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THE IMPLEMENTATION OF THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS BY PROCESSES OF PARTICIPATORY BUDGETING: DEVELOPMENT OF THE TRANSPORT SYSTEM AND ROAD SAFETY (THE CASE OF THE CITY OF POZNAŃ, POLAND)

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ABSTRACT: Transport systems in cities must be constantly adjusted to accommodate the ongoing changes in the environment. Apart from life quality expectations, civilizational growth requires also meeting certain requirements in terms of safety and environmental protection. The aim of this study is to determine the extent of the implementation of the postulates of Target 2, Goal 11. of the UN Agenda for Sustainable Development through the projects submitted to participatory budgeting. When analysing the projects submitted by city dwellers, special attention was paid to those intended to introduce changes in the city's transport system. The study takes into account all of the previously implemented participatory budgets. Amongst the total of 1478 projects submitted in the years 2013-2019 316 concerned transportation issues. 46 of them were selected by vote by city dwellers. They were mostly projects concerning the construction and extension of bicycle paths and increasing the safety of pedestrians. The study findings show how big interest city dwellers have in transport and communication issues. The selection of projects submitted in this regard can contribute greatly to increasing safety, reducing the impact on the environment and, in effect, improving the quality of city life.

KEY WORDS: participatory budgeting, social participation, transport system, road safety

Introduction

One of the major tasks of city authorities is to provide city dwellers with the possibility to move around the city to perform their daily activities. The transport systems that fulfil the obligation must be effective and efficient. At the same time the systems must be safe for all the dwellers, both those using the systems and those not using them. These days, a major challenge concerning transport systems is the reduction of their environmental impact. City authorities are facing increasing demand on the part of legal requirements and social protests to apply adequate measures aimed at reducing the environmental impact exerted by public transport.

The public transport issues are dealt with by the authors of the UN Agenda for Sustainable Development (the UN General Assembly, 2015). Postulates in that respect are defined in Development Goal 11 Make cities inclusive, safe, resilient and sustainable. Target 2 of Goal 11 sets out as follows: “by 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport”. Special attention must be paid to “the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.”

The activities that render possible the implementation of the postulates of the UN Agenda for Sustainable Development can be implemented by various entities and institutions through a variety of processes. A remarkable form of taking action is participatory budgeting. It is exceptional in being a direct reflection of the actual needs of city residents. Here, a question arises: do city dwellers understand the need for making changes to the way that transport systems operate? Are the projects submitted to participatory budgeting connected with the way transport systems operate; and if so, what aspects of their operations? This leads us towards the key question of this study: do the submitted projects correspond with the goals of the Agenda for sustainable Development? The aim of the article is to determine the level of the implementation of those postulates through projects submitted facultatively by city residents. Focusing attention on the tasks implemented under participatory budgeting makes it possible to speculate about the consistency of the residents' needs and expectations with the UN goals of sustainable development of city transport. From the practical aspect, the study helps identify the needs of city dwellers in terms of transport and road safety, and also recognise the types of the tasks requested and their time variability.

An overview of the literature

Participatory budgeting is becoming an increasingly important tool for managing public finance in cities across Poland. Under a new law passed in 2018, it is obligatory for all county towns to create participatory budgeting (the Act of 11 January 2018 amending some other Acts with a view to increasing the role of citizens in the process of electing, operating and controlling some public bodies, the Journal of Laws of 2018, item 130 as amended, art. 1, point 1, let. A). The obligation to implement participatory budgeting has been sanctioned by law with regard to 66 towns.

In September 2015, the UN General Assembly voted through the document *Transforming Our World: the 2030 Agenda for Sustainable Development* (the UN General Assembly, 2015). Its key content is composed of 17 goals referred to as Sustainable Development Goals. The goals are strictly connected with 169 targets which showcase the scale and character of the UN 2030 Agenda. Goal 11 of that strategy refers directly to cities and their versatile functions.

