PRACE NAUKOWE UNIWERSYTETU EKONOMICZNEGO WE WROCŁAWIU RESEARCH PAPERS OF WROCLAW UNIVERSITY OF ECONOMICS AND BUSINESS

2019, vol. 63, nr 9

ISSN 1899-3192 e-ISSN 2392-0041

Agnieszka Dembicka-Niemiec

University of Opole

e-mail: adembicka@uni.opole.pl ORCID: 0000-0003-3992-6989

REALIZATION OF REGIONAL OPERATIONAL PROGRAMME OF THE OPOLSKIE VOIVODESHIP 2014-2020. ASSUMPTION AND ACTIVITIES IN THE OPOLE AGGLOMERATION IN THE CONTEXT OF SUSTAINABLE DEVELOPMENT

REALIZACJA ZAŁOŻEŃ RPO WO 2014-2020 ORAZ INWESTYCJI W AGLOMERACJI OPOLSKIEJ W KONTEKŚCIE ZRÓWNOWAŻONEGO ROZWOJU

DOI: 10.15611/pn.2019.9.03 JEL Classification: R0, R5

Summary: The objective of the article is the identification and assessment of measures contributing to the development of the Opole Agglomeration in the context of the concept of sustainable development. It identifies the measures undertaken in the scope of the conducted policy within the existing functional area, and evaluates them in the context of the assumptions of sustainable development. The implementation of such an objective also involved the determination of the types of projects financed within the Regional Operational Programme of the Opolskie Voivodeship 2014-2020 (ROP OV 2014-2020), and the scope of their influence. The analysis was based on three main aspects of sustainable development: economic, social, and environmental. Moreover, the study attempts the identification of the benefits from the measures and policy concerning the said area implemented by the Opole Agglomeration Association. The study was based on the desk research method involving the analysis of strategic and programming documents and statistical data.

Keywords: Opole Agglomeration, sustainable development, functional area.

Streszczenie: Celem artykułu jest identyfikacja i ocena działań mających wpływ na rozwój aglomeracji opolskiej na gruncie koncepcji zrównoważonego rozwoju. Istotne jest zidentyfikowanie działań podejmowanych w zakresie prowadzonej polityki w ramach istniejącego obszaru funkcjonalnego oraz ich ocena w kontekście założeń zrównoważonego rozwoju. Aby zrealizować tak określony cel, analizę oparto na typach projektów finansowanych w ramach RPO WO 2014-2020 oraz zasięgu ich oddziaływania. W rozważaniach uwzględniono trzy główne aspekty rozwoju zrównoważonego: ekonomiczny, społeczny oraz środowiskowy. Ponadto starano się zidentyfikować korzyści płynące z prowadzonych

przez Stowarzyszenie Aglomeracji Opolskiej działań i polityki dotyczącej przedmiotowego obszaru. Przeprowadzone badania opierały się na metodzie *desk research*, w ramach której dokonano analizy dokumentów strategicznych i programowych oraz danych statystycznych.

Słowa kluczowe: aglomeracja opolska, zrównoważony rozwój, obszar funkcjonalny.

1. Introduction

In accordance with the new paradigm of regional policy with a territorial approach, conducted in Poland as well as in other European countries, the implemented measures consider the spatial context, i.e. geographic conditions. Political initiatives which are undertaken nowadays may contribute to the better use by regions of their strengths, advantages and may support overcoming the divisions resulting from administrative borders. It is important to underline that many of the problems with which regions are facing are multi-sectoral, and effective solutions require an integrated approach and cooperation between different authorities and actors. Therefore it is important to build synergies between economic efficiency, social cohesion and ecological balance, allowing the implementation of sustainable development assumptions during programming political activities. The regional Operational Programs of Voivodeships (ROP) are one of the instruments for implementing the development policy and spending funds from the European Union (EU). Taking into account the new approach to territorially concentrated regional policy, the research was based on an analysis of activities in the field of the Opole Agglomeration as an area towards which a territorial strategy is being implemented. The main aim of the article was to identify the type and range of impact of the projects related to three main areas of influence in accordance with the concept of sustainable development (economic, social, environmental). It was important to identify if the implemented projects had a network character or were only local. The character of the activities and implemented investments indirectly affect the outcome of the implemented regional policy and show the level of cooperation between municipalities and other stakeholders.

2. Importance of the agglomeration development and territorial cooperation in the scope of its functioning

The beginning of the new paradigm of regional policy was the slow convergence of underdeveloped regions which prompted taking action in both scientific and decision-making environments, on the change of goals, priorities, instruments, entities and territorial areas of regional policy intervention (Konopińska, 2015, p. 74). It is important to use the endogenic potential of the region without limiting the scope of the undertaken initiatives to administrative boundaries, but with consideration of the functional boundaries (designated in geographic terms, based on a coherent profile

of the socio-economic and spatial parameters) (cf. Barca, 2009). Such an approach permits the determination of measures better adjusted to the specificity of a given place. The new paradigm is based on territorial development which takes place in a functional arrangement and is strongly dependent on endogenous resources. This is a process focused on the optimal use of territorial capital as well as that developed within network relations (Nowakowska, 2017, p. 36).

Moreover, the Concept of Spatial Management of the Country 2030 (*Koncepcja...*, n. d.) emphasises that the territorial approach is also characterised by the integration of public activities in the spatial aspect. In this context it was important to identify the functional areas in the scope of a specified formal basis for the cooperation of various administrative entities whose task is among others the formulation of development objectives and measures.

Therefore, the planning and carrying out development measures in functional areas provide the basis for the cooperation between various entities and levels of governance. Cooperation of various partners within functional areas is of key importance for coherent and complex pro-development actions and problem solving (Ministerstwo Rozwoju Regionalnego, 2013, p. 3).

Moreover, it was important to create a framework of urban policy that would regulate the development of cities and functional areas in a sustainable, coherent, and efficient way. Cities generate the highest GDP, at the same time concentrating various kinds of conflicts in the social, economic, and spatial sphere. Therefore the coordination of measures within the city and its vicinity is of great importance (Kociuba, 2015, p. 50).

For the purposes of this paper, the definition of a functional urban area and urban agglomeration is required. The idea of functional urban areas is a result of a growing organisational complexity in different areas, and constitutes the most complex solution as an organisational-spatial form (Śleszyński, 2015, p. 38).

Pursuant to KPZK 2030, "a functional urban area is a spatially continuous settlement system composed of administratively separate units. It covers a compact urban area, a functionally related urbanised zone, and centres of close vicinity" (KPZK 2030, p. 166).

These are urbanised areas with the highest population density and the most important functions in the settlement system of the country. They cover both the urban centres in their administrative boundaries included in the four categories mentioned below (metropolitan, regional, subregional, and local centres), and the functional areas of urbanised suburban zones. In administrative terms, the areas can cover urban, rural, as well as urban-rural communes.

The functional areas of regional centres were also designated. They are created around voivodeship capitals (e.g. Opole) and around other centres not fulfilling such functions, but with high potential and great importance for the development of the country from the point of view of the objectives of its spatial management policy (*Koncepcja...*, n. d., p. 168). They are cities fulfilling important administrative,

economic, and social roles, concentrating some metropolitan functions, but with a considerably smaller scale of influence (usually regional) than metropolitan centres. They play the basic role in the economic, social, and administrative life of particular regions, and some of them, due to specialisation, directly influence the development of the country (*Koncepcja...*, n. d., p. 168).

The term urban agglomeration (UA) is often used in related literature alternatively to the term of large city or metropolis (Szmytkie, 2014, p. 36). Nonetheless, an agglomeration was defined as a "spatially continuous area with specific parameters resulting from the occurring process of building development concentration. Its scope covers not only the city, but also the related area of strong influence. Intensive urbanisation processes are accompanied by strong economic and social phenomena, and concentration of qualified labour force. The area of an agglomeration includes numerous administrative and financial institutions, education, research, and didactic centres. An important indicator of an agglomeration is the occurrence in its area of concentrated technical infrastructure, transport nodes, and social infrastructure" (Strategia Rozwoju AO-SRAO). UAs contribute to the economic, social, and spatial development. These areas are characterised by a high level of management, and strong concentration of key activities, particularly those with supra-commune importance. Agglomerations are designated primarily based on the functional relations occurring between the areas surrounding the city. They participate in development processes, often generating a high level of life and space management, at the same time influencing the development of the entire region. In SRAO, an agglomeration is defined as a space accompanying a large and strong city (agglomeration centre – Opole), showing considerable similarities with it: morphological (layout of structures), physiognomic (appearance of the surroundings), and functional (villages with non-agricultural character). This means that agglomerations include communes which against the background of the voivodeship are the most 'urban', irrespective of their administrative status. 'Urban' parameters can also concern rural or urban-rural communes (Aglomeracia Opolska, 2018c, p. 20).

