

The delimitation of areas of strategic intervention in Poland: A methodological trial and its results

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Abstract

This main aim of this study is the examination and discussion of a conceptual and theoretical model for Poland's areas of strategic intervention. Following a review of the current strategic documents at national and regional levels, it is possible to propose two basic categories of areas of strategic intervention: 1) growth areas (territories with natural or socioeconomic properties particularly favourable for development); and 2) problem areas (territories with unfavourable features and socioeconomic and/or natural processes). Among the problem areas it is possible to distinguish three main types: the social, the economic and the natural, albeit with the possibility of applying an even more detailed typology that allows for combinations of these types. Scientific findings can be combined with the results of empirical research to encourage the proposal of a new method of delimiting areas of strategic intervention. The identification of growth areas is primarily based on expert knowledge, which is clearly qualitative. In turn, the processes by which problem areas are delimited is quantitative in nature, reflecting analyses of selected diagnostic indicators that take social, economic and natural issues into account. The results which were obtained relate to the concept of endogenous development, as well as the assumptions under pinning policies of territorial cohesion.

Key words: *planning, strategic areas, growth areas, problem areas, Poland*

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1. Introduction

Contemporary processes of socioeconomic development can be categorised by factors tending to increase spatial and regional disparities. These unfavourable phenomena, manifested both in society and in terms of polarised space, need to be counteracted using an effective development policy. Today, there is a prevalent view seeking to condition the outward spread of development from territories most likely to play host to it (e.g. agglomerations and metropolitan areas). In this context, processes of regional polarisation, as well as the diffusion of growth, are taken as encompassed in a development policy based around the polarisation-diffusion model. The concept underpinning this model is considered to be based on theories of unbalanced regional development, given their structure, by many authors originating from F. Perroux (1955), A. O. Hirschman (1958), and J. Friedmann and W. Alonso (1966). The primary assumption here is that growth is, by its very nature, uneven, given that it is concentrated in areas where conditions are most suitable.

A. Pike et al. (2006) note that, from the point of view of territorial development, the “winner” regions are generally

the large metropolitan regions and just some industrial or tourist regions. It would thus seem that the concept of poles of growth might still have something to offer in terms of practical success, but only if defined factors underpinning growth are present. Indeed, in this article, we seek to justify the idea that such a probable conditioning of success entails the way in which localised poles of growth are based on certain selected elements of the settlement network. In the case of poorly-developed regions, there is a need to seek out the inherent potential that, when supported appropriately (via intervention) will help determine an area's competitive advantage. What is clear in all of this is the need for a very tailored, individualised approach to be taken to regions, with effective use being made of their inherent resources. In this context, Pike et al. (2006) postulate nothing less than the formulation of “alternative development strategies”.

At the same time, spatial structure is currently defined, not only by place and territory, but also by inter-linkages (Castells, 2008). What are involved here are not merely links between poles of growth (creating extensive network configurations, such as Poland's proposed network metropolis:

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Korcelli et al., 2010), but also the integrated development of urban and rural areas, as well as improved connectivity at the individual level.

As is clear, such assumptions are in line with the current cohesion policy of the European Union, whose subjects are defined areas. This reflects the now-effective recognition of territorial disparities within each and every EU Member State. The development of a given territory is also very much conditioned by the quality and quantity of its internal resources, as well as the degree to which these are being used. It is on this basis that the role of coordination and steering at the regional level has increased, along with the need for regional endogenous resources to be utilised.

Today, territory is less likely to be looked at from the point of view of administrative boundaries, with greater attention being paid to internal potential, key resources and barriers to development. This further denotes even greater interest in the development of given administrative units that are homogeneous in character, and defined in terms of similar natural, social or economic features. The assumption is that the activation of a region's potential will have a positive influence on the living conditions of its inhabitants, and will allow the most efficient use to be made of intervention, and of the investment associated with it. Assumptions like these guide the theoretical concepts of territorial capital (Camagni, 2008; Capello et al., 2009), endogenous capacity (Scott and Storper, 2003), the place-based economy (Barca, 2009), non-endogenous development (Ray, 1997), and local conditioning and networking (Fujita et al., 1999). The further assumption here is that territorial cohesion *inter alia* entails the establishment of the kind of regional policy that is in line with the paradigm of territorially targeted policy, with emphasis put on local development conditions, and with account taken of given places' specifics and comparative advantages (Bohme, 2011; Zaucha et al., 2015). All of these concepts in turn assume that practical activity should involve a wise choice of specific features, and putting in place the best opportunities for defined areas to develop, with action in consequence being focused within their boundaries.

These days it is not therefore the case that the very idea of strategic public assistance is undermined. Rather, efforts are being made to direct such activity as effectively as possible, sometimes also by "going off the beaten track" where public assistance is concerned. In Germany – regarded as nothing less than a 'trial plot' for this kind of policy given the 1990 reunification – regional policy is seen to focus mainly on the eastern *Länder*, under an assumption that there will be a gradual cessation of support for the old industrial districts located in the West (like the Ruhr or the Saarland), with these having been allocated just about all of the funding pre-1990 (Lentz, 2010). A similar change of public-aid strategy (including an end to support for mining districts) took place in the UK (Lagendijk, 2007).

