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KNOWLEDGE OF BASIC PRODUCTION SAFETY STANDARDS AND RULES OF GOOD AGRICULTURAL PRACTICE IN OPINIONS OF AGRICULTURAL OWNERS

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ABSTRACT

The paper discusses the relation between issues related to environment protection and agricultural production carried out according to the adopted cultivation system. Surveys were conducted in 127 farms focused on plant production of which a fragment has been presented showing agricultural producers' opinions about issues related to the Code of Good Agricultural Practice. One of underlying assumptions was an attempt to identify farmers' attitudes to and their opinions about the practical application of principles adopted in the Code. The research shows that the application of the principles of good agricultural practice depended on the cultivation system adopted on the farm. Owners of farms managed in the integrated and organic production system fully declared knowledge of the Code itself and the content it contained, which translated into a higher level of their knowledge and implementation of recommendations in practice compared to people running traditional farms. One of major obstacles preventing the implementation of good agricultural practices by farms was the lack of information about the Code and promotion of its importance to the implementation of the concept of sustainable development.

Key words: the Code of Good Agricultural Practice, plant farms, sustainable development, sustainable agriculture

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INTRODUCTION

Due to growing environmental problems, efforts were taken in the 1960s to improve the state and protection of the environment. The environmental conditions determine the shape and character of social life, whereas the nature itself, alongside the economy and culture, provides a framework for the phenomena and processes taking place in human communities [Miletzki and Broten 2017]. By indicating threats to humanity, the public was urged to change the present pervasive domination of a human being over the nature aimed at short-term maximisation of profits and to take efforts to ensure the right development [Bartosik 1996, Adamska 2015, Śleszyński 2017].

The efforts to find balance between the environmental, economic and social spheres also applied to agriculture [Duer 2017]. Intensive farming and improvement in technology contributed to higher and better quality crops. As a result, agriculture gained more importance compared to the other economic sectors [Pretty et al. 2010]. On the other hand, however, such radical changes in agricultural practices and land cultivation led to degradation of the soil and water conditions, caused changes in biological diversity and rural landscape and led to the deterioration of

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air quality [Płonka 2017]. The negative environmental impact of agricultural activity, and by default its negative impact on the natural environment of a human being, was acknowledged by the Organisation for Economic Cooperation and Development as one of the major problems that should be combated as part of the efforts to improve the state and protection of the environment [OECD 2012]. Thus, among the systems of modern agriculture, a serious threat is posed by that which does not respect the principles of rational use of the natural environment [Wilson 2001, Dubas 2007, Korska-Adamowicz et al. 2012]. According to Dubas [2007], this system should not be used at all.

The above assumptions became one of the elements of the policy pursued within the structures of the European Union, which has for many years been promoting a model of agriculture that is focused on environmentally friendly activities and complies with the principles of sustainable development [Żylicz 2004, Skowroński 2006]. This approach was reflected in the Common Agricultural Policy (CAP), which requires the implementation of agricultural practices that do not undermine environmental sustainability, bring economic benefits and facilitate social development [Zegar 2012]. Unfortunately, farmers mainly adapt their production to the criteria of micro-economic effectiveness, undermining environmental sustainability and burdening the whole society with the costs of restoring it [Payraudeau and van der Werf 2005, Bołtromiuk 2006]. That is why the Union's agricultural policy introduced activities designed to promote production methods that help to protect the environment and rural areas as well as forms of excluding land from agricultural production.

Another key activity aimed at environmental protection was linking direct payments with the obligation imposed on farmers to comply with the so-called good agricultural practice and quality standards, which are in line with the concept of an agriculture model that is based on safe production both to the environment and consumers' health [Kraciuk 2004, Hart 2015].