One of consequences of the expansion of the actual functioning of a city outside its administrative boundaries is the development of relations of a legal-territorial character. Local associations are established aimed at facilitating the functioning of particular functional areas, e.g. the Agency for the Development of the Wrocław Agglomeration (http://www.araw.pl (date of access: 06.02.2018)), the Poznań Metropolis Association (http://www.aglomeracja.poznan.pl (date of access: 06.02.2018)), of the Opole Agglomeration Association (https://aglomeracja-opolska. pl (date of access: 06.02.2018)). Affiliation in this type of associations is voluntary and usually has nothing to do with the actual functional area serving as backdrop for the large urban centre (Szmytkie, 2014, p. 45). Such associations aim at more efficient and effective governance in various spheres of socio-economic life. It should be emphasised that the area of OFA designated by the Ministry of Regional Development is substantially smaller than the area of OA. The functional area of the voivodeship

capital is not the same structure as the agglomeration of the city. The efficient functioning of the agglomeration is largely determined by for example the transport system permitting fast travel to the central city from any place, and providing territorial cohesion.

3. Sustainable development in the regional approach

The most popular definition of sustainable development is that included in the "Our Common Future" Report from 1987: "The path of human progress which meets the needs and aspirations of the present generation without compromising the ability of future generations to meet their own needs". This is a very general approach requiring more thorough analysis. The literature on the subject provides many attempts to define sustainable development in detail. One of them is presented by Borys, who considers sustainable development as the harmonisation of the economic, social, ecological, and spatial aspect (Borys, 1998, p. 176). According to the author, in addition to the three most frequently mentioned aspects, the theory of sustainable development also has the spatial aspect concerning spatial policy and the concept of spatial management, and the institutional-political aspect focusing on the politics, governance, and management on different levels of the organisation of society. A condition of the implementation of sustainable development in the context of its aspects is the combination of four policies: ecological, economic, social, and spatial, and the system of governance and management of the country (Borys, 1998, pp. 94-95).

Analogically, sustainable development in the regional scale is defined in various ways. According to Kiełczewski, it is the use of regional resources providing the community of the region with the growth of wealth and simultaneously guaranteeing development possibilities for the future generations (intergenerational equity) and communities of other regions (intragenerational equity) (Kiełczewski, p. 31). This is a universal definition, although there seems to be no universal recipe for the sustainable development of regions (Kiełczewski, 2009, p. 33). Nonetheless, regional sustainable development covers three basic aspects: economic, social, and environmental. In the scope of each of the aspects, the region should develop in a way not limiting the development possibilities in the remaining aspects. Cohesion in terms of the applied measures concerning the transport, technical, and social infrastructure, and the system of governance of different units included in the region is important.

One of the tools of implementation of regional policy are the Regional Operational Programmes (ROP) constituting medium-term development plans. They permit obtaining resources from Structural Funds, and constitute documents of an operational character, specifying the main directions of the development of voivodeships in a given financial perspective. The implementation of the assumptions of ROP contributes to the intoduction of strategies of development of particular voivodeships. Their objective is to increase regional competitiveness and promote sustainable development in the regions (Harasimowicz, 2015, p. 43).

4. Measures undertaken in the scope of the functioning of OA

It should be emphasised that one of the most important tools of the implementation of territorial strategies in functional areas are so-called Integrated Territorial Investments. The possibilities of their implementation are arranged between the voivodeship self-government and communes interested in the development of the functional area (Szafranek, 2015, p. 110). In the Opole region, the function of the ITI Association and its related rights and obligations were ascribed to the Opole Agglomeration. Since December 2013, it has been functioning as an association of 21 units of territorial self-government¹ (Aglomeracja Opolska, n. d. *Raport z realizacji Strategii Rozwoju AO....*, p. 5). The units differ in terms of size and structure, as well as budget.

In order to meet the challenge of spatial integration of FUA, self-governments work together to show the will of cooperation in the implementation of development plans (OA-link).

