Development of rural areas in Poland and regional smart specialisation strategies

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Abstract

An important role in socio-economic changes in rural areas plays the innovations. Currently, much attention to the issue of rural economic progress is devoted. This is reflected in the EU cohesion policy changes, which focus on the activation and support of the development of new technologies, economic, social and environmental solutions in member states and regions. An instrument of the new EU policy, is a smart specialization, i.e. investment priorities defined by individual states and regions. The paper defines the term of smart specialization and focuses on national and regional smart specializations in Poland. Identified specializations from the perspective of rural and agricultural development were described and assessed. Analysis showed that in the vast majority of Polish regions the areas of smart specialisation are strongly related to the activities typical of rural economy. They include for instance: production of healthy and safe food, agriculture, agricultural-food processing, renewable sources of energy or tourism, what should be perceived as an opportunity for improvement of the socio-economic situation on these areas. However, the issues of rural development are not expressly visible in the described strategies and policy instruments undertaken on their basis. Additionally, it should be emphasised that the evaluation of smart specialization's influence on the rural areas of Polish regions is problematic at the present stage.

Keywords: rural areas, development, strategy, smart specialisation, region

Развитие на селските райони в Полша и стратегии за регионална интелигентна специализация

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Резюме

Важна роля в социално-икономическите промени на селските райони играят иновациите. Понастоящем голямо внимание се отделя на резултатите от икономическия прогрес в селските райони. Това е отражение на промените в кохезионната политика на ЕС, която се фокусира върху активирането и подпомагането на развитието на нови технологии, икономически, социални и екологични решения в страните – членки и регионите. Интелигентната специализация е инструмент на новата политика на ЕС, т.е. инвестиционни приоритети, определени от индивидуалните страни и региони. Докладът дефинира термина интелигентна специализация и се фокусира върху националната и регионална смарт специализация в Полша.

Идентифицираните специализации от перспективата на селското и земеделско развитие са описани и оценени. Анализът показва, че в по-голямата част от полските региони областите на интелигентната специализация са тясно свързани с типични дейности за селската икономика. Те включват например: производство на здравословна и безопасна храна; селско стопанство; селскостопанско преработване; възобновяеми източници на енергия; туризъм, които могат да се разглеждат като възможност за подобряване на социално-икономическата ситуация в тези райони. Въпреки това, резултатите от селското развитие не са изрично видими в описаните стратегии и политически инструменти, предприети на тяхната база. Трябва да се подчертае, че развитието на влиянието на интелигентната специализация върху селските райони в Полша е проблематично в настоящия етап.

Ключови думи: селски райони, развитие, стратегия, смарт специализация, регион

INTRODUCTION

Discussions on the possibilities and mechanisms of development of rural areas in Poland have been carried out for many years. They are focused, above all, on disproportions in the economic position of inhabitants of rural and urban areas as well as on spatial differences in the condition of technical and social infrastructure. It is emphasised that the development of an appropriate regional policy requires to take the diversity of rural areas into account. Apart from the areas located close to the cities, functionally associated with these centres, as well as near the towns of high tourist value, many villages in Poland are considered the so-called peripheral areas. They are characterised by the negative population phenomena (depopulation), traditional economic structure, as well as clearly visible social problems (unemployment, poverty or limited access to public services). The research indicates that the share of areas with the increased presence of demographic, economic and social problems in particular regions in Poland is diversified. Previous analyses documented their concentration mainly in the eastern part of the country (Rosner and Stanny, 2014).

Diminishing of the differences in the territorial development is a task of regional policy. In recent years a great variability in terms of both the goals, as well as the methods of achieving socio-economic and economic cohesion between the regions has been observed in Poland. According to the research the aforementioned policy constitutes, to a great extent, an inadequate imitation of the EU solutions, focused on spending measures transferred from its budget, and not on the quality effects or balancing of disproportions present for a long time (Kozak, 2014; Karpińska, 2016).