The efforts to link financing agricultural activity with the requirement to follow certain principles of conduct in line with the concept of sustainable agriculture (and development) imposed on European Union member states an obligation to create a document containing the key principles of running a farm. In Poland, the Code of Good Agricultural Practice (CGAP) was created in 2004, specifying environmentally-friendly agricultural practices and providing information serving as a source of knowledge on the protection of individual elements of the environment. The task of the Code is to inform what is permitted and what is prohibited in agricultural activity and to prevent malpractice. It thus provides a set of practices designed to shape farmers' social attitude towards the laws in force by teaching how to reduce the negative environmental impact [Kania 2006].

However, adherence to the principles and recommendations of the Code of Good Agricultural Practice is not always obligatory to farmers. Whether it is necessary to follow them in practice is to a large extent determined by the cultivation system adopted by a farm, which is often inseparably connected with implementation of different packages (or their options) under the Rural Development Programme (RDP). Adoption of a certain cultivation system, i.e. sustainable agriculture, organic agriculture or integrated production, forces a farmer to use methods that go beyond a standard (good) agricultural practice. Making financial support conditional along with the necessity of compliance with certain standards (dos and don'ts) presented in the CGAP establishes certain conditions for the receipt of payments, while on the other hand – reduces the risk of a negative environmental impact of agriculture [Juntti 2012].

MATERIAL AND METHODS

The aim of the work was try to made to identify and assess the attitude of agricultural producers to the compliance with the principles, standards and orders laid down in the CGAP. The survey conducted in 2017 among farms situated in municipalities located in selected parts of Lesser Poland. These areas have been specifically selected to reflect the diversity of economic and natural conditions found in the region. A total of 127 owners of plant producing farms were surveyed. The criterion for selecting entities for the survey was carrying out agricultural activity in accordance with the adopted cultivation system, namely traditional system, also referred to as conventional system, organic system or integrated system. The research sample consisted of 87 farms carrying out activity in a conventional (traditional) manner, 12 farms carrying out activity in accordance with the principles of an integrated system and 28 farms operating in compliance with the requirements of organic

agriculture. All the analysed farms participated in the payment systems of the CAP. Obtained research results were considered in the context of agricultural production systems, farm size and education of respondents. Thus, the practical implementation of the assumptions of the Code depends above all on a farmer's level of knowledge, including awareness of the environmental impact of his/her agricultural activity (especially with reference to the conventional system), and a farmer's good will, which is often a result of recognition of the benefits [Płonka 2017]. Although, the sample size was not representative of the entire population of farms in the region, allowed the observation of phenomena and draw conclusions.

The main research tool that was used to obtain information and empirical data was a survey questionnaire. The survey research was conducted by means of two research techniques. The first was auditorium method, which involved distribution of the survey questionnaire among respondents, a group of people gathered in a given space, to complete (53 people). The second technique of data acquisition was the method called Computer Assisted Web Interviews (CAWI). In this method, which is currently one of the most widely used research techniques, a survey questionnaire is distributed to respondents by electronic means and completed online (74 people) [Sobocińska 2005].

RESULTS AND DISCUSSION

The analysis has shown that almost a third of farm owners engaged in plant production in accordance with the conventional system who participated in the survey stressed that until the research they had not been familiar with the concept of the Code or its content. In contrast, knowledge of the Code was declared by all respondents managing their farms in the organic or integrated system. The survey results confirmed the assumption that the selected cultivation system was related to the knowledge of the Code and its principles, but the level of this knowledge varied quite significantly (Table 1). In most cases, the respondents assessed their knowledge about good agricultural practice as average, regardless of the size and system in which they managed their farms. A very good knowledge of the standards and recommendations contained in the Code was mainly declared by farmers carrying out integrated plant production, mostly with higher education (almost 45% of responses). Meanwhile, farmers running traditional farms mostly assessed the level of their knowledge in that area as basic (33.2% of responses) or average (20.1% of responses). Every third respondent from that group, having basic education or vocational training, admitted to not knowing anything about the Code or its recommendations. It can also be seen that due to the size of the farm, owners of farms over 10 ha of arable land declared a much higher level of knowledge of the Code's rules.