The initiatives and measures undertaken by OA were analysed with consideration of the three basic aspects of sustainable development: economic, social, and environmental. The activity of OA and specified development objectives for the designated area were stipulated in the following documents the provisions of which were subject to analysis:

- Development strategy of OA for the period 2014-2020.
- Economic development programme of OA by 202.0.
- Programming-spatial concept for the optical ICT network of OA (OSTA).
- Study of the cultural heritage of OA.
- Conceptual study of the complex modernisation of the education system of OA.
- Communication study of OA.
- Solidary in the face of threats.

One of the key documents pointing to a common vision of the development of territorial units belonging to the OA Association (OAA) is the Development Strategy of the Opole Agglomeration for the period 2014-2020. The document stipulates the improvement of the internal cohesion and transport accessibility of the Agglomeration, constant economic growth, improvement of the quality and accessibility of provided public services, including educational services, and improvement of the state of the natural environment with simultaneous rural development.

Moreover, the Strategy of Integrated Territorial Investments of OA specifies the following development priorities:

- P1. New investments and an increase in the economic activity of OA.
- P2. Low emissions economy.

¹ Opole, Gogolin, Krapkowice, Lewin Brzeski, Niemodlin, Ozimek, Prószków, Zdzieszowice, Chrząstowice, Dąbrowa, Dobrzeń Wielki, Izbicko, Komprachcice, Łubniany, Murów, Popielów, Strzeleczki, Tarnów Opolski, Turawa, Walce, Tułowice.

- P3. High quality of education.
- P4. Cultural heritage and culture in OA.

In the scope of each priority, detailed objectives were specified, the implementation of which is pursued (Aglomeracja Opolska, n. d. *Raport z realizacji...*, p. 3):

- P1: Objective 1. Provision of favourable conditions for investments generating new workplaces.
 - P2: Objective 2.1. Improvement of energy efficiency and use of RES.
 - Objective 2.2. Improvement of air quality.
 - P3. Objective 3 Development of competences important in the labour market.
 - P4: Objective 4 Development of the supraregional cultural brand of OA.

The implementation of measures aimed at supporting the **economic aspect** was particularly based on the preparation of investment areas in OA. New investment land provided with basic amenities is expected to increase the attractiveness of the region and attract new investors, and therefore increase the possibility of employment for the local community. It should be emphasised that the Opole voivodeship is characterised by an unfavourable demographic trend and a negative migration balance. In order to stop the outflow of population, favourable conditions for work and life should be provided. This is planned to be achieved through the implementation of objectives specified in strategic documents. Activities supporting the development of areas in the scope of OA in the economic aspect with complementary character were aimed to also focus on initiatives related to the economic promotion of OA on the national and international scale, development of an integrated investor service system, preparation of a common investment package of OA, and improvement of transport accessibility of the existing and designated investment land. The tasks have not been fully implemented.

One of the detailed objectives determined in the scope of the implementation of the Strategy of Development of OA focuses on the provision of conditions in the demand for e-services in the public sphere in the area of OA. So far, measures have been undertaken resulting in support of the development of electronic public services at regional/local level, and an increase in their accessibility for citizens (Aglomeracja Opolska, n. d., pp. 20-21) It should be emphasised that the city of Opole, constituting the central unit of the region in 2017, changed its administrative boundaries incorporating some communes neighbouring the territory of the city. As a result, the city has greater possibilities of allocation of new land for investment. This is expected to translate into an increase in the investment attractiveness of the city and the surrounding areas.

The social aspect of sustainable development is perceived in quite broad terms, and concerns the quality of life of residents. Nonetheless, the analysis took into account all measures aimed at the improvement of the quality of life of residents particularly in the scope of the functioning of the health service, level of education, prevention of poverty and social exclusion, e-administration, improvement of transport accessibility in OA, social integration, and preservation of tradition and culture.

A considerable part of the implemented projects concerned the improvement of transport accessibility of OA (27 projects). The measures particularly focused on investments with the expected result of the improvement of connections of the internal transport system (23 projects). The situation was similar in the case of the number of investments implemented in the scope of increasing the quality of education (28 projects), including 86% of initiatives aimed at the strengthening of general and vocational education in OA.

Due to the fact that the majority of territorial units associated in OAA are of a rural and urban-rural character, measures for the development of rural areas are important. In this aspect, all the implemented projects had the character of investment tasks (30 projects), and concerned the strengthening of the functionality of rural areas. The incurred expenditure aimed at supporting the development and improving the network infrastructure, and improving the quality of the basic local services provided to the rural community (Aglomeracja Opolska, n. d. *Raport z realizacji Strategii Rozwoju AO...*, p. 8).