The relatedness of the above issues fits in the framework of research on participatory budgeting seen as the tool for inclusion, shared responsibility and shared decision making, as well as the implementation of the provisions of sustainable development. Amongst the most significant studies in this respect are those conducted by Cabannes (2004, 2015), Sintomer et al. (2008, 2010) and Dias (2018). A number of studies dealing with the issue cover a broader context of participatory democracy, e.g. the works of Boulding et al. (2010), Touchton and Wampler (2014). A great number of studies deal with certain selected elements of public participation, mainly with regard to particular areas of living in the city or the operations of spatial units (Avritzer, 2010; Livengood and Kunte, 2012). Furthermore, authors have also worked on numerous case studies of particular cities and countries (Menegat, 2002; Makau et al., 2012; Gonçalves, 2014). In Poland, the issue is also gaining an increasing popularity among researchers. Some interesting studies have been conducted by Burchardt-Dziubińska (2016), Pabiś (2017), Bernaciak, Sobol and Rzeńca (2017, 2018). An attempt at analysing the issues of public participation from the viewpoint of the implementation of Sustainable Development Goals was also undertaken by Fuldauer et al. (2019), McLaren et al. (2017), Bednarska-Olejniczak et al. (2019), and Chądzyński et al. (2017). However, all of the studies fail to examine the extent to which the projects submitted to budgeting and implemented under public vote meet, directly or indirectly, the detailed elements of Sustainable Development Goals (the 169 corresponding targets in particular).

Therefore, no attempt has yet been made to analyse the projects submitted to participatory budgeting with regard to city transport. This area appears to be of particular importance given the totality of transport investment in cities and towns across Poland, the role of transport in the economy, as well as the dilemmas concerning the sustainability of transport solutions (Platje et al., 2018; Paradowska, 2017; 2016; 2014). It should also be noted that research on the communization of the decision-making on the development of transport systems and improving road safety is being conducted for selected cities in Poland, but those studies do not always cover the implementation of the postulates of Sustainable Development Goals (Beim, 2012; Glazińska, 2018; Mroczek, 2018). Thus, this study falls into the broad research on participatory budgeting viewed as a tool for shared decision-making and implementing the provisions of sustainable development as well as sustaining transport systems and improving safety in cities following the guidelines of the UN Agenda for Sustainable Development.

Research methods

In order to solve the question under analysis and achieve the goals set, the method of researching documents was used. The subject of the analysis was the projects submitted to the participatory budgeting of the city of Poznań, Poland. The research covered all of the projects submitted so far. In the years 2013-2019, 1479 projects were submitted, the aggregate sum of which totalled PLN 1,235,075,648. Following a number of public votes, 202 projects were accepted for implementation, the aggregate sum of which totalled PLN 146,542,522. The goals of the projects were subject of a detailed analysis. They were compared to the postulates of Target 2 (Goal 11) of the UN Agenda for Sustainable Development. The postulates stress the importance of access to “safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.”

The analysis was conducted in a dynamic manner. The number and worth of transport-related projects was identified for subsequent years. Two types of projects were distinguished: a) all of the projects submitted to participatory budgeting, b) the projects voted through by city residents. A ratio was used to calculate and show the proportion of the number and worth of the projects selected against all projects submitted. An internal structure of transport projects was also presented, breaking it down into four categories. Projects concerning pedestrian transport, bicycle transport, public transport

and individual motor transport were regarded as discrete categories. The results of the analysis are presented in the text form as well as in the form of tables and graphs.

Results of the research

In the years 2013-2019, a total of 1479 projects were submitted to the participatory budgeting of the city of Poznań. 316, i.e. 21 per cent of them, were projects involving the issues of overall transport systems. By vote, city dwellers chose 202 projects to be implemented, of which 46, i.e. 23 per cent, concerned transport issues. The number of submitted projects was steadily rising. By 2017 the number did not exceed 50, while in 2018 and 2019 the figure was over 60 (figure 1).

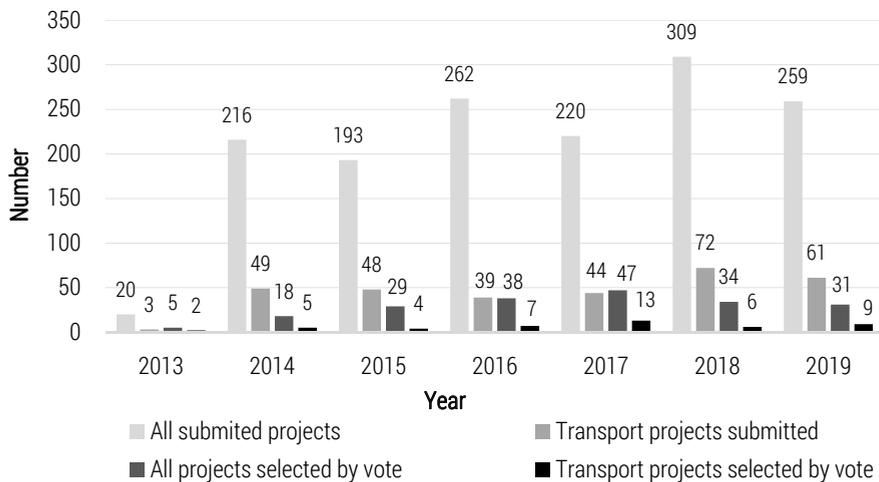


Figure 1. The number of transport projects submitted and selected by vote under the Poznań participatory budgeting in the years 2013-2019

Source: author's own work.