Further part of the research involved asking the farm owners who declared knowledge of the concept of the Code (i.e. 99 respondents) whether they applied its guidelines in practice. It should be borne in mind that only comprehensive implementation of the recommendations contained in the Code minimises the risk

Table 1. Knowledge of the concept and principles of the CGAP based on the farmers' opinions according to the type of the crop system and size of farms (%)

Items		Type of the crop system and size of farms									
		traditional				ecological			integrated		
		total	<10 ha	10–20 ha	>20 ha	total	<10 ha	10–20 ha	total	<10 ha	10–20 ha
Degree of knowledge of the GAP in farms	very good	2.0	0.0	0.0	100.0	24.0	28.6	71.4	44.6	20.0	80.0
	good	13.0	18.2	27.3	54.5	12.0	66.7	33.3	12.0	50.0	50.0
	average	20.1	41.2	35.3	23.5	46.0	69.2	30.8	32.4	50.0	50.0
	basic	33.2	69.0	31.0	0.0	18.0	100.0	0.0	11.0	100.0	0.0
	lack	32.7	46.4	53.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: own survey on the basis of conducted research.

of a negative impact of production on the quality and state of the environmental resources. A 100% share of positive answers to that question was recorded only among the owners of organic farms (mainly with secondary and higher education). A high share of responses indicating the application of the Code's principles in practice was also recorded among respondents carrying out integrated agricultural production. Over 80% of the responses in that group of respondents indicated a comprehensive application of the Code's principles in practice, whereas the rest (i.e. 17%) of the respondents practised such principles partially, i.e. they implemented selected recommendations. A large share of negative responses (over 50%) indicating failure to follow the recommendations of the Code in practice was observed among farmers managing their the smallest farms (up to 5 ha of UAA) in the conventional system. Only 15% of the respondents from that group admitted to comprehensive implementation of the practices and recommendations contained in the Code. As found in studies by Płonka and Wielewska [2018], regardless of the criterion of education or farm size, the reasons for relatively large share of negative responses as stated by the respondents include: the size of the document along with the formal and legal character of its language which discourage from studying the text and lack of information (including the promotion and popularisation of the benefits) on good agricultural practices.

The next stage in the implementation of the research aim of this study was to extend the research to include assessment of the level of respondents' knowledge on the key principles of a good agricultural practice in the area of plant production. It was decided that the level of knowledge of the Code's content as declared by the farmers surveyed should be verified by testing the respondents on the basics (detailed questions) regarding the principles of the management of plant production on a farm. Consequently, the owners of the farms analysed were asked to answer questions related to the rational use of fertilisers as well as principles of using plant protection products. It is worth noting here that fertilisation is one of the basic yield-forming and intensifying measures in agriculture, which determines the level and quality of crops. On the other hand, intensification of agricultural production is regarded as one of key factors causing degradation of elements of the environment and decline of biodiversity [OECD 2012]. According to Symonides [2008], the higher the intensity of agricultural use, the stronger and more lasting this negative impact. Therefore, among the modern cultivation systems, a serious threat is posed by a system that does not respect the principles of rational use of the environment.

The respondents were presented with a question about the permissible level of annual maximum dose of nitrogen in natural fertilisers per 1 ha UR, for which they were instructed to choose one response out of three options (1 correct one – 170 kg N/ha, and two incorrect ones). The results confirmed a very good knowledge of the subject among organic farmers, running small farms (up to 20 ha of UAA) – all the respondents from that group provided the correct answer (Table 2). A high share of correct responses was also recorded in the group of small integrated farms, where 80% of farm owners with secondary or higher education knew the dose of nitrogen recommended in the Code of Good Agricultural Practice. The biggest number of incorrect responses was provided by farmers carrying out agricultural production in the conventional system. They were especially the owners of the smallest farms, with an area not exceeding 10 ha of UAA, also characterized by a lower level of education. Almost 65% of them provided incorrect responses, i.e. the response indicating the dose exceeding the permissible level or the response indicating a lower level than the permissible dose (70 kg N/ha UR).