An interesting initiative undertaken in the functioning of OA is the project "Youth comes with age – active seniors in the Opole Agglomeration". The objective of the project is to increase in the accessibility and quality of social services for seniors, the development of support systems and of social services in the aspect of among others recreation and culture. The participants of the project are persons above 60 years of age. They take part in various workshops, outdoor, theatre, and other educational activities. The activities reduce the phenomenon of social exclusion of the elderly, and are very important considering the current population structure of the region.

Another measure implemented in the range of functioning of OA is the project: "Solidarity in the face of threats". It is aimed at the improvement of the functioning of the system of counteracting and reducing the effects of the occurrence of extreme phenomena in the area of the Opole Agglomeration. The activities undertaken aim at the rational and effective coordination of the activity of the rescue services of the commune and 'powiat' (county) Crisis Management Centres in a situation of the occurrence of extraordinary threats. In view of the increasingly frequently occurring extreme weather phenomena such as violent rainfall, fires, and strong winds, resulting in damage to property and threat to the life of residents, it is important to join forces on a regional scale, and support the local community in situations of threat (Aglomeracja Opolska, 2018b).

The analysis of the **environmental aspect** of sustainable development focused both on measures related to the improvement of the life of residents and with the economic aspect and low emission economy. Measures related to broadly defined transport, both public and personal, are important for the development of the agglomeration. Many possibilities currently exist aimed at encouraging the local community to use public transport and discourage the use of cars. The measures undertaken so far do not seem to be satisfactory in such terms. New passenger

transport units have been recently purchased for public transport, although they constitute less than 9% of the planned purchase. Investment in 37 modern hybrid buses is planned (including 12 articulated buses), as well as 15 buses supporting transport in the communes of the Opole Agglomeration (www.opole.pl/czysta... (date of access: 07.02.2018)). Initiatives undertaken in the transport infrastructure have so far focused on the construction, modernisation, or alteration of public transport stops, and not the construction of park&ride or bike&ride objects. In the entire OA, a total of less than 10 km of bicycle lanes have been improved and constructed. Many rural areas have no roads or bicycle roads, and residents wishing to move between municipalities often have to join heavy road traffic endangering their lives. A coherent pedestrian-bicycle system is currently not implemented, but its implementation is planned. The plans cover the construction of an Intelligent Transportation System (ITS), aimed at more efficient traffic management, monitoring of events on the roads, faster response to them, and the collection of vast amounts of information on traffic and the distribution of such information (Aglomeracja Opolska, 2018c, p. 10). According to the above analysis, the detailed objective, namely the development of low emissions public transport and other environmentally friendly forms of mobility in the area of OA is implemented only partially, and so far to an insufficient degree.

Another issue important from the point of view of assumptions of sustainable development is the implementation of a low emissions economy. The analysis of strategic documents points to the specific objective of the implementation of a low emissions economy in SRAO, but no separate document exists specifying particular tasks to be undertaken in the area of all communes of OA. Due to the problem of smog present in rural and urban areas during the heating season, the issue seems important. The undertaken measures are often dispersed, are implemented by individual units, and do not constitute the effect of prospective thinking, but only as a response to needs met in a given territorial unit.

OA includes ecologically valuable areas. Therefore, one of the most important measures are those related to the protection of biological diversity. Educational-information measures are particularly undertaken in the scope, involving educational-promotional actions for the residents of the area of OA, including among others (www.ao-realiz projekty):

- environment-related competitions for children, youngsters and adults;
- open lectures and presentations;
- environmental classes for children and youngsters;
- courses and workshops;
- scientific conferences;
- theatre classes for seniors;
- preparation and issuance of a textbook for biodiversity management in the communes of the Opole Agglomeration;
- visits to the Biodiversity Centre in Milicz.

The effect of the measures should be seen shortly after their completion, but for the purpose of strengthening their impact, they should be repeated cyclically. In the scope of implementation of the objective, namely rural development, investments were made related to the municipal management (construction of a sewage network, construction of a selective waste collection point, household-level sewage treatment plants), small infrastructure, and management of green areas in communes. These are measures important from the point of view of environmental protection, and their successive implementation contributes to the improvement of the quality of groundwater, spatial management, and other environmental aspects.

