

ENVIRONMENTAL POLICY INTEGRATION AND ITS SUCCESS ON SETTLEMENT LEVEL IN HUNGARY

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Abstract

This paper aims to present environmental policy integration and its success on settlement level in Hungary. To do so, firstly, the author gives an overview in historical perspective of the rise of environmental protection and environmental policy taking a look at the international level and Hungary. Secondly, the summary of the author's empirical researches in the topic in the past decades draws the readers' attention to the role of the impact of the recent recentralization process in Hungary on the environmental actions at urban level, and also highlights the role of the size of settlement in environmental policy. The analyses show that the lack of information is crucial in the failure to make positive environmental actions. On the other hand, in larger, urbanised settlements, due to their higher development and investment capacity and risk, the role of environmental assessment related to planning activities is considered more important.

Keywords: environmental policy, spatial planning, strategic environmental assessment (SEA), environmental policy integration (EPI)

INTRODUCTION

Urbanisation (currently 55% of the global population live in cities (Rácz, 2019), the increase of investments and the rapid expansion of artificial surfaces – especially in metropolitan regions – have caused significant conflicts between nature and society creating challenges for sustainability (Lennert et al., 2020) and for dynamic equilibrium for the ecosystem (Nagy, 2006) and needs for a more environmentally integrative (urban) development policy. Hence, 'cities around the world face many environmental health challenges including contamination of air, water and soil, traffic congestion and noise, and poor housing conditions exacerbated by unsustainable urban development and climate change' (Vardoulakis et al., 2016, p.1).

In the modern era, Carson's (1962) 'Silent Spring' initiated the thinking on the connection of human and nature and triggered the emergence of widespread environmental conscious discussion (Kozma, 2019), despite several attempts made earlier (e.g. Leopold, 1949). Today,

the interpretation of the notion varies and can diverge from the original notion depending on the views of the author (Vujko et al., 2018). From the 1980s the redistribution system of the European Community (EC) resulted in the implementation of major investment projects and plans. In parallel, the idea of Sustainable Development and the Environmental Programmes of the EC have been started and the resulting environmental policy tools (such as Environmental Impact Assessment (EIA) or Strategic Environmental Assessment (SEA)). While the tool of Environmental Assessment emerged in the late 1960s in the USA and the 1970s in European countries (e.g. France, the Netherlands) (Szilvácsku, 2003), their institutionalisation was postponed to the late 1990s, early 2000s. (The implementation deadline of the directive 2001/42/EC on Strategic Environmental Assessment was June 2004 for the European member states). SEA, as a new tool can integrate environmental policy concerns into spatial planning and urban development (Varjú, 2011).

This paper is a summary of the author's works in the past decade on environmental policy integration (EPI) on settlement level. After the presentation of the methods and materials used for this paper, using multiyear and multilevel approach, the aim of this article is twofold. Firstly, as a theoretical background, the paper gives an overview about the environmental policy integration into settlement/urban policy, then the focus shifts to Hungarian spatial policy and environmental policy integration. The second part – in the results and discussion section – contains a time series empirical research investigating the environmental policy integration and their urban size differences in Hungary and shows how settlements of different size could learn and integrate environmental policy.

DATA AND METHODS

Using a systematic literature review, the paper provides a historical overview about environmental policy integration into urban/spatial policy from the 19th century internationally, then in Hungary, emphasising the milestones of the integration.

The author conducted an online survey among local governments in Hungary. The first wave was sent out in 2008 to all local governments. Another wave (with the same questions) was sent out in 2011¹. These questions focused on the appearance and use of SEA and environmental programming at settlement (NUTS 5/LAU2) level. In 2014, under the umbrella

¹Similar surveys were conducted in Slovakia and Romania.

of the ÁROP² project, surveys for the local governments investigated – among other questions relating to public services – the orientation of settlement leaders towards environmental policy and its integration into spatial/urban planning (e.g. waste management, environmental planning, nature protection). Parts of this survey are also used here.

THEORETICAL BACKGROUND – AN OVERVIEW OF ENVIRONMENTAL POLICY INTEGRATION

The well-known idea of ‘sustainable development’ (WCED, 1987) has played an increasingly important role in policy making since 1987. With the strengthening and far-reaching effect of environmental policy, the idea of Environmental Policy Integration (EPI) came to the fore in the last decades (Lenschow, 1997). For the safekeeping of the natural environment, European Community introduced the Environmental Impact Assessment (85/337/EC). This assessment ‘only’ concerned concrete building projects in order to reveal the hazardous effects of investments on nature. Later on, extending the Assessment and using the practice of some developed countries, EU introduced the Strategic Environmental Assessment (SEA) in its ‘Directive 2001/42/EC of the European Parliament and the Council on the assessment of the effects of certain plans and programs on the environment’. Consequently, by the middle of the 2000s, EPI had become an unavoidable element of regional and urban planning policy (Varjú, 2013b), and it requires system-thinking approach (Németh & Péter, 2017). However, how did we get here? And what is the situation like in Hungary?

Integrating environmental policy into settlement policy – international outlook

In the complex sense, the notion of ‘environmental protection’ is a product of the second half of the 20th century, becoming widespread in scientific publications from the 1970s. In this sense, ‘environmental protection’ can be considered as a new issue, but there are three components of the notion that appeared in the legislation long before the middle of the 20th century:

- the aim of protecting certain objects of the natural environment against human damage or pollution,
- protection against damage to certain objects in the natural environment as a result of spontaneous processes in nature,

²ÁROP 1.1.22-2012-2012-001 project

- the elimination of the damages of civilization that endanger or disturb human within the settlement environment (Kilényi, 1978, p. 91).