In order to assess the knowledge of general principles of the application of fertilisers, respondents were also asked to provide an answer to a question about maintaining a minimal, safe distance in the use of fertilisers in agricultural areas bordering lakes or water reservoirs covering more than 50 ha. According to the recommendations presented in the Code, this distance should be at least 20 m from the bank and this answer was correctly indicated by both farmers running organic farms and those carrying out production in accordance with the integrated system (up to 20 ha of UAA). Out of the three possible responses (i.e. 5 m, 20 m and 40 m), only the respondents maintaining conventional production incorrectly indicated the distance of 5 m (19%) or the distance twice as long as the recommended one (27%).

The assessment of the knowledge of the principles of appropriate use of fertilisers was supplemented by questions concerning recommended periods of the ap-

Table 2. Knowledge of the maximum annual dose of nitrogen per 1 ha of UAA based on the farmers' opinions according to the type of the crop system and size of farms (%)

Items		Type of the crop system and size of farms									
		traditional				ecological			integrated		
		total	<10 ha	10–20 ha	>20 ha	total	<10 ha	10–20 ha	total	<10 ha	10–20 ha
Max. annual dose of itrogen per 1 ha of AA	70 kg N/ha	47.5	89.3	7.1	3.6	0.0	0.0	0.0	16.7	50.0	50.0
	170 kg N/ha	37.3	4.5	54.5	41.0	100.0	64.3	35.7	83.3	40.0	60.0
	270 kg N/ha	15.2	33.3	44.4	22.3	0.0	0.0	0.0	0.0	0.0	0.0

Source: own survey on the basis of conducted research.

plication of fertilisers, including the optimal dates of application of manure as well as natural and organic fertilisers in a liquid form. The owners of organic farms and those managed in the integrated system, mainly with secondary or higher education, achieved 100% of correct answers in both the areas analysed (Table 3). A relatively high share of correct answers was also recorded among farmers maintaining farms in the conventional system. Over 2/3 of them correctly indicated the optimal date of the application of manure, which falls on early spring or late autumn assuming immediate ploughing. Moreover, over 80% correctly indicated the environmentally safe date of the application of natural and organic fertilisers in a liquid form. This was the only group of respondents who gave answers suggesting lack of knowledge of the recommended dates of fertilisation, however this result can be considered as satisfactory compared to the data indicating lack of knowledge of the Code (32% of farmers).

The analysis of the knowledge of good agricultural practice in the organisation of plant production was also supplemented by raising respondents' awareness of the principles of the application of plant protection products. These issues were given quite a lot of attention in the Code, which also indicated possibilities of combining and using various methods (i.e. biological, chemical and agro-technical) in order to ensure proper protection to plants, while maintaining the appropriate level of safety of humans and the environment. This stage of the research verified among others the knowl-

Table 3. Knowledge of the dates of application of fertilizers (%)

Items	Cultivation system		
	traditional	ecological	integrated
The optimal date of application of manure			
Late summer	3	0	0
Early spring/late autumn*	76	100	100
Early autumn**	21	0	0
The optimal date of using natural fertilizers in liquid form			
February 1 – October 30	5	0	0
March 1 – November 30	83	100	100
April 1 – December 30	12	0	0

* provided immediate ploughing, ** regardless of weather conditions

Source: own survey on the basis of conducted research.

edge of the concept and length of waiting periods, i.e. time that must pass between the application of a plant protection product and harvesting of plants. Over 66% of the respondents correctly interpreted the concept of waiting time, whereas the rest equated it with prevention (24%) or tolerance (10%). The best knowledge of the term and principles of application was recorded among farmers from smaller farms managing production in accordance with the integrated system. This result confirmed the assumption that the farms which adopted this cultivation system apply plant protection products in compliance with the principles adopted in integrated plant protection. The concept of waiting time was less known among conventional farms, with only 42% owners able to define it correctly. It is encouraging that among farms focused on organic farming, where no chemical plant protection products are used, almost 70% of those surveyed were familiar with the concept and principles of waiting time.