In recent decades, the professed goal of the regional policy adopted centrally in Germany has thus been to even out the levels of development of the two parts of the country (Spatial Development..., 2001; Cohesion Policy..., 2014), with the sectorally-conditioned areas of intervention now playing host to technical infrastructure and human capital (Strubelt, 2010). The efforts to restructure Eastern Germany have not been without their critics, however, and it is interesting that some of the latter are in countries also passing through the post-1990 systemic transformation, with emphasis placed on the underestimation of historical and cultural matters (Horváth, 2012).

In the Central and Eastern European Countries (CEECs), there is a universal need for regional policy to be pursued, in reflection of the status of many areas as lagging behind in both infrastructural and social terms. Work by J. Penzés (2013) that brings together results from various authors, makes it clear that about 50% of Poland, the Czech Republic, Slovakia and Hungary can be regarded as peripheral. The problem status arising out of this kind of peripheralisation is scale-dependent, and relates in particular to spatial accessibility (Novotný et al., 2015). At the same time, these countries pursue regional policies that differ greatly from one another and do not always favour the achievement of territorial cohesion (Cotella, 2006).

The idea of tailoring to meet the needs of individual regions facilitates devising model solutions with respect to transformations anticipated in areas characterised by given socioeconomic and environmental features. What is therefore indicated is the development of a synthetic configuration, classifying regions, that allows the most effective actions to be taken. One of the tools helping the regions' spatial differentiation to be understood and decisions as regards the disbursement of assistance taken, is the typology of territorial units, or else the delimitation of areas needing external support. At the EU level, such classification work is the subject matter for projects pursued and expert reports drawn up, e.g. within the framework of the European Observation Network, Territorial Development and Cohesion (ESPON) Programme, or such projects as European Development Opportunities in Rural Areas (EDORA) (Copus et al., 2011; EDORA, 2011), European Land Use Patterns (LUPA) (Bański and Garcia, 2013) and Small and Medium sized Towns in their Functional Territorial Context (TOWN) (TOWN, 2014).

A particular kind of territorial category is the Problem Area, long analysed and now well-known in the subject literature. Classification in this case is usually conceptualised in relation to subject matter, or is indicated in regional typologies. Problem Areas have been a focus for the European Union Cohesion Policy, just as they had been widely identified previously within the framework of the East European Countries (EEC) regional policy (as agricultural areas lagging behind, areas with declining industries, and peripheral regions failing to attract investment), and EU agricultural policy (mountainous areas, areas with low-quality productive agricultural space, and areas experiencing specific difficulties). The focus was on supporting the least-developed areas, but it did not yield the anticipated results (General Report on the Activities..., 2002; Churski, 2010; Tondl, 2001). Documents relating to the spatial policy on Problem Areas often has these areas down as somehow "specific" or isolated. Detailed treatment is afforded geographical isolation (in the context of islands and mountain valleys; Damsgaard et al., 2011). Many studies also stress the state of the environment as a key factor, given that this helps condition intervention in a given area.

In Polish regional policy, a process whereby development has been "individualised" finds its reflection in concepts devised for the categories known as the functional area (FA), area of strategic intervention (ASI) and problem area (PA). Special development instruments are devised for each, *inter alia* financial incentives, a properly-selected investment policy and special streams of funding. The functional areas are also defined and identified in the currently-binding National Spatial Development Concept 2030 (Koncepcja Przestrzennego Zagospodarowania Kraju 2030, 2011).

They are distinguished in terms of common geographical, territorial and socio-economic conditioning characterising a system of functional links and common objectives for forms of development ensuring an efficient utilisation of land. Functional areas are in fact subdivided into the urban and rural, as well as those featuring a specific phenomenon on the macro-regional scale, those in which development potential is being shaped, and those requiring the pursuit of new functions as suitable regional policy instruments are applied.

This same document identifies problem areas – as one of the types of so-called “functional area”. These are places in which spatial conflicts or dysfunction regarding development come into existence, leaving it necessary for the state to intervene at the national level. These are therefore areas in which access to services is most limited, towns or cities that have been deprived of the leading socioeconomic function they had discharged previously, near-border areas, areas developing to the most limited extent, areas least accessible in terms of the time it takes to reach them, and revitalised areas.

While functional areas remain a relatively new category in Polish development policy, problem areas have long been a matter of research interest (Bański, 2001). The first classification of them can be found in a study seeking to diagnose the state of the national economy (Kukliński, 1983), in which the research considers five categories of area, i.e. population areas, agricultural areas, areas featuring asocial behaviour, areas characterised by health problems and areas threatened environmentally (ecologically) (Gawryszewski and Potrykowska, 1988; Eberhardt, 1989; Kassenberg and Rolewicz, 1984; Kokotkiewicz, 1985; Kulikowski, 1992; Zagożdżon, 1988). Thereafter, problem areas were not a popular research topic, such that it was only with changes in regional policy following Poland’s EU accession that a basis for the intensification of analogous studies was put in place.

