

**THE ROLE OF LOCAL GOVERNMENT
IN THE CREATION OF INNOVATION
IN REGIONAL PERIPHERAL ECONOMIES
(A CASE STUDY OF THE LUBLIN REGION, POLAND)**

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Abstract

The subject of this work is to find ways to strengthen the innovativeness of economies in local systems, both from government authorities and business entities. The aim of the study is to assess the scale and scope of activities undertaken by the examined local government units aimed at strengthening the innovativeness of local economies. The paper presents the perspective of local government and enterprises, which allowed for a positive verification of the hypothesis of the existing inconsistency between the activity of government authorities and the expectations of entrepreneurs in support of their pro-innovation activities by local governments. The paper demonstrates that activities aimed at creating innovative conditions have been undertaken on a small and limited scale by local authorities. Nevertheless, local authorities are aware of the need to intensify activities that are particularly important for the local economic sector. The empirical part of this work was based on the results of a survey conducted in 2015, using an interview questionnaire addressed to representatives of local authorities and enterprises in two counties of the Lubelskie Province. The research material consisted of 14 interviews with representatives of municipalities and 147 interviews with entrepreneurs.

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GOSPODARKI REGIONU PERYFERYJNEGO
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Słowa kluczowe: lokalna gospodarka, lokalne strategie innowacji, czynniki innowacyjności.

Abstrakt

Celem badań jest ocena skali i zakresu działań podejmowanych przez jednostki samorządu terytorialnego, ukierunkowanych na wzmocnienie innowacyjności lokalnych gospodarek. Zaprezentowano perspektywę władz samorządu terytorialnego i przedsiębiorstw, co umożliwiło pozytywną weryfikację hipotezy o istniejącej niespójności między aktywnością władz samorządowych i oczekiwaniami przedsiębiorców odnośnie do wsparcia ich działań proinnowacyjnych ze strony samorządów. Wykazano, że aktywność na rzecz tworzenia uwarunkowań sprzyjających innowacyjności przez władze samorządowe była podejmowana w niewielkiej skali i w ograniczonym zakresie działań. Wśród władz samorządowych istnieje świadomość potrzeby intensyfikowania działań szczególnie ważnych dla lokalnego sektora gospodarczego. Część empiryczną pracy oparto na wynikach badań sondażowych zrealizowanych w 2015 roku z wykorzystaniem kwestionariusza wywiadu skierowanego do przedstawicieli władzy lokalnej oraz przedsiębiorców na terenie dwóch powiatów województwa lubelskiego. Materiał badawczy stanowi 14 wywiadów z reprezentantami gmin i 147 wywiadów z przedsiębiorcami.

Introduction

The authorities of local territorial units are responsible for all matters referring to a given town or a particular municipality, including, among others, the elaboration of development plans and strategies, the formulation of local development policies and the ongoing functioning of the particular territorial unit. The efficiency and effectiveness of these tasks are determined by the conditions and factors arising from the location, the current state of development, the level of development, the regional policy of the state, the internal development policy of the region, as well as from cooperation and territorial coordination. These factors are of particular importance for local systems located in the peripheral regions. The activity of local governments and business entities plays a key role for the local systems. Local governments shape the paths of development and the way of using local potential and create external conditions for investment while the business entities, through their activity, create processes of growth and development. Currently, development of entrepreneurship aimed at implementing innovation in enterprises and an increase in the level of innovation of the whole territorial system are considered to be essential for improving the competitiveness of territorial units.

The problem in this article concerns the development of local development policy aiming at strengthening the innovativeness of the local system. The article represents a strengthening viewpoint that draws attention to the need for a territorial approach to stimulate innovation in economies (BARCA 2009, CAPELLO, LENZI 2013, CREVOISIER 2014) and the importance of the institution in this process (RODRIGUEZ-POSE 2010, SOKOŁOWICZ 2015). As a result of the strengthening of the territorial approach, the concept of territorial capital is developing (CAMAGNI 2017, ZAUCHA et al. 2015.)

The analysis of innovations in the territorial dimension is connected with a systemic approach. According to a systemic approach, innovations are the result of social interactions between economic actors. The system of innovation is an open system in interaction with its environment (BRACZYK et al. 1998, p. 11). The significance of the geographical dimension of innovation systems has naturally emerged as a consequence of the emphasis put on the relations with sources of knowledge and innovation external to the firm (IAMMARINO, MCCANN 2013, ASHEIM, ISAKSEN 2002). It should be emphasized that external sources of useful knowledge are particularly important for smaller operators due to their limited technical, financial and human resources (STAWASZ 2015, p. 167).

The channels through which knowledge spills over a local area are identified in the relational capital of the area. This term can be defined as all relationships established between firms, institutions and people, which stem from a strong sense of belonging and a highly developed capacity of cooperation typical of culturally similar people and institutions (CAPELLO, FAGGIAN 2005). High capabilities in social interaction and communication, particularly in the forms of high trust, learning capacity, and networking competence are bound with the economic and social success of a firm (MORGAN, COOKE 1998).

The category of innovative milieu is a broad category of innovations, relationships and territory (CREVOISIER 2004). Dynamic milieus as systems in which one might work to stimulate innovation are local and regional systems of innovation, where the local milieu is the central focus (DE LA MOTHE, PAQUET 2012, p. 2, 6).

Institutions in the systems of innovation fulfill a number of functions. The functions of institutions in relation to innovation are: providing information and reducing uncertainty, managing conflicts and cooperation, providing incentives, as well as channelling resources to innovation activities. On the other hand, institutions could also cause barriers to innovation processes (EDQUIST, JOHNSON 1997, p. 51-55). In the development of the innovativeness of regions and their organizations, professional and effective local and regional authorities have begun to play an increasingly important role (HUCZEK 2012, p. 32). What needs to be emphasized is that local and regional authorities should be coordinated (MUSCIO 2006, p. 775).

Literature with regards to the subject emphasizes that the concept of learning regions is of great importance for territorial innovation processes. What can also be defined is a local learning system, which consists of actors that are highly interrelated in structures that are flexibly managed (NOWAKOWSKA et al. 2011). Local authorities create a key strength in this system which is potentially capable of creating innovation in local economies. The role of the authorities in stimulating development is to create conditions for the cooperation of various local actors to achieve common development goals (GUZAL-DEC 2017, p. 64, ZWOLIŃSKA-LIGAJ 2015a, p. 336-338). They are an important part of the local innovation environment (local innovation milieu) which is determined by: the scale of local innovation,

the cooperation and collaboration of companies, as well as the scale of localization and agglomeration effects (SHEFER, FRENKEL 1998, p. 187).

In the case of territorial units, the innovativeness is understood as the ability to participate in the innovation cycle and is perceived as their development objective. Implementation of local, pro-innovative economic, social and spatial policy that enhances the competitiveness of the local economy should stimulate the improvement of the ability of business entities to participate in the innovation cycle (BROL 2009, p. 60).

Territorial self-government units have a wide range of instruments to stimulate the innovation of a given area. These include various actions to improve entrepreneurial conditions as well as instruments targeted strictly at stimulating innovation. The second group includes: financial instruments, organizational and legal instruments, creation of innovative awareness and animation of network relations (NOWAK et al. 2011). The issue of innovation should therefore be adequately covered in the provisions of the local development strategy and included in the promotional activities of the local government unit (*Przewodnik...* 2015). The particular involvement of local authorities in pro-innovation activities is, however, taking place when local innovation strategies are being developed and implemented (ADAMOWICZ 2015, p. 12).

In the process of stimulating local innovation, the competence of local authorities is of great importance. The research conducted in the Lublin Voivodship confirmed relations between the competencies of local authority representatives and measures supporting the competitiveness and innovativeness of local companies. The ability to create entities that support local companies and the ability to meet the companies' needs have a visible impact on the innovativeness of the firms (PYLAK et al. 2014, p. 285).

