

Andrzej Hadzik, Aleksandra Hadzik

THE SUSTAINABLE TOURISM OF RURAL HEALTH RESORT AREAS. THE OUTLINE OF THE ISSUE

Summary

The paper presents the issue of the sustainable tourism which corresponds with the concept of the sustainable development. The work concentrates on the theoretical analysis of the sustainable tourism, often treated as a tool of accomplishment of the sustainable development or the tool of the development of tourism itself.

The article is an attempt to state the basic rules of the sustainable tourism on the so-called rural health resort areas. The work shows what kind of tourism can be developed on the analysed rural areas, at the same time being in harmony with the concept of the sustainable tourism.

In the paper the analysis of the national and foreign literature from the domain of the concept of the sustainable tourism, including rural areas, and the observation of the chosen indicators of the sustainable development of health resorts villages are presented.

The concept of the sustainable development arose in the 1970s and it was an expression of the critical reaction to the growing interference in natural and social and cultural resources. The concept of the sustainable development is not opposite to the possibilities of economic growth, on condition that the pace of the reproduction of the environmental resources is not slower than the pace of the usage of these resources.

The theoretical basis of the usage of the rules of the sustainable development in the world literature started to be seen at the turn of the 1980s and 1990s. The document „Agenda 21 for Travelling and Tourism Economy” turned out to be fundamental for the development of the concept of the sustainable tourism.

The practical use of the concept of the sustainable development in the rural areas economy needs devising indicators and indexes characterizing this development.

The indicators are divided into: indicators of environmental pressure (danger, stress), indicators of condition (quality) of the environment and indicators of preventive activities.

The economic significance of the tourism lies in its positive influence on the different departments of the economy, including agriculture. One of the more important impacts is stopping the migration of people from the rural areas.

Key words: sustainable development, sustainable tourism, rural tourism, rural health resorts, statutory health resorts

INTRODUCTION

The changes progressing in Poland after 1989 are the reason of interest in the result of the growth of tourism which is one of the most dynamically developing fields of the economy. The results connected with the development of the tourist function are seen mainly in the places where the tourist movement is directed. They include also rural health resorts, where specific spatial structure allows guests (tourists and resort visitors) use different kinds of attractions, tourist and health resort base, general infrastructure and different kinds of trade and services.

THE AIM AND RANGE OF THE STUDY

The aim of the work is the presentation of the concept of the sustainable tourism, consistent with the theory of the sustainable development. The article includes the theoretical analysis of the sustainable tourism, often defined as a tool of accomplishment of the sustainable development or the tool of the development of tourism itself.

The work is an attempt to state the basic rules of the sustainable tourism on the rural areas situated on the health resorts areas. The article is supposed to give an answer to what kinds of tourism can be developed on the analysed rural territories, being in agreement with the concept of the sustainable development.

METHODS OF RESEARCH

Methods of research in the work is the analysis of the national and foreign literature from the domain of the concept of the sustainable tourism, including rural areas, and the observation of the chosen indicators of the balanced development of health resorts villages.

THE BASIS OF THE CONCEPT OF THE SUSTAINABLE DEVELOPMENT

The concept of the sustainable development arose in the 1970s and it was an expression of the critical reaction to the growing interference in natural and social and cultural resources [Jędrzejczyk 1995, p.35]. The definition „sustain-

able development”¹ was introduced in 1972 on the United Nations conference in Stockholm which was a kind of reaction to the growing ecological and social danger. The concept of the sustainable development, understood as „...the economic and social growth, which will bring the satisfaction of the needs of modern society without disturbing the needs of the future generations” ensures considering in the development of tourism on a given territory not only economic aims, but also social and ecological ones. According to S. Łojewski and Z. Skinner (1998) the sustainable development is characterized by the equal treatment of economic constituent (economic efficiency), social constituent (social acceptance) and environmental one (ecological rationality).

The contemporary concept of the sustainable development is not opposite to the possibilities of economic growth, on condition that the pace of the reproduction of the environmental resources is not slower than the pace of the usage of these resources [Jędrzejczyk 2001, p. 29]. The sustainable development includes the following rules:

- full, intersectional planning and drawing up of developmental strategies;
- keeping basic ecological processes;
- protection of people’s heritage and biological variety;
- development which does not cause using up of natural resources which will be used by present and future generations [Strzembicki 2001, p. 32].