In turn, areas of strategic intervention are those in which full utilisation of development potential will only be possible if there is intervention from outside (Krajowa Strategia Rozwoju Regionalnego..., 2010). Such areas are identified in many strategic documents at the national level, as well as in most regional development strategies. Strategic intervention *sensu lato* is each non-standard public action targeted territorially. The notion of strategic intervention links up irrevocably with regional policy’s fundamental dilemma: to support areas already developed and subject to investment? Or to better the chances enjoyed by less-favoured, poorly-developed regions?

As is clear from the detailed analysis of national- and regional-level strategic documents relating to areas of strategic intervention, these may be either problem areas or functional areas – a fact that ensures conceptual confusion, while providing for freedom of interpretation. The methods used to identify areas of strategic intervention are also varied, to such an extent that they lack cohesion. Overall, the 14 national-level documents subject to research here, identified 32 different categories of area of strategic intervention, while the 16 strategies at voivodeship level relate to as many as 138. What is more, a single local-authority area (*gmina*)¹ can sometimes have in excess of 40 types of special areas located in its territory.

This study’s main aim has been the contemplation and discussion of a conceptual and theoretical model for intervention areas in Poland, which have featured rapid development over the last 25 years, albeit in association with a wider socio-economic polarisation (growth of disparities) in the territorial dimension. The scientific output here is combined with the results of empirical research to encourage the proposal of a new method of delimiting areas of strategic intervention. The results obtained relate to the concept of endogenous development, as well as the assumptions underpinning policy on territorial cohesion.

2. Conceptual assumptions

A review of Poland’s currently-binding strategic documents on the national or regional level, permits the identification of four categories of strategic intervention, with several sub-categories present in each. Two of the categories are so-called special areas, of which the first are of a territorial/administrative nature, comprising different types of urban centre (e.g. regional capitals, sub-regional centres), or else rural areas. Then there is the group identified in terms of subject-matter or sector, with areas of commercial agriculture, potential tourist and health-resort areas, areas of innovative investment and poles of growth. The two remaining categories of areas of strategic intervention – i.e. functional areas and problem areas – reflect strategic solutions adopted in previous years and introduced into physical development policy. Within the above “problem area” category, it is typical to find those in which development processes are unfavourable and in need of support (on account of migration outflows, economic stagnation and so on), areas in which access for goods and services is hindered (on account of a peripheral or near-border location, or in general with limited transport access), and areas featuring environmental problems (frequent floods, droughts, pollution, etc.). The classification is augmented by functional areas, a category that relates to both rural and urban, but also to places with especially valuable natural features, and so on.

In regional policy, there are two main categories of area identifiable, apart from the units arising out of the administrative division of Poland. These are:

1. areas that are homogeneous from the point of view of socioeconomic features as broadly conceived – which can be identified with functional areas; and
2. areas with development processes of defined dynamics and degrees of advancement that may be equated with areas of strategic intervention (Fig. 1).

The latter would be understood as areas in need of action to reinforce inherent potential for development and to prevent negative natural and/or socio-economic phenomena from occurring. This reflects the fact that the two categories of area, while mutually augmentative in part, should be treated separately in regional policy, and will furthermore take account of the different spatial scales at which they occur.

In line with the assumptions referred to above, it is possible to propose two categories of area of strategic intervention:

1. the growth area (GA); and
2. the problem area.