The empirical data obtained was also subjected to calculations using statistical methods of hypothesis verification, which served to determine the correlation between the answers given by the respondents and selected variables occurring in the studied population. First, the hypothesis about the existence of a given relationship was verified, and then its direction and strength were determined. The χ^2 independence test (chi-square) was used to verify the hypothesis about the relationship between the variables.This analysis was carried out at the significance level $\alpha = 0.01$, testing the research hypotheses H_0 and H_1, which meant: H_0 – no relationship between the examined features; H_1 – there is a relationship between the studied features. After verifying the hypothesis about the existence of a relationship between the studied variables, the character (direction) and strength were determined, for which the Pearson *C* contingency coefficient and the convergence coefficient *g*. Bearing in mind that the convergence coefficient *g* can take different values depending on which variable we treat as dependent and which as independent, it was always calculated twice, for both cases: g_{wk} (row to column convergence coefficient) and g_{kw} (convergence coefficient column to row) [Babbie 2003, Sobczyk 2004]. The statistical calculations carried out showed that the differences in the responses obtained from the respondents representing the compared groups were statistically significant in the context of: agricultural type and farm size as well as the level of education of the respondent (Table 4). For the remaining analysed criteria, no statistically significant differences were found.

CONCLUSIONS

Carrying out agricultural activity involves using elements of the environment, such as soil, water and air, which every farm needs for production. The higher the intensiveness of agricultural use, the greater and more lasting the consumption of environmental resources. Therefore introducing or maintaining balance between agriculture and the environment must be a permanent and long-term process based on holistic approach to

Table 4. The significance of differences in the declarations of the respondents, depending on variables present in the examined sample – the test χ^2 results and correlation coefficients

Items	$\chi^2_{\alpha=0.01}$	χ^2	*C*	g_{wk}	g_{kw}
Compliance with CGAP rules and farm size	22.301	60.478[1]	0.233	0.000	0.013
Compliance with CGAP rules and agricultural type of the farm	27.582	107.602*	0.304	0.041	0.032
Compliance with CGAP rules and level of education of the farm owner	21.107	26.206*	0.156	0.000	0.018
Compliance with CGAP rules and farm owner's gender	15.086	6.758	–	–	–
Compliance with CGAP rules and origin of the farm owner	15.086	3.067	–	–	–
Compliance with CGAP rules and location of the farm	15.086	1.020	–	–	–

*the result is significant at the level $\alpha = 0.01$

Source: own survey on the basis of conducted research.

farms and relevant legal regulations, an example of which is the Code of Good Agricultural Practice – one of basic documents shaping farmers' attitude towards the environment. Implementation of the recommendations, orders and prohibitions specified in the Code imposes on agricultural producers responsibility for the improvement of the condition and quality of the environment and contributes to the implementation of the assumptions of the concept of sustainable development (including sustainable agriculture).

Acting in line with good agricultural practices largely depends on a farmer's level of knowledge, including awareness of the environmental impact of his/her agricultural activity, and in particular on the cultivation system adopted. This is because the different cultivation systems vary in terms of the extent to which they implement the assumptions of sustainable development (and agriculture).

Implementation of good agricultural practice is especially important in the case of conventional farms. Even when they benefit from financial aid granted under the common agricultural policy aimed at promoting a sustainable system of farming, i.e. implementing agricultural practices that do not undermine environmental sustainability while reducing the negative environmental impact of agriculture, in practice they do not apply these rules. Thus it is very important to systematically inform farmers and raise their awareness of the adverse impact of agricultural activity on the environment and how it can be prevented. As survey results show, almost one third of respondents maintaining the traditional model of agriculture did not encounter the concept of the Code of Good Agricultural Practice, were not familiar with its content and did not follow its principles in practice.