The proportion of transport projects in the Poznań participatory budgeting must be considered significant. With regard to the submitted projects the proportion was between 15% and 25%. The average annual figure was 21%. The projects selected by residents by vote constitute a similar proportion. Transport projects accounted for 14%-40% with the annual average proportion of 25% (figure 2).

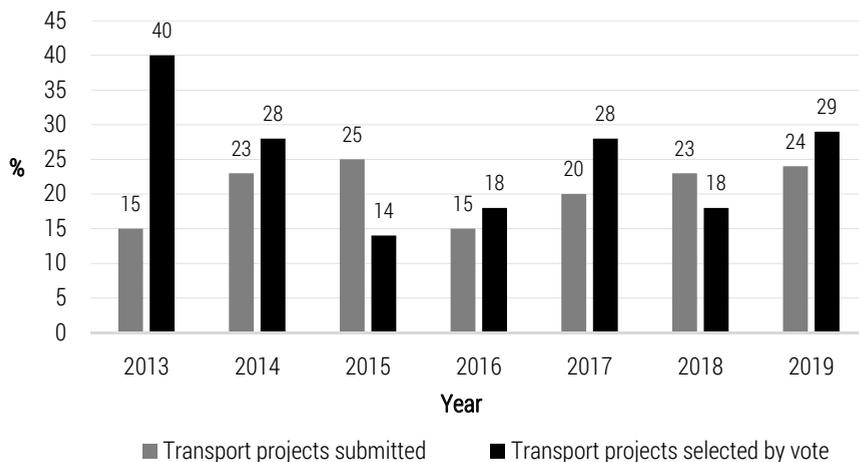


Figure 2. The proportion of transport projects submitted and selected by vote under the Poznań participatory budgeting in the years 2013-2019

Source: author's own work.

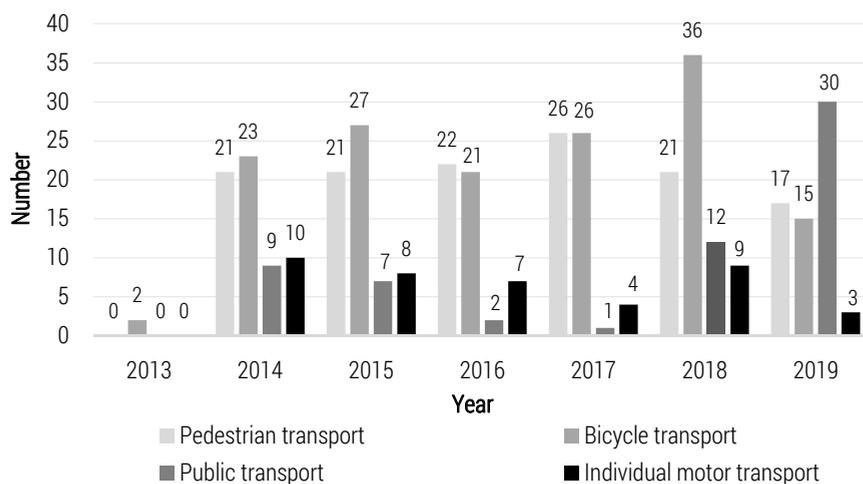


Figure 3. Transport projects submitted to the Poznań participatory budgeting in the years 2013-2019, according as per category

Source: author's own work.

Amongst all the transport projects submitted to participatory budgeting there are four different categories: pedestrian transport, bicycle transport, public transport and individual motor transport. Some of those projects implemented the goals of two of the above categories. The biggest number of projects concerned the category of bicycle transport (150). Pedestrian trans-

port projects took the second place with 128 projects submitted. Relatively few projects were submitted within the categories of public transport (61) and individual motor transport (41) (figure 3).

The categories come in a similar order in terms of the projects selected by residents for implementation. However, there are significant disparities among the categories themselves. In the years 2013-2019, 38 bicycle transport projects were selected for implementation, accounting for 25% of all projects submitted in that respect. As regards pedestrian transport, 22 projects were selected, accounting for 17% of all projects selected in that respect. When it comes to public transport, only 3 projects were selected, and as far as individual motor transport is concerned, only 2 projects were selected (accounting for 5% of projects in both categories respectively).