THE CONCEPT OF THE INDICATORY EVALUATION OF THE SUSTAINABLE DEVELOPMENT OF THE RURAL HEALTH RESORTS

The practical usage of the concept of the sustainable development in the economy of rural resorts requires devising indicators and indexes characterising this development. The literature of the subject gives many suggestions of the indicators of the sustainable development [Borys 1999; Fiedor 1995; Gawroński 2003; Hamond *et al.* 1995]. Generally the indicators of this kind are divided into indicators of environmental pressure (danger, stress), indicators of condition (quality) of the environment, and indicators of preventive activities. An interesting suggestion of the indicators of the sustainable development of the rural areas presented K. Gawroński [Gawroński 2003, pp. 218-219].

Gawroński [2003] distinguishes among the indicators of the sustainable development: using the resources, pollution, quality of life (chart 1). Adjusting Gawroński’s idea, the indicators characteristic to the specificity of the statutory health resorts being simultaneously the tourist spots were added to the concept [Gaworecki 2007, p. 191]. The specific health resorts and tourist indicators describe health resort and tourist management, health resort and tourist motion, remedial and tourist values and vicinity of transport.

¹ Beside „sustainable development”, there is also another term „qualitative growth”.

Table 1. The proposal of indicators for sustainable development of rural spas

Issue	Indicators of sustainable development		Unit
I. The usage of resources			
1	Agrarian areas	The percentage of farming areas on the whole area	%
		The percentage of soil grounds	%
		The percentage of orchards	%
		The percentage of meadows and pastures	%
		Indicators of quality of agricultural production space (IUNG in Puławy)	pt
2	Woods	The percentage of woods and shrubby areas on the whole area	%
		The percentage of protected woods	%
3	Ecological areas	The percentage of ecological areas on the whole area	%
4	Facilities	The percentage of areas with facilities and buildings on the whole area	%
		The percentage of industrial areas	%
		The percentage of recreational areas	%
		The percentage of fossil areas	%
5	Waters	The percentage of inland waters on the whole area	%
6	Ecological protected terrains	The percentage of national parks	%
		The percentage of nature reserves	%
		The percentage of landscape parks	%
II. Pollution indicators			
1	Air	Emission level of SO ₂ , NO _x , CO ₂ , dust	mg/m ³
2	Water contamination	The length of rivers according to the cleanness	km
		Level of BOD ₅ , COD in rivers and stagnant waters	mg/O ₂ /l
3	Ground contamination	Level of heavy metals in ground (lead, cadmium, chrome, nickel)	mg/kg [dry mass]
4	Waste	The amount of waste	tons
		The level of pH, SO ₂ , NO _x in waste	mg/kg
III. Quality of life indicators			
1	Consumption	Average monthly income from hired work per person in a household	zloty
		Average monthly income from agriculture per person in a household	zloty
		Average monthly income from self-employment per person in a household	zloty
		Average monthly spending per person in a household	zloty
		The amount of transactors registered to the REGON system	number /1000 people
2	Accommodation	Average size of a house or flat	m ² /person
		Average amount of people in one house or flat	number
3	Social facilities	Shops	number /1000 people
		Schools	number /1000 people
		Health centres	number /1000 people
		Telephones	number /1000 people
4	Technical facilities	The length of water supply system	km
		The length of sewage system	km
5	Social health	Sick rate (civilization diseases – e.g., heart diseases and tumours)	number /1000 people
		An average length of life	years

IV. Specific tourist indicators			
1	Tourist and sanatory facilities	Spas per km ²	number
		The number of the highest standard places in general amount of sanatorium places	%
		Percentage proportion of the number of sanatorium beds to the number of inhabitants	%
		Spas and hospitals per km ²	number
		Indoor pools per km ²	number
		The number of beds for tourists per km ² (Charvat indicator)	number
		Baretje and Defert indicator - the number of beds for tourists multiplied by 100 in relation to the number of inhabitants	number
		Tourist facilities indicator that shows the maximum number of tourists that can freely take advantage of all the facilities without any problems.	number
2	Tourism	Tourist intensity indicator that shows the number of tourists who use local accommodation facilities per 1000 inhabitants (Schneider indicator)	number
		Tourist function indicator that shows the amount of tourist who use local accommodation facilities per km ² (Defert indicator)	number
		The total number of days spent by tourists per km ²	number
		The maximum amount of people that can be in the given region without causing any damages for natural environment.	number
3	Sanatory and tourist values	Wells	number
		Wells productivity	m ³ /h
		Medical sections	number
		Attractiveness of touristic values	Synthetic measurement
4	Communication	Railway stations per km ²	number
		The length of roads per km ²	km/ km ²

