
W KIERUNKU UMIEDZYNARODOWIENIA / TOWARDS INTERNATIONALIZATION

Environmental Protection Programmes in selected Polish communities as the first step towards sustainable development

Programy ochrony środowiska w wybranych polskich gminach jako pierwszy krok do zrównoważonego rozwoju

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Abstract

Purpose: This paper assesses the possibility of using Environmental Protection Programmes (EPPs) in Polish local government as a tool to manage and protect the environment. In Poland, local government units (LGUs) at all levels are obligated by law to prepare EPPs in accordance with the principle of sustainable development.


Methodology: A survey was used as a research tool to determine the role of EPPs in LGUs at the community level. This research attempted to answer the following question: Are environmental protection programmes merely a document that communities are obligated to prepare?

Findings: The results of this research show that community awareness is still very low. Communities only prepare the EPPs, but they do not think about using them as a long-term management tool.

Originality/value: This research contributes to showing the role of EPPs in the management of communities in Poland.

Research limitations: A limitation of this research is the number of respondents, as it only included a small number of Polish communities. Another limitation is that this research presents only the view of one group of stakeholders – clerks.

Keywords: environmental protection programmes, community, stakeholder theory, sustainable development, reporting.

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Streszczenie

Cel: Artykuł koncentruje się na ocenie możliwości wykorzystania programów ochrony środowiska (POŚ) w polskich jednostkach samorządu terytorialnego jako narzędzia zarządzania i ochrony środowiska. W Polsce jednostki samorządu terytorialnego wszystkich szczebli są prawnie zobowiązane do przygotowania programów ochrony środowiska zgodnie z zasadą zrównoważonego rozwoju.

Metodyka: Jako narzędzie badawcze wykorzystano ankietę w celu określenia roli POŚ w jednostkach samorządu terytorialnego na poziomie gminy. W badaniu tym podjęto próbę odpowiedzi na pytanie: Czy programy ochrony środowiska są jedynie dokumentem, który jednostki samorządu terytorialnego są zobowiązane przygotować?

Wnioski: Wyniki tego badania pokazują, że świadomość gmin jest nadal bardzo niska. Gminy przygotowują POŚ, ale nie myślą o wykorzystaniu ich jako narzędzia długoterminowego zarządzania.

Originalność/wartość: Badania przyczyniają się do ukazania roli programów ochrony środowiska w zarządzaniu gminami w Polsce.

Ograniczenia badawcze: Ograniczeniem jest liczba respondentów, ponieważ badania objęły niewielką część gmin. Kolejnym ograniczeniem jest to, że w badaniach przedstawiono poglądy tylko jednej grupy interesariuszy – urzędników.

Słowa kluczowe: programy ochrony środowiska, gmina, teoria interesariuszy, zrównoważony rozwój.

Introduction

The protection of the environment has become a very important issue for all populations and for governments at the central and local levels. Environmental problems, such as air and noise pollution, and poor urban solid waste management, are a result of urbanisation (Angiola et al., 2015; Carvalho, Fidélis, 2009). Consequently, in recent decades, governments have made an environmental commitment, developing initiatives to reduce the impact of their activities on the natural environment. Public entities face pressure to reduce the negative environmental impact of their activities (Ribeiro, Guzman, 2010). Local governments have been encouraged to create appropriate management systems to support environmental planning and policy-making (Qian, Burritt, 2007). Sustainability reporting can be evidenced in several types of publicly available documents, including long-term community council plans, reports based on the global reporting initiative (GRI) (Bellringer et al., 2011) and biodiversity reporting (Gaia, Jones, 2019). In many local governments, sustainability programmes have the characteristics of what Christopher and Nadya (2011) refer to as 'bolt-on sustainability'. Limited environmental programmes may signal temporary interest in the environment, thus failing to yield broader organisational benefits (Zeemering, 2018).

The problem is that the programmes may only signal interest in environmental problems since the communities do not use them as tools that could be very helpful in protecting and managing the environment correctly. A variety of institutional mechanisms exert pressure on local governments to adopt methods and practices to enhance legitimacy to ensure continued access to resources (Montecalvo et al., 2018, p. 367).

This paper focuses on the possibility of using Environmental Protection Programmes (EPPs) in Polish local government as a tool to manage and protect the environment. The idea of an EPP makes it possible to measure the results of protecting the natural environment. That information is vital, especially since protecting the natural environment is one of the basic tasks of local government units (LGUs). The information that delivers EPP can be used to better manage environmental protection in LGUs.

The article uses a literature review and the survey method to conduct research. The author used a survey to determine the role of EPPs in LGUs at the community level. The survey is an effective observation technique often used in social research (Babbie, 2008, p. 277). The main objective of using a questionnaire is to obtain highly reliable and valid information (Taherdoost, 2016, p. 28). The survey is commonly used in research when there is a need to collect data from a relatively large population of respondents (Rowlej, 2014, p. 312). This is the first article that attempts to show the possibility of using EPP for effective management by LGUs. This article underlines the role that the natural environment plays in each of the examined communes. The research shows that communes do not use the potential that a properly prepared and evaluated EPP gives.

The remainder of the paper is organised as follows. The first section presents the literature review in relation to protecting the environment as a part of local governments' sustainable development. The second section outlines stakeholder theory as the theoretical background for the research. The third section presents the research question, while the following section outlines the research methods and the characteristics of the three voivodeships where the survey was conducted. In addition, the communities that participated in the survey are described. The next section presents the results of the research and the statistical analysis, while the last section includes the conclusion and discussion.

1. Literature review

Increasing attention to and demand for transparency and accountability for sustainable development have led organisations in both the private and public sectors to balance their economic and environmental sustainability goals to fulfil their social responsibility. In recent years, there has been increased pressure on the public sector to improve performance, with greater emphasis being placed on the need for accountability. Sustainability reporting has emerged as a key reporting mechanism to help organisations discharge such accountability (Kloot, 1999; Williams, 2015). In sustainability reporting, the focus is on obtaining and providing information for problem-solving by different managers in public and private sector companies (Burritt, Schaltegger, 2010).

Many important issues are connected to sustainable reporting in local governments. They include the comprehensive implementation of sustainability reporting and the unlikelihood of environmental and social performance measures

being adopted in the public sector while it remains voluntary, and the lack of competitive advantage in the adoption of such measures. Either the reporting needs to be made mandatory, or the non-competitive nature of operations needs to change, even if this is achieved just by tying resources competitively to performance measurement across all sustainability indicators (Adams et al., 2014). Moreover, sustainable development cannot be achieved through isolated initiatives but through integrated efforts at various levels that comprise social, environmental and economic aspects.

The successful implementation of sustainable development relies upon disentangling complex interactions among goals and targets. An integrated approach toward sustainability requires the realisation of the potential of key dimensional pillars simultaneously, as well as the management of the tensions, trade-offs and synergies among these dimensions (Mensah, 2019). Currently, some local governments do not seem to understand the role their reports can play in determining how sustainable development should proceed (Bellringer et al., 2011). Another important issue is that sustainable development at the local level should involve the creation of a partnership and communication among the government sector, business sector and local community by establishing local governance. If people are encouraged to enter into broader societal communication and active participation as important actors in sustainable development, they will feel responsible for its vision and goals (Sobol, 2008). Assessing sustainable development encompasses two basic considerations. First, development must not deplete the national resource base. Second, economic growth must find a balance and harmony with environmental protection by using resources more efficiently with less harmful environmental impact (Kelly, Moles, 2017).

Previous research has focused on different areas of sustainable development in the public sector. Pickvance (2002) used a survey of mayors, notaries and environmental officials in 600 LGUs in Hungary to explore the relationship between environmental group mobilisation, environmental group influence and environmental policy. Upadhyay and Brinkmann (2010) evaluated the level of green local government standard adoption in Florida using a web-based review and survey of 26 local governments within the context of the 'Three Es': environment, equity and economic development. In Italy, 116 provincial capitals analysed municipality behaviour regarding the use of 'green management strategies' (Angiola et al., 2015). Lehmann et al. (2022) underlined that green growth, agrowth, post-growth and degrowth are major concepts in the role of economic growth in achieving environmental sustainability. Green governance is essential to achieve the goals agreed upon by local and global governments (Debbarma, Choi 2022).

In Western Australia, Hossain (2018) analysed local government authorities' sustainability reporting practices in the absence of mandatory reporting guidelines using content analysis of their websites. He used calculations to compare the GRI's disclosures with those of 140 local council websites to develop a sustainability reporting disclosure index. Bellringer et al. (2011) studied the role of sustainability reports in local governments by conducting semi-structured exploratory interviews with the people responsible for preparing sustainability reports from five New Zealand councils.

In Portugal, Ribeiro et al. (2012) analysed the degree of development of environmental management practices in local government. They collected data by sending a postal questionnaire to 204 entities, and positive answers were obtained from 62 entities. Kulin and Sevä (2019) analysed the relationship between citizens' normative views about government responsibility and their support for government spending on the environment. They used survey data collected predominantly in 2016 that constituted a representative sample of the adult population in almost 30 countries.

2. Theoretical background

A number of assumptions are implicit in the definition of stakeholder theory, which business ethicists developed in the mid-1980s (Radin, 2015, p. 32): 'managers should proactively address stakeholder needs and aim to balance multiple (and at least partially conflicting) stakeholder interests. Stakeholder theory partially relies on the idea of shared values and shared attitudes' (Richter, Dow, 2017, p. 429). The theory provides a foundation for investigating the complex relationships between a business firm (local government authorities) and society (Khojastehpour, Shams, 2019). Stakeholder theory is based on normative statements for the other two elements: instrumental aspects and descriptive elements. The descriptive elements of stakeholder theory are concerned with representing and describing organisations and organisational behaviour to empirically identify stakeholders in different organisational settings (Donaldson, Preston, 1995; Rose et al., 2018). It is important that stakeholders can mobilize public opinion (Johnson, Brennan, 2015, p. 110).

Local government implementation of sustainable development requires stakeholder analysis, a useful tool for understanding the complex relationship between nature and social systems in environmental governance (Suškevičs et al., 2013; Tevapitak, Helmsing, 2019; Malakar, Lu, 2021). However, due to environmental externalities (Dahlman, 1979) and the definition of interest in traditional enterprise theory, all stakeholders are interested in ecological management (Long et al., 2015). An all-inclusive definition would describe a stakeholder 'as a group (or a coalition, collective, market, neighbourhood, network, publics or society), individual (or actor, agent, constituent, member, participant, partner, party or vector) or entity (institution, corporate or organisation) that may be a human (person or citizen) or non-human (the environment, natural entity or God) even anyone or anything' (Miles, 2017, p. 25). This research focuses mainly on the problem of the behaviour of different groups of actors (prime stakeholders) (Savage et al., 1991) responsible for implementing rules of sustainable development in communities (clerks, local authority) as part of the local society (citizens). An organisation's success rests upon its relationships with stakeholder groups, including numerous interests such as the environment or society (Alonso et al., 2018; Fauchald, Gulbrandsen, 2012; Otto-Zimmermann, 2012). The problem is that the organisational structure in local governments resembles the structure of traditional bureaucracy (Hood 1991; Kamal et al., 2011), making it much more

difficult to implement new management tools or methods in the public sector. An additional problem is the difficulty in implementing 'something new' when this requires the involvement of employees and does not translate into higher wages.

3. The research questions

In Poland, LGUs at all levels are legally obligated to prepare EPPs in accordance with the principle of sustainable development (Article 14, 15, Journal of Laws 2001 No. 62, item 627). The main purpose of preparing and adopting EPPs is LGUs' implementation of EPPs that is consistent with the principles of the most important strategic and programme documents. EPPs should constitute the basis for how the environmental management system functions, binding all activities and documents related to environmental and nature protection at the level of a given local government unit. The implementation of an EPP consists of the following elements: cooperating with stakeholders, developing the content of the EPP, managing, monitoring, periodic reporting, evaluation and updating.