The aim of this study is to assess the scale and scope of activities, which are undertaken by local government units and are aimed at strengthening the innovativeness of local economies. This work analyzed the actions resulting from the provisions of the local innovation strategies of the examined districts. The paper presents the perspective of local self-government and enterprises. The hypothesis concerning the existing inconsistency between the activity of self-government authorities and entrepreneurial expectations regarding the support of their pro-innovative actions by territorial self-governments was formulated. It was assumed that local government authorities perform an insufficient number of pro-innovation activities which result from direct cooperation with the business community. In other words, the local government does not offer enough tools of direct support.

Material and Methods

Empirical research was carried out in the Lubelskie Province. It is a region with a number of features characterizing its peripheral character. It is a region at an average level of development of innovative potential, classified into a group of provinces that deepen their delay and lose distance (*Diagnoza...* 2013, p. 13).

In the Lubelskie Province, local (district) innovation strategies (LISs) have already been developed within the framework of the systemic project entitled "Intellectual Capital of the Lublin Region 2010-2013" commissioned by the Marshal's Office of the Lubelskie Province. They covered the formulation of assumptions of local innovation strategies for selected districts, indicated as areas of potential growth or areas directly threatened with stagnation¹. Two districts have been selected for the study, the Pulawski district, which has been included in the areas of potential growth, and the Bialski district, which represents the areas threatened with stagnation. In the local innovation strategies of the surveyed districts, priority was given to the following development directions (ZACHER et al. 2017a, 2017b):

- creation of conditions for the development of the local innovation system;
- strengthening of the process of technological specialization of the district;
- strengthening of the process of functional specialization of the district.

In each of the districts, seven municipalities were selected for the study². The selection of research units was made taking into account their degree of development and the specificity of their differentiated location in the district area and the nature of their economy. In each of the fourteen units that were subjected to analysis, a survey was conducted using an interview questionnaire addressed to a representative of the local authority – a head of the community or a mayor. In addition, in the examined municipalities³, based on the REGON register, 10 to 15 companies were selected for the survey. The selection was made on the basis of the municipality type, the number of economic entities in the municipality, the reflection in the sample of the branch structure of the economic operators in the municipality and the highest employment level. A method of diagnostic survey with the use of an interview questionnaire addressed to the owners (or managers) of the companies was used as the tool for the research. Standardized personal interviews were conducted by a research company.

¹ Project implemented in the framework of the Human Capital Operational Program, Priority VIII Regional human resources for the economy, measure 8.2. Transfer of Knowledge, sub-measure 8.2.2. Regional Innovation Strategies, www.kil.lubelskie.pl.

² In the Bialski district: Miedzyrzec Podlaski and Terespol towns and rural communes of: Terespol, Wisznice, Tuczna, Drelow and Konstantynow (36.8% of territorial units were examined); In Pulawy district: the town of Pulawy and the urban-rural communes of: Kazimierz Dolny and the town of Nałeczow and the rural communes of: Baranow, Janowiec, Wawolnica, Kurow (63.6% of territorial units were examined).

³ In Pulawy district, due to the smaller number of municipalities, Wawolnica commune was excluded from the studies.

The research was financed by the Pope John Paul II State School of Higher Education in Biała Podlaska, under the Own Research Grant Fund. The study mostly used closed questions. The actions included in the local innovation strategies of the examined districts were assessed. Local authorities have confirmed their activity in the area or have reported a lack of it. The authorities have also pointed out the three most important actions that need to be intensified. Entrepreneurs assessed the activity of the authorities on a scale of 0-5, where 0 meant no activity and 5 was very high. Using the same scale, entrepreneurs also assessed the importance of the activity of the municipality authorities to strengthen company innovativeness. Local authorities also pointed out the three most important of the 14 actions that depend on the possibilities of increasing the innovativeness of the municipality. There was an opportunity to provide open-ended answers, but none were given.

The examined sample was dominated by micro-enterprises operating in the form of sole proprietorships. The surveyed companies mainly represented the services, trade and construction sectors. A total of 147 interviews were collected, including 80 in the Bialski district and 67 in the Pulawski district. The research was conducted from July 1st to August 10th, 2015 (71.64% in Pulawski district and 51.5% in Bialski district). The results of the research were processed using statistical software (Statistica). They are presented in descriptive and graphic form in tables.