Source: the study of coefficients: the use of supplies, dirt and the quality of life: K. Gawroński. Wskaźniki i kryteria zrównoważonego rozwoju w aspekcie gospodarki przestrzennej. [w:] R. Michałek (red.): Inżynieria Rolnicza. Polskie Towarzystwo Inżynierii Rolniczej-Komitet Techniki Rolniczej PAN, Warszawa 2003, Nr 3 (45), Tom I, s. 218-219; the own study of coefficients touristic and health resort.

The sustainable development of the statutory health resorts and other places having the health resort functions, including rural areas and villages in Poland, depends on many conditions which can be evaluated according to the indicators presented above. One of them is the technical infrastructure on a proper level, which was given in the analysis in the health resorts. Rural parishes and rural and urban municipalities with the functions of health resort were examined. Among rural parishes (12 parishes) were: Goczałkowice Zdrój, Zbrosławice, Istebna, Mielno, Ustronie Morskie, Dziwnów, Solec Zdrój, Horyniec Zdrój, Solina, Długopole Zdrój, Przerzeczyn, Uście Gorlickie. Amid rural and urban municipalities (15) were: Wieliczka, Brześć Kujawski, Konstancin-Jeziorna, Trzebnica, Iwonicz-Zdrój, Rabka Zdrój, Rymanów, Busko Zdrój, Krasnobród, Połczyn Zdrój, Łądek Zdrój, Gołdap, Piwniczna Zdrój, Muszyna, Sękowa, Osiek.

As a result of the examination of the chosen elements of the technical infrastructure, i.e., sewage system, water supply system, it was stated that the analysed rural health resort areas did not fully represent the proper level of the

analysed technical infrastructure until the middle of the 20th century [Hadzik 2004, pp. 65–72]. The lowest was especially the saturation and dynamics of the changes in sewage systems in a part of the examined places.

The specific health centres and tourist indicators, beside the presented indicators of using the resources, pollution, quality of life, are the basis of the implementation of the concept of the sustainable tourism on the rural health resort areas.

THE SUSTAINABLE TOURISM AS A TOOL OF THE IMPLEMENTATION OF THE SUSTAINABLE DEVELOPMENT ON THE RURAL HEALTH RESORT AREAS

The concepts of using the rules of the sustainable development in the tourist activity began to be visible at the turn of the 1980s and 1990s, mainly thanks to the publications of American researchers [Jędrzejczyk 1995, pp. 35–37]. The document „Agenda 21 for Travelling and Tourism Economy” turned out to be fundamental for the development of the concept of the sustainable tourism, prepared in 1995 by World Trade Organisation and World Travel and Tourism Council. The document includes the general rules of the basic development of tourism, it is:

- tourist activity should be conducive to healthy and productive life in harmony with environment and should bring different nationalities together, in the atmosphere of tolerance and openness;
- tourism development should work on keeping the natural resources of the environment and protect the native local culture;
- development of tourist activity should take place with the co-operation of the local people, who can gain new possibilities of income;
- in tourism the rule of limiting wastes, saving energy and water, eliminating the substances dangerous for the environment should be taken into consideration, what is more, the tourist activity should stimulate pro-ecological behaviour among tourists, local people and employees of the tourist agencies;
- on the global level the ideas of free market and free exchange of tourist services should be promoted in tourist activity, simultaneously maintaining the standards of environment protection;
- development of tourist activity must be based on the variety of natural and cultural values and maintenance of this variety;
- development of tourist activity must take place in an integrated way, with planning on the different levels of the economy [Zaręba 2000, pp. 36–37].

The concept of sustainable tourism is the result of examining connections between tourism, environment and development. In the literature of the subject sustainable tourism is treated as a tool of realizing the sustainable development,

on the other hand as a tool of developing the tourism itself [Nieżgoda 2006, p. 37]. The Federation of National Parks and Wildlife Reserves defines sustainable tourism as „each form tourist development, management and activity, which keeps ecological, social and economic integrity of territories, and also maintains natural and cultural resources of these areas unchanged”.

