

DEVELOPMENT PATHS OF PPP PROJECTS ON ROAD CONSTRUCTION IN POLAND AS A PART OF THE SUSTAINABLE ENVIRONMENT

W. Bugajski

*SGH Warsaw School of Economics, Collegium of Socio-Economics,
Warsaw, Republic of Poland
Wojciech.Bugajski@doktorant.sgh.waw.pl*

The Polish economy needs investment-this is the diagnosis in the Strategy for Responsible Development. The goal of the Government of the Republic of Poland is a 25% investment share in GDP in 2030. To be able to implement it, Poland needs various sources and methods of financing.

An important assumption in the analysis is the assumption that PPP is the most optimal tool for implementing road projects in the situation of investment financing with limited possibilities of the state budget.

Keywords: PPPs, economy, budget, economic policy, economic development, sustainable environment.

Introduction

The main purpose of this report is to analyze good practices in the implementation of road projects in Canada and on the other hand in Spain under the Public-Private Partnership formula in the context of the possibility of using this model in Poland on the sociology and political point of view. Based on economic science, research is carried out on the links between public investment decisions and responsibility, as is recognized by K. G. Sobiech-Grabka, intergenerational. There are no questions such as whether a public investment (including in the infrastructural sector) should be taken, knowing that its offset effects will be detrimental to successive generations? Why is the decision-making process not accompanied by deeper ethical reflection? [Sobiech-Grabka, 2019]. The current use of the funding opportunities for projects in the economy in Poland using the Public Private partnership model [PPP] is insufficient and oscillating at an unsatisfactory level. The support of EU funds is largely supported by investment activities, but it is also necessary to contribute to these projects.

Definition of the Public-Private Partnerships

Based on the literature on the subject, one can put forward the thesis that although there are a lot of definitions of the PPP itself, nevertheless, there is no single universal definition that would be widely used [World Bank, 2017].

Public-Private Partnership in Canada as a case studies

Research by the Canadian Statistics Office shows that Canada has very good economic results. This is evidenced by macroeconomic data. The Canadian economy grew in the second quarter of 2017 faster than expected by the market and recorded the best period of 12 months for a decade. Canada's GDP index increased by 4.5 per cent. in the second quarter on an annual basis of up to 1.85 CAD [Bugajski, 2018].

PPPs projects in Spain. Lessons for Poland

Perthus Tunnel Railways – case in Spain

In October 1995, Spain and France signed an international agreement to construct and operate the cross-border section of the high-speed rail (HSR) line designed to connect both countries across the Pyrenees. The Figueres-Perpignan line is 44.4 km long, of which 19.8 are in Spain and 24.6 in France [Observatorio hispanofrances de trafico en los Pirineos, 2008]. In terms of the public works involved, the most challenging section was the 8.3-km, twin-bore tunnel (Perthus Tunnel). To execute the work and operate the line, the participation of the private sector was foreseen. It was established that the concessionaire would receive subsidies from both States, as well as from the EU.

The public-private partnerships in Poland

Public-Private Partnership (PPP) projects harness both the public and the private sector to provide goods and services which are conventionally supplied by the public sector while easing the stringent budgetary constraints placed on public expenditure. Since the 1990s, 1 749 PPPs worth a total of 336 billion euro have reached financial close in the EU. Most PPPs have been implemented in the field of transport, which in 2016 accounted for one-third of the entire year's investment, ahead of healthcare and education.

Summary

According to the European PPP Expertise Centre (EPEC), 1 749 PPP projects worth a total of 336 billion euro reached financial close in the EU PPP market between 1990 and 2016. Before the financial and economic crisis, the PPP market was experiencing a sharp increase in volume, but since 2008 the number of new PPP projects has decreased considerably. In 2016, the aggregate value of the 64 PPP transactions that reached financial close

in the EU market was 10.3 billion euro. Most projects were in the transport sector, which accounted in 2016 for one-third of all PPP investment, followed by the healthcare and education sectors. The analysis of selected examples of investment tasks carried out in Canada in the Public-Private Partnership model perfectly justifies the thesis put forward in this study, namely that PPP is an optimal tool for the implementation of infrastructure projects in the situation of seeking off-budget financing of road projects.

BIBLIOGRAPHY

1. *Abou-bakr, A. Managing Disasters Through Public-Private Partnerships / A. Abou-bakr. – Washington : Georgetown University Press, 2013. – P. 32–34.*
2. *Bugajski, W. Partnerstwo publiczno-prywatne w sektorze drogowym / W. Bugajski // Budownictwo i Prawo. – 2019. – № 1. – S. 37–41.*
3. *Bugajski, W. Partnerstwo publiczno-prywatne w Kanadzie. Lekcje dla Polski / W. Bugajski // Biuletyn Polskiego Towarzystwa Ekonomicznego. – 2018. – № 4(83). – S. 35–43.*
4. *Bugajski, W. Co dalej z partnerstwem publiczno-prywatnym w drogownictwie? / W. Bugajski, A. Woźniak // Budownictwo i Prawo. – 2018. – № 4. – S. 5–8.*
5. *Chinchilla, M. El nuevo contrato de colaboración entre el sector público y el sector privado / C. Chinchilla // Revista Española de Derecho Administrativo. – 2006. – № 132. – P. 609–644.*
6. *Delmon, J. Public Private Partnership Programs: Creating a framework for private sector investment in infrastructure / J. Delmon. – Toronto : Kluwer, 2014. – P. 328.*
7. *Jachowicz, A. Partnerstwo publiczno-prywatne narzędziem efektywnej realizacji zadań publicznych / A. Jachowicz. – Warszawa : Wydawnictwo Difin, 2016. – S. 245.*
8. *Mączyńska-Ziemecka, E. Economy in the conditions of impermanence / E. Mączyńska-Ziemecka // PTE. – 2011. – № 2. – P. 40.*
9. *Canada. – URL: <http://www.p3canada.ca>. – Date access: 10.05.2019.*
10. *Sobiech-Grabka, K. G. Public-private partnership as a method of internalisation of intergenerational Responsibility / K. G. Sobiech-Grabka. – Warszawa : CeDeWu, 2014. – P. 10–11.*
11. *The Public-Private Partnerships Law Review – Edition 4. – URL: <https://thelawreviews.co.uk/edition/the-public-private-partnerships-law-review-edition-4/1168081/spain>. – Date access: 23.10.2018.*

The author declares that the article was created using their own financial resources.

DEVELOPMENT OF ENVIRONMENTAL LITERACY AMONG THE STUDENTS OF BIOLOGY DEPARTMENT AT THE BELARUSIAN STATE MEDICAL UNIVERSITY

A. Butvilovsky, V. Grigorovich, V. Butