski
Poznań University of Economics

Agnieszka Brelik
West Pomeranian University of Technology in Szczecin

Abstract. The paper reviews the concept of public goods, indicating its various dimensions. The fundamental objective of the paper is conceptualizing public goods and answering a question whether a public goods delivered by agricultural land is valorized in land prices. The aim of the study was also to identify the mechanism that makes intrinsic land utility transformed into productivity in monetary units. A conducted research consists in deriving a land rent capitalized in land prices and estimating its share in land value in comparison with the share of lease fees in the different regions of Poland in years 2000–2009. In the authors opinion since accession of Poland to the UE a market has valorized intrinsic utilities of land, whereas the new role of capital and labour is distribution of those utilities in favour of consumers. Given the fact that there is a lack of Polish scientific studies on agricultural areas as a provider of public goods findings of foreign scientists were also used in the research. Since the beginning of human civilization, the land has been creating certain utilities which satisfy human needs. When the dangerous side effects of industrial agriculture have occurred intrinsic land utilities are being discovered anew. They have a nature of public goods and constitute a hard core of the sustainable agriculture paradigm. Despite irreversible accumulation of capital in the anthropogenic environment many new utilities of the land come into existence without additional capital and labour inputs. Since they are public goods, they are paid from taxes in great measure. This way an intrinsic land utility takes a form of a paid product and can be called "intrinsic productivity" of land.

Key words: public goods, intrinsic land productivity, sustainable agriculture

---

[1] Poznań University of Economics (article was financed by the National Science Centre funds based on Decision No DEC-2011/01/D/HS4/01842 from 13.10.2011).
Corresponding author – Adres do korespondencji: Bazyli Czyżewski, Poznań University of Economics, Department of Macroeconomics and Food Economy, Niepodległości 10 Av., 60-967 Poznań, Poland, e-mail: kmigz@ae.poznan.pl, Agnieszka Brelik, West Pomeranian University of Technology in Szczecin, Żołnierska Str. 48, 74-210 Szczecin, Poland, e-mail: abrelik@zut.edu.pl

INTRODUCTION

The paradigm of sustainable agriculture gives rise to the two theses which seem particularly inspiring [Jeżowski 2009]:

- Along with affluence of the society, a tendency to pay for recreating utilities of the natural resources grows. The question is why?
- Natural and social capital (in the meaning of public goods) may be substituted with physical capital only to a certain extent, and the degradation of natural and social capital cannot be compensated with the benefits of the physical capital.

Referring to the first thesis that a wealthy society is more prone to pay for recreating utilities of the natural resources, its quite probable justification is the evolution of the hierarchy of needs. It is mentioned by T. Borys, who writes that "the modern consumer is excessively influenced by the Maslov's pyramid of needs" [Borys 2009]. Possibly, it is not the consumer but the economists, market analysts, and marketing creators who attached to Maslov's hierarchy of needs so much that they treat it as an axiom of the modern market economy, and draw conclusions on the basis of it. For example, they limit the interpretation of utilities of natural and social resources solely to the category of higher order goods and the Engles' law. And what if in societies at a certain level of development the pyramid changes its shape towards a rectangle (or a trapezium)? Then, the needs former the lowest levels stop dominating in the importance hierarchy or in the order of satisfying them.

In other words, the whole vector of complementary needs from various levels of the Maslov's pyramid determines the quality of life and has to be satisfied simultaneously. If yes, the demand for products which are obligatory to consume means also a demand for the remaining components of the mentioned vector. It means that the consumer will voluntarily pay for the utilities of the natural resources. One question remains. When does such a change of hierarchy of needs occur and does it happen spontaneously or is a specific institutional stimulation needed? In our opinion, it is a spontaneous process but an institutional stimulation through education can increase its pace.

One of the conditions for the above process to translate into improvement of allocation of resources (in Pareto's understanding) is, however, a proper definition and enforcement of the property right to these resources. From the point of view of the sustainable agriculture paradigm, it mainly concerns the agricultural land resource. Assuming that the land factor provides new utilities as regards production of goods and services satisfying consumers' new needs, the benefits of the increase of resource productivity should fall to its owners, including, inter alia, the farmers. Only then is it possible to assure long-lasting development of agrarian structures (sustainable development). We understand the development of the structures as several simultaneous processes: first, concentration of land resources, but also in the meaning of consolidation i.e. an increase of internal coherence and homogeneity of the agricultural land. Second, it concerns intergenerational rehabilitation of the agricultural land resource, in order to hand down to the next generations renewable public goods and other utilities of land in a non-deteriorated condition. Third, it is indispensable to invest in the infrastructure enabling a proper use of well-being of the natural environment and rural areas by farmers and users from outside agriculture. All the above mentioned development paths require suitable financial resources. Allocation

of the land rent in agriculture should serve that purpose, and by "remunerating the land factor" we mean financing these processes from the land rent.

With regards to the last of the theses according to which natural and social capital (understood as so-called pure public goods, common and merit goods) can be substituted with physical capital only to a certain extent, an observation arises that in the conditions of the new paradigm, the land should create some utilities "intrinsically" i.e. without participation of capital and labour. Therefore, land cannot be treated according to the mainstream economy doctrine as a type of fixed assets. Moreover, it is impossible to adopt neoclassical microeconomic concepts to optimize its outlays. It also means that not in all conditions can the productivity of natural resources be increased through substitution for capital.

MATERIAL AND METHODS

The aim of the article is to answer the question if and how intrinsic land utility in sustainable agriculture model transforms into productivity in monetary units becoming a valorization of public goods. A deductive analysis of above problem has been supported with empirical research which consist in deriving a land rent value from land prices and comparing it with lease fees in the different regions of Poland. Authors formulates a hypothesis that the rise of the agricultural land prices in Poland after 2004 over-proportional than a dynamics of fees results from an attempt of land market at valorizing public goods.

RESULTS

The idea of public goods[2]

The theory of public choice is called the economics theory of politics. This relatively new field of economic sciences involves applying methodological tools and assumptions of standard economics to analyze people's behaviour in the activities of political character and in other areas of public sphere [Wilkin 2005]. Economics defines goods as means which are used to satisfy man's needs. A general definition of public goods concentrates on the two features: non-rivalry and non-excludability [Atkinson and Stiglitz 1980]. The theory was formulated in 1954 by an American economist and statistician, a Nobel Prize winner, lecturer at the Massachusetts Institute of Technology, Paul Anthony Samuelson [Samuelson 1954], who assigned them with the following properties while defining the goods: (a) no one is excluded from the benefits resulting from their use (non-excludability from consumption) means that goods public consumed by one individual do not eliminate the possibility of the same good being consumed by another one, the goods are desired by the society, while the market mechanism is unable to provide them. Typical cases

[2] Partly was used the paper: Brelik A., Matuszczak A., 2013. Issues of public goods in multifunctional development of rural areas. Economic Science for Rural Development 30, 1–5.

of rival consumption concern goods such as clothing or bread, whereas benefiting from a fireworks display will be of non-rival consumption nature. It is impossible to exclude it from consumption, since if someone is at a spot which gives a good view of the display, then a company organizing the display is not able to forbid him/her to admire the show. On the other hand, fireworks are not competitive consumption-wise, because watching them by one person does not deprive others of the possibility to watch the same show; (b) a rise in the number of users neither eliminates, nor decreases the possibility of a given good being used by all users (they are non-competitive consumption-wise). Whereas the property of certain goods is that they are available to everyone. We cannot prohibit others, in a simple manner and without a great degree of effort and means, to use those goods. Without a doubt, such goods include fresh air, music, lake water, as well as television.

According to Wilkin [2010]: "both in modern economies and in public life a search continues for ways of merging effectiveness of market mechanisms and social needs for delivering goods of public nature. Mixed goods, called merit goods, feature such characteristics". Merit goods give a start to complex processes of redistribution, which involve applying exceptional taxes. Infrastructure limiting the pollution of the natural environment is an example of a merit good of positive external effects.

The questions evolve around the economics of overcrowding, coming largely from Charles Tiebout's publication titled "Local public goods" and a pioneering work of James Buchanan "Club goods" [Tiebout 1956, Buchanan 1965]. Toll goods or club goods are typically of local range and they occur in a situation when a limited (selected) circle of users covers jointly, in the form of periodic fees, the costs of operation, and in return acquires the right to use the goods freely, while at the same time excluding all other potential users. Which in practice means, that club goods include goods that meet only one of the conditions presented by Samuelson. The so-called country clubs could serve as an example of such, along with closed sports-recreation centres, residential estate systems of day care for children, cable television, theatres. Toll goods, as opposed to private goods, for which one pays as well, are divisible. Many people can use them at the same time without any detriment to such a good. A theatrical performance or a television programme can simultaneously be watched by a large number of viewers. At the same time, it is easy to define which viewers are entitled to watch a performance – e.g. by checking the possession of entry tickets. Thorough research resulted in creating separate theoretical constructions for toll goods [Buchanan 1965, Cornes and Sandler 1986].

Additionally, a question arises of whether the provision of public goods at a local level produces the scale effects. The provision of public goods at a central level enables achieving the returns of scale, however it is frequently ineffective (on account of a varying demand of local communities for a given good). Locally provided public goods generating positive externalities require properly extensive borders of a territorial unit. In order to provide public goods effectively, a region incurring the costs needs to use all the external effects. In line with the definition of the World Bank[3], public goods generate shared benefits, whereas public evils generate shared costs. The spatial reach of such external effects determines whether a good is local, regional, national or global. One cannot automatically assume that the scope of reach is determined by goods provider. Local goods can be de-

[3] Website of the World Bank http://web.worldbank.org/.

livered by the state, while global goods/evils by a city or region. The definitions of public goods quoted above used currently by economists are not entirely consistent with the common understanding of a public good as a good available and destined for everyone and linked with a non-public institution. Public goods understood in this way are typically defined by economists as social goods. These are goods which ordinarily could be private goods, but for a variety of reasons, usually as a result of social policy conducted by the public authorities, they are available to every citizen and they are financed from the public funds (e.g. education or health care) [Baum and Śleszyński 2009].

Oates [1972] identifies the variation of society's preferences as a rational argument in favour of decentralisation. The idea is that the centralization and standardization of goods provision to the population, which is diversified in respect of preferences is not optimal from the point of effectiveness "the affluence level will always be higher if the level of consumption of local public good is determined by each territorial unit on an individual basis as opposed to the value being determined from above when external effects and no cost limits occur". A crucial question arises whether a market mechanism could also cope with public goods valorization through other goods' prices provided in a regular way? That would be the most efficient solution when a consumer (or producer) is eager to pay more for a specified product (or production factor) in exchange for some public goods delivery.

Valorization of public goods in land prices and lease fees[4]

In the peasant economy, a part of the utility attributed to the exclusive effect of the forces of nature was relatively big and partially expressed in the financial productivity of a farm (since it created a part of the product without the participation of outlays). Its significance started to decrease under the conditions of industrialization of agriculture and activation of the law of diminishing marginal utility. In the industrial agriculture, the intrinsic participation of land in the creation of utilities decreased in favour of capital and hired labour. Moreover, the intrinsic financial productivity of land declined to a considerable degree.

With time, however, productive functions of agricultural land, subject to the microeconomic optimization and its obligation to satisfy existential needs, became competitive towards each other. It gave rise to a need to search for a new concept of economic development, i.e. the sustainable development paradigm.

A question arises, to what extent the thesis about the occurrence of "intrinsic land utilities" in the context of the sustainable development paradigm is true. One of the premises of the development of this paradigm is the fact that the natural environment in highly developed countries became almost entirely anthropogenic. Under such conditions, the way of using natural resources has to change as well. It is forced by the new needs and priorities described above, i.e. a demand for an assurance concerning renewability of natural resources as well as pro-social and pro-environmental criteria of the resources allocation. They discover anew the land factor "utilities" which are marginal for the in-

[4] Partly there was used the paper: Czyżewski B., Majchrzak A., 2013. Samoistna produktywność ziemi a dobra publiczne w paradygmacie rolnictwa zrównoważonego. W: Determinanty rozwoju regionalnego w Polsce. Społeczeństwo, gospodarka, środowisko (Eds. K. Pająk, J. Polcyn). Wydawnictwo Adam Marszałek, Toruń, 271–287.