In order to protect certain elements of the human environment, human activity has been regulated by individual societies for centuries. England's water protection laws can be traced back to 1848 and the birth of laws to protect air quality, to 1863. In France, the first law was passed in 1810, dealing with environmental damages caused by industry. If we have a look at not only the laws that comprehensively protect certain elements of the environment, but at the sporadic provisions related to environmental protection, we can find a number of regulations. This includes first-century Lex Julia, who banned heavy-duty vehicles from Rome at a time, which had a population of one million at the time (Julesz, 2008).

The need to protect the natural environment has intensified with industrial development. Already the medieval British economy had accounted for smoke/air pollution, and royal decrees punished open-color coal burning. The first regulations concerned mainly forest areas, as this was precisely the sensitive point at this time that contributed to everyday industrial activities. But their overuse could be a danger (not only in connection with firewood extraction, but also due to hunting, the forest was an important food industry base even in the early 20th century). This is how the Austrian Imperial Forest Act (Reichsforstgesetz) was created in 1852, and the Swiss Forest Police Act (Forstpolizeigesetz) in 1902. The Dutch Hinderwet (formerly known as Fabriekwet) (Law on Disturbance and Environmental Impact), enacted in 1875, defined 'environmental permitting' as the predominant task of municipalities. Thus, the delegation of environmental issues – which affected not only the natural environment but also the settlements – to the appropriate territorial level took place in time (Varjú, 2015).

In countries where industrial development started relatively later, the notion is mainly referred to as 'environmental conservation'. For example, in the Soviet Union and Bulgaria, the term environmental protection did not become established for a long time. The reason is that the term 'nature conservation' was used to denote environmental protection (Kilényi, 1978).

The history of Swedish environmental law also dates back to the 19th century with water and neighborhood regulations, additionally, by 1907, the country had passed their first conservation law. Due to its geographical location, Denmark also established its first environmental regulation in the 19th century to protect its coastline (Julesz, 2008).

Environmental policy has been actively appearing in urban planning and urban development policies since the early 1930s and came to the forefront with the early

suburbanization processes (Enyedi, 1984) rearranging the urban social structure, accompanied by environmental and sociological problems (Varjú, 2015). One of the early responses to this phenomenon was the Athens Charter elaborated by the Fourth Congress of the International Organization of Modern Architecture, adopted in 1933. The proclamation containing the new principles of urban planning (Egyed, 2018) was published in 1941 by Le Corbusier under the title of Charter of Athens. For decades, even after the Second World War, this document was a definitive document of the ideas of urban development and urban planning (Varjú, 2015).

The Athens Charter (1933) emphasized the notion of functionality and proposed that the creation of urban areas, the arrangement of cities would take place along their homogeneous functions. In doing so, the document insisted the planners to ensure a healthy environment in residential areas and emphasized the importance of green spaces. It also states that the separation of industrial areas from residential sectors is a basic requirement and that the distance between the place of work and the place of residence is to be reduced to a minimum. The central ideas of the Charter were mainly centered around architectural issues, dealing with the location of buildings, the use of new materials, and the rapid relocation of people and goods. It outlined an idealized urban structure in which modern technology can fully meet the needs of people. From a political point of view, it suggested that a city form should be dictated from above (c.f. top-down governance) instead of formulating as a result of community participation (c.f. bottom-up approach).

The findings and resolutions of the Athens Charter (1933) were extremely up-to-date and largely still relevant today. It evaluates the natural, social, political and economic whole of the city and its surroundings in a systemic approach and attaches great importance to the physiological and psychological nature of human in relation to urban planning (Hajnal, 2006).

However, the breakthrough in environmental policy and the assessment of our environment can undoubtedly be traced back to the United States of the beginning of the 1960s when Rachel Carson's (1962) book presented the ecological consequences of the widespread, uncontrolled use of various pesticides.

The widespread international political appearance of environmental problems can be linked to the speech of U Thant, secretary-general of the 1969 UN Economic and Social Council, who spoke about the global environmental crisis (Hajnal, 2006). In Europe, the environmental policies of Sweden and Denmark played an important role in the expansion of environmental action: the European Environment Agency – based in Copenhagen – held its first major environmental conference in Stockholm in 1972 (Julesz, 2008). 1972 was an important year for ex-ante environmental assessments and the strengthening of environmental protection too.

It was then that the first report of the Club of Rome was published, entitled *The Limits of Growth*, which sought to draw attention to the consequences of the overuse of natural resources (Moser & Pálmai, 1992). Since the 1970s, the Commission has also been doing more and more to ensure that the integration of environmental protection and environmental policy is a guiding principle in its basic and other development documents. In 1987, the European Commission integrated the most important principles of environmental protection into the Treaty of Rome, many of which are among the general principles of the European Union. These principles are: the principle of prevention, the principle of integration of environmental considerations, the polluter pays principle, the principle of state responsibility and commitment, the principle of international cooperation, individual and collective participation, and the principle of subsidiarity (Nagy, 2008, p. 309).

The next important step for environmental research and environmental policy is undoubtedly the so-called Brundtland Report entitled *Our Common Future* (1987), which articulated the notion of Sustainable Development, the most cited concepts of in planning and development.

The UN Conference on Environment and Development was held in 1992 in Rio, which was also an important milestone. The AGENDA 21 (1992) adopted a number of details on the subject of sustainable development, emphasizing the active role of the local level that is unavoidable in urban development thinking. Chapter 28 of Agenda 21, the main document of the UN Conference on Environment and Development held in Rio de Janeiro in 1992 deals specifically with the Local Agenda 21, which also harmonizes with the EU principle of subsidiarity (Varjú, 2013b).

The Maastricht Treaty, signed in 1992, expands the principles of the Union with the principle of sustainable development (Nagy, 2008) and enshrines the integration of environmental objectives into economic and sectoral policies (Kerekes & Kiss, 2003). Certainly, over the last two decades, environmental considerations have been integrated into several other EU policies, including development ones. Both in the ESDP (1999) and as a supplement / renewal of the Lisbon Strategy (2000), the Gothenburg Declaration, adopted in 2001, as a priority, identifies the consideration of the principle of sustainable development and the iterative inclusion of environmental interests in development policy (Varjú, 2011).

The idea of social, economic and environmental sustainability also had an impact on urban development. The New Athens Charter was published by the European Council of Mayors in 1998, after nearly 4 years of preparation, recognizing new types of problems in European cities. However, the new Charter does not return to the theses of previous documents, but

aims to ‘define a sustainable development program for the city living with its surroundings, define the role of the urban planner in the implementation of the program, and make recommendations to professionals and urban policy makers at various levels’ (Hajnal, nd, p. 9).

The Charter articulates the need to prioritize mixed land use over the traditional functionalist approach. It emphasizes that the sustainability of the city depends to a large extent on land use patterns and transport systems that cannot be managed separately. The main priorities of the Charter are:

- ensuring real civic participation in planning;
- plans must be based on the principles of sustainable development;
- planning must help economic competitiveness, boost employment;
- planning should promote social and economic cohesion (Hajnal, nd).

The ESDP (European Spatial Development Perspective) draws up spatial development guidelines for the European Commission and the Member States, based on an assessment of the social, economic and infrastructural spatial structure of the European Union. The document was adopted in 1999 after five years of preparation. The directives drawn up at the Potsdam meeting are not binding, but they play a key role in shaping the institutional system and planning process of European territorial development. The main objective of the document is ‘balanced and sustainable territorial development’. One of the key guidelines of the ESDP is the wise and sustainable management of the natural and cultural heritage (ESDP, 1999).

In March 2000, the European Council adopted the Lisbon Strategy, according to which the European Union must become the most competitive and dynamically developing knowledge-based economy in the world by 2010, with increasing employment. At the same time, economic growth must ensure sustainable development, social cohesion and a high level of environmental protection, as well as increase the quality of life and living standards of European citizens (Varjú, 2010).

The European Council in Gothenburg on 15 and 16 June 2001 endorsed the Commission's strategy for strengthening the environmental pillar ("Sustainable development in Europe for a better world: a European Union strategy for sustainable development"). The document adds a third, environmental dimension to the principles of the Lisbon Process for employment and economic reform and social cohesion. Economic policy guidelines have been set to sustain growth (sic.) and promote structural reforms. Sustainable development is threatened by

climate change, deteriorating environmental health conditions, poverty, an aging population, a decline in biodiversity, and the scale of transport, problems that require a global solution. The long-term objectives of the strategy include combating climate change and increasing the use of clean energy sources, tackling public health problems, achieving greater social responsibility in managing natural resources and conserving biodiversity, and developing transport, transportation and land use in an environmentally friendly way.

The Leipzig Charter on Sustainable European Cities was adopted by the Ministers for Spatial Planning of the Member States (together with the Territorial Agenda) at the Informal Ministerial Meeting on Urban Development and Territorial Cohesion organized by the European Commission in Leipzig on 24–25 May 2007. The Charter is based on the Green Paper on the Urban Environment (1990), on the results of urban pilot projects for the period leading up to the turn of the Structural Funds, on the Lille Work Program, on the Rotterdam Urban Acquis and on the Bristol Accord.

The key elements of the document are organized around demographic, social exclusion and environmental issues, and the document itself identifies two main priorities. These are the emphasis on integrated urban development policy and the priority given to the treatment of disadvantaged neighborhoods (Varjú, 2015).

The priority of the integrated urban development policy was the need to create high-quality public spaces, the need to modernize infrastructure networks and increase energy efficiency, and to emphasize proactive innovation and education policies (Varjú, 2015). Priority action strategies focusing on deprived neighborhoods will also improve the physical environment, strengthen the local economy and local labor market policies, proactive education and training policies (with a focus on the younger generations) and efficient and affordable urban transport (public transport, pedestrians) and cycling.

The development of the Hungarian environmental policy and its integration into settlement policy

At the end of the 19th century, the first modern laws related to nature and environmental protection were enacted in Hungary. The Forest Protection Act of 1879 was amended in 1935 to protect nature more widely. The first steps were partly in accordance with Act XXIII of 1885 on water law, which can be linked to river regulation and the XIX Act of 1888 on Fisheries (Varjú, 2010).

The concept of environmental protection first appeared in the Hungarian legal literature in 1971. Since then, legislation has accelerated. In 1972, environmental protection was included

as a national target program (1012/1972 / IV.27 MT) in the national long-term scientific research plan. In 1973, a proposal to draft a law was made before the National Assembly, and a year later its social debate took place. The National Environmental Council was established in 1974, and then in 1976 Act II. on the Protection of the Human Environment (Kilényi & Tamás, 1980) (which has since been repealed and replaced by Act LIII of 1995) placed the issue of environmental protection at the highest (sub-constitutional) legal level (Varjú, 2010).

In Hungary, the governmental tasks of environmental protection – with the involvement of ministries and central authorities – were performed by the National Environment and Nature Protection Office established in 1977 operating until the end of 1987. The Ministry of Environment and Water Management was established on 1 January 1988 (Tatai, 1988), which has since undergone several name changes and changes of responsibilities to supervise directly and indirectly (through its national and regional authorities) nature protection and environmental protection.

In the late 1980s, in addition to the growing environmental and scientific considerations, environmental social movements played an increasingly important role in attacking not only the state socialist system in Hungary, but also the introduction of ecological aspects into public thinking. Initially, the problems typically appeared at the local level. There were places where similar environmental conflict caused more (e.g. in Ajka) upheaval from the population, there were places where less (e.g. in Százhalombatta) provoked resentment and publicity. However, in the period of state socialism, these social actions typically appeared only locally and only to a small extent in the national communication channels (Varjú, 2010).