Table 1. Strategic objectives of OA in the context of aspects of sustainable development

Aspects	Economic aspect	Social aspect	Environmental aspect
Improvement of transport accessibility of OA	+	++	+
Economic development of OA	++	+	0
High level of education	+	++	0
Environmental protection	0	+	++
Rural development	0	+	++

where: ++ the implementation of measures largely supports development in a given aspect of sustainable development; + the implementation of measures supports development in a given aspect of sustainable development; 0 the implementation of measures does not support development in a given aspect of sustainable development.

Source: own elaboration.

To sum up the above, an assessment was made of the effect of particular measures on the implementation of the assumptions of sustainable development in its particular aspects (Table 1).

5. Regional Operational Programme of the Opolskie Voivodeship – projects implemented in the Opole Agglomeration

Due to the context of sustainable development, it was important to designate projects contributing to the development of its particular dimensions. For this purpose, a total of 223 projects implemented in the period 2014-2020 were analysed with consideration of planned measures in terms of the character of the project according to its influence. Due to the occurrence of investments considerably contributing to the improvement of the quality of space, the spatial dimension of sustainable development was also designated. Almost half of the measures affected the economic sphere, less than 30% the social aspect, and the smallest percentage concerned projects in the spatial and environmental dimensions (Figure 1).

From a research point of view, it was also important to analyze the projects according to their value (Table 2).

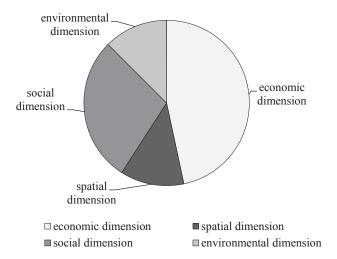


Fig. 1. Contribution of projects implemented in the scope of ROP OV 2014-2020 by their character specified in terms of their influence in particular dimensions of sustainable development

Source: own elaboration.

Table 2. Total value of implemented project of OA in the context of aspects of sustainable development

Aspect of SD	Total project value (PLN)	% of expenditures in particular aspect of SD
Economic	756,033,824 zł	55%
Spatial	194,698,464 zł	14%
Social	151,498,675 zł	11%
Environmental	275,118,242 zł	20%
Total	1,377,349,206 zł	100%

Source: own elaboration.

The value of all the projects was PLN 1,377,349,206. The projects affecting the economic sphere had the largest share (55%). This dominance coincides with the number of projects implemented in this aspect. The value of the projects implemented in the environmental aspect was characterized by a significant share (20%). However, for the share of the number of projects it was not so significant. Thus, a small number of projects were implemented but considerable expenditure was incurred for their implementation. This is the outcome of infrastructure investments of an environmental nature whose values are much higher than the projects in the social aspect.

The projects implemented in the scope of ROP OV were identified in terms of their effect on the development of particular aspects of sustainable development as well as the range of their influence (Table 3). The levels of influence were determined based on the analysis of the content of projects and type of beneficiary. The effect of a project on the local level covered initiatives concerning the commune and its direct

vicinity, and the unitary level concerned only one unit, e.g. one enterprise or institution. Projects implemented on a regional level affect the development of the region (in this case OA and the voivodeship). The foreign level concerned only companies that through the implementation of the project undertook cooperation with other entities from abroad, or increased their competitiveness internationally. The contribution of particular projects was determined in the scope of each of the aspects of sustainable development.

Table 3. Influence of the projects implemented in the scope of ROP OV 2014-2020 including sustainable development (SD)

Aspect of SD Scope	Economic	Social	Environmental	Spatial
Unitary	31%	59%	62%	23%
Local	3%	12%	27%	65%
Regional	41%	29%	11%	12%
Foreign	25%	0%	0%	0%
Total:	100%	100%	100%	100%

Source: own elaboration.

The economic dimension is characterised by the highest contribution of projects with a regional nature that increased the level of competitiveness of companies as well as the competitiveness of the region in this aspect. Projects with a social character were particularly implemented in a unitary scope. The measures largely supported the local community, and responded to the occurring needs, e.g. establishment of a new nursery and its equipment, establishment of a seniors' centre, or senior citizen care home. Initiatives classified into the environmental dimension were particularly of a unitary character, and concerned a particular object, its modernisation in terms of source of heat and electricity with the application of heat pumps, or the complex thermo-modernisation of public buildings in the commune. Projects with a spatial character had an effect on the spatial values, but also on the quality of technical infrastructure, cultural heritage values, and image of the commune/powiat. This group of projects in particular includes those aimed at the revitalisation of space.