dustrial agriculture and give them the nature of public goods which should be paid for by the entire society. It cannot, however, be the same intrinsic utility of agricultural land as in the 18th century since, at least in the highly developed countries, the natural environment was diametrically changed by a man. Once again, a bigger and bigger part of the land utility comes into existence intrinsically, however, in the conditions of advanced and irreversible accumulation of capital in the well-being of natural resources. Therefore, it can be stated that in the sustainable agriculture many new utilities of the land come into existence intrinsically, i.e. without additional capital and labour outlays, (but not without their causal force in general), and in some cases without increasing the total amount of capital and labour outlays. Since they have the nature of public goods, they are paid from taxes in great measure (in the EU through the CAP programmes)[5], and this payment goes to the land users not being owner of the land resource which created them. Therefore, an intrinsic land utility takes a form of a paid product and can be called "intrinsic productivity" which increases the financial productivity of the production structure.

For example, extensification of cultivating, e.g. grasslands within the agriculture-environmental programmes, enables lowering capital as well as labour outlays, and the payment of the economic rent within the CAP. The rent is sometimes misinterpreted as compensation for a fall in land productivity. However, we need to take into consideration the fact that even if it scarcely compensates the lost productivity, as far as the value is concerned, it happens in the conditions of lower capital (current assets and depreciation) and labour costs. Therefore, the financial productivity of production factors (understood as the relation between a financial product and outlays) de facto grows. The increase can be attributed to the causal force of nature (land), since lower intensity of management activates its natural utilities regarded as natural goods. In the quoted example of extensive cultivation of grasslands, it will be e.g. bigger biodiversity, landscape and recreational values and more "ecological" material (hay).

It is a market mechanism that decides about a distribution of land rent among land owners and land holders, e.g. leaseholders. In the conditions of sustainable agriculture, if a leaseholder is the one who "takes care" about a land, the adequate part of land rent should be attributed to him since it is recognized by a market mechanism. That regularity is confirmed by the data in the Table 1.

In 2005 a significant change in valorisation process has clearly visible. In the preceding period 2000–2004 the lease fees and land rents shares (two last rows of Table 1) are almost similar. After accession to the UE market mechanism has realized that agricultural areas deliver also some public goods. This is expressed with a substatntial rise of land prices which doesn't influence on the lease fees. According to Table 1 the share of lease fees in a land value decreases. There is a question why?

As it was predicted above, a market doesn't attributed the hole land rents to the owner of agricultural area but the main part of it is theoretically assigned to leaseholders' (farmers) activities[6]. It stays in accordance with CAP regulations which allot direct payments on behalf of "land users" rather than the land owners. This is a reasonable solution since

[5] With the right level of social awareness these utilities can be paid through prices of products and services.

[6] Assuming that their net incomes correspond with the land rent value derived from land prices.

Table 1. The shares of the lease fee in the market price of 1 ha of utilized agricultural areas (UAA) in Poland (%) *vs.* the shares of land rent derived from land prices in 2000–2009