Following the change of regime, the organizational, institutionalized and civil framework conditions and systems of environmental protection improved. Besides, urban strategic planning has also become common in the post-socialist CEEC countries (Bajmóczy et al. 2020). In the 1990s environmental pollutions were clearly reduced (Szirmai, 1999). The reason for that was the post-socialist socio-economic transformation that has resulted in unexpected challenges such as brownfields (Dannert and Pirisi, 2017). On the other hand, the accelerating decline of large-scale industry from the mid-1980s was accompanied by a decrease in pollution, so environmental issues were partially ‘resolved’. On individual level, changes in income, existential status have diverted attention from environmental issues towards society.

Following the change of regime post-1990, environmental policy became increasingly important at the political level. The environmental profession has also been an active participant in the strengthening of international environmental protection. In addition to

Hungary's representation at the policy level at the previously mentioned international environmental summits, Academician István Láng was also an active participant in the Brundtland Committee (Varjú, 2010).

There was a change in the dynamics of Hungarian environmental policy in the 2000s, in which the strengthening of international organizations in Hungary (e.g. Greenpeace) and the institutionalization of social actors (such as the establishment of Civil Consultation Forum or the social consultation procedures) played an important role in spatial planning activities (Glied, 2008).

In the 2000s, environmental policy became an increasingly broad societal issue. The main reason was that environmental problems were 'fragmented'. With the transformation of large-scale industry and collective agriculture, and the improvement of industrial technologies the residential sector has become the biggest polluter. With the development of the Hungarian consumer society, the problems can only be remedied by broad social cooperation. Following the international environmental policy of the 2000s, climate change and energy use and energy efficiency have become key issues in Hungary as well (Varjú, 2010).

During the process of EU accession, environmental policy became more and more important, which was facilitated not only by legal harmonization, but also by professional policy interest. The 1995 LIII. the Act on General Rules for the Protection of the Environment sets out the details of the elaboration of the National Environmental Protection Program (NEP). Thus, the Parliament first approved Hungary's Environmental Protection Program in 1997 (EPP-I) and then in 2003 (EPP-II). The second EPP (2003–2008) – learning from the mistakes of the first – had fixed only 46 objectives as opposed to the 120 of the previous. Accordingly, the objectives were not fragmented, and it provides a specific, quantified list of indicators to monitor each objective (Varjú, 2010).

The Appendix to the 4th EPP (2015–2020), adopted in 2015, already defines in detail the measures required for each strategic goal, clarifying the tasks and responsibilities of individual actors, the government, local governments, economic organizations, enterprises and everyday people. The coherence of regional development activities, programming and planning and environmental policy were promoted not only by the National Environmental Protection Program, but also by the law of LIII of 1995 on the general rules of environmental protection, which stipulates (§ 46) that local governments must develop an independent municipal environmental protection program in their area of competence or adopt it with their representative body [§ 46 (1) b].

That legislation is in accordance with Section XXI of the law 1996 on Spatial Development

and Spatial Planning, according to which [§ 3 (3)] the task of spatial planning is to explore and evaluate environmental conditions and to take into account the load-bearing capacity when setting development goals.

Environmental integration has been strengthened in the European Union since the early 1980s with the establishment of environmental action programs. In the meantime, the development of a Strategic Environmental Assessment (SEA) obligation, which will be incorporated into the legislation of the Member States, began in 1991, and was formulated as an EU directive only in 2001. Of course, not all Member States wished to apply the test before the publication of the Directive (Fleischer, 2004).

Annex III to Council Regulation (EC) No 1260/1999 lays down general provisions on the Structural Funds. Chapter 2 on evaluation already required ex-ante, mid-term and ex-post evaluations at program level. Of these, there is an increasing emphasis on ex-ante evaluations.

The descriptive nature of environmental impacts and aspects, which goes beyond assessment and is becoming more and more pronounced, has also increasingly prompted the EU and the European Commission's XI. (Environment) to develop a stand-alone testing system for program-level planning from the methods and experience of impact assessments to date. Considering parts of Council Directive COM/96/0511 and past experience, the European Parliament and the Council defined and established the Strategic Environmental Assessment on 27 June 2001 as a stand-alone integrative policy and tool.

Following the practice of the European Union, the Hungarian legislation has also paid more and more attention to the legal regulation of assessments related to the achievement of environmental protection and sustainable development. In connection with the plans, the XXI. s. Section 23 of the Spatial Development Act (in view of the EU EIA regulations following the signing of the EU Cooperation Agreement in 1995) requires, among other things, the preparation of environmental impact assessments for all spatial plans. However, this has not yet been the case for development decisions.

As already mentioned, the EC required member states to incorporate the details of Strategic Environmental Assessments into their own legislation by mid-2004. Accordingly, in 2004 the Hungarian Parliament amended Act LIII of 1995 on Environmental Protection. Article 27 of the current legislation states, inter alia, that 'In order to protect the natural and built environment in a coordinated manner, the expected environmental effects of the ideas contained therein must be explored in the spatial development concepts and in the preparation of spatial planning and settlement structure plans ...'. Sections 43 and 44 of the same law already provide for environmental assessments to be carried out, but also state that various

plans and programs are subject to ‘... an environmental assessment, which includes an environmental assessment under separate legislation. No plan or program may be submitted without an environmental assessment.’ This special legislation is entitled 2/2005. (I.11.) On the environmental assessment of certain plans and programs. This legislation already specifies in which plans and programs it is mandatory to carry out strategic environmental assessment. However, the legislation only stipulates that the program must be an integral part of this assessment, the environmental assessment must be agreed with the competent environmental inspectorate and specifies the content elements and the need for monitoring, but it does not provide more detailed methodological guidance. It should be noted here that neither the Hungarian legislation nor the EU directive regulates exactly to what extent it is necessary to carry out SEA developments. Thus, Hungarian law does not oblige the developer to prepare an SEA for a regulatory plan prepared for a part of a city. It also gives the planner some leeway to determine the size of the plan and the expected environmental impact. However, by referring to this ‘room for maneuver’, municipalities may be able to avoid the obligation to carry out an environmental assessment in the case of minor modifications (referring to the otherwise legitimate but, as it turned out, irrelevant suggestion that has a licensing obligation) (Varjú, 2010).