The activity of local authorities to strengthen the innovativeness of local economies – the perspective of local government

In the examined local self-government units, the activity to create favorable conditions of innovation was undertaken on a small scale and within a limited scope. The most frequently declared actions aimed at creating conditions conducive to the development of local innovation systems in the examined local government units were: establishing international contacts, introducing pro-innovative changes in municipal offices, establishing cooperation with other national units of local government, expanding the sphere of science and the business environment, as well as encouraging organizations to contribute to the socio-economic development of their areas (Tab. 1).

Insufficient emphasis was placed on the activities which required specific involvement. Also, there was an insufficient amount of financial resources given to adequately prepare employees. Rarely, local government institutions supported innovative projects involving, inter alia, the development of cooperation networks and undertaking activities related to the dissemination of various types of knowledge supporting local entrepreneurs in their innovative activity.

Table 1

Selected activities undertaken from 2010 to 2015 by local governments aimed at creating conditions for the development of the local innovation system resulting from local innovation strategies by districts and types of surveyed territorial units (number of indications, $N = 14$)

Measures	Pulawski district			Bialski district		In total
	rural communes	urban-rural communes	urban commune	rural communes	urban communes	
Establishing international contacts	2	1	1	4	1	9
Implementation of modern IT solutions in the office	2	1	1	4	–	8
Raising the qualifications of the office staff	2	1	1	4	–	8
Creating links between self-government units	–	2	1	4	1	8
Cooperation with scientific institutions and the business environment	2	2	1	3	–	8
Application of advanced technologies in the municipal economy	2	2	1	2	–	7
Participation in integrated projects implemented by innovation centers, producer groups, LAGs and others	2	2	1	1	1	7
Support for innovative projects, including networking	1	1	–	4	–	6
Popularization of knowledge about funding opportunities for innovative projects	1	–	1	2	1	5
Supporting the promotion of local brands	2	1	–	1	–	4
Creating web sites / platforms for popularizing knowledge, exchanging experiences on innovative business opportunities	–	1	1	1	1	4
Preference of innovation in the implemented development directions of the municipality	–	–	1	3	–	4
Dissemination of knowledge about the benefits of cooperation	–	–	–	2	–	2
Development of public-private partnerships	1	–	–	–	–	1

Source: own calculations based on research.

Development of cooperation with the business sector in such areas as the promotion of local brands, the application of preferences for innovative directions in the development of local economies, or joint action with the business sector in the form of public-private partnerships, also constituted an underused type of activity aimed at the improvement of local innovation conditions. In the Bialski district, a fairly high level of activity in the examined areas was observed in the rural communes, whereas in the Pulawski district – high activity was noted in urban-rural communes and in the town of Pulawy.

In the examined units of territorial self-governments, the involvement of local authorities in supporting the development of the technological specialization⁴ of the local economy was not noticed. According to the declarations of the respondents, the most supported area of economic activity was tourism. Nevertheless, the support was provided quite rarely through the development of integrated tourism projects using modern information and communication technologies. The factor which favored the development of this sector was the high activity of the authorities in strengthening the cooperation of institutions promoting cultural, ethnic and local tourism (Tab. 2).

Development of the sector with relation to the protection and promotion of health was declared less often, while the development of the agri-food production sector was declared very rarely, also within the framework of supporting the implementation of innovative solutions in this sector. A small group of local governments took measures to support selected sectors, which are important for the local economy, and to develop products and/ or services, which are based on local raw materials. More favorable support should be given to the entire sector of the bioeconomy, which is the key smart specialization of the region and creates a wide range of innovative opportunities in the peripheral regions. Within the framework of the bioeconomy, attention should be paid to the development of ecoproducts (ZWOLIŃSKA-LIGAJ 2015b, 2016). The authorities showed great interest in improving the conditions of accessibility of local entities to modern IT and technical infrastructure. This interest should be seen as a favorable condition for the development of local economies.

In the framework of the measures that support the selected sectors of local economies, the activity of rural and urban local government institutions from the Bialski district is especially noticeable. In the Pulawski district, the urban-rural communes were characterized by greater activity in the analyzed areas in comparison to rural communes.