Regions (voivodships)	Avarege rate of change* (2000–2004)	Avarege rate of change (2005–2009)	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Average price of UAA in PLN per 1 ha of UAA	1.09	1.21	4786	5197	5042	5753	6634	8244	9290	12134	15388	17042
The shares of the land rent derived from the land prices in the price of 1 ha of uaa (%)**	0.88	0.98	11.79	10.68	7.32	5.78	6.92	5.23	5.26	5.5	6.09	6.13
Average lease fee of UAA in PLN per 1 ha of UAA	0.95	1.03	451	490	446	399	371	277	304	368	453	426
The shares of the lease fee in the market price of 1 ha of UAA (%)												
Dolnośląskie	1.02	0.76	11.14	11.48	10.17	8.16	11.92	5.78	4.56	3.91	3.70	3.05
Kujawsko-pomorskie	1.02	0.82	6.28	8.13	11.20	6.93	6.76	3.07	3.12	2.83	2.70	2.51
Lubelskie	0.90	0.88	9.55	12.44	16.73	7.66	6.15	3.77	3.64	3.62	3.96	3.21
Lubuskie	1.04	0.74	8.59	12.37	10.34	9.70	10.22	3.57	3.82	3.28	2.57	2.30
Łódzkie	1.05	0.84	5.38	6.77	8.43	7.70	6.42	2.81	3.00	3.15	2.88	2.61
Małopolskie	0.95	0.86	4.81	7.77	3.67	3.92	3.94	2.42	2.23	2.12	2.24	1.90
Mazowieckie	0.72	0.86	17.00	12.56	7.23	7.76	4.48	2.74	2.87	2.92	2.93	2.08
Opolskie	0.87	0.85	9.81	8.13	8.87	9.09	5.61	4.36	3.81	3.53	3.49	2.50
Podkarpackie	0.92	0.75	14.08	6.26	14.06	7.55	9.97	3.20	3.93	3.57	2.56	2.44
Podlaskie	0.68	0.85	23.85	13.09	6.46	7.00	4.96	3.48	3.08	2.95	2.98	2.21
Pomorskie	0.78	0.86	9.60	9.88	5.19	8.13	3.62	2.89	3.21	2.39	2.14	1.67
Śląskie	0.75	0.97	7.32	5.75	3.89	7.88	2.32	2.62	2.20	2.03	2.09	1.98
Świętokrzyskie	0.90	0.94	8.29	5.57	6.72	5.97	5.39	3.48	3.77	3.87	3.88	3.93
Warmińsko-mazurskie	0.95	0.88	5.22	7.00	10.21	6.49	4.22	4.41	3.27	2.84	2.49	2.24
Wielkopolskie	0.92	0.91	5.89	7.06	6.07	5.71	4.26	3.50	3.53	3.16	3.01	2.61
Zachodniopomorskie	1.01	0.79	8.22	19.10	17.99	10.78	8.57	3.17	3.10	2.79	2.87	2.66
POLAND	0.88	0.85	9.42	9.43	8.85	6.94	5.59	3.36	3.28	3.03	2.95	2.50

*a geometric mean of dynamic indexes (previous year = 1).

** it means a perpetual rent discounted in the present value of land (as a discount rate the long-term interest rate were taken – according to Eurostat data).

Source: Own estimations on the basis of: Eurostat 2000–2009, GUS 1997–2011, GUS 1996–2010a, GUS 1996–2010b.

a "land user" (not always being a land owner) has to fulfill the *Good Agricultural and Environmental Conditions* (GAECs) and bear essential outlays which entitle to receive subvension from CAP. Thus land rent is accumulated in agricultural area instead of being transferred to other sectors.

CONCLUSIONS

On the basis of the above deliberations, it is possible to formulate a necessary condition of the sustainable development in agriculture: capital, labour (own and hired) and the land factor utilities must be "fairly" paid for such development to occur. However, two questions arise: what does "fairly" mean and is it a sufficient condition? In our opinion, "fair" capital and labour cost in the capitalist system is determined by the market mechanism. It is not a problem in the case of capital and hired labour. However, the market does not value the own labour remuneration in individual farming. Therefore, its cost should be parity to the market rates in food economy[7]. As for the "fair" value of land rent, relatively the best mechanism should be the agricultural land market, as long as it meets basic conditions of informative efficiency. Is the above condition sufficient for the sustainable development? Yes, if potential chances for social development which are provided by fair remuneration of labour, are used by farmers and if the residual income (i.e. after paying capital and labour) attributed to the land rent is really "invested" in the well-being of agricultural land.

From the point of view of sustainable development, we can paraphrase the motto "social existence determines consciousness" and say that it is "prosperity that determines consciousness"[8] with time. Long-term prosperity enables development of the institutional sphere in which the above formulated necessary conditions will be sufficient. These processes are nothing new in the economics. They are described by e.g. Kuznets curves, which show that only after exceeding the critical point do the economic, social and environmental goals coincide. As far as the sustainable development theory is concerned, an issue whether the development requires a transformation of human nature, is often raised. Authors agree with H. Rogall that "ethics of sustainability should not strive to change a man" [2010][9] although many researchers of social processes underline the necessity of change of our political culture (in a broad sense), and propagate the ethics of responsibility. Wrong way. The process has to be grassrooted and evolutionary. The moment, when there appear benefits of cooperative behaviours of "homo oeconomicus" is replaced by "homo cooperativus". With time, economically successful societies develop social institutions (norms and values) which are oriented to thinking in terms of community and satisfying needs. It is a very well rational process. It appears that the societies concentrated solely on individual benefits lose profits resulting from lower transactional costs [Rogall 2010], and at a certain stage, building institutions of social cooperation becomes more profitable than incurring