The EPP should define the goals, directions of interventions and tasks, their schedule and the measures necessary to achieve the goals, including legal and economic mechanisms and financial resources. The areas of intervention listed in the EPP include climate protection and air quality, noise pollution, electromagnetic fields, water management, water and sewage management, geological resources, soils, waste management and waste prevention, natural resources, and threats of serious accidents.

Executive bodies at various levels of local government are obliged to prepare a report every two years and present it to the commune council. The report should evaluate the tasks performed and the level of achievement of the adopted indicators. Examples of indicators that could be used for monitoring EPP include the achieved level of packaging waste recycling %, forest area in ha, area of parks and green areas in housing estates in cities, or the length of the distribution water supply network (km) (Ministry of the Environment, 2015, pp. 6–9). All stakeholders should be involved in the evaluation process, including services and inspections in a given local government unit. The solutions adopted in the EPP must take into account actions that lead to the sustainable management of environmental resources in all aspects (Ministry of the Environment, 2015, pp. 6–9).

The LGUs prepare many documents according to legal regulations, but they do not use their potential in management. An example of a document that has potential and that could be helpful in any aspect of managing local government in Poland is the EPP, which should be a base for local government to prepare sustainability reports that have become very important in local government and a tool used to protect the natural environment. Furthermore, with the development of New Public Management (NPM), accountability has become increasingly focused on performance and quantifiable indicators of the outputs of local government (Peters, 2002, p. 164). Sustainable development reporting by public sector organisations creates the opportunity to provide information on the performance of ecosystems, regions and countries, with many public sector organisations being regional in

their operation (Ball, Bebbington, 2008, p. 324). Finally, EPPs give a local government unit the ability to measure the results of its environmental protection activities by using a ratio of sustainable development. As Pollitt (2018, p. 168) highlighted, performance management is now not only a lynchpin in NPM, it has the possibility to go wider than has been used.

Based on the above, the research questions are:

1. Do communities use the opportunities offered by properly prepared environmental protection programmes?
2. Do the main actors have sufficient awareness of the role of protecting the natural environment in the communities?

4. Research methods

An online approach was applied as the most efficient data collection method (Andade, 2020), and ProfiTest was used to create and distribute the survey. The questionnaire, which consisted of six closed questions that were designed to collect data for this research, was sent to all the municipalities in Wielkopolskie, Pomorskie and Małopolskie. The respondents were the clerks from the departments of environmental protection that are responsible for preparing the EPP. These three voivodeships were chosen to ascertain whether there are any differences in the level of preparing EPPs and reporting the issues connected with protecting the environment. Wielkopolskie is one of the most developed voivodeships in Poland. Pomorskie and Małopolskie are more tourist-oriented voivodeships, and purposive sampling was used (Babbie, 2008, p. 212).

Cramér's V test was used to ascertain if there was any dependence between the respondents' answers and voivodeship, size and type of community. The analysis was performed using the SPSS software.

The table below presents the general characteristics of the three voivodeships.

Table 1. General characteristics of the surveyed voivodeships in 2018

Item	Małopolskie	Wielkopolskie	Pomorskie
Area (km ²)	15,183	29,826	18,321
Total population	3,400,600	3,494,000	2,333,500
Proportion of protected landscape areas (%)	8.1	10.6	5.6
Proportion of landscape park areas (%)	6.8	6.9	6.7
Proportion of investment in environmental protection in percentage of total investment	9.4	3.1	3.1
Proportion of forest land, wooded land and shrubland in the total area (%)	30.3	26.6	30.5
Proportion of arable land in the total area (%)	60.6	64.7	50.1
Number of beds in hotels	101,065	42,014	115,901
Number of municipalities	182	226	123

Source: author's own study based on data from Statistics Poland.