The representatives of the self-governments that were subjected to the survey, indicated measures, which according to them, need to be intensified in order to increase the innovativeness of the municipality. Such measures consisted mainly of various forms of self-government involvement in the development

⁴ Defined as “the structure of the distribution of activities across different sectors of a country” (ARCHIBUGI, PIANTA 1992, p. 1).

Table 2

Selected measures, which have been undertaken from 2010 to 2015 by local governments with the aim of strengthening the technological specialization of the commune, resulting from local innovation strategies according to communes and the types of the territorial units studied. (number of indications, $N = 14$)

Measures	Pulawski district			Bialski district		In total
	rural communes	urban-rural communes	urban commune	rural communes	urban communes	
Development of cooperation of institutions promoting cultural, ethnic and local tourism	1	2	1	5	2	11
Development of IT and technical infrastructure	2	1	1	5	2	11
Supporting the promotion of the region's tourist attractions, implementing and developing niche products and tourism services	2	2	1	4	1	10
Reinforcement and development of the sector related to the protection and promotion of health	1	1	–	3	2	7
Support for the development of key sectors of the local economy	–	1	–	3	2	6
Support of cooperation for the development of products and services based on local raw materials	–	2	–	2	–	4
Implementation of integrated tourism projects using ICT	1	1	–	2	–	4
Supporting the implementation of innovative solutions for agricultural and agri-food production	–	1	–	2	–	3
Supporting the production, promotion and distribution of agri-food products	–	–	–	1	–	1

Source: own calculations based on research.

of innovative projects (14 indications), including the popularization of knowledge referring to funding opportunities for innovative projects (5), other activities to support innovative projects (4), creation of websites/ platforms for popularizing knowledge, exchanging experiences on innovative business opportunities (3) and participation in integrated projects implemented by the institutions supporting innovation (2). According to respondents' opinions, another group of measures were aimed at strengthening the innovativeness of selected sectors of the local

economy (10 indications), including mainly agri-food production (5). However, the development of tourism products and services (1) and the development of the sector of health protection products and services (1) have been identified as being of little importance. The efforts to foster cooperation for the development of local products and services, as well as the promotion of local brands (3), were underpinned as a potential factor for the development of local economy innovation. The third group of activities, which was included in the priority actions aimed at increasing the innovativeness of the districts, were those connected with the functioning of municipal offices and the performance of their own tasks (6 indications). The last and least frequently mentioned group of actions of key importance for the increase of the innovativeness of the municipality was

Table 3

Activities where the possibility of increasing the innovativeness of a commune depend, as indicated by the representatives of the surveyed units of territorial self-government according to the districts and the types of examined territorial units. (number of indications, $N = 14$)

Measures	Pulawski district			Bialski district		In total
	rural communes	urban-rural communes	urban commune	rural communes	urban communes	
Use of EU and other funds	3	1	1	3	2	10
Activity of entrepreneurs	3	2	1	2	–	8
Bringing in an outside investor	1	–	–	3	1	5
Developing local innovation networks and clusters	–	1	–	1	2	4
Encouraging the emergence of new businesses	1	–	–	3	–	4
Expansion of technical infrastructure	1	–	–	1	1	3
Utilization of resources and environmental assets of a commune	1	1	–	1	–	3
Assistance provided by the local government in the development of existing enterprises	2	–	–	–	–	2
Supporting the development of business environment institutions	–	–	1	–	–	1
Assistance of an institution	–	1	–	–	–	1
Development of public-private partnerships	–	–	–	–	–	–
Pro-environmental investments	–	–	–	–	–	–

Source: own calculations based on research.

the development of cooperation for innovation with scientific institutions and the business environment (2), as well as establishing international contacts (1).

Among the key actions enhancing the innovativeness of districts, the surveyed representatives of the local authorities observed the activity of local actors in the use of external funds, including the European Union, as well as the attitudes and activity of representatives of the local economy. The importance of such activities as creating incentives for external investors, stimulating local entrepreneurship, and developing various forms of local co-operation was minor. Not contributing to an increase in the innovativeness of municipalities on a large scale were activities such as the development of technical infrastructure, activities focused on the utilization of resources and assets of the natural environment and its protection in local development, the involvement of local governments in the development of local enterprises, including public-private partnerships and concern for the development of business environment institutions and the use of institutional offers that can contribute to fostering local development processes (Tab. 3).

It should be noted that in the Pulawski district, more emphasis was placed on the importance of entrepreneurial activity and the support of local government in the development of existing enterprises. In the Bialski district, characterized by a lower development potential, local authorities recognized a need for entrepreneurial development which can be achieved through undertaking a number of activities such as bringing in an outside investor, stimulating the emergence of new businesses, and a greater concern for the development of local forms of cooperation for the enhancement of innovation. The authorities of urban communes have emphasized the use of EU and other funds, while the rural communes also emphasize the activity of entrepreneurs as an important factor.

The activity of local authorities for enhancing the innovativeness of the local economy and an evaluation of its importance in the innovativeness of the entrepreneurial enterprise

In most of the analyzed activities of the municipal authorities, the surveyed entrepreneurs assessed the assistance as low or very low. The highest marks were given to the activity of the authorities which focused on changing the functioning of the office and the communal economy. The representatives of the local economy perceived the constant improvement of the qualifications of the office employees as the only above-average activity of the local authorities. Measures, which aimed at increasing the innovativeness of IT solutions in the office and implementing modern technologies in the municipal economy, were evaluated relatively high when compared to other activities, but still they were

placed at a low level. There was also a limited scope of cooperation between local authorities and other territorial government units as well as insufficient participation in integrated projects implemented by various institutions important for their impact on the innovativeness of the local economy, including innovation centers, producer groups and LAGs. In the case of other activities, entrepreneurs indicated a low level of activity by local authorities.

The evaluation by entrepreneurs showed diversity between districts and the types of territorial units. Entrepreneurs from the Pulawski district noticed a much higher activity from municipal authorities in the examined areas. In the case of rural communes, the activity was related to improving the qualifications of the office employees and the implementation of modern IT solutions in the office. Whereas in the municipality of Pulawy, the respondents indicated the activity of local government was mainly participation in integrated projects implemented by innovation centers, producer groups, LAGs and others, improvement of the qualifications of the office employees, implementation of modern IT solutions in the office and cooperation with scientific institutions and the business environment. In the Bialski district, the majority of the local authorities' activity was rated as below average. Only in the case of urban communes of this district was higher activity observed in the application of advanced technologies in the municipal economy and the creation of relationships among self-government units. Evaluation by entrepreneurs confirms a much greater area of pro-innovation activities in the case of urban and urban-rural communes when compared to rural areas with regard to both of the surveyed districts (Tab. 4).

The surveyed entrepreneurs assessed most of the analyzed and feasible actions as important for strengthening the innovativeness of an enterprise. In particular, the respondents stressed the importance of preferences for innovation in the implemented actions aimed at the development of the commune's economy, local self-government's support for the promotion of local brands, popularizing knowledge about the possibilities of financing and supporting innovative projects, including cooperation networks (Tab. 5).

The efforts of the authorities to disseminate, in various forms, the knowledge of the possibilities of innovative activity and to undertake extensive cooperation with the various institutions involved undertaking more advanced innovative activities in local environments. This included academia and the business environment, innovation centers, group producers, and LAGs. Furthermore, developing public-private partnerships was acknowledged as being equally important. Among the activities which are of relatively small importance for strengthening the innovativeness of the local economic sphere in the light of the current studies are: concern of local authorities for pro-innovation changes in the functioning of municipal offices, including improving the qualifications of the office employees and the implementation of modern IT solutions as well as solutions used in the municipal economy. Entrepreneurs did not observe any association between the actions of local authorities and the development

Table 4

Evaluation* of activities by municipal authorities aimed at creating conditions for the development of the local entrepreneurial innovation system by district and type of territorial unit ($N = 147$)