[7] e.g. to the rates in agricultural enterprises according to the Polish Classification of Activity.
[8] Certainly, prosperity "costs money". It is developed within long-term processes of capital accumulation in the entire economy, and above all in activities outside agriculture. Their analysis, however, exceeds the issues of the hereby paper.
[9] Rogall H., 2010. Ekonomia zrównoważonego rozwoju. Teoria i praktyka. Zysk i S-ka, Warszawa.

these costs. Similar conclusions are supported by the theory of rational choice and game theories. In most cases of so-called decision dilemmas, cooperative solutions appear to be the most profitable (e.g. in "the prisoner's dilemma"). However, in order to make the right decisions, one needs to mature on the basis of gathered experiences (own or of others).

Is the Polish society at this stage of development? Probably not. However, the processes of integration with better developed countries stimulate mentality changes, and in our opinion, paradoxically, this "quality convergence" has a chance to catch up with the quantity convergence. Perhaps this way it will be possible to avoid seemingly inevitable delays in the development of the institutional sphere regarding the economic development of the country.

REFERENCES

Atkinson A., Stiglitz J., 1980. Lectures on Public Economics. McGraw-Hill, New York, 483–487.

Baum R., Śleszyński J., 2009. New function of agriculture – providing public foods. Stowarzyszenie Ekonomistów Rolnictwa i Agrobiznesu. Roczniki Naukowe 11 (2), 21.

Borys T., 2009. Problemy zrównoważonej konsumpcji. W: Rozwój zrównoważony, teoria i praktyka. B. Fiedor, R. Jończy (Eds.). [Problems of sustainable consumption. In: Sustainable development – theory and practice]. Wyd. Uniwersytetu Ekonomicznego we Wrocławiu, Wrocław, 57.

Brelik A., Matuszczak A., 2013. Issues of public goods in multifunctional development of rural areas. Economic Science for Rural Development 30, 28–33.

Buchanan J., 1965. An economic theory of clubs. Economica, New series 32 (125), reprinted (2001) Externalities and Public Expenditure Theory, vol. 15 of The collected works of James Buchanan (1999–2002). Indianapolis Liberty Funds, Indianapolis.

Cornes R., Sandler T., 1986. The Theory of Externalities, Public Goods, and Club Good. Cambridge University Press, Cambridge.

Czyżewski B., Majchrzak A., 2013. Samoistna produktywność ziemi a dobra publiczne w paradygmacie rolnictwa zrównoważonego. Determinanty rozwoju regionalnego w Polsce. Społeczeństwo, gospodarka, środowisko. K. Pająk, J. Polcyn (Eds.). [Independent land productivity vs. public goods in the sustainable development paradigm. In: Determinants of regional development in Poland. Society, economy, environment]. Wyd. Adam Marszałek, Toruń, 271–287.

Czyżewski B., 2010. Kontrowersje wokół rent gruntowych: od ekonomii klasycznej do czasów współczesnych [Controversies with land rents: from classic economics to the current Times]. Ekonomista 2, 227–242.

Gruda M., Woś A., 2008. Waloryzacja czynników wytwórczych rolnictwa [Valorizing agricultural production factors]. IERiGŻ-PIB, Warszawa, 5–6.

Eurostat. Long-term interest rates – 10-year government bond yields, 2000–2009.

GUS, 1997–2011. Provided for individual order data on the prices of arable land, meadows and lease fees, Warsaw.

GUS, 1996–2010a. Statistical Yearbook of Agriculture and Rural Development for the period 1995––2009. Warsaw.

GUS, 1996–2010b. Statistical Yearbook of Agriculture and Rural Development for the period 1995––2009. Warsaw.

