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Abstract: As a result of the increasing significance of environmental protection, which can be observed in the past decades, according to international trends, the leaders of Hungarian settlements have also begun to pay more attention to this area. An important role in the management of settlements is played by municipal councils elected by the population, whose decisions are prepared by various sectoral committees. Despite the fact that the scope of the committees' work is often wider than can be deduced from their names, we think it stands to reason to examine to what extent environmental protection are present in the names of municipal council committees.

In the light of the above, this paper emphasises the following questions with respect to Hungarian settlements with a population of at least 5,000: to what extent is environmental protection present in the committee structures of the municipal councils of local governments and which factors influence the presence of environmental protection in the committee structure of local governments?

The findings of the present paper can be summarised in the following major statements:

- Municipal councils of settlements consider the presence of environmental protection in the committee structure as important, but they primarily deal with this area in combination with other sectors.
- Environmental protection is most frequently dealt with in the same committee with the areas of urban development.
- The presence of environmental protection in the committee structure shows correlation with three factors, of which the strongest link can be found in case of the volume of traffic passing through the settlements.

Keywords: municipal council, sectoral committee, size of settlements, volume of traffic, presence of pollution.

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Introduction

As a result of the increasing significance of environmental protection, which can be observed in the past decades, the value of the local level, as well as the role of the local governments representing this, have increased considerably in this area. Several authors (Baker *et al.*, 2012; Beattie *et al.*, 2001; Bulkeley, 2005; Ivey *et al.*, 2006; Wang, 2011) have come to the conclusion that local governments play an important role in efforts against air, water and soil pollution. According to Moss (Moss, 2008), local governments should primarily concentrate on the prevention of pollution, since this is the most efficient means of reducing health and environmental risks, as well as environmental expenses.

In almost every European country the most important decision-making body of the local government is municipal council which organisation governs the life of the settlement by way of local government regulations and decisions (Androniceanu, 2010; Chakrabarty & Chand, 2012; Denhardt & Denhardt, 2006). At the same time, however, in some countries it can be witnessed that municipal councils delegate a part of their tasks and powers, together with the financial resources necessary for their implementation, to specialized committees, which also have the function of providing their opinions on proposed local legislation before it is submitted to the municipal council.

In Hungary – according to the international trends – local governments fulfil a very important role on the local level in the field of environmental protection: on the one hand, they can initiate developments, measures and actions with respect to environmental protection; on the other hand, they must also discharge a number of tasks prescribed by law. The most important of these is Act LIII of 1995 on environmental protection, in which Section 46 (1) regulates the most fundamental roles of local governments in the field of environmental protection. Under this act, local governments may, in the interest of preserving and improving the condition of the environment, perform official tasks, issue municipal ordinances. They shall work out municipal environmental programmes for their respective areas of competence, and each local government shall monitor the state of the environment in its area of competence and shall inform the public thereof as required, but at least once a year (Belányi *et al.*, 2010).

Within local governments in Hungary, according to the European trends, one of the most important decision-making bodies is the municipal council (Csefkó, 1997), which is elected, under the law, by the residents of the settlement every five years (the most recent election was held in 2014, and the next one will be in 2019). But in organising the work of municipal councils their various committees (which partly consist of local councillors and partly outside experts) play a very important role (Árva *et al.*, 2014); for example they prepare decisions, elaborate development concepts and initiate that the local government intervene in a given area.

These committees are established by the municipal council after the local elections, and there is hardly any change in their structure between elections. Despite the fact that the scope of the committees' work is often wider than can be deduced from their names, we think it stands to reason to examine to what extent environmental protection is present in the names of local council committees, since to some extent this indicates the commitment of local governments towards environmental protection. In addition to members of the municipal council (councillors), external experts may also sit on committees, whose presence there means the embodiment of the democratism of public administration (WahedUzzaman & Alam, 2015)

In the light of the above the present paper emphasises the following question with respect to Hungarian settlements with a population of 5,000 and over:

- to what extent is environmental protection present in the committee structures of the municipal councils in case of the local governments examined and how did its situation change after the 2014 municipal election?
- which sectors are in the same committee with environmental protection?
- which factors influence the presence of environmental protection in the committee structure of local governments?

1. Methodology

The necessary information was available from the Rules of Organisation and Operations, which in most cases contained the names and compositions of the committees; in the absence of this information, the minutes of the municipal councils, as well as information available on the websites of the settlements concerned were used.

In the determination of the volume of traffic, we used the data published by Magyar Közút Zrt. for 2013 (Magyar Közút, 2014), which included the daily average number of vehicle units (unit/day) passing through the settlements. In the calculation of this figure, vehicles of different type are taken into account with a different weight. The extent of industrial pollution on the settlements was determined on the basis of data from the European Pollutant Release and Transfer Register (http://prtr.ec.europa.eu/), which includes industrial and agricultural companies on the various settlements producing hazardous wastes and emitting pollutants.