As indicated above, the legislation that requires urban planners to make settlements sustainable is not too strict. Hence, the author’s hypothesis is that in Hungary there is connection between the size and type of settlements and environmental cogitation. Settlements with high population numbers are significantly more inclined to make environmental assessment, facing higher risks due to the higher number of developments and investments.

RESULTS AND DISCUSSION

The SEA is a relatively new tool which ensures the EPI into regional development policy. SEA appears differently in different national organizations’ development policy. There are countries where environmental assessment has long experience (e.g. UK, France) and there are countries (e.g. Hungary, Slovakia) where the implementation of SEA has just started since the legal enactment.

Prior to the establishment of the Hungarian legal framework, the environmental assessment of the Regional Operational Program (2007–14) was carried out by the ROP SEA methodology in 2003. The methodology was developed on the basis of the ex-ante evaluation

required by Council Regulation (EC) No 1260/1999 on the Structural Funds and the aforementioned Directive 2001/42 / EC. However, as there was no generally accepted methodology for the preliminary assessment of the environmental impacts of plans and programs – only the tools proposed by the European Commission – a methodological framework was developed for the ROP (Varjú, 2010). This SEA has since been followed by several SEAs, mainly prepared for strategic plans, but research experience shows that the process did not reach the urban level, (especially the small settlement level), or was difficult to reach. Not only the SEA, but also the preparation of the environmental program of the settlements are missing. Without this, it is difficult to build sustainable conscious settlements.

The empirical survey in 2008

A first examination of the environmental awareness of settlements has been conducted in 2008, partly through the issue of the local application of SEAs. The research focused (in part) on local governments. At the settlement level, the author also strived for full representativeness, so he tried to find the e-mail addresses of all local governments in Hungary. However, only 2352 working e-mail addresses were available in comparison to the number of settlements of 3152 (TEIR 2008) (including the districts of Budapest), while without it the number of distributed questionnaires was 2329.

Initial studies have shown that SEA, as a new environmental mechanism, is far less widespread at the county level than in national or regional development policy. There can be several reasons for this. On the one hand, it has not been long since the entry into force of the government decree (early 2005) and the completion of the research presented in the indicated literature (October 2008) from a planning point of view. During this time, it is assumed that the development plans of the municipalities have not reached a stage where they should be updated. If there are those who are still in this state, then it is likely that in smaller, more disadvantaged settlements the environmental assessment may not be given (sufficient) emphasis in the renewal of plans, in these municipalities the information on SEA is incomplete despite the existing notarial function.

The municipal survey conducted in 2008 in the cited research showed that the basic problem with the municipal level is that 45.8% of the respondents had not even heard about the SEA, and only 9.8% of the respondents had done so. However, this 9.8% is nuanced by the fact that in the period under review (between January 2005 and the date of the response) 73% of the responding municipalities had a plan or an amendment to it that should have been subject to an environmental assessment (Table 1). The settlements that had already heard

about the SEA and had an environmental inspection program (54% of the responding municipalities), almost one-third (28%) of these settlements also prepared an SEA.

Table 1 Some answers to the questionnaire

	Yes	No	DK/NA
(3.) Have you ever heard about SEA?	50.8 %	45.8 %	3.4 %
(4.) Has your settlement done an SEA since 2005?	9.8 %	71.4 %	18.8 %
Has your settlement had any development plan to plan or renew since 2005?	73.0 %	23.8 %	3.2 %
If so, (you had plan(s), have you done SEA?	28.1 %	46.9 %	25.0 %

Source: Varjú, V. (2010) p. 136.

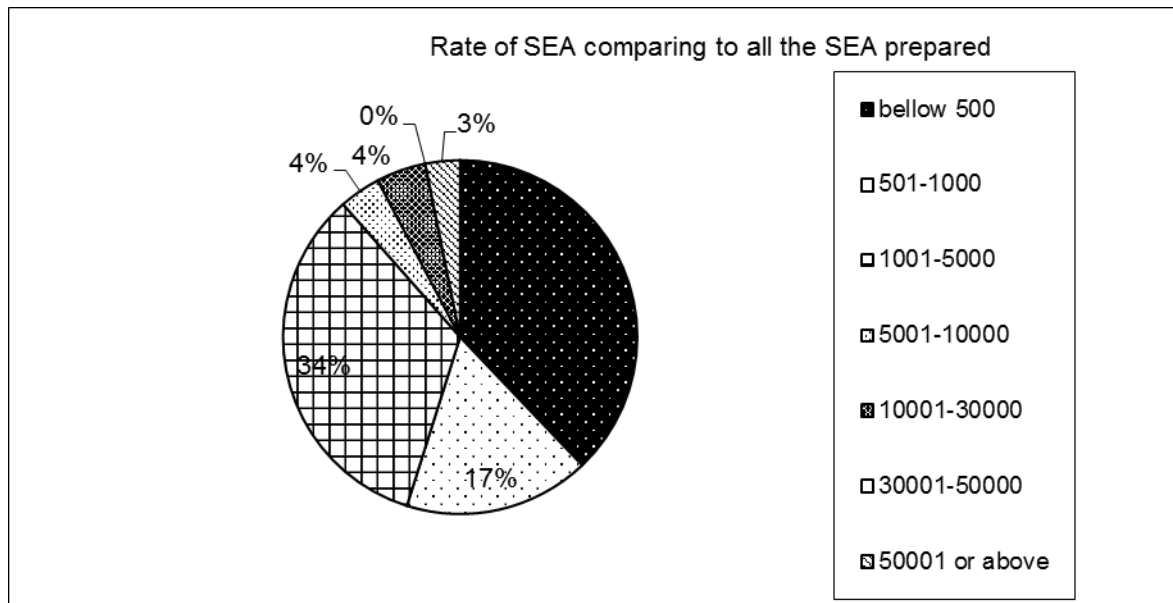
This means that more than two-thirds of the settlements – even if we put it a little polarized and assume that the non-respondents did not prepare an SEA – may have committed a deliberate or unintentional, but negligent violation of the law (this was also undertaken by several municipalities). The reasons for this are largely to be found in the absence of knowledge. In addition to the fact that almost half of the settlements do not have any information about environmental assessment, those who have some knowledge typically suggest that an information network would make it easier for them to find their way on such and similar issues.

Lack of resources also appears as a cardinal issue in the settlements. Although half of those who prepared an SEA entrusted its implementation to the developer of the plan and included the cost of the environmental assessment in the budget of the plan, the other half of the SEA municipalities used additional financial resources to carry out the environmental assessment. Those who deliberately did not prepare an SEA mostly justified this on the grounds that it was not necessary, as a means of enforcing environmental interests already existed, namely the EIA. Several have identified the SEA with the mandatory environmental program of the municipalities, which is really important, but not the same as the SEA. Among the reasons of the respondents, there was an argument at the county level, but with the opposite sign, that the SEA should be prepared not at the municipal level, but at the higher county or regional level (Varjú, 2010).

Differences in settlement size

If we examine the answers according to the size of the settlement, we can see that it is mainly the small population settlements that conducted an environmental study for their plans or their modifications (Figure 1).

Figure 1 SEAs prepared for settlement/urban development plans by settlement categories (weighted data)



Source: Varjú V. (2010), p. 138.

Figure 1 shows that despite the fact that small settlements were under-represented in terms of access to the questionnaire – i.e. many of them did not have a working e-mail address, are more excluded from information than larger settlements – in these settlement type, relatively, more SEAs were prepared. However, this does not mean that environmental interests are better enforced or more sensitive. This is supported by the answers given to the other open questions.

Here, if we examine the answers according to the types formed according to the population of the settlements (Table 2), the average of the ‘ratings’ given to each question shows that environmental interests are considered the most important by the settlements between 1000-5000 people (4.54 on average). Small settlements appear to be less environmentally sensitive in this respect. This may be since small settlements are not affected by environmental problems, as small industrial investments in small settlements are small, which can have a polluting effect. This is supported by the fact that cities with more than 10,000 inhabitants consider environmental issues to be more pronounced than average, as the higher traffic load

and the higher volume of industrial investments also carry higher environmental risks, which must be taken into account in development planning (Varjú, 2010).

Table 2 The mean and the variance from the mean of the whole sample relating to the answers of the questions No. 15/1,2,4.

Settlement size	1. SEA can contribute to the conservation value of settlements	Variance from the mean (%)	2. The SEA is another compulsory task for local governments	Variance from the mean (%)	4. SEA is a long term investment in timeline for local governments	Variance from the mean (%)
Under 500	3,85	-1,28	3,48	10,13	3,15	-6,25
501–1000	3,84	-1,54	4,64	46,84	3,06	-8,93
1001–5000	4,54	16,41	3,68	16,46	3,50	4,17
5001–10000	3,70	-5,13	3,08	-2,53	3,45	2,68
10001–30000	4,03	3,33	2,86	-9,49	3,71	10,42
30001–50000	4,20	7,69	3,00	-5,06	3,80	13,10
50001 or bigger	4,00	2,56	3,00	-5,06	3,15	-6,25
The mean of the sample	3,90		3,16		3,36	

Source: Varjú V. (2010) p.139.

The above-mentioned findings were also supported by the assessment of the answers to the first, third and fourth questions. While settlements with less than 1,000 inhabitants see the environmental assessment as a less profitable investment in the long run than average, cities with more than 10,000 inhabitants tend to see it as an additional, mandatory task (Varjú, 2010).

Empirical investigations in 2012

In 2012, we tried to explore the environmental awareness of local governments and their relationship to environmental policy and sustainability through a repeated local government survey. Accordingly, we sent an online, self-administered questionnaire to the Hungarian municipalities twice, in April and May 2012. An online link to complete the questionnaires was sent to a total of 4,584 email addresses. The e-mail address includes both 3153 (2012) settlements in Hungary and 23 districts of Budapest. There were settlements that had multiple email addresses. The e-mails available on the internet were combined with the database available on the websites of the 19 county Government Offices, as well as with the list of local government e-mail addresses officially requested from the Ministry of the Interior. We found a total of 15 settlements where none of the one or more email addresses were alive.

Most (3) “inaccessible” settlements were in Borsod-Abaúj-Zemplén county. 80% of the settlements not reached by e-mail are settlements with less than 1000 inhabitants.

Of the municipalities surveyed, 649 clicked on the link sent and / or started filling in the questionnaire, and 283 municipalities completed it. After filtering out duplications and territorially unidentifiable municipalities, 272 fully completed municipal questionnaires were evaluated. The questionnaires were filled in anonymously, the identification of the received questionnaires was automatically blocked, so which settlement did not voluntarily provide the name of the settlement, these settlements were not included in the final analysis. The municipalities that gave the name of their settlement contributed to the success of the analysis, however, according to the rules of research ethics and the profession (Héra & Ligeti, 2005) these settlements remain unidentifiable when presenting the results. In the questionnaires we asked the mayors of the settlements, but there were places where the questions were answered by the deputy mayor or an employee of the mayor's office authorized for questions.