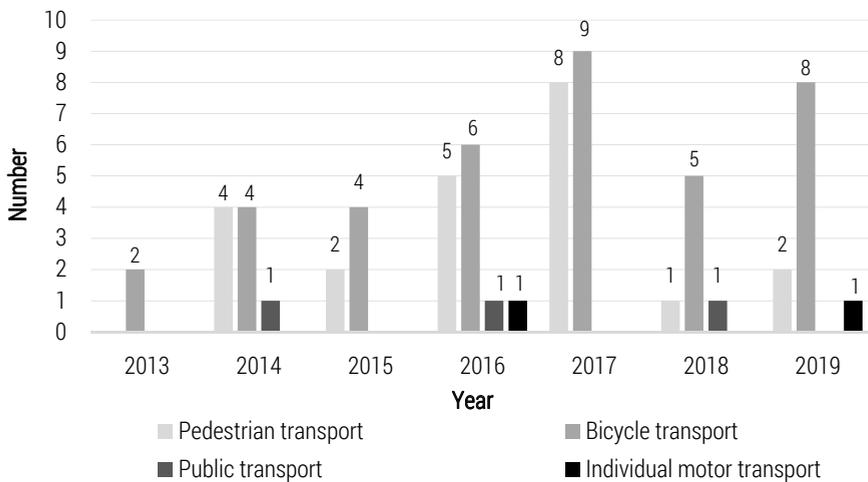


Figure 4. Transport projects selected for implementation under the Poznań participatory budgeting in the years 2013-2019, as per category

Source: author's own work.

Conclusions

The research findings reveal that residents of the city under analysis show a lot of interest in improving the existing transport systems. City residents manifest their interest in two ways. First, they submit a great number of projects to be implemented under the participatory mechanism. Second, transport projects win huge support of residents in public vote. The large number of projects showcases the big role played by local leaders as well as formal and informal residents' associations. Thanks to their activity and

mobilization a lot of projects that fulfil the postulates of residents in terms of bettering city transport systems can be implemented under the participatory budgeting mechanism. Furthermore, a great number of votes cast by city dwellers on transport projects shows how important improvement in transport systems is to them. The analysis findings show also that transport projects take a bigger proportion of projects selected by vote (23%) among all the projects sent to implementation than all the projects submitted (21%). The findings show an increasing demand for active leaders who would verbalize the needs of city residents by drawing up projects that showcase their expectations in terms of improving city transport systems.

The projects submitted and selected under the Poznań participatory budgeting meet explicitly the transport postulates formulated by the UN Agenda for Sustainable Development (Goal 11, Target 2). The projects most often submitted and most often selected reflect the expectations of city residents with regard to the development and extension of bicycle and pedestrian paths. The development of bicycle paths is instrumental in the residents' safe cycling around the city. The readiness of bicycle paths encourages city dwellers to change their daily commuting routine in terms of their travelling to and from work as well as leisure activities. Thus, the development of bicycle paths helps reduce the impact that individual motor transport exerts on the environment. Road safety standards are also raised thanks to the numerous investment projects covering pedestrian transport. The development, extension and repairs of pavements contribute to improving safety and comfort of life of the groups listed in the Agenda as particularly vulnerable, i.e. children, the elderly, and the disabled.

Interestingly, the projects on individual motor transport are enjoying a relatively little interest on the part of city dwellers. Over the period under analysis, only two projects of that type were selected. Both were aimed at regenerating the existing road solutions, slowing down the traffic and improving safety, thus helping realize the postulates set out by the United Nations.

Of the four transport categories under analysis, public transport is the category that failed to gain any significant support that would be otherwise possible through the implementation of the submitted and selected projects under participatory budgeting. In the period under analysis, only three projects of that type were implemented. Public transport is managed by independent private business operators at operational level. Apparently, city residents' believe they have no influence on changing any solutions in this respect. However, the actual provider of public transport, responsible for its development and any changes at the strategic level is city authorities with residents having a real influence on their decisions. Changes in this area

would only be possible if the leaders of local communities became more active and made city dwellers more aware of their right to have their postulates realized by city authorities.

In the light of the above presented study findings, participatory budgeting can be regarded as an effective mechanism for implementing the postulates of the UN Agenda for Sustainable Development in terms of transport systems. The needs and expectations of the self-organizing local communities are in line with the postulates of the Agenda. Because the study findings are rather narrow – they only cover the case of a single city – it is hard to make any broader conclusions. The theses put forward in this study will be only verified if the research can be also conducted in more cities in Poland and other economic and political systems.

The contribution of the authors

Arnold Bernaciak – 50% (conception, data acquisition, data analysis, interpretation discussion).

Anna Bernaciak – 50% (literature review, data analysis, interpretation, discussion).

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