Wielkopolskie is the largest voivodeship in terms of area and population. Protected areas constitute 10.6% of its total area, while landscape park areas constitute 6.9%. It also has the largest agricultural potential and the largest percentage of arable land, accounting for 64.7% of its total area. By contrast, the largest percentage of forest land, as well as shrubs and trees, is located in Pomorskie, representing 30.5% of its total area. Despite this, Małopolskie invests the most in environmental protection – its capital expenditure accounts for 9.4% of the total investment expenditure. Małopolskie and Pomorskie have the largest number of hotel beds, and they have high tourist potential according to the ranking determined by the Hellwig technique and the TOPSIS method (Technique for Order of Preference by Similarity to Ideal Solution) (Synówka-Bejenka, 2017).

4.1. Characteristics of the Communes that Participated in the Survey

The primary purpose of drawing up and adopting an EPP is the implementation by LGUs of an environmental policy that is consistent with the principles of the most important strategic and programme documents. EPPs should be the basis for an environmental management system that links all activities and documents regarding the protection of the environment and nature at the level of a given local government unit (Ministry of the Environment, 2015).

Employees of municipal divisions/inspectorates that deal with environmental protection were selected as respondents. The questionnaire was completed by 59 respondents from Wielkopolskie, 49 from Małopolskie and 41 from Pomorskie. The general characteristics of the surveyed voivodeship in 2018 are presented in Table 2.

Table 2. The structure of the surveyed communities

Type of community	Number of respondents	Wielkopolskie		Małopolskie		Pomorskie
		Frequency (%)	Number of respondents	Frequency (%)	Number of respondents	
Rural	22	37.29	29	59.18	30	73.17
Urban	6	10.17	3	6.12	5	12.20
Urban-rural	31	52.24	17	34.70	6	14.63
Total	59	100.00	49	100.00	41	100.00
Size of the community (inhabitants)	Number of respondents	Frequency (%)	Number of respondents	Frequency (%)	Number of respondents	Frequency (%)
0–5,000	10	16.95	4	8.16	11	26.83
5,001–10,000	20	33.90	21	42.86	14	34.15
10,001–20,000	18	30.51	16	32.65	9	21.95
>20,001	11	18.64	8	16.33	7	17.07
Total	59	100.00	49	100.00	41	100.00

Source: author's own elaboration.

In relation to actions taken to protect the environment, a very positive aspect is that all the surveyed communes in Wielkopolskie and Pomorskie have a sewage system (100%), while in Małopolskie, 95.92% of the communes have a sewage system. What is worrying, however, is that many inhabitants do not use it. In the Małopolskie voivodeship, in more than 65.3% of the surveyed communes, fewer than 60% of inhabitants used the sewage system. The situation is similar in Pomorskie, where, in 68.3% of the communes, over 60% of the inhabitants used the sewage system, and in 47.5% of Wielkopolskie communes, 60% of inhabitants used it.

4.2. Developing, updating and monitoring the EPPs by municipalities

The first question in the questionnaire looked at the development of a current EPP by municipalities (Table 3).

Table 3. Development of an EPP by municipalities

An- swer	Wielkopolskie		Małopolskie		Pomorskie	
	Frequency (%)	Number of respondents	Frequency (%)	Number of respondents	Frequency (%)	Number of respondents
Yes	81.4	48	67.3	33	80.5	33
No	18.6	11	32.7	16	19.5	8
Total	100.0	59	100.0	49	100.0	41

Source: author's own elaboration.

In Wielkopolskie and Pomorskie, over 80% of municipalities had an up-to-date EPP. In Małopolskie, however, only 67.3% of the surveyed communes had an up-to-date EPP. The research was carried out to determine whether there are significant differences in the respondents' answers due to the voivodeship they come from, the size of the commune they represent and the type of commune.

Table 4. Cramér's V test

Item	Cramer's V
Voivodeship	0.152
Size of community	0.268
Type of community	0.152

Source: author's own elaboration.

The results of the Cramér's V test (Table 4) indicate that there is no correlation between the respondents' answers due to the type, size of commune or voivodeship

that the respondents represent. However, commune size did influence the respondents' answers. The fewest communes did not develop an EPP in the smallest municipalities with up to 5,000 inhabitants and in the largest municipalities with more than 20,000 inhabitants.