9% of all settlements in Hungary gave an evaluable answer to the survey. By county, the number of responses varied within two percentage points. An exception to this is Borsod-Abaúj-Zemplén county, where the return rate is below 6%, while in Békés county, the return rate is above 14%; Baranya county represents the Southern Transdanubia region with a return of over 11%, Somogy and Tolna counties with a return of 8%.

Most of the valid questionnaires came from settlements between 1001-5000 people (42%). Based on the replies, it can be said that groups with a settlement size of more than 1000 people are over-represented, while groups with a settlement size of less than 1000 people are under-represented compared to the national proportions. In order to make the quantifiable findings on the size of the settlement representative, in the group comparisons compared to the main average, the answers were weighted based on the ratio of the numbers of the sample elements of each group to the population.

During the empirical research, we were the first to probe the attitudes of local governments towards the performance of tasks. We were interested in how important local governments consider their environmental and nature conservation tasks to be in comparison to their other tasks. We only dealt with the tasks and attitudes related to environmental protection after that. In the questionnaire, we identified eight groups of tasks (Table 3) that local governments had to rank.

38.6% of the settlements marked the basic education tasks, while 25% indicated the basic social tasks in the first, most important place. (A significant part of their budget was also

spent on this until the change in the municipal structure.). In the second place, educational, social and health tasks also appeared (representing a total of 77% of the marks in the second place), while the mark in the third place gave a similar result. Only 1.5% of respondents ranked tasks related to environmental protection in the first place, barely 4% in the second place and 7% in the third place. (No coherence was found between the ranked designations and the size of the settlement.) (Varjú, 2013a)

Table 3 Most important tasks of local governments

Tasks relating to environmental protection
Improve security
Improve public roads
Basic service provision in health
Basic service provision in culture
Basic service provision in education
Basic service provision in social services
Job creation initiatives

Source: Varjú V. 2013a.

When asked whether the municipality had a municipal environmental protection program, almost 9% of the settlements answered “No”. Similarly, Bányai (2017) also draws our attention to the non-sanctioning of the non-existence of environmental protection programs and the lack of environmental protection programs in some settlements in their research conducted in 2016.

The following parts of the questionnaire already dealt specifically with environmental activities. Municipalities were also able to rank the ones they considered most important among their most typical environmental task groups (Table 4) (Varjú, 2013a).

Table 4 The most important environmental related tasks of local governments

Improvement of built environment
Improvement of local flora and fauna (increase biodiversity)
Forcing local energy supply
Rainwater drainage
Organisation of waste management
Public cleanliness
Local air quality management
Sewage treatment, drinking water supply
Improvement of green areas, parks, leisure spaces

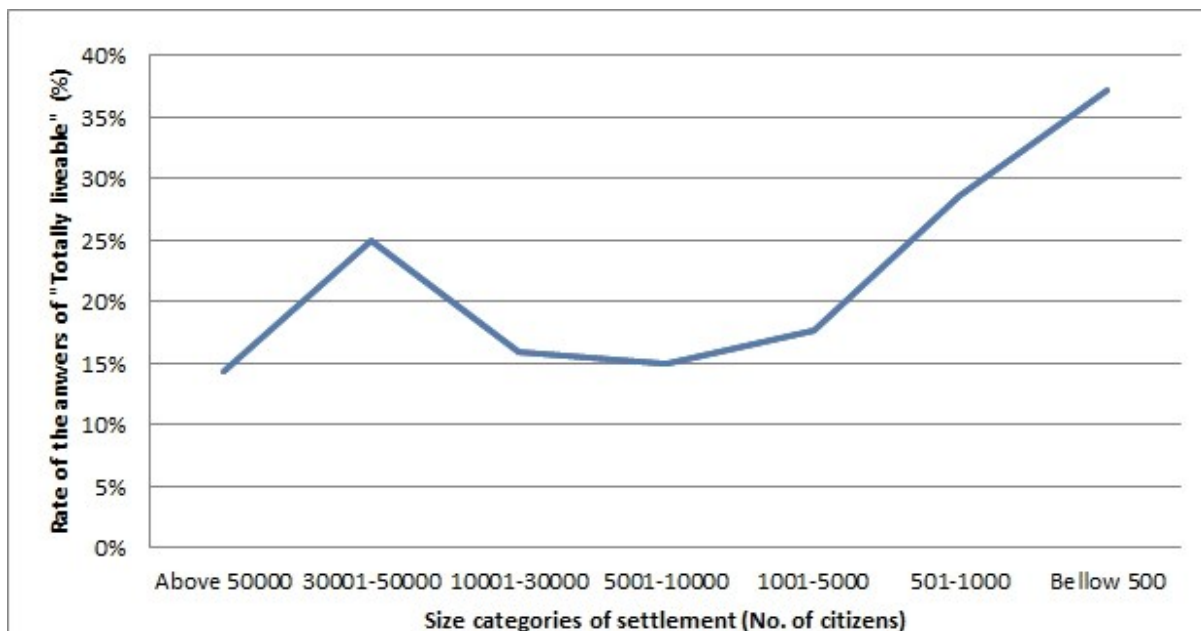
Source: Varjú, V. 2013a

26% of the municipalities indicated wastewater treatment and 23.5% public cleanliness as the most important task. With a ratio of between 13% and 17%, there were five second most important environmental tasks, in order of: stormwater drainage; sanitation; organization of waste management; improvement of green spaces, parks, leisure spaces; wastewater treatment. In the third place in the ranking, these five tasks also appeared the most frequently.

To the question, ‘How would you characterize the environmental awareness of the population of your settlement?’ 3% of respondents believe that the population is fully environmentally conscious. 37% of the respondents reported a low level of environmental awareness among the population, 58% about the environmental awareness to be improved, and 1.5% of the respondents reported a lack of environmental awareness.