Farm owners who carried out production based on integrated or organic cultivation systems were aware of the fact that only knowledge of and compliance with the principles of good agricultural practice would allow them to carry out environmentally-friendly activity in line with the idea of sustainable development and sustainable agriculture. Moreover, participation in financial assistance schemes promoting environmentally-friendly cultivation systems obliged farmers to increase knowledge and implement it in agricultural practice, which was reflected in survey results. These farmers showed higher, often specialised, level of knowledge on good agricultural practice. Based on their answers, which were correct (in 100%) in most of the issues analysed, one can assume that their knowledge is translated into practical activities reflecting the concept of sustainable development.

However, the principles of farming in systems focused on the environmental protection require that producers have extensive knowledge and systematically improve their environmental awareness. Thus, they should be popularised and implemented into the agricultural practice not only by farmers themselves, but also by administration, agricultural advisory service and agricultural education at all levels. This is because environmentally-friendly cultivation systems are the only option of modern sustainability-oriented agriculture.

REFERENCES

Adamska, H. (2015). Zrównoważony rozwój obszarów wiejskich na przykładzie Dolnego Śląska. Wydawnictwo Uniwersytetu Przyrodniczego we Wrocławiu, Wrocław.

Babbie, E. (2003). Badania społeczne w praktyce. PWN, Warszawa.

Bartosik, K. (1996). Koncepcja trwałego rozwoju a poszukiwanie strategii [The Concept of a Permanent Development and the Search for Global Strategies]. Ekonomista, 2, 225–246.

Bołtromiuk, A. (2006). Przyczyny i skutki wzrostu zainteresowania aspektem środowiskowym w polityce rolnej UE [The Reasons and Consequences of Increasing Interest of Cap Environmental Aspects]. Roczniki Naukowe SERiA, 8, 4, 59–63.

Dubas, A. (2007). Zrównoważony rozwój we współczesnych systemach rolnictwa [Sustainable development in contemporary agriculture systems]. Fragmenta Agronomica, 3(95), s. 71–75.

Duer, I. (2017). Dobra praktyka rolnicza w programach rolnośrodowiskowych. IUNiG Puławy. Retrieved from http://www.tnz.most.org.pl/dokumenty/publ/ochrona/dobra_praktyka.htm [accessed 06.07.2019].

Hart, K. (2015). Green direct payments: implementation choices of nine Member States and their environmental implications. IEEP, London.

Juntti, M. (2012). Implementing Cross Compliance for Agriculture in the EU: Relational Agency, Power and Action in Different SocioMaterial Contexts. Sociologia Ruralis, 52(3), 294–310.

Kania, J. (2006). Programy rolno-środowiskowe i zasady dobrej praktyki rolniczej jako możliwość optymalnego gospodarowania i ochrony dolin rzecznych [Agri-environmental programme and good farming practices as opportunities of the best farming system and protection of river-valleys]. Infrastruktura i Ekologia Terenów Wiejskich, 4(1), 74–99.

Korsak-Adamowicz, M., Dopka, D., Płotczyk, B. (2012). Prowadzenie gospodarstw rolnych w różnych systemach a wpływ na środowisko przyrodnicze [Running farms in different systems and its effect on the environment]. Fragmenta Agronomica, 29(2), 77–86.

Kraciuk, J. (2004). Propozycja zmian we Wspólnej Polityce Rolnej [Proposed changes in the Common Agricultural Policy]. Wspólnoty Europejskie 11.

Miletzki, J., Broten, N. (2017). Development as Freedom. Taylor and Francis, London.

OECD (2012). Environmental Outlook to 2050. Consequences of Inaction. Retrieved from http://dx.doi.org/10.1787/9789264122246-en [accessed 01.07.2019].

Payraudeau, S., Werf, van der H. (2005). Environmental impact assessment for a farming region: a review of methods. Agriculture, Ecosystems & Environment, 107(1–2), 1–19.

Płonka, A. (2017). Wpływ zasad Kodeksu Dobrej Praktyki Rolniczej na poprawę konkurencyjności gospodarstw rolnych w opiniach ich właścicieli [Impact of the Code of Good Agricultural Practice for Improving the Competitiveness of Farms in the Opinions Their Owners]. Marketing i Rynek, 10, 505–516.

Płonka, A., Wielewska, I. (2018). The code of good agriculture practice as an element of sustainable development based on opinions of farm owners. Economic Science for Rural Development, 48, 204–211.

Pretty J., Sutherland, W., Ashby, J., Auburn, J., Baulcombe, D. et al. (2010). The top 100 questions of importance to the future of global agriculture. International Journal of Agricultural Sustainability, 8(4), 219–236.

Skowroński, A. (2006). Zrównoważony rozwój perspektywą dalszego postępu cywilizacyjnego [Sustainable development as the perspective of further civilisation development]. Problemy Ekorozwoju, 2, 47–57.

Sobczyk, M. (2004). Statystyka. PWN, Warszawa.

Sobocińska, M. (2005). Badania marketingowe przez Internet. (In:) K. Mazurek-Łopacińska (ed.) Badania marketingowe. Teoria i praktyka. PWN, Warszawa.

Symonides, E. (2008). Ochrona przyrody. Wydawnictwo Uniwersytetu Warszawskiego, Warszawa.

Śleszyński, J. (2017). Wskaźniki trwałego rozwoju na poziomie lokalnym. Optimum. Studia Ekonomiczne, 4(88), 39–52.

Wilson, G.A. (2001). From productivism to post-productivism and back again? Exploring the (un)changed natural and mental landscapes of European agriculture. Transactions of the Institute of British Geographers, 1, 77–102.

Zegar, J. (2012). Współczesne wyzwania rolnictwa. PWN, Warszawa.

Żylicz, T. (2004). Ekonomia środowiska i zasobów naturalnych. PWE, Warszawa.

ZNAJOMOŚĆ PODSTAWOWYCH STANDARDÓW BEZPIECZEŃSTWA PRODUKCJI I ZASAD KODEKSU DOBREJ PRAKTYKI ROLNICZEJ W OPINIACH WŁAŚCICIELI GOSPODARSTW ROLNICZYCH

STRESZCZENIE

W opracowaniu podjęto problem wzajemnych relacji pomiędzy kwestiami ochrony środowiska a produkcją rolną prowadzoną według przyjętego systemu uprawy. Badania przeprowadzono w 127 gospodarstwach rolnych nastawionych na produkcję roślinną, z których fragment zaprezentowano, ukazując stosunek producentów rolnych do zagadnień związanych z Kodeksem Dobrej Praktyki Rolniczej. Jednym z przyjętych założeń była próba identyfikacji postaw rolników i ich opinii na temat znajomości oraz stosowania w praktyce zasad zawartych w Kodeksie. Z badań wynika, iż stosowanie zasad dobrej praktyki rolniczej zależało od przyjętego w gospodarstwie systemu uprawy. Właściciele gospodarstw prowadzonych w systemie produkcji integrowanej oraz ekologicznej w pełni deklarowali znajomość samego Kodeksu, oraz zawartych w nim treści, co przekładało się na wyższy poziom ich wiedzy oraz realizację zaleceń w praktyce w porównaniu z osobami prowadzącymi gospodarstwa tradycyjne. Jednymi z głównych przeszkód wdrażania dobrych praktyk rolniczych w gospodarstwach był brak informacji i promowania znaczenia Kodeksu dla realizacji koncepcji zrównoważonego rozwoju.

Słowa kluczowe: Kodeks Dobrej Praktyki Rolniczej, gospodarstwa roślinne, rozwój zrównoważony, zrównoważone rolnictwo