In the literature of the subject many different names opposed to mass tourism are identified with the sustainable tourism. Among these names, beside the name of „sustainable tourism” itself, there are for example: „green tourism”, „gentle tourism”, „responsible tourism”, environment-friendly tourism”, „agrotourism”, „rural tourism”, „alternative tourism”, „eco-tourism” [Nieżgoda 2004, pp.77–78]. Some researchers think that above names should be opposed to mass tourism [Zaręba 2000, p. 51]. A. Niezgoda has a different opinion – she thinks that what does not exist in „a small scale” does not have to be different from the concept of the sustainable tourism [Nieżgoda 2006, p. 41]². W. Mirowski distinguishes criteria allowing to classify particular forms of tourism to the categories of sustainable tourism:

- conformity with the environmental conditions connected with the protection of landscapes, water, greenery, plants and animals, and environment as a whole;

- conformity with the health needs, resulting from taking care of people’s and animals’ health, supplying ecological food, ensuring recreation and rest to individual tourists and the whole society;

- conformity with economic requirements, which focus on: ensuring economic development of tourist regions, fair distribution of costs and benefits, financial support for small and medium companies, development aimed at the variety of tourist phenomena;

- conformity with material and technical conditions, which means planning the infrastructure able to gradually adjust to the development of tourism, maintaining the indicators of permissible capacity of buildings equipment and accepting the physical and spatial limits of areas which, when exceeded, cause the danger of disagreement between casual life of locals and tourism [Mirowski 2002, p.19].

I. Jędrzejczyk suggests an interesting interpretation of connections of the idea of sustainable development with tourist economy, which can be noticed on the rural areas with the tourist and health resort functions, explaining the above connections with the help of:

- narrow physical depiction, the example of which can be such planning, implementing and exploitation of tourist and health resort objects that the

² Mass tourism may have a positive influence over the development of some regions, but only with proper planning and acting in accordance with the rules of balanced development. The goal is not to limit the number of tourists, but to create tourism that is environmentally friendly, remembering simultaneously about the conditions of economic and social development [Nieżgoda 2004, p. 81].

demand for water would not cause the lowering of the level of underground water and deteriorating the quality of water;

– wide physical depiction, including groups of environmental elements or the whole ecosystems, where the proper use of a single element of environment does not have to mean the rationality of the use of its other elements; the example here is cutting forests because of the tourist investment, like a skiing slope or an accommodation building—which, connected with planting in other places, can cause irreversible changes to existing plants and animals;

– social and economic depiction which assumes such use of environment by tourism which ensures improvement of the quality of life of individuals and the society as well, on condition that this process would not be implemented at the expense of future generations [Jędrzejczyk 1995, pp. 37–38].

According to the literature of the subject rural tourism is spending time in the rural environment and it includes first of all agro-tourism³ and eco-tourism⁴ [Gaworecki 2007, pp. 73–81]. L. Strzembicki distinguishes a group of activities which in rural tourism are the condition of starting the concept of sustainable motion. They include:

- balanced usage of natural, social and cultural resources;
- reducing the excessive use and damages, which will bring reducing to minimum the costs of liquidation of long-term ecological damages;
- caring of social, cultural and natural variety;
- integration of tourism and planning leading to the development of agricultural tourism along with the national and regional strategies for tourism and economy;
- supporting of local economies;
- active attitude of local societies towards tourism, which brings social and ecological advantages and improves tourism;
- consultations between institutions, organizations and local societies;
- training;
- tourist marketing which enhances people to take care of natural, cultural and social environment, giving them more satisfaction from tourism;
- engaging in scientific research [Strzembicki 2001, pp. 37-38].

RECAPITULATION

Agro-tourism that functions in accordance with the concept of sustainable development may become an important method of preserving and development

³ Agro-tourism is a sort of rural tourism that is strictly connected with agriculture.

⁴ Eco-tourism is a sort of rural tourism that is strictly connected with natural and social environment without causing any changes in it.

of social, cultural and natural environment. However, the development of various kinds of tourism should be adapted to the specificity of natural environment in accordance with appropriate levels of its bio-diversity. The development of sustainable agro-tourism may bring prosperity to local economies. The economic importance of agro-tourism comes from positive influence on other parts of the economy [Jędrzejczyk 1995; Kowalczyk 2001, p. 213]. The advantages of agro-tourism for agriculture is beyond any question. [Gaworecki 2007, pp. 177–189; Gruszczyński 2003, pp. 176-179; Jędrzejczyk 1995, pp. 52-55; Kowalczyk 2001, p. 214].