Smart specialisations are becoming an important instrument in achieving the socio-economic objectives of the EU. This concept has developed dynamically in recent years and encountered great interest on the part of representatives of the public authorities, scientific and business environments. At the beginning, it was discussed as one of the theoretical concept, but later it was adapted to the needs of the EU Cohesion Policy (McCann and Ortega-Argiles, 2013). The implementation of smart specialisations in the EU is to combine the strategic assumptions and activities of the public policy at the supranational, national and regional levels, as well as to contribute to improving the efficient use of financial resources (EC, 2010). The single framework for the application of this instrument at all these above-mentioned levels makes this project unique on the scale of the EU and of the Member States (Morgan, 2015).

In this context, the opportunity and, at the same time, the challenge for the country and individual region is a smart specialisations. Its application determines not only access to financing innovative projects from EU funds, but also may be an

important development stimulus. A key aspect of the smart specialisation mechanism is to identify the most important areas or sectors with the significant economic and innovation potential. In Poland, national and regional smart specialisations have already been identified. The paper assesses this process from the point of view of the rural regions. It also indicates the opportunities and risks for these areas, which may be associated with the implementation of smart specialisations in the future.

MATERIAL AND METHOD

A major source of information for this analyses were the information provided by the European Commission (hereinafter referred to as the Commission) and in particular the strategy papers of central and self-government administration bodies (Ministry of Development, Marshal Offices), including regional innovation strategies (RIS), regional development strategies, regional operational programmes (ROP) and other documents and smart specialisations.

Definition and assumptions of smart specialization

Smart specialisation is most generally the concept and practice of implementing the regional policy and innovation support policy. According to the EU documents, the term smart refers to the economic growth, whose components are innovation and knowledge. In turn, specialisation concerns the integration and concentration of public support on selected areas and industries (EC, 2010). In accordance with the assumptions of its authors, smart specialisation most often takes a form of strategies. In the EU policy programming period 2014–2020, they are referred to as national/regional research and innovation strategies for smart specialisation (RIS 3). These are integrated and locally defined economic transformation programmes. Among the characteristics of these strategies, five characteristics are usually mentioned:

* Focus of support (within the framework of the investment policy) on the priorities, needs, challenges with regard to the knowledge-based development;

* Use of the potential, strengths, competitive advantages of a given region;

* Fostering innovation and private investment;

* Fostering the involvement of various stakeholders;

* Basing on objective data and evidence and on monitoring and evaluation systems (Forray et al., 2012).

According to the definition, a key assumption of smart specialisation strategies is the economic transformation of the region. It is understood as a transition from the old to the new sector, where the essential importance here is attributable not to the characteristics of the tar-get area of economic activity but to the process of its selection, which is to be based on coop-eration of various entities. On the other hand, the economic transformation may also mean modernising existing industries (understood as improving their efficiency and quality of the production), by means of specific measures, called key enabling technologies – KET (Forray et al., 2012). It should be added that selected specialisations should be historically associated with the given area. In the smart specialisation approach, the point is to use optimally the potential of the region (the principle of embedding into local conditions – place-based approach and embeddedness). In the strategic documents regarding smart specialisation, the transfor-mation is also referred to as the diversification aimed at triggering the synergy effects (expan-sion of a market offer) and indirect effects (spill-over), formed from a combination of the new and existing key industries. What is important here is the so-called principle of relatedness, which consists in diversifying activity of companies, areas of management into related areas using new, innovative techniques and processes.

It should be noted that in the sparsely populated regions, with a small number of developed industries and companies, the process of selecting and implementing smart specialisation may be more difficult to carry out than in urbanised areas, with the modern structure of the economy. For these areas, it is recommended to involve scientific centres and strong public-private partnerships in creating and implementing development strategies.

National and regional smart specialisations: the case of Polish rural regions

A change in the approach in the EU cohesion policy based on smart specialisations has been reflected in the Polish development policy. In the strategy papers at the central and re-gional levels, as well as in the operational programmes, political and expert debate, the issue of smart specialisations started being taken into account. At the same time, many experts, scientific and popularisation studies have been drawn up, which broadly describe this subject and point to the ways of implementing the new instrument of the Cohesion Policy (Kardas, 2011; Hełpa-Słodowa, 2013; Wyrwa, 2014).

At the national level, the identification of smart specialisations has been initiated by research projects and updating the strategy papers regarding scientific research. In the years 2012-2013, under the auspices of three ministries, workshops and meetings were held with the representatives of industrial sectors, economic operators and researchers, which were aimed at discussions around the future development model of the Polish economy.

National smart specialisations were adopted in Poland in 2014. They included 19 fields within five thematic areas. Currently, smart specialisations in Poland consist of 21 fields, grouped into five thematic sections: healthy society, agri-food, forest-wood and environmental bio-economy; sustainable energy, natural raw materials and waste management, innovative technolo-gies and industrial processes. One thematic section (agri-food, forest-wood and environmental bio-economy) and 3 specialisations apply to the agri-food sector and are closely connected with the economy of rural areas (innovative technologies, processes and products of the agri-food and forest-wood sectors, high quality food, bio-technological processes and products of special-ist chemistry and environmental engineering). In 2014–2020, at the central level, the most important instrument for implementing the innovation policy and smart specialisations will be the Smart Growth Operational Programme (SG). At the regional level, in the introduction of smart specialisations the documents: RPO and RIS3 will be of importance.
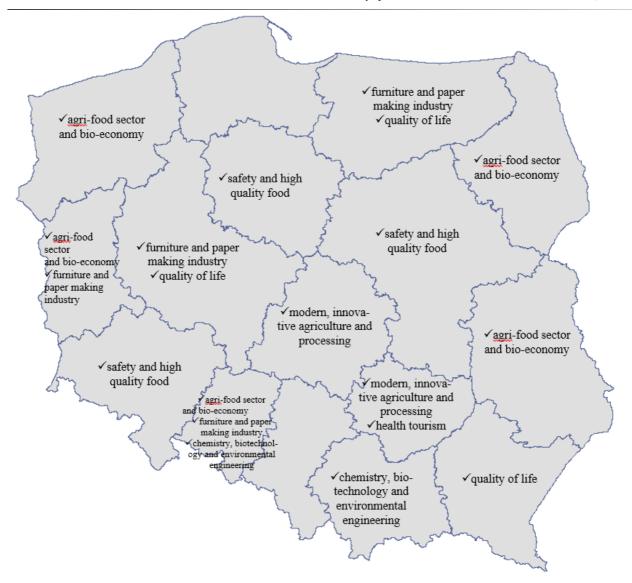
Analysis showed that all regions defined smart specialisations. This process was ac-companied by a significant institutional effort and financial inputs related to the creation of systems to support innovation and new strategy papers. It is estimated that in most cases, the direction and shape of the above-mentioned solutions was correct (Kogut-Jaworska, 2015). In majority of regions, however, too many industries were se-lected as smart specialisation. This move may be associated with a will to achieve flexibility and enhance opportunities for support of region-al contracts by the EU and national authorities. The funds available under the Cohesion Policy may not be sufficient to support such a large number of specialisations.

In Polish regions, regional innovation strat-egies based on smart specializations or other documents referring to these topics, have been prepared in order to increase the region's inno-vation, and also in connection with the need to fulfil the condition for using EU funds fo-cused on supporting innovation as part of the cohesion policy for 2014–2020. By the end of 2016, all regions have identified intelligent specializa-tions and adopted relevant strategic doc-uments. The issues of smart specialization in the scope of premises and identification methods, the im-plementation system (instruments, institutions),

the action plans, financing sources, and the monitoring and evaluation systems, were generally included in regional innovation strategies, or in separate documents. In all cases it was declared that identification of smart specializations (process of entrepreneurial discovery) has been carried out in accordance with the methodology developed at the EU level, i.e. based on objective data and tools (data analysis, SWOT, interviews, surveys), and with the use of social consultations conducted with representatives of various groups (entrepreneurs, administration, scientists, associations). Generally this process was supported by subsidies from EU funds available from the previous financial perspective (so-called systemic projects under central and regional operational programmes). For the vast majority of regions, the selected priority support areas, which constitute the strong side and economic potential, setting their competitive position, were related to agriculture, agri-food industry, and business operations closely related with rural areas (e.g.: agritourism, health tourism and recreation, forestry, energy production from renewable sources). The aforementioned operations did not become smart specializations only in the case of the Śląskie and Pomorskie regions.