In the second question, the respondents were asked about updating the EPP (Table 5). In 80.5% of the communes surveyed in Pomorskie, the EPP is updated on an ongoing basis, and in Wielkopolskie, it is updated on an ongoing basis in 74.6% of the communes. However, only 59.2% of communes in Małopolskie update the EPP on a regular basis.

Table 5. Updating and monitoring the EPPs by municipalities

An- swer	Wielkopolskie		Małopolskie		Pomorskie	
	Frequency (%)	Number of respondents	Frequency (%)	Number of respondents	Frequency (%)	Number of respondents
Updating of the EPPs by municipalities						
Yes	74.6	44	59.2	29	80.5	33
No	25.4	15	40.8	20	19.5	8
Total	100.0	59	100.0	49	100.0	41
Monitoring of the EPPs by municipalities						
Yes	74.6	44	67.3	33	73.2	30
No	25.4	15	32.7	16	26.8	11
Total	100.0	59	100.0	49	100.0	41

Source: author's own elaboration.

Regularly monitoring programmes is vital from the point of view of assessing the effects of actions implemented under the programme. Therefore, the last question (Table 5) in this area concerned the evaluation of activities undertaken by municipalities under the EPP. In Wielkopolskie, 74.6% of respondents stated that the programme is monitored on an ongoing basis, and in Pomorskie, the figure was 73.2%. Only 67.3% of respondents from Małopolskie stated that the programme was monitored on an ongoing basis.

4.3. The role of the environment in municipalities

The scope of actions taken to protect the environment by the examined communes. In the guidelines for preparing an EPP, the activities implemented by the municipalities were divided into nine areas. The respondents were asked to assign an individual weight (from 1 – least often, to 9 – most often) to areas in terms of the frequency of implemented activities in their communities. Table 6 presents the average results within individual measures.

Table 6. Areas of activity in protection of the environment (from 1 to 9)

The areas of activity	Wielkopolskie		Małopolskie		Pomorskie	
	mean	ranking	mean	ranking	mean	ranking
Climate protection and air quality	5.26	3	4.37	8	4.74	3
Noise pollution	4.02	5	4.56	6	3.97	8
Electromagnetic fields	2.75	9	3.97	9	4.31	5
Water management	4.51	4	5.12	4	4.43	4
Water and sewage management	5.30	2	5.17	3	5.46	1
Geological resources	3.14	8	4.49	7	3.75	9
Soils	3.26	7	4.64	5	4.27	6
Waste management and waste protection	5.77	1	5.45	1	5.30	2
Natural resources, serious waste threat	3.61	6	5.21	2	4.25	7

Source: author's own elaboration.

As Table 6 shows, Wielkopolskie and Małopolskie Municipalities undertook the most activities related to environmental protection in the field of waste management and prevention. In Pomorskie, most actions occurred in the field of water and sewage management, waste management and prevention, and climate protection and air quality. The fewest actions were undertaken by all the communes in the fields of geological resources, soils, and noise pollution.

To what extent does information on activities carried out for the benefit of the natural environment by municipalities influence their positive/negative image? In general, respondents believe that information on environmental activities has a medium impact on the image of the municipality.

Table 7. The image of municipalities in the opinion of the respondents on a scale from 0 to 100%

Municipalities	Frequency (%)
Wielkopolskie	57.29
Małopolskie	60.08
Pomorskie	64.24

Source: author's own elaboration.

As Table 7 shows, for the Pomorskie respondents, information on activities carried out for the benefit of the environment affects the image of the municipalities the most, with 64.24%. According to respondents from Wielkopolskie, the activities for the benefit of the environment affect the image of the municipalities the least, with 57.29%.