Increasing social awareness of the necessity to protect European environment and health should bring bigger demand for rural spas with sustainable development where local people and local environment will become important factors in forming the image of such region [Lewandowska 2007, p. 31].

REFERENCES

- Borys T. 1999. *Wskaźniki ekorozwoju*. Wydawnictwo „Ekonomia i Środowisko”, Białystok.
- Cater E. *Environmental contradictions in sustainable tourism*. The Geographical Journal, 161/1, 1995, pp. 21-28.
- Dubel K. 1996. *Przyrodnicze uwarunkowania rozwoju zrównoważonego na przykładzie regionu*. Materiały Interdyscyplinarnej Konferencji Naukowej nt. Mechanizmy i uwarunkowania ekorozwoju, Białystok, pp. 7-14.
- Fiedor B. *System wskaźników i indeksów ekorozwoju*. ESEŚiZN, Biblioteka Ekonomia i Środowisko, No. 18, pp. 110-123.
- Gaworecki W. 2007. *Turystyka*. PWE, Warszawa.
- Gawroński K. 2003. *Wskaźniki i kryteria zrównoważonego rozwoju w aspekcie gospodarki przestrzennej*. [in:] R. Michałek (editor). Inżynieria Rolnicza. Polskie Towarzystwo Inżynierii Rolniczej-Komitet Techniki Rolniczej PAN, Warszawa, No. 3 (45), volume I, pp. 215-227.
- Gruszczyński J. 2003. *Preferencje w wielofunkcyjnym rozwoju wsi*. [in:] R. Michałek (editor). Inżynieria Rolnicza. Polskie Towarzystwo Inżynierii Rolniczej-Komitet Techniki Rolniczej PAN, Warszawa, No. 3 (45), volume I, pp. 175-181.
- Hadzik A. 2003. *Infrastruktura techniczna jako element rozwoju funkcji leczniczo-turystycznej w sudeckich terenach wiejskich*. [in:] R. Michałek (editor). Inżynieria Rolnicza. Polskie Towarzystwo Inżynierii Rolniczej-Komitet Techniki Rolniczej PAN, Warszawa, No. 3 (45), volume I, pp. 351-361.
- Hadzik A. 2004. *Poziom infrastruktury technicznej w gminach o funkcjach turystyczno-uzdrowiskowych w Polsce. Wybrane zagadnienia*. [in:] G. Gruszczyński (editor). Infrastruktura i Ekologia Terenów Wiejskich, Polska Akademia Nauk, Oddział w Krakowie, Komisja Technicznej Infrastruktury Wsi, Kraków, No. 2, pp. 61-73.
- Hammond A., Adriane A., Rodenburg E., Bryant D., Woodward R. 1995. *Environmental Indicators a Systematic Approach*. Word Resource Institute, Washington.
- Honey M. 1999. *Ecotourism and Sustainable Development: Who Owns Paradise*. Island Press, Washington.
- Hunter C. 1995. *Sustainable Tourism as an Adaptive Paradigm*. Annals of Tourism Research, 24/4.