Measures	Pulawski district						Bialski district				In total	
	rural com-munes		urban-rural communes		urban com-munes		rural com-munes		urban com-munes			
	\bar{x}	S	\bar{x}	S	\bar{x}	S	\bar{x}	S	\bar{x}	S	\bar{x}	S
Raising the qualifications of the office employees	2.83	0.79	3.06	0.44	4.13	0.64	1.98	1.12	2.31	1.20	2.73	2.89
Implementation of modern IT solutions in the office	2.84	0.76	3.00	0.37	4.11	0.60	1.94	1.19	2.27	1.36	2.46	1.23
Application of advanced technologies in the municipal economy	2.15	0.82	2.68	0.72	3.50	0.71	1.88	0.98	2.47	1.17	2.30	1.03
Creating links between self-government units	2.07	0.83	2.73	0.59	3.17	0.41	1.89	1.10	2.50	1.25	2.26	1.09
Participation in integrated projects implemented by innovation centers, producer groups, LAGs and others	2.05	1.39	2.48	0.75	4.22	0.67	1.86	1.14	2.27	1.20	2.25	1.25
Development of public-private partnerships	1.65	0.93	2.55	0.76	3.13	0.35	1.83	1.02	2.27	1.23	2.09	1.06
Establishing international contacts	1.50	1.16	2.73	0.46	3.71	0.49	1.73	1.14	2.23	1.17	2.09	1.19
Cooperation with scientific institutions and the business environment	1.00	0.87	2.13	0.64	4.13	0.64	1.89	1.15	2.30	1.26	2.05	1.26
Supporting the promotion of local brands	1.37	1.04	2.57	1.41	2.42	0.90	1.92	1.10	2.27	1.20	2.04	1.21
Preference for innovation in the development direction implemented in the municipality	1.07	1.21	1.95	1.05	2.91	1.38	1.64	1.19	2.30	1.15	1.82	1.27
Creating websites / platforms for popularizing knowledge, and exchanging experiences on innovative business opportunities	1.24	0.87	1.95	1.02	2.54	1.13	1.68	1.10	2.20	1.35	1.82	1.16
Supporting innovative projects, including networking	1.00	0.98	1.55	0.91	2.50	1.38	1.80	1.03	2.23	1.22	1.75	1.16
Popularization of knowledge referring to funding opportunities for innovative projects	1.00	0.89	1.64	1.09	2.21	1.25	1.64	1.10	2.33	1.35	1.71	1.21
Dissemination of knowledge about the benefits of cooperation	0.90	0.86	1.67	0.91	2.08	0.86	1.64	1.22	2.33	1.32	1.68	1.20

* Evaluation was made on a scale from 0 to 5, where 0 stands for no activity and 5 for very high activity. Source: own calculations based on research.

Table 5

Evaluation* of activities by municipal authorities aimed at strengthening the entrepreneurial innovativeness of the municipality by district and type of territorial unit ($N = 147$)

Measures	Pulawski district						Powiat bialski				In total	
	rural communes		urban-rural communes		urban commune		rural communes		urban communes		\bar{x}	S
	\bar{x}	S	\bar{x}	S	\bar{x}	S	\bar{x}	S	\bar{x}	S		
Preference of innovation in the development directions implemented in the municipality	4.10	0.61	4.13	0.81	4.23	0.73	2.02	1.32	3.43	5.58	3.27	2.81
Supporting the promotion of local brands	4.43	0.63	4.39	0.66	4.00	0.82	2.04	1.21	2.43	1.41	3.17	1.50
Popularization of knowledge referring to funding opportunities for innovative projects	4.31	0.54	4.57	0.59	4.62	0.65	1.88	1.22	2.43	1.33	3.15	1.57
Supporting innovative projects, including networking	4.10	0.76	4.57	0.73	4.62	0.65	1.94	1.08	2.50	1.31	3.15	1.50
Dissemination of knowledge referring to the benefits of cooperation	3.90	0.61	4.13	0.69	3.92	0.95	1.90	1.11	2.67	1.32	3.00	1.37
Creating websites / platforms for popularizing knowledge, and exchanging experiences on innovative business opportunities	3.93	0.52	4.17	0.65	4.15	0.55	1.92	1.24	2.43	1.22	2.99	1.40
Participation in integrated projects implemented by innovation centers, producer groups, LAGs and others	3.87	0.78	4.17	0.58	4.23	0.93	1.85	1.24	2.50	1.43	2.99	1.47
Cooperation with scientific institutions and business environment	3.07	1.08	3.74	1.14	3.85	1.28	1.92	1.16	2.53	1.33	2.75	1.38
Development of public-private partnerships	3.20	0.76	3.35	0.78	2.92	1.26	2.00	1.12	2.47	1.43	2.64	1.21
Raising the qualifications of the office employees	2.93	0.94	2.70	1.40	2.54	1.20	1.92	1.19	2.37	1.40	2.40	1.27
Application of advanced technologies in the municipal economy	2.60	0.67	2.48	0.90	2.15	0.80	1.82	1.10	2.50	1.36	2.25	1.08
Creating links between self-government units	2.27	0.83	2.43	0.99	1.85	0.80	1.80	1.19	2.47	1.36	2.15	1.12
Establishing international contacts	1.53	1.36	1.83	1.15	2.15	1.57	1.80	1.33	2.50	1.36	1.93	1.36
Implementation of modern IT solutions in the office	1.66	0.94	1.74	1.18	1.77	1.01	1.74	1.21	2.27	1.53	1.83	1.22