4.4. The role of performance measurement in the Environmental Protection Programmes

Reporting the effects of actions for environmental protection in financial or budgetary statements. As Table 8 below shows, the respondents had very divided opinions regarding the need to report the effects of environmental protection measures in the financial or budgetary statements prepared by municipalities. One of the tasks carried out by LGUs is the protection of the environment and nature. Financial outlays for the activities carried out in this area are reflected in both budget and financial reports. However, it is not possible to present the effects of these activities with financial indicators (Kowalczyk, 2018). Therefore, non-financial indicators, which include environmental indicators, should be used. It is the environmental indicators that are used to assess the degree and implementation of the sustainable development goals. Non-financial indicators also provide information for the needs of assessing the effectiveness of a local government unit (Kowalczyk, 2021, p. 81).

Table 8. Reporting the effects of actions for environmental protection in financial or budgetary statements

Answer	Wielkopolskie		Małopolskie		Pomorskie	
	Frequency (%)	Number of respondents	Frequency (%)	Number of respondents	Frequency (%)	Number of respondents
Yes	44.1	26	38.8	19	39.0	16
No	13.5	8	22.4	11	9.8	4
I don't know	42.4	25	38.8	19	51.2	21
Total	100.0	59	100.0	49	100.0	41

Source: author's own elaboration.

In Wielkopolskie, 44.1% of respondents thought that the effects of environmental protection actions should be reported in statements; in Małopolskie and Pomorskie, almost 39% of respondents gave such an answer. A large proportion of respondents do not know whether the effects of such actions should be reported in the commune's financial or budgetary statements. The figures were 51.2% of respondents in Pomorskie, 42.4% in Wielkopolskie and 38.8% in Małopolskie.

The research was carried out to determine whether there are significant differences in the respondents' answers to the question (as shown in Table 9). The researcher examined whether the answers differed depending on the voivodeship they came from, the size of the commune they represent and the type of community.

The results of Cramer's V test (Table 9) indicate that there is no correlation between the respondents' answers due to the type of commune, namely whether the respondents come from an urban, rural or urban-rural commune. Furthermore, the voivodeship from which the respondents come and the size of the commune are not correlated to their answers.

Table 9. Cramér's V test

Item	Cramér's V
Voivodeship	0.110
Size of the community	0.142
Type of community	0.116

Source: author's own elaboration.

The use of indicators to monitor and evaluate the environmental programme. Monitoring and evaluating the EPP requires appropriate indicators (Table 10).

Table 10. The use of indicators to monitor and evaluate the environmental programme

Indicators	Wielkopolskie		Małopolskie		Pomorskie	
	Frequency (%)	Number of respondents	Frequency (%)	Number of respondents	Frequency (%)	Number of respondents
Only nonfinancial	10.2	6	14.3	7	12.2	5
Only financial	10.2	6	4.1	2	12.2	5
Financial and nonfinancial	79.6	47	81.6	40	75.6	31
Total	100.0	59	100.0	49	100.0	41

Source: author's own elaboration.

Most of the surveyed communes use both financial and non-financial indicators for this purpose. Results showed that 75.6% of respondents stated that communes in Pomorskie use both financial and non-financial ratios. The figures were 79.6% for Wielkopolskie and 81.6% for Małopolskie.

5. Discussion

The research showed that there is still low awareness of reporting environment protection issues in communes. In Wielkopolskie and Pomorskie, over 80% of municipalities have a current EPP, whereas in Małopolskie, only 67.3% have an up-to-date EPP, although they are obligatory. The incentive for greater involvement in the issue of environmental protection should be connected with the nature of the voivodeship. This research was conducted in three voivodeships, two of which, Pomorskie and Małopolskie, had a high tourist value. Only 72% of all the municipalities admit that they monitor or update their programmes. The weakest

results were recorded in the Małopolskie voivodeship, which has a high tourist value, suggesting that communes in voivodeships with high tourist value are not very involved in protecting the environment. The results are very disappointing, especially considering that internationally, there is growing concern about the social and environmental impact of organisational activities (Farneti, Guthrie, 2009).