- Jeżowski P. 2000. (editor) *Ochrona środowiska i ekorozwój*. SGH, Warszawa.
- Jędrzejczyk I. 2001. *Nowoczesny biznes turystyczny. Ekostrategie w zarządzaniu firmą*. PWN, Warszawa.
- Jędrzejczyk I. 1998. *Wybrane problemy programowania rozwoju zrównoważonego regionów górskich*. [in:] *Problemy Zagospodarowania Ziemi Górskich*. Zeszyt 44, PAN, Komitet Zagospodarowania Ziemi Górskich, Kraków.
- Jędrzejczyk I. 1995. *Ekologiczne uwarunkowania i funkcje turystyki*. „Śląsk”, Katowice.
- Koreleski K. 2007. *Koncepcja rozwoju zrównoważonego w unijnej polityce kształtowania obszarów wiejskich*. [in:] G. Gruszczyński (editor). *Infrastruktura i Ekologia Terenów Wiejskich*, Polska Akademia Nauk, Oddział w Krakowie, Komisja Technicznej Infrastruktury Wsi, Kraków, No. 1, pp. 19-26.
- Kowalczyk A. 2001 *Geografia turystyki*. PWN.
- Lewandowska A. 2007. *Turystyka uzdrowiskowa. Materiały do studiowania*. Uniwersytet Szczeciński, Szczecin.
- Łojewski S., Skinder Z. 1998. *Koncepcja badań w dziedzinie zrównoważonego i wielofunkcyjnego rozwoju obszarów wiejskich*. Zeszyty Naukowe AR, Sesja Naukowa, No. 59, Kraków, pp. 11-23.
- Majewski J., Lane B. 2001. *Turystyka wiejska i rozwój lokalny*. Fundacja Fundusz Współpracy, Poznań.
- Meadows D.H. i in. 1973. *Granice wzrostu*. PWE, Warszawa.
- Mirowski W. 2002. *Wpływ świadomości i kultury ekologicznej na ekologizację turystyki*. [in:] *Gospodarka turystyczna w XXI w.*, S. Bosiacki (editor), AWF Poznań.
- Müller H., Flügel M. 1999. *Tourismus und Ökologie*. Forschungsinstitut für Freizeit und Tourismus der Universität, Bern.
- Nasza wspólna przyszłość*. 1991. Raport Światowej Komisji d.s. Środowiska i Rozwoju, PWE, Warszawa.
- Niezgoda A. 2006. *Obszar recepcji turystycznej w warunkach rozwoju zrównoważonego*. Prace habilitacyjne, No. 24, AE, Poznań.
- Niezgoda A. 2004. *Problems of Implementing Sustainable Tourism in Poland*. The Poznań University of Economics Review, 4/5, Poznań.
- Niezgoda A. 2004. *Problemy wprowadzania turystyki zrównoważonej w Polsce*. [in:] „Studia Turystyczne”, No. 1, pp. 77-88.
- Niezgoda A., Zmyślony P. 2002. *Identifying Determinants of the Development of Rural Tourist Destinations in Poland*, Tourism, volume 51, No 4, Institute for Tourism, Croatian National Tourist Board.
- Our Common Future*. 1987. Raport Brundtland, World Commission on Environment and Development.
- Place S. *Ecotourismus for sustainable development: oxymoron or plausible strategy?*. Geojournal, 35/2, pp. 131-173.
- Sharpley R. 2002. *Sustainability: A Barrier to Tourism Partnerships* [in:] *Tourism and Development, Aspect of Tourism 5*, R. Sharpley, D. Telfer (editors), Channel View Publications, Clevedon-Buffalo-Toronto-Sydney.
- Strzembicki L. 2001. *Zrównoważony rozwój turystyki wiejskiej-założenia i formy realizacji*. *Problemy Turystyki*, No. 3-4, Instytut Turystyki, Warszawa, pp. 31-41.
- Sustainable Tourism and Natura 2000*. SECA, Lisbon 1999.
- Ustawa z dnia 27 kwietnia 2001r., *Prawo ochrony środowiska*. Dz. U., No. 62, position 627, z późniejszymi zmianami.
- Woźniak M. 2002. *Infrastruktura a zrównoważone zarządzanie obszarami wiejskimi*. [in:] R. Michałek (editor). *Inżynieria Rolnicza*. Polskie Towarzystwo Inżynierii Rolniczej-Komitet Techniki Rolniczej PAN, Warszawa, No. 3 (36), volume III, pp. 463-471.
- Zaręba D. 2000. *Ekoturystyka. Wyzwania i Nadzieje*. PWN, Warszawa.

Żabińska T. 2000. *Paradygmat turystyki zrównoważonej a rozwój turystyki na obszarach chronionych*. [in:] *Gospodarka turystyczna u progu XXI wieku*, S. Bosiacki (editor), AWF, Poznań.

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

Dr Andrzej Hadzik
The Faculty of Tourism, Recreation and Management
The University of Physical Education in Katowice
ul. Mikołowska 72b,
40-065 Katowice

M.A. Aleksandra Hadzik
Doctorate at The Silesian University
The Deputy Director of Regional Branch of KRUS
ul. J. Korczaka 5,
42-200 Częstochowa

Reviewer: *Prof. Władysława Stola, Ph. D, Dr. Sc.*