Hagedorn K., Arzt K., Peters U., 2002. Institutional Arrangements for Environmental Co-opertaives: a Conceptual Framework. Environmental Co-operation and Institutional Change. Theories and Policies for European Agriculture. In: K. Hagedorn (Ed.). Edward Elgar, Northampton, 14–19.

Jeżowski P., 2009. Kapitał naturalny i rozwój zrównoważony a sprawiedliwość. W: Rozwój zrównoważony, teoria i praktyka. B. Fiedor, R. Jończy (Eds.). [Natural capital and sustainable development versus justice. In: Sustainable development – theory and practice]. Wyd. Uniwersytetu Ekonomicznego we Wrocławiu, Wrocław.

McKean M.A., 1993. Empirical Analysis of Local and National Property Rights Institutions. Beijer Discussion Paper nr 42. Beijer International Institute of Ecological Economics, Stockholm.

Oates W., 1972. Fiscal Federalism, New York Harcourt Brace Jovanowich, after Bukowicz G., Theoretic basis for the division of competences between central and local authorities. Local government and public good, 47–68.

Rogall H., 2010. Ekonomia zrównoważonego rozwoju. Teoria i praktyka [Economics of sustainable development. Theory and practice – in Polish]. Wydawnictwo Zysk i S-ka, Poznań, 154–191.

Samuelson P.A., 1954. The Pure Theory of Public Expenditure. Review of Economics and Statistics 36 (4), 387–389.

Tiebout C., 1956. A Pure Theory of Local Expenditures. Journal of Political Economy 64.

Wilkin J., 2005. The Theory of Public Choice: An Introduction to Economic Analysis of Politics and Functioning of The Public Sphere. Scholar, Warszawa.

Wilkin J., 2010. Goods Delivered by Agriculture in Light of the Theory of Public Goods. Multifunctionality of Agriculture. Research Directions, Methodology Foundations and Practical Implications. IRWiR PAN, Warszawa, 41.

DOBRA PUBLICZNE A SAMOISTNA PRODUKTYWNOŚĆ ZIEMI – ROZWAŻANIA WOKÓŁ PARADYGMATU ROLNICTWA ZRÓWNOWAŻONEGO

Streszczenie. Celem artykułu było przedstawienie koncepcji dóbr publicznych oraz odpowiedź na pytanie, czy dobra publiczne dostarczane przez użytkowników ziemi rolniczej są waloryzowane za pomocą jej wartości. Celem opracowania była również identyfikacja mechanizmu transformacji użyteczności ziemi w produktywność w wymiarze finansowym. Przeprowadzone badania zakładały oszacowanie rent gruntowych zdyskontowanych w cenach ziemi rolniczej, a następnie określenie ich relacji do wartości ziemi oraz do czynszu dzierżawnego w przekroju województw w Polsce w latach 2000–2009. W opinii autorów od momentu akcesji Polski do UE rynek waloryzuje w cenach samoistną użyteczność ziemi rolniczej, podczas gdy rolą kapitału i pracy jest jej dystrybucja między rolnictwem a konsumentem. W celu zweryfikowania celu badawczego wykorzystano zarówno literaturę polską, jak i zagraniczną. Od początków cywilizacji człowieka ziemia tworzy samoistnie pewne użyteczności, które zaspokajają jego potrzeby. Od kiedy pojawiły się niebezpieczne efekty uboczne rolnictwa industrialnego ta twórcza rola ziemi jest odkrywana na nowo. Jej użyteczności stają się dobrem publicznym, którego ochrona jest istotą paradygmatu rolnictwa zrównoważonego. Pomimo nieodwracalnej akumulacji kapitału w środowisku antropogenicznym, wiele użyteczności powstaje bez dodatkowych nakładów kapitału i pracy. Jako że są one dobrami publicznymi opłaca się je z podatków. W ten sposób samoistna użyteczność ziemi przybiera formę produktu spieniężonego i może być nazywana samoistną produktywnością.

Słowa kluczowe: dobra publiczne, samoistna produktywność ziemi, zrównoważone rolnictwo

Accepted for print – Zaakceptowano do druku: 09.12.2013