Of the 149 communes surveyed, only one stated that there is no form of nature protection. Most of the surveyed communes identified nature monuments in their areas. A large percentage of municipalities declared that they have Natura 2000 areas and protected landscape areas. This shows that the natural environment plays a very important role in each of the examined communes. Consequently, the communities should try to protect natural resources since they use them in their activities and consume resources that belong to the whole of society (Savage et al., 2001, p. 25).

The respondents are aware of the greatest threats that have a negative impact on the environment. Areas they mentioned that require the most interventions were waste management and waste prevention, sewage management, and water management. However, they also believe that information about municipalities' activities to protect the natural environment has a medium impact on shaping their positive/negative image. This is a problem since the respondents do not think that what a community can do to protect the environment will be important for the creation of its image. According to residents from Małopolskie and Pomorskie, which have significant tourist potential, information on activities to protect the environment has a greater impact on shaping the municipalities' image.

In all areas of activity in EPPs, there are indicators that allow the programme to be monitored and evaluated. It is believed that the availability of information is an important performance driver (Laihonen, 2017; Movnihan, Pandey, 2010). Therefore, it is important to develop structures and procedures that make it possible to learn based on performance information, especially since all the indicators are prepared according to sustainable development. The low awareness of the role played by reporting on environmental activities is confirmed by the results of further research. A small percentage of respondents believe that the results of actions taken to protect the environment should be reported in the financial or budgetary statements of municipalities. It should be emphasised, however, that only 39% of respondents from the Małopolskie and Pomorskie voivodeships, which have high tourist potential, believe that the results of activities should be included in the financial or budgetary statements of municipalities. Sustainability reporting is assumed to refer to information disclosure on what has been done or achieved in that respect (Uyar et al., 2019, p. 2). On a positive note, the vast majority of respondents believe that both financial and non-financial measures should be used to monitor the effects of activities carried out under the EPP.

Zemmering (2018) states that environmental programmes may only signal temporary interest in the environment, thus failing to yield broader organisational benefits. Communities should be obliged by law to prepare PPEs, and the research shows that the level of implementation of PPE is quite high since it has been obligated by the law.

In the research conducted by Carvalho and Fidélis (2009), the respondents were asked to identify measures required to solve the local environmental problems. One of the ideas was to create a municipal council committee for the environment. This shows how important a PPE could be for local governments. It means that the idea of developing a programme that includes all the issues connected with protecting the environment is the right decision and should be implemented, not only in Poland.

Qian et al. (2010) argued that accounting plays a very important role in environmental management because of regulatory pressures from different environmental regulatory bodies and the environmental expectations of local communities. This research shows that few respondents realise that showing the impact of protecting the environment in financial and budgetary statements is an important issue. However, 'environmental accounting' has not developed much; in fact, it remains the non-financial variant. Annual reports, and their underlying information-generation systems, have expanded greatly over the past 40 years in terms of additional narrative economic non-financial information (Russell et al., 2017, p. 1435; Krasodomska, Zarzycka, 2020).

Conclusion

The research shows that actors still do not have sufficient awareness of the role of protecting the natural environment in the communities. EPPs should be prepared by all communities in Poland since they are all responsible for the natural environment in Poland in accordance with the principles of sustainable development. This research showed that the awareness of actors – clerks – of the usefulness of the information that can be delivered by the programme of protecting the natural environment is not high. The clerks only prepare EPPs, but do not consider using them as a long-term management tool. Ball (2012, p. 39) underlined that the differences between the public and private sectors do not lie primarily in what motivates individuals; they lie in the institutions within which employees operate, and employees face radically different incentives and constraints. Officials have this capability because they can compare the results achieved over time. EPP evaluation allows for the benchmarking of the results achieved between communes from given poviats or voivodship, and even at the level of the entire country.

The local governments should move towards environmentally-friendly planning and management rather than just focusing on the problems that have already occurred or the construction of infrastructure. They should also promote public and stakeholder participation in environmental management by providing knowledge and raising the people's awareness (Panya et al., 2018, p. 40).

A limitation of this research is the number of respondents, as it only included a small number of Polish communities. Another limitation is that this research presents only the view of one group of stakeholders – clerks.

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