¹ Local government administration ~ commune

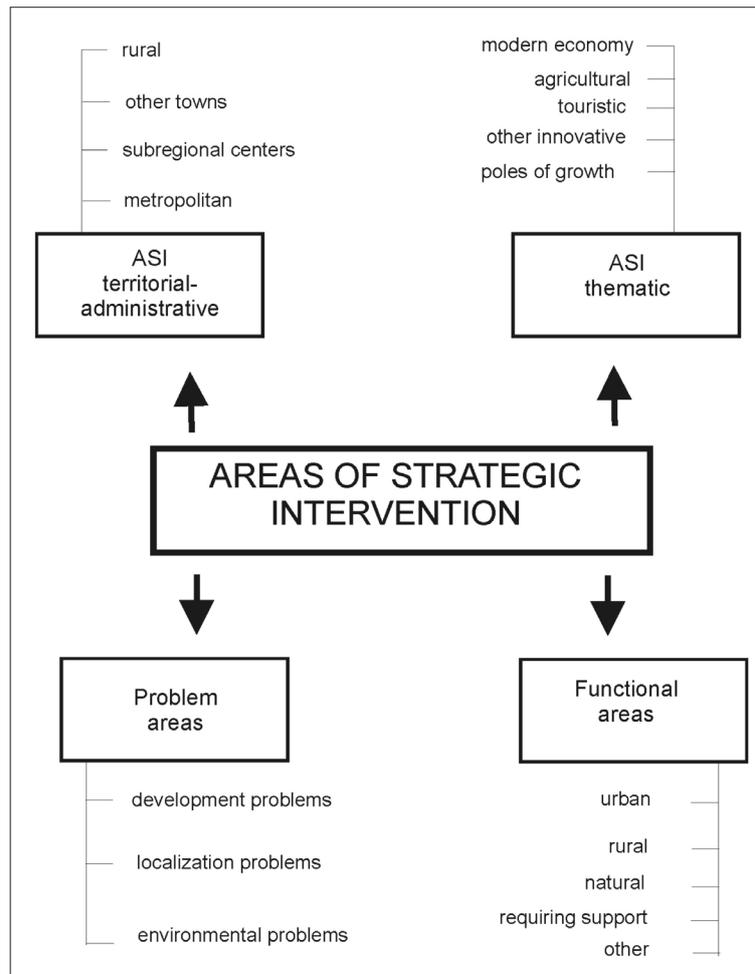


Fig. 1: Classification of areas of strategic intervention on the basis of an analysis of strategic documentation at the national and regional levels. Source: authors' conceptualisation

Beyond that, each of these types may also be subject to delimitation on national, regional and local levels. While the first category can be defined as including territory with natural or socio-economic properties particularly favourable for development, the second would include areas of unfavourable features and socio-economic and/or natural processes.

Growth areas may be treated as “flywheels” of regional development. Underpinning their identification are both an understanding of development mechanisms in operation hitherto and an indication of processes that may arise in the future. The main aim of the activity should be to strengthen their endogenous potential in order to boost competitive advantage. Factors to be taken into account among the criteria for identifying growth areas are an assessment of endogenous resources and investment effectiveness, as well as an appraisal of interventions up to the given time and their outcomes, and of the possibilities for innovations to diffuse.

Problem areas stand in contradistinction to growth areas. Their identification requires the use of an indicator-based method, and it would seem appropriate to distinguish three basic categories thereof, taking social, economic and natural aspects into account. While the first group includes areas in which the socio-demographic features are unfavourable, the second is associated with difficulties with running a business (engaging in economic activity), and the third relates to areas in which human-environment conflicts arise and are present.

3. Methods of delimiting Areas of Strategic Intervention

The identification of growth areas was based on expert knowledge, albeit with a multi-stage delimitation procedure. The first of these stages entailed the indication of “strategic sub-systems” representing the primary environment for the development of society and the economy. Among them, a distinction was drawn between the settlement- and transport-related, industrial and technological, and tourist and recreational sub-systems, as well as some special ones (e.g. those related to military security or to a trans-boundary location). At this point, an indicative list of potential growth areas was generated, reflecting the expert knowledge possessed by the participants. Subsequently, a set of assessment questions was drawn up with a view to appraising the potential results of intervention in the areas already identified. First and foremost, these concerned the long-term development effects, and the possibility for these factors to diffuse (or trickle down) into less-developed areas.

The ten evaluation questions that were used are as follows:

1. Does the GA have a socioeconomic potential suitable for the mobilisation of development processes?
2. Are there unutilised natural and/or socioeconomic resources in the GA?
3. Will intervention ensure that the phenomenon of polycentrism is present in the GA?

4. Does the GA concentrate, within its subsystems, key geographical areas from the point of view of the country as a whole?
5. Will development of the GA result in a diffusion of pro-development stimuli?
6. Is high efficiency of results in relation to outlays anticipated for the GA?
7. Are there features favouring the development of the GA's spatial structure?
8. Will the GA exert a strong impact internationally or domestically?
9. Will intervention in the GA prove safe from the environmental and sustainable development points of view?
10. Does potential intervention in the GA come under the goals set out for development in strategic national documents?

The fourth stage of the research entailed a "point-wise" assessment of potential growth areas made by the experts. The evaluation made in relation to each question received points in the range of 1 = low potential to 10 = high potential.

The delimitation of problem areas was carried out using standard statistical analysis, in which a key aspect was the assessment of the level of socioeconomic development in Poland's units of communes (*gminas*), as defined by appropriately selected diagnostic indicators, which also represent tools for the potential monitoring of change

following intervention-related activity. In terms of their scope, the selected indicators took in a broad spectrum of socio-economic and natural features. The indication of problem areas thus related to both a geographical location and a defined scale and the nature of problems requiring intervention.

The delimitation of problem areas was achieved in several stages. At the outset, a selection was made of seven indicators (measures) for each group of problem issues (i.e. for the natural, social and economic: see Tab. 1).

Statistical data originated from Poland's Central Statistical Office (CSO), its State Electoral Commission (SEC) and Central Examination Commission (CKC), as well as from the Institute of Soil Science and Plant Cultivation in Puławy (ISSPC). Use was also made of the resources of the Institute of Geography and Spatial Organization of the Polish Academy of Sciences (IGSO), in regard to potential commercial accessibility (Komornicki et al., 2015), temporal and spatial accessibility (Śleszyński, 2016), and the fragmentation of the landscape.

All measures were standardised using the formula:

$$t_{ij} = \frac{(x_{ij} - \bar{x}_j)}{l_j}$$

where x_{ij} is the value for feature j in gmina i , \bar{x}_j the arithmetic mean for feature j , and l_j the standard deviation characterising feature j .

General name of indicator	Measure
Natural indicators	
Green space	Green space in m ² per inhabitant
Threat of flood or inundation	Share of land threatened by flood and inundation
Threat of drought	Climatic Water Balance Index
Conditions unfavourable to agriculture	Areas with Unfavourable Conditions Index
Conflict-generating potential	Product of the number of inhabitants and the extent of naturally-valuable areas
Transformation of the landscape	Landscape Fragmentation Index
Wastewater treatment	Share of populace served by wastewater treatment plants
Social indicators	
Demographic ageing	Share of population accounted for by people of post-productive age (60/65+)
Migration balance	Balance between people registering/deregistering permanent stays (per 100 inhabitants)
Education of the populace	Share of populace aged 13 and over with higher education
Level of school education	Mean primary-school test result
Income poverty	Share of populace on welfare, in line with income
Level of activation of society	Peak turnout at general elections
Access to services	Synthetic index of temporal access to centres offering lower- or higher-order services
Economic indicators	
Overall level of economic development	GDP per inhabitant (as related to national average)
Advanced entrepreneurship	No. of businesses in higher-order services per 1,000 inhabitants
Wealth of local authorities	Own incomes in the commune budget expressed per inhabitant
Wealth of inhabitants and their developments	Utilisable area of dwellings given over for use expressed per inhabitant
Unemployment rate	Number unemployed per 100 people of productive age
Spatial accessibility	Index of potential commercial accessibility
Urbanisation	Share of land that is built-up and urbanised

Tab. 1: Natural, social and economic indicators defined for delimiting problem areas
Source: authors' elaboration

Each standardised value for a measure was then ranked using numbers between 1 and 10, in line with a division into 10 groups of analysed territorial units of equal size. The first 10% of the areal components (gminas) with the lowest values for an indicator obtained the rank 1, the next 10% rank 2 and so on, up to the 10% with the highest values given a ranking of 10.

As this was done, it was borne in mind that certain indicators reflect factors that stimulate development, while others reveal its potential suppression. A last stage then entailed the determination of threshold values below which a unit of territorial administration was assigned to a problem area. The threshold value was determined by reference to the arithmetic mean value, as increased by the size of the standard deviation (Tab. 2).

In line with the delimitation method adopted, the problem areas were identified as natural, social or economic, albeit with statistical analysis making it clear that some territorial units complied with the definitions for problem areas of more than one group.

The effect of this process was ultimately the resulting seven types of problem area to be proposed, i.e. those concentrating (Fig. 2):

1. social problems;
2. economic problems;
3. natural problems;
4. social + economic problems;
5. social + natural problems;
6. economic + natural problems; and
7. social, economic and natural problems.

4. Results and discussion

Using the expert method described previously, it was possible to identify a total of 25 growth areas, with 9 of these related to metropolitan areas and 16 to subject-related areas. Included among the metropolitan areas are:

1. the Warsaw Metropolitan Area;
2. the Bydgoszcz-Toruń Metropolitan Area;
3. the Gdańsk-Sopot-Gdynia Metropolitan Area;
4. the Silesian Conurbation;
5. the Kraków Metropolitan Area;
6. the Łódź Metropolitan Area;
7. the Poznań Metropolitan Area;
8. the Szczecin Metropolitan Area; and
9. the Wrocław Metropolitan Area.

All of these areas are poles of growth at either national or regional levels. Potential interventions here should therefore seek to eliminate any barriers that might disrupt further development, while also enhancing the diffusion thereof. Activity should focus first and foremost on public transport and road infrastructure, waste management and pollution abatement, as well as cooperation at the local government level. Each area also has its specific features needing to gain reflection in the selection of certain intervention measures that are specially targeted or tailored. For example, in the Silesian Conurbation such features are a reduction of the role of extractive and heavy industry, along with support for the developing motorisation cluster, inter alia by helping to back measures that achieve better integration with the R&D sector. In turn, the Kraków Metropolitan Area must work to eliminate the barriers to development provided by the state of

Characteristic	Problem areas		
	Natural	Social	Economic
Minimum	18	7	7
Maximum	60	66	69
Median	39	39	39
Mean	38.8	38.5	38.4
Standard deviation	6.1	11.1	13.2
Threshold (mean + SD) after rounding-off	45	50	52
No. of gminas reaching threshold values (% of set given in parenthesis)	424 (17.1)	407 (16.4)	428 (17.3)

Tab. 2: Statistical characteristics and threshold values qualifying gminas for “problem area” status
Source: authors' elaboration