It also appeared that small settlements judged their own settlement most positively in terms of their liveability. As the size of the settlement increases, the favorable perception also decreases (Figure 2). (The rise of the city category between 30001-50000 people can be attributed to the low number of answers.) (Varjú, 2013a)

Figure 2 The rate of ‘yes’ answers to the following questions by settlement category: ‘Is your settlement/city liveable, and its environmental surrounding attractive?’



Source: Varjú, V. 2013a

ÁROP empirical research shows that local governments have been prepared for one of the key issues of the new waste management law to be adopted in autumn 2012. In accordance with the regulations of the European Union (2008/98 / EC), by 2015 the separate waste collection system must be in operation in the settlements of Hungary, where at least paper,

metal, plastic and glass will be selectively collected. According to the questionnaire survey, in the summer of 2012, 90% of the settlements already have separate waste collection. 85% of the settlements collect paper and glass separately, 88% collect plastic. However, the selective collection of metal takes place only in 36% of the settlements. Typically (almost exclusively) small settlements are those that have not yet developed their selective waste collection system. 7% of settlements with between 500–1000 and 1001–5000 inhabitants, while 38% of settlements with less than 500 inhabitants did not have separate waste collection. (Interestingly, a city with more than 50,000 inhabitants also stated that they do not have separate waste collection.) (Varjú, 2013a)

43% of local governments also encourage selective waste collection in other ways. The most common was the optional smaller collection container. 65% of municipalities use this. Nearly 10% of them provide the opportunity to use less frequent emptying. It was common (20% of incentives) to provide multiple options for separate waste collection, to reduce the amount of municipal waste. 4% of the frontrunner settlements also provide the possibility to pay a fee proportional to the amount of waste transported in some way (e.g. by using a chip system) (Varjú, 2013a). However, it should be noted here that due to the function of the NHKV operating from 2016, the waste management system had been reorganized, namely centralized, without allowing or promoting the separate collection with fee reduction. The fee for waste collection has been unified and does not reflect on waste consciousness. Operation has been also affected by redefined supply areas.

When asked whether environmental investments were made in the settlements after the turn of the millennium, 43% of the respondents answered ‘yes’. 63% of respondents reported investments related to wastewater treatment and 19% reported the construction of a landfill. These investments were financed by the ISPA/Cohesion Fund. Renewable energy investment was reported by 18% of respondents (typically through environmental development tenders) (Varjú, 2013a).

Some findings of a follow-up research

The OTKA research – conducted by the University of Debrecen with the leadership of László Fodor taking place between 2015 and 2018 also examined the issue of settlements, cities and environmental protection and local environmental policy. It could also be seen from the volume summarizing the research (Fodor & Bányai 2017) that the focus was primarily on legal aspects, approaching the topic from the point of view of environmental law.

In the analysis of the changes in legislation, Pump (2017) draws attention to the problem that although local governments have numerous opportunities and obligations in shaping their sustainability and environmental policies, ‘local governments cannot develop long-term environmental policies because the content of environmental policies is constantly changing. (By that time) it cannot be foreseeable what the division of tasks between the state and the local government would have been in each area, and in what and how it would affect the decision-making freedom of the local government’ (Pump, 2017, p.48). Pump also pointed out that in waste management the partial centralization of the system had several spill-over effects. ‘However, the radical change in the division of responsibilities between the local government and the state has changed not only their system of relations, but also everyone who was and has been involved in the provision, use and control of public services’ (Pump, 2017, p. 49).

Fodor (2017, p. 71) also formulates the foundation of a sustainable settlement in such a way that ‘one of the keys to environmental protection is the integration of environmental considerations into various decisions’. That is, environmental policy integration is also needed at the local level. On the regulatory side, he draws attention to the fact that the phenomenon of integration can be well illustrated at the level of local government regulation, even though the scope of regulatory issues at this level is far from complete, as many issues only concern central regulation and the scope of local government is limited in both space and time.

Fónai and Péntzes (2017) – in their 2016 empirical municipal data collection – found that half of the local governments cooperate with the regional environmental authority in the performance of official tasks, and 39.6% with the national park directorate. In the transformed institutional system, the co-operation of local governments with the territorial environmental protection authority has not fundamentally changed, meaning that local governments have quickly adapted the new institutional methods of managing environmental issues. Incidentally, 38% of local governments have carried out an environmental impact assessment during local decree-making and strategy-making, and a municipality that has carried out such an activity will also take its results into account. 8.8% of the settlements had local conflict from the municipal decisions. In environmental regulations, local governments strive to take into account the aspects of local society and the state of the environment (Fónai & Péntzes, 2017: 80–85).

Fónai and Péntzes (2017) also state that overall, local governments enforce a more following and enforcing local environmental policy, in which the determining actor is the

local government, which is somewhat influenced by the local society, and much less by professional organizations.

CONCLUSION

Not surprisingly, the analyses showed that the lack of information is crucial in the failure of making environmental assessment. $\frac{3}{4}$ of Hungarian settlements had no knowledge of the notion of SEA in 2008. Even more problematic is the fact that the recently presented analyses and the investigation of the mentioned OTKA also showed that around 9% of Hungarian settlements do not have an environmental programme that is compulsory since 1995. Respondents (of empirical researches) were lacking practical experience in the field as well, especially in smaller settlements, where the lack of (human and financial) capacity seems to be the most challenging issue. The bottlenecks and frequent shortcomings of the institutional infrastructure (e.g. local civic interest groups, bureaucratic, often shock-laden green authorities) do not provide an adequate basis for ‘urban environmental consciousness’.

The past decade of recentralization processes has also affected the potential of cities and rural settlements to be active in environmental improvement. The hierarchical institutional setting, the dominance of institutional knowledge set back the emergence of local, territorial interests, hence the emergence and integration of local environmental cogitations.

In larger, urbanised settlements, due to their higher development and investment capacity and risk, the role of environmental assessment related to planning activities is considered more important.

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