The implemented projects were also analysed in terms of the type of undertaken measures, and projects with point infrastructure character and network infrastructure character were designated (Figure 2).

Projects implemented in the scope of ROP OV were dominated by projects with point infrastructure character, i.e. those implemented in one place. Such a state suggests the lack of a network-based (spatial) approach to the development of OA regarding the use of resources from the aforementioned programme.

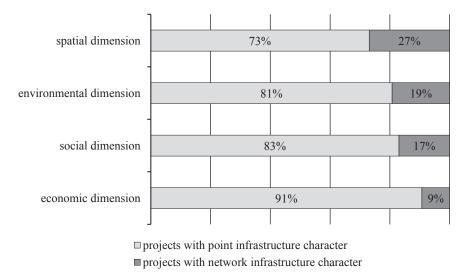


Fig. 2. Type of implemented projects in particular dimensions of sustainable development Source: own elaboration.

The analysis of the types of the analysed projects in the economic dimension suggests the considerable dominance of the number of investments implemented in a given company or institution (purchase of equipment and devices). Infrastructure investments such as road construction were difficult to classify, because they were often of a point character, e.g. replacement of the road surface over a section of 1.5 km and construction of a pavement in a given municipality, which did not permit treating them as projects of a network character. On the other hand, for example the construction of a ring road was classified as an infrastructure investment of a network character, because it contributed to the development of the road network. In the social dimension, particularly point measures were implemented, but measures of a network character also occurred, such as projects covering sets of tasks aimed at contributing to the development of sustainable intermodal urban mobility, or the reduction of emissions of pollutants harmful for the environment and generated by road vehicles. This type of projects also has an impact in the environmental dimension, and their implementation aims at the improvement of air quality in cities.

6. Conclusion

The Opole Agglomeration as an area of associated and cooperating communes seems to be a relevant unit with better possibilities of implementation of particular objectives, particularly those requiring systemic and coherent measures, than each of the communes separately. The specified strategic objectives seem to be complete, and correspond with the development problems concerning the region. It should be

emphasised that the priority objective of the planned strategic measures is to guarantee sustainable development of OA. The conducted analysis concerned measures in the scope of three aspects of sustainable development. It particularly showed the positive aspects of their implementation. The rate of implementation of particular tasks contributing to achieving the adopted objectives, and the lack of a common approach and perspective thinking in the case of striving for a low emissions economy or sustainable development, is however, disturbing. Therefore, the said tasks should be treated in a systemic way, and areas of associated communes should be treated as a single unit in which a particular initiative should be implemented. In the case of the implementation of tasks in the scope of a low emissions economy in a point-based approach, the desired effect will not be achieved.

The analysis of measures implemented as part of ROP OV 2014-2020 showed the predominance of projects with a point character and unitary or local scope in the majority of aspects of sustainable development. Only the economic aspect is dominated by projects aimed at the improvement of competitiveness of companies in the region and internationally, and therefore contributing to the economic competitiveness of the region. This suggests that the implementation of particular projects itself in terms of the use of the source of financing of ROP OV may prove insufficient. The existence of the Opole Agglomeration Association and undertaking initiatives in the scope of its activity increases the possibility of the implementation of initiatives covering all communes included in OA, and contributes to the more effective implementation of regional development objectives.

Bibliography

- Aglomeracja Opolska. (2018a). *Miasta i aglomeracje miejskie polityka miejska Unii Europejskiej*, Retrieved May 5, 2018 from https://aglomeracja-opolska.pl/aktualnosci/miasta-i-aglomeracje-miejskie-polityka-miejska-unii-europejskiej
- Aglomeracja Opolska. (2018b). Ochrona różnorodności biologicznej Regionalnego Programu Operacyjnego Województwa Opolskiego. Retrieved May 5, 2018 from https://aglomeracja-opolska.pl/realizowane-projekty/ochrona-roznorodności-biologicznej-regionalnego-programu-operacyjnego
- Aglomeracja Opolska. (2018c). *Solidarni w obliczu zagrożeń*. Retrieved May 12, 2018 from https://aglomeracja-opolska.pl/realizowane-projekty/solidarni-w-obliczu-zagrozen
- Aglomeracja Opolska. (2018d). *Strategia Rozwoju Aglomeracji Opolskiej na lata 2014-2020, Raport za 2018 rok.* Retrived from http://aglomeracja-opolska.pl/sites/default/files/page/attachments/raport_strategia_ao_2018.pdf
- Aglomeracja Opolska. (2018e). *Studium komunikacyjne AO*. Retrieved May 12, 2018 from https://aglomeracja-opolska.pl/sites/default/files/page/attachments/streszczenie_studium_komunikacyjnego_aglomeracji_opolskiej.pdf
- Aglomeracja Opolska. (n. d.). *Raport z realizacji Strategii Rozwoju AO w 2015 r.* Retrieved from https://aglomeracja-opolska.pl/content/sprawozdawczo%C5%9B%C4%87-i-monitoring
- Aglomeracja Opolska. (n. d.). *Raport z realizacji strategii ZIT AO 2016 r.* Retrieved from https://aglomeracja-opolska.pl/content/sprawozdawczo%C5%9B%C4%87-i-monitoring