The analysed information regarding smart national and regional specialisations includ-ed the data from 2012–2016. At that time, intelligent specialisations were identified, relevant strategic documents adopted, and activity schedules prepared. Implementing operational pro-grammes at the national and regional level, were in the initial stages of the advanced phase (this applies particularly to the RPO). Therefore, it is too early to assess the impact of smart specialisations on rural regions. In this context, we can outline only potential opportunities and risks associated with the implementation of this instrument. The effectiveness of stimulating the socio-economic development of rural areas due to innovations shall to a decisive extent depend on the activity business entities from those areas in the field of

research, innovation and acquiring support for introducing new solutions into their business practices. An important role in taking advantage of the possibility of specialisation should be ascribed also to institutions responsible for the regional innovation support systems, as well as to the effects of activ-ities undertaken in research and scientific organizations. Emphasis is invariably put on the fact that the condition of increasing innovativeness of the national economy, is to intensify contacts between the world of science and research, and the business sector, as well as a signifi-cant increase in adapting the results of scientific research to business practice.

The analysis of regional innovation strategies and documents relating to smart speciali-sations showed that in most cases, the problems of rural and agricultural areas were not given much attention. Moreover, the special instruments, actions or methods to support innovation in these areas usually were not proposed. Such situation was observed regardless of the fact that most regions selected specialisations based on natu-ral resources (land, forests, water, fauna, flora, crops, clean air, landscape, bio-raw materials) and sectors (agriculture, agri-food processing, bio-economy, production of safe food with high quality values) typical of rural regions, which are relevant to its future development.

Fig. 1. Smart specialisations of Polish regions directly related to the agri-food and rural economy
Source: Own elaboration based on (World Bank, 2016) with the use of PQstat software.

CONCLUSIONS

A weak point of the previous regional policy instruments introduced in Poland was mainly the short term of their applicability and the limited real impact of adopted strategies. Strategic planning created institutional systems or instruments were often used for meeting formal conditions in applying for EU support. The results of the analyses indicate that a lot of smart specialisations of regions did not match national specialisations. However, it should be noted that the consistency with national specialisations should not be an overriding issue determining the assessment if the regions made a proper selection. In case of the entire country and of the individual regions, the relatively greatest consistency related to the selection of specialisation connected with the agri-food, forest-wood and environmental bio-economy. Most of the regions (14 of 16) selected specialisations or subspecialisations concerning those fields (in all voivodeships, 81 specialisations were selected). Relatively, the least often selected specialisation area in the regions was the field regarding natural resources and waste man-agement (4 cases). The regional strategies in question indicate that the entrepreneurial process of discovery proceeded in the regions in various ways. Different was the approach to its or-ganisation (methodology, tools), level of inter-est and involvement of stakeholders (including) self-government authorities. As a consequence, the results of the selection of specialisations were diversified.

In many regions, in fact, a large number of priorities were determined. At the same time, there are no uniform mechanisms for monitoring and evaluating the implementation of specialisations. They refer, depending on the regions, to planned assessments of achieving the objectives and mea-sures provided for in regional innovation strate-gies, regional operational programmes or special documents related to smart specialisations.

Regional innovation strategies based on smart specialisations should be adapted to the whole of geographical, economic, social and institutional conditions of the countryside, including to the specific nature of these areas in the individual regions. Most regions have se-lected, as their area of specialisation, the sectors related to the environment and agri-food economy (bio-economy, healthy food, tourism) or to industry, which so far have been also an important factor of development. The selection of traditional sectors (agriculture) as an area of specialisation may be in the future a barrier to their development due to fostering the economic slowdown in the future (Grochowska, 2016). In addition, the concentration of support on a small number of priorities (smart specialisation) may increase a risk of failure. It is therefore necessary to search and commercialise solutions at the interface between these sectors with other modern sections and technologies. Nevertheless, this approach seems natural for the modern innovation support policy, because the ef-fective activation of these processes is costly and time-consuming, and in many cases it consists in experimenting and often does not succeed. Sup-port and evaluation of its effectiveness should be extended over many years. At the current stage, the assessment of the impact of smart specialisa-tions on agriculture and rural regions in Poland is premature. The mere process of identifying smart specialisations at the level of the country and of the individual voivodeships should be assessed positively. It may contribute to greater innovation in rural areas in the future.