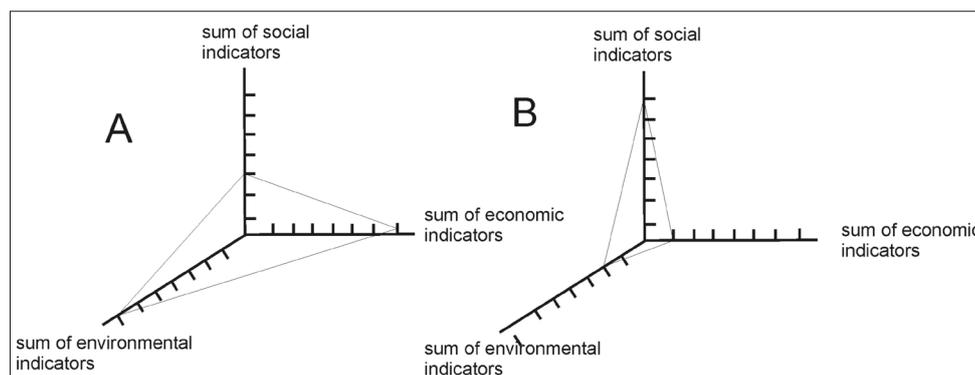


Fig. 2: Model examples of the typology of problem areas: A – an area with a concentration of economic and natural problems; and B – an area with social problems. Source: authors' conceptualisation

the environment (above all manifested by air pollution), while also working on urban planning structure, the protection of monuments, and the very intensive tourist traffic.

The remaining growth areas are characterised by mostly very marked socio-economic specifics that can be seen as arising from the localised nature of natural resources, or else the development of defined sectors of the economy (see Fig. 3). Each area is thus of strategic significance to the national economy when it comes to, for example, the presence of natural resources, food security, new sources of energy, the leading industrial sectors, the development of tourism or cross-border cooperation. It is likewise for these reasons that very well-defined interventions in support of growth need to be made in these areas.

The proposed growth areas are in line with current knowledge, and with the assumptions of the planning documents in place. Certain possible changes in Poland's development policy might offer a basis for the list of areas to be modified, or supplemented with new key categories of area. Certain of the areas also make reference to configurations that are bipolar (e.g. Warsaw–Łódź), tripolar (Gdańsk–Gdynia–Sopot) or transboundary (the Kraków Conurbation plus the Ostrava region in the Czech Republic). In such cases, support must favour the internal complementarity of these configurations, in particular combating the domination of one or other of the poles.

The concept of the growth area should relate first and foremost to the enjoyment of good prospects, or else to the idea of support being extended to ensure development. Growth areas are seen to be assignable to three main categories, i.e. poles of growth, areas characterised by one kind of subject matter or another, and clusters featuring advanced technologies. Where the first category is concerned, identification should concentrate on the socio-economic potential broadly conceived, as this connects with given areas' capacities to function as poles of development. In turn, identification in relation to the two remaining categories should arise out of a diagnosis of the state of modern technology and R&D backup, as well as specialised services, food security and environmental resources.

Where areas featuring problems of a natural origin are concerned, some 424 gminas could be implicated, representing 17% of the national total, occupying over 16% of the area of Poland and resided in by 31% of the population nationally (Fig. 4). These areas are concentrated spatially, with 40% of all the gminas involved located in Mazowieckie, Wielkopolskie or Lubelskie voivodeships. The largest natural problem areas are along the lower or middle stretches of the River Vistula, as well as in the upper Oder Valley. In each case, the problem in question is the threat of flooding. Other key environmental problems involve erosion of the coast, water shortages, soil erosion and the fragmentation of formerly