* Evaluation was made on a scale from 0 to 5, where 0 stands for no importance and 5 for great importance
Source: own calculations based on research.

of contacts among territorial self-government units, including national and international ones, and the creation of innovative possibilities in the sphere of the local economy (Tab. 5).

Summary

The activity of the surveyed local governments for the stimulation of local innovation resulting from the provisions of local innovation strategies, both in terms of creating conditions for the development of local innovation systems as well as strengthening the technological specialization of districts by fostering the innovativeness of local economic sectors, was undertaken on a small scale and with only a limited scope of measures. Nevertheless, local authorities are aware of the need to intensify the actions that are particularly important for the local economic sector. Such actions, indicated by the surveyed entrepreneurs, include: fostering innovation in the developmental direction of a community, supporting the promotion of local brands, popularizing knowledge about financing and supporting innovative projects; including the creation of cooperation networks.

Local governments are not sufficiently committed to activities that can play a more prominent role in enhancing local innovation. These include both innovation and co-operation activities, and provide direct support to companies developing innovative solutions. Moreover, local governments focus on the development of selected areas of the economy in an insufficient way. Tourism is the dominant industry, while the agri-food sector, the development of which could provide the municipalities with the opportunities for a broader revival of local economies and the use of local resources, is only supported to a limited extent.

Local authorities appreciate the role of enterprises in developing the innovativeness of the municipalities and the external environment. However, this awareness should increasingly lead towards the emergence of common projects introducing new solutions and integrating local entities into cooperation. The municipal authorities should act as the integrators of such cooperation, and they should to a greater extent benefit from innovative cooperation opportunities between scientific institutions and the business environment. Moreover, they should establish international contacts.

The activity of local government authorities should focus to a greater extent on supporting the local entrepreneurship, using more advanced support and cooperation opportunities with the businesses – including public-private partnerships, business environment institutions, and cooperation with and the use of local innovation institutions.

The low self-evaluation of local government activity was consistent with the evaluation of the activity in the surveyed areas by the entrepreneurs. With regard to the opinions of respondents, the highest activity was undertaken by the authorities in the area of implementing the pro-innovation changes in the

municipal offices and in the municipal economy. The activity of local authorities channeled in such a manner is not sufficient with regard to the importance of all activities of the authorities to increase the innovativeness of enterprises. Entrepreneurs attributed the greatest importance towards fostering innovation in the development directions implemented in the communes, supporting the local authorities' promotion of local brands and to the popularization of knowledge; especially with regards to financing and supporting innovative projects. The hypothesis concerning the existence of an inconsistency between the activities of government authorities and the expectations of entrepreneurs, especially with regard to innovation in rural communes and districts threatened with stagnation was positively verified. Due to the limited capacity of the local governments of peripheral regions, it is important to systematically support their actions, which may contribute to greater innovativeness within local economies.

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