LITERATURE

Foray, D., Goddard, J., Beldarrain, X. G., Landabaso, L., McCann, P., Morgan, K., Nauwelaers, C., Ortega-Argilés, R., 2012. Przewodnik Strategii Badań i Innowacji na rzecz inteligentnej specjalizacji (RIS 3). Luksemburg, pp. 13, 14-16, 39

Grochowska, R., 2016. Regional Innovation Strate-gies and food industry – evidence from Polish experience. Presentation at the Regional Studies Association.

Chechelski, P., Figiel, Sz. (eds.) Grochowska, R., Kuberska, D., Kufel, J., Oliński, M., Wasilewski, A., 2015. Wybrane aspekty innowacyjności w sektorze rolno-spożywczym, PW nr 10, IERiGŻ-PIB, Warszawa, pp.

123-127

Kardas, M., 2011. Inteligentna specjalizacja – (nowa) koncepcja polityki innowacyjnej. Optimum. Studia Ekonomiczne, nr 2 (50), pp. 122-125

Karpińska, A., 2016. Polityka innowacyjna – od innowacji ku…, [in:] Such-Prygiel, M., Novikova, K. Społeczeństwo polskie w drugiej dekadzie XXI wieku: wymiary, problemy, idee, Wydawnictwo Wyższej Szkoły Gospodarki Euroregionalnej im. Alcide de Gasperi w Józefowie, Józefów, p. 69.

Kogut-Jaworska, M., 2015. Identification of Smart Specialisations in Polish Regions in the Context of the EU's New Financial Perspective 2014–2020. *Oeconomia Copernicana*, 6 (2), p. 33.

Kozak, M. W., 2014. Dziesięć lat polityki spójności w Polsce. *Studia Regionalne i Lokalne*, 4 (58)/2014, Euroreg, Warszawa, 25-50

McCann, P., Ortega-Argiles, R., 2013. Modern regional innovation policy. *Cambridge Journal of Regions, Economy and Society*, Oxford, pp. 3-30

McCann, P., Ortega-Argiles, R., 2013. Transforming european regional policy: a re-sults-driven agenda and smart specialization. *Oxford Review of Economic Policy*, Volume 29, Number 2, pp. 416-420

McCann, P., 2015. The regional and urban policy of the European Union. Cohesion, Results-orientation and smart specialisation. Edward Elgar Publishing, Cheltenham, p. 85.

Rosner, A., Stanny, M., 2014. Monitoring rozwoju obszarów wiejskich. Etap I. IRWiR PAN, Warszawa.

Słodowa-Hełpa, M., 2013. Inteligentna specjalizacja polskich regionów. Warunki, wyzwania, dylematy. *Rocznik Nauk Społecznych*, tom 5 (41), nr 1, Wydawnictwo KUL, Lublin, pp. 90-91

Wyrwa, J., 2014. Smart specialisation – a novel approach towards region development in Poland. *Acta Scientiarum Polonorum, Oeconomica*. 13 (3), SGGW, Warszawa, p. 151.

Bank Światowy, 2016. W kierunki innowacyjnej Polski: proces przedsiębiorczego odkrywania i analiza potrzeb przedsiębiorstw w Polsce. Ministerstwo Rozwoju, Warszawa, p. 3.

EC, 2010. Polityka regionalna jako czynnik przyczyniający się do inteligentnego rozwoju w ramach strategii Europa 2020. Komunikat Komisji do Parlamentu Europejskiego, Rady, Europejskiego Komitetu Ekonomiczno-Społecznego i Komitetu Regionów, KOM (2010), Bruksela.

Conference „Building Bridges: Cities and Regions in a Transnational World" Graz, Austria.