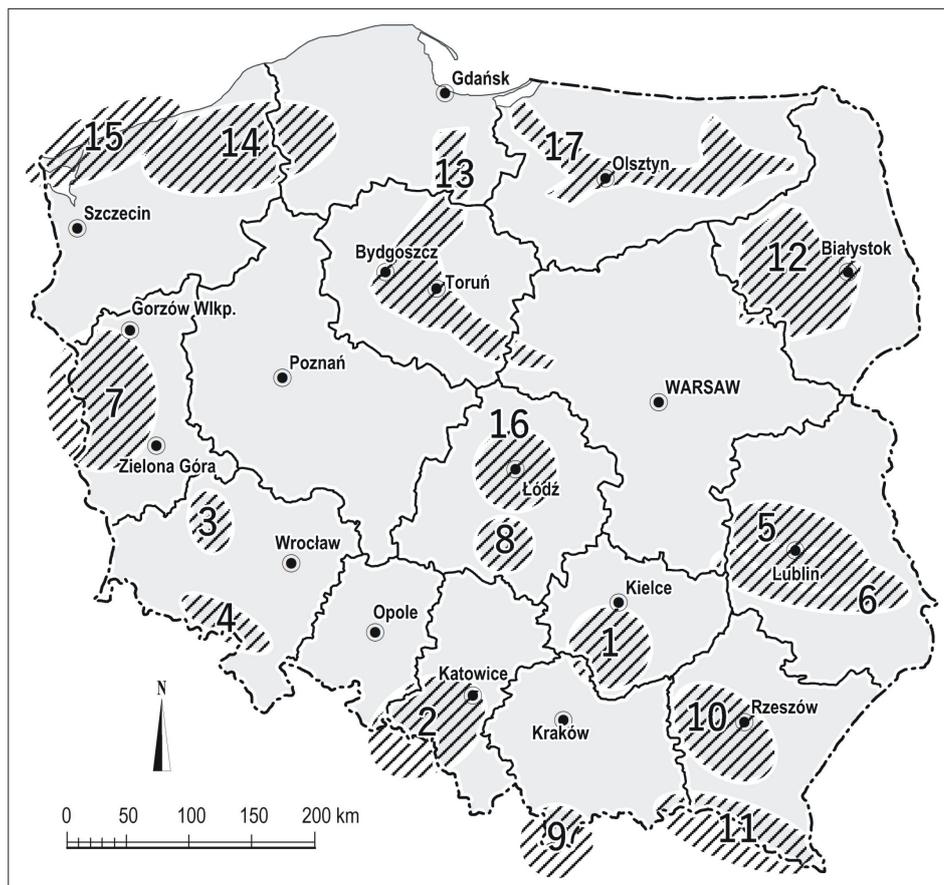


Fig. 3: Areas of strategic intervention – growth areas

Legend: 1) the Świętokrzyski Ceramics and Construction Industry Cluster; 2) the Katowice-Rybnik-Bielsko-Biała Conurbation; 3) the Legnica-Głogów Industrial District; 4) the Sudety Industrial District; 5) the Lublin Industry and Power-Supply Cluster; 6) the Lublin Agricultural Region; 7) the Lubuskie-Brandenburg Transboundary Area; 8) the Bełchatów Industrial District; 9) the Tatra Mountain Transboundary Area; 10) Aviation Valley; 11) the Eastern Carpathian Tourist Region; 12) the Podlasie Dairying Cluster; 13) the Lower Vistula Valley; 14) the Pomeranian Renewable Energy Zone; 15) the Western Coast; 16) the Łódź Node; 17) the Warmia-Mazury Tiger.

Source: authors' research

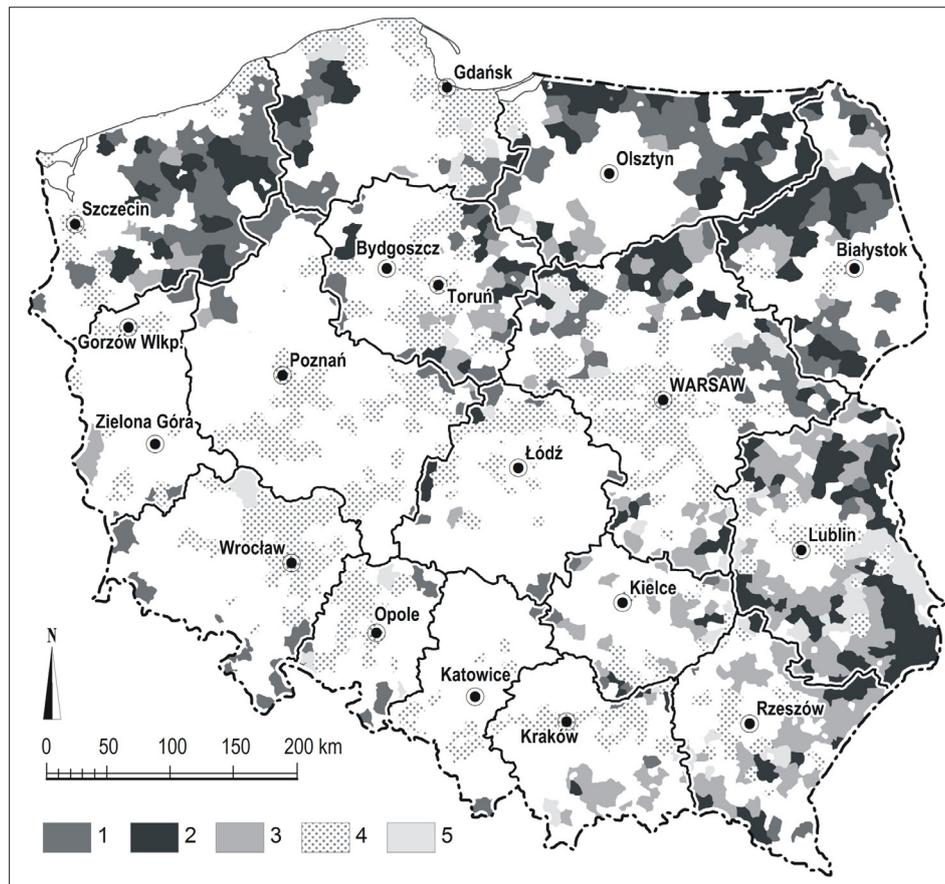


Fig. 4: Distribution of problem areas

Legend: 1) PA with a concentration of social problems; 2) PA with a concentration of social + economic problems; 3) PA with a concentration of economic problems, 4) PA with a concentration of natural problems; 5) other PA

Source: authors' research

continuous forest complexes. The natural problem areas rather rarely “interact” with areas categorised from the social or economic points of view. This shows that only a few gminas are concentrated in areas with both environmental or economic problems and those of a social nature.