- Barca, F. (2009). An agenda for a reformed cohesion policy. A place-based approach to meeting European Union challenges and expectations, Independent Report prepared at the request of Danuta Hübner, Commissioner for Regional Policy. Retrieved November 20, 2019 from https://ec.europa.eu/regional_policy/archive/policy/future/barca_en.htm
- Borys, T. (1998). Teoretyczne aspekty konstruowania wskaźników ekorozwoju. In B. Poskrobko (Ed.), Sterowanie ekorozwojem. Teoretyczne aspekty ekorozwoju. Białystok: Wyd. Politechniki Białostockiej.
- Harasimowicz, A. (2015). Rola Regionalnego Programu Operacyjnego Województwa Podlaskiego w kształtowaniu środowiska przyrodniczego regionu. *Ekonomia i Środowisko 2*(53), https://www.transport-publiczny.pl/mobile/opole-chce-56-nowych-autobusow-w-tym-tez-hybrydy-51613. html/, Accessed 17 February 2020
- Kiełczewski, D. (2009). Rozwój zrównoważony w skali regionalnej. Środowisko przyrodnicze czynnik czy bariera rozwoju?. In *Zrównoważony rozwój aspekty rozwoju społeczności lokalnych*, Białystok: Fundacja Forum Inicjatyw Rozwojowych.
- Kociuba, D. (2015). Miejskie obszary funkcjonalne wyzwania planistyczne. Studia Miejskie, (18).
- Koncepcja Przestrzennego Zagospodarowania Kraju 2030. (n. d.). Retrieved from http://rpo2020. lubuskie.pl/wp-content/uploads/2013/01/Koncepcja_Przestrzennego_Zagospodarowania_Kraju 203013.pdf
- Konopińska, N. (2015). Przesłanki nowej polityki regionalnej szansą rozwoju obszarów górskich. *Studia Ekonomiczne, Uniwersytet Ekonomiczny w Katowicach*, (209), 74-84.
- Ministerstwo Rozwoju Regionalnego. (2013). Kryteria delimitacji miejskich obszarów funkcjonalnych ośrodków wojewódzkich. Warszawa. Retrieved from http://rpo.lubuskie.pl/documents/10184/77013/3.+Kryteria+delimitacji+MOF+o%C5%9Brodk%C3%B3w+wojew%C3%B3dzkich_MR-R+luty+2013.pdf/e064d0cf-1aa0-491f-b94e-739ccc85eabc
- Nowakowska, A. (2017). Terytorializacja rozwoju i polityki regionalnej. *Biuletyn KPZK*, (268), 26-38. *Report of the World Commission on Environment and Development: Our Common Future*. Retrieved November 20, 2019 from www.sustainabledevelopment.un.org
- Szafranek, E. (2015). Zintegrowane inwestycje terytorialne jako narzędzie budowy potencjału obszarów funkcjonalnych. Przykład Kędzierzyńsko-Kozielskiego Subregionalnego Obszaru Funkcjonalnego. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu*, (392).
- Szmytkie, R. (2014). W kwestii metropolii i obszarów metropolitalnych. Retrieved May 5, 2018 from http://przeglad.prawo.uni.wroc.pl/wp-content/uploads/2014/06/Szmytkie PAP nr 2 2013.pdf
- Śleszyński, P. (2015). Problemy delimitacji miejskich obszarów funkcjonalnych w Polsce. *Rozwój Regionalny i Polityka Regionalna*, (29), 37-53.