For the purposes of analysis according to settlement size, several groups were established. The basis for the categories were the relevant provisions of law (Act L of 2010 on the election of local councillors and mayors), which specifically defined the number of local councillors who can be elected at settlements (Table 1).

Table 1. The number of councillors that can be elected at settlements of different sizes

Number of inhabitants	Number of councillors
5,001-10,000 person	8
10,001-25,000 persons	11
25,000-50,000 persons	14
50,001- persons	minimum 17

Source: Act L of 2010 on the election of local councillors and mayors

In the course of the analysing the data, several methods were used with the application of the Statistical Package for Social Sciences 14.0 (SPSS 14.0). Firstly, in the interest of surveying the importance of environmental protection and determining its points of connection with other sectors, statistical correlation numbers were calculated. Secondly, in order to explore the relationship between the size of the settlement, the volume of road traffic and the presence of industrial polluters on the one hand and the appearance of environmental protection in the committee structure, crosstabs have been formulated. Thirdly, the strength of the relationships was determined by way of the calculation of the Pearson correlation coefficient.

The originality of the study is indicated by the fact that, relying on statistical data from various sources, it analyses the appearance of environmental protection in the committee structure of local governments, as well as its characteristic features and determining factors.

2. Position of environmental protection in the structure of municipal council committees

From the 273 local governments of settlements examined, 78 had a committee structure in which the word "environmental protection" is used, and this proportion of 28.6% means the 12th position from among the 34 sectors referenced in the names of the committees (Table 2). Looking at the trends dual picture can be observed: although, environmental protection debased one position after the 2014 municipal election but it still belongs to those sectors where the proportion did not diminish.

The importance of an individual sectors within municipal councils is also reflected to some extent by whether a separate committee deals with it or the committee's scope of competence encompasses several areas. In the case of settlements an analysis of the situation irrespective of the sectors shows a balanced situation (Table 3), as the number of committees dealing with one, two and three or more sectors varies between 30 and 40%.

Table 2. The appearance of the individual sectors/areas in the structure of municipal council committees before and after the local elections of 2014 (only those sectors are shown in the table which were mentioned in case of at least 5% of the committees both before and after the given date, in %)

	Before local election	After local election
Financial	100.0	100.0
Urban Development	69.6	71.1
Social Affairs	71.4	68.9
Procedural	70.3	67.0
Culture	64.5	60.8
Sport	52.7	50.5
Education	60.4	49.8
Healthcare	52.0	46.2
Economic Development	35.2	32.2
Law	35.9	31.9
Human	24.5	31.9
Environmental Protection	28.6	28.6
Youth	25.6	24.9
Public Safety	17.2	18.3
Urban Management	14.3	14.3
Tourism	10.3	13.9
Public Procurement	10.6	9.5
Asset Management	9.2	8.8
Agriculture	8.4	8.8
Wealth-Declaration	7.0	7.3

Source: the Rules of Organisation and Operations of the local governments, the minutes and the websites of the municipal councils

Looking at the situation of environmental protection from this aspect (Table 4), produces dual picture: on the one hand, the number of committees dealing only with environmental protection may be regarded negligible; however, after the 2014 municipal elections the number of committees being responsible for only one sector in addition to environmental protection is increasing.

Table 3. The most important analysed elements of the committee structures of local councils at the settlements

	Before local election	After local election
The number and percentage of committees	30.2	30.5
dealing with a single sector/area		
The number and percentage of committees	37.1	37.3
dealing with two sectors/areas		
The number and percentage of committees	32.7	32.2
dealing with three or more sectors/areas		

Source: the Rules of Organisation and Operations of the local governments, the minutes and the websites of the municipal councils

Table 4. The presence of environmental protection in the committee structures of municipal councils at the settlements examined

	Before local election	After local election
The number and percentage of	1.2	1.3
committees dealing exclusively with		
environmental protection		
The number and percentage of	38.5	43.6
committees dealing with one sector/area		
in addition to environmental protection		
The number and percentage of	60.3	55.2
committees dealing with two or more		
sectors/areas in addition to		
environmental protection		

Source: the Rules of Organisation and Operations of the local governments, the minutes and the websites of the municipal councils

A more detailed analysis of the committees that deal with other sectors in combination with environmental protection reveals that environmental protection are combined with 16 different areas in the period examined (Table 5).

Table 5. The number of sectors linked to environmental protection in the committee structure of municipal councils in settlements over 5,000 population

	Local councils of settlements combining environmental protection with one other sector	Local councils of settlements combining environmental protection with two or more other sectors
Urban development	24	31
Urban management	2	12
Agriculture	3	10
Finance	0	10
Tourism	0	9
Public safety	3	4
Sport	1	3
Economy	0	3
Education	0	2
Culture	0	2
Public procurement	0	2
Asset management	0	2
Health	0	1
Youth	0	1
Social sphere	0	1
Procedural	0	1

Source: the Rules of Organisation and Operations of the local governments, the minutes and the websites of the municipal councils

Among these sectors an outstanding role is played by urban development, which is mainly due to the fact that it is especially in connection with urban development activities that environmental problems may arise. The second and third places are occupied by urban management and agriculture, while finance and tourism are on the fourth and fifth places. The activities of three of the above named four areas are more or less related to environmental protection, while the presence of finance may be explained by the fact that this sector often forms a joint committee with the urban development sector which is linked with environmental protection.

If we look at the appearance of democratism, as mentioned earlier in the introduction of this paper, a very good position of environmental protection can be witnessed (Table 6): it is among the sectors in which the rate of participation of external members in the committees is higher than the average, in the background of which we can find two factors. On the one hand, this area requires considerable professional knowledge; on the other hand, as shown in Table 2, it is not considered by municipal councils among the most important sectors.

Table 6. The composition of municipal council committees in the period after the local elections of 2014 (the proportion of internal and external members; the table only shows those sectors in which at least 15 committees work)

Agriculture	1.47	Sport	1.55
Environmental protection	1.50	Healthcare	1.57
Tourism	1.50	Social affairs	1.57
Civil society	1.51	Urban development	1.57
Youth	1.51	Financial	1.60
Public safety	1.53	Law	1.62
Education	1.53	Asset management	1.69
Urban management	1.53	Procedural	1.81
Human	1.54	Public procurement	1.85
Economic development	1.55	Wealth declaration	2.59
Culture	1.55		

Source: the Rules of Organisation and Operations of the local governments, the minutes and the websites of the municipal councils

3. Factors influencing the role of environmental protection

From among the factors influencing the role of environmental protection in the committee structure of municipal councils of local governments, we took the following three into consideration, which also influence each other to some extent:

- The size of the settlements concerned:
- The volume of traffic on the given settlements;
- The presence of businesses polluting the environment on the given settlements.

The size of the settlements may justify the presence of environmental protection in the committee structures for two reasons. On the one hand, as mentioned earlier, it also determines the size of the municipal council, and larger municipal councils aim to cover as many sectors as possible, and therefore, environmental protection is also included more often. On the other hand, tasks related to environmental protection (e.g. noise pollution) primarily emerge on larger settlements, and it is therefore on such settlements that the municipal council may consider the setting up of a committee dealing with this issue as important. In case of the other two factors (volume of road traffic, presence of industrial polluters) it can assumed that settlements would set up committees dealing with environmental protection where there is a concrete environmental problems threatening the settlement.

The results fundamentally confirmed the initial assumptions. On the one hand, in terms of the population of the settlements (Table 7), the bigger size category the settlement is the higher relevant value was found. In addition, the proportion of local governments dealing with environmental protection independently or only in combination with another area is higher than the average in case of larger settlements, while the proportion of settlements dealing with environmental protection together with two or more other areas is higher than the average in case of smaller settlements (with populations below 25,000).

Table 7. The role of environmental protection in the committee structures at settlements of different sizes

	A	В	C
5,001-10,000 persons	21.2	42.9	57.1
10,001-25,000 persons	33.7	37.5	62.5
25,001-50,000 persons	35.7	50.0	50.0
50,001-	44.4	75.0	25.0

- A the proportion of local governments featuring environmental protection in the committee structure in the given size bracket (%);
- B the proportion of local governments having committees devoted exclusively to environmental protection or combining it with a single other area in a committee within the local governments featuring environmental protection in the committee structure (%);
- C the proportion of local governments with committees combining environmental protection with two or more other areas within the local governments featuring environmental protection in the committee structure (%)

Source: The Rules of Organisation and Operations of the local governments, the minutes and the websites of the municipal councils

The second examined factor was the volume of road traffic, and the data concerning this indicate that this also has a significant impact on the featuring of environmental protection in the committee structure (Table 8): on the one hand, more than half of settlements "suffering" from outstanding volumes of traffic have

committees with the phrase "environmental protection" featured in their names, and less than 10% of settlements with a small volume of traffic have a committee dealing with environmental protection. On the other hand, in the case of the settlements with smaller volume of traffic, environmental protection is featured mainly in the names of those committees which include minimum three areas in their responsibilities and competences; while in the case of the settlements "suffering" from outstanding volumes of traffic, the ratio of committees dealing with only one area in addition to environmental protection exceeds the average value.

Table 8. The role of environmental protection in the committee structures on settlements according to the volumes of road traffic

	A	В	C
Small volume of traffic (unit/day $\leq 5,000$)	6.1	33.3	66.7
Medium volume of traffic $(5,000 \le \text{unit/day} \le 10,000)$	34.6	37.8	62.2
Large volume of traffic $(10,000 \le \text{unit/day} \le 15,000)$	48.6	52.9	47.1
Outstanding volume of traffic (15,000 ≤ unit/day)	58.6	52.9	47.1

- A the proportion of local governments featuring environmental protection in the committee structure in the given size bracket (%);
- B the proportion of local governments having committees devoted exclusively to environmental protection or combining it with a single other area in a committee within the local governments featuring environmental protection in the committee structure (%);
- C the proportion of local governments with committees combining environmental protection with two or more other areas within the local governments featuring environmental protection in the committee structure (%)

Source: The Rules of Organisation and Operations of the local governments, the minutes and the websites of the municipal councils, Magyar Közút Zrt. (2014)

On the basis of the data, the presence of industrial and agricultural facilities polluting the environment also has an influence on the inclusion of environmental protection in the committee structure (Table 9): in the case of the settlements with a considerable number of facilities polluting the environment, the inclusion of environmental protection in the committee structure is above the average; nevertheless, no significant relationship can be observed in that respect whether the committee deals with only one or more other areas in addition to environmental protection.

If we compare the impact of the three factors (Table 10), we can state that from the point of view of the featuring of environmental protection in the committee structures (the existence or non-existence of a committee dealing with environmental protection), as well as the weight with which environmental protection is featured (dedicated committee or one dealing with environmental

protection in combination with one other area or in combination with two or more other areas), the strongest link can be found in case of the volume of traffic, while the influence of the other two factors is much smaller. The significant effect of the volume of road traffic can, in all likelihood, be traced back to the fact that on the settlements concerned this causes a significant problem that is well-perceivable by all, and due to which the elected local councillors deemed it necessary to set up a committee (also) dealing with environmental protection.

Table 9. The role of environmental protection in the committee structures on settlements with industrial facilities producing hazardous wastes or emitting pollutants

	A	В	C
No such facility	29.1	45.5	54.5
One such facility posing minimal risk	14.8	50.0	50.0
Several such facilities posing medium risk	35.2	47.4	52.6
Several such facilities posing a significant risk	50.0	42.9	57.1

- A the proportion of local governments featuring environmental protection in the committee structure in the given size bracket (%);
- B the proportion of local governments having committees devoted exclusively to environmental protection or combining it with a single other area in a committee within the local governments featuring environmental protection in the committee structure (%);
- C the proportion of local governments with committees combining environmental protection with two or more other areas within the local governments featuring environmental protection in the committee structure (%)

Source: The Rules of Organisation and Operations of the local governments, the minutes and the websites of the municipal councils, European Pollutant Release and Transfer Register

Table 10. The strength of the linear correlation between the featuring of environmental protection in committee structures and the three factors examined

	A	В
The size of the settlement	0.159	0.182
Volume of road traffic	0.398	0.388
Presence of industrial polluters	0.053	0.047

- A the existence of a company dealing with environmental protection (is there such a committee or not);
- B the strength of the presence of environmental protection in the committee structure (does the given committee deal only with environmental protection or also with one or more other areas)

Source: The Rules of Organisation and Operations of the local governments, the minutes and the websites of the municipal councils, Magyar Közút Zrt. (2014), European Pollutant Release and Transfer Register

4. Conclusions

The findings of the present paper can be summarised in the following major statements.

- Municipal councils of settlements consider the presence of environmental protection in the committee structure as important, but they primarily deal with this area in combination with other sectors. Environmental protection can be found in the first half of the ranking of sectors occupying the committee structure, and its significance has not decreased since the elections of 2014; at the same time, the proportion of committees that combine environmental protection with at least two other areas is significantly above the average.
- Environmental protection is most frequently dealt with in the same committee with the area of urban development: in case of committees dealing with two sectors, urban development is almost exclusively the only one with which environmental protection is combined, while in case of committees dealing with three or more areas, urban development appears three times as often as the next sector.
- The presence of environmental protection in the committee structure shows correlation with three factors: on settlements that have a larger population, a larger volume of traffic and more industrial facilities, committees dealing with environmental protection appear in a larger proportion. The calculation of correlations showed the highest value from the above factors for the environmental loads caused by traffic, which means that the effect of this factor can be considered as the strongest.

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