Problem areas in the “social” category were identified in more than 16% of all gminas, accounting for 21% of the total area of Poland, but resided in by only 6% of the national population. Social problems first and foremost are concentrated in rural or weakly-urbanised areas. Almost 2/3 of the problem gminas are located in just five of Poland’s province-regions (Lubelskie, Mazowieckie, Podlaskie, Warmińsko-Mazurskie and Zachodniopomorskie voivodeships). The clearest set of contiguous areas afflicted by social problems is present in Central Pomerania, while others are in north-eastern and eastern Poland. Problems there arise from out-migrant outflows, ageing of the remaining inhabitants and a skewing of the structure of the population by gender (with “shortages” of women of marriageable age).

Problem areas in the “economic” category were in turn found to comprise some 428 gminas, whose total area equals about 20% of Poland, with a population just below 7% of the national total. They are found mostly in such areas as Lubelskie and Mazowieckie voivodeships, as well as Podkarpackie and Podlaskie. The spatial distribution of the data make it clear that key factors denoting economic problems are an over-dependence of the local economy on agriculture (to the point of near mono-functionality in some areas), as well as the related phenomena of limited

economic activity on the part of inhabitants and a level of unemployment that can be regarded as high in comparison with other regions of Poland.

This work to delimit problem areas confirmed what is known in the literature, in that phenomena of a problematic nature are above all found in eastern Poland and in Central Pomerania (Węclawowicz et al., 2006; Bański and Mazur, 2009; Churski, 2010; Komornicki and Śleszyński, 2009).

5. Conclusions

The need for a “sorting-out” process was perceived in the conceptual and methodological confusion arising from the fact that Polish regional policy deals with different types of designated “areas” (e.g. special areas, areas of strategic intervention, functional areas, problem areas, towns or cities considered to be losing key functions, and so on), and in that which is connoted – and even the area embraced – by the designation may be characterised by a high degree of overlap. The process by which concepts in national- and regional-level planning documents became so heterogeneous appears to have started with Poland’s EU accession, and in part reflects initiatives seeking to harmonise domestic regional policy with EU standards, and in part also the practical need to disburse EU funding. The instability of the political and institutional environment in Poland has also played a role.

The identification of the areas of strategic intervention arises out of a comprehensive diagnosis of the socio-economic situation and the state of the natural environment, an analysis

of current thrusts in development policy at home and abroad, and in the application of expert knowledge. The latter proved particularly crucial in the identification of growth areas, given the markedly qualitative nature of the phenomena involved. In turn, the process by which problem areas are delimited is quantitative in nature, reflecting analyses of selected diagnostic indicators that take social, economic and natural issues into account. Reference to subject literature in which authors make use of various statistical measures helps confirm the distribution of the problem areas whose existence is signalled in the present study. This reflects the fact that the precise choice of indicator (assuming at least that there are an appropriate number thereof) does not have a very marked influence on the existence of problem areas, and their distribution as mapped.

Areas of strategic intervention do not constitute a homogeneous category, in that they are taken to include:

1. growth areas, i.e. places with favourable prospects for development in which intervention can help to further competitive advantage, regionally or nationally; and
2. problem areas, in which socio-economic phenomena and/or those relating to the natural situation, generate development challenges that require defined forms of intervention from beyond their boundaries.

Among the problem areas it is possible to distinguish three main types, i.e. the social, the economic and the natural; albeit with the possibility of applying a more detailed typology that allows for combinations of these types (as social + natural, socio-economic, economic + natural, and mixed). Analyses made it clear that the largest group comprises areas in which problems of a natural origin are concentrated (361 gminas), followed by areas with concentrations of economic problems (194 gminas), areas with both social and economic problems (188 gminas), and areas with concentrations of social problems (182 gminas). This left only two categories characterised by a small number of local-authority areas, i.e. those with economic + natural problems (26 gminas) and those with social + natural problems (17 gminas).

This research confirmed how diverse the areas of strategic intervention are, as well as the fact that this is true both of the growth area and problem area sub-categories. In Polish conditions, this represents the verification of the thesis that development policies need to be targetted and tailored, regionally. In the context of discussions on regional policy models, including the polarisation and diffusion paradigms, the research showed that effective intervention in given areas requires parallel support for a polycentric network of growth poles (or areas), and for areas afflicted by economic, social or environmental problems.

The research materials also show how factors determining the need for intervention differ greatly from one area to another: inter alia, noteworthy are the areas in a relatively favourable economic situation, but nevertheless facing serious social problems; or else those in which environmental factors present a serious barrier to development (Zaucha et al., 2015). This all reveals that, while strategic documents in the countries of Central Europe often mention territorial cohesion, this is in practice understood only narrowly among decision makers (often as a specific kind of tool by which territorial cohesion objectives can be achieved). The process of delimiting problem areas used here reveals that this is just one way of looking at the issue, at the same time pointing to the major role played by other components of territorial cohesion (Medeiros, 2011), such as environmental sustainability and polycentrism or the cooperation between units.

In a methodological sense, the delimitation process pursued here is just one possible proposal. Its suitability would nevertheless seem attested to by the straightforwardness of the assumptions employed, which allow for the ready identification of factors speaking for intervention. This also makes it possible for the effects of solutions (development policies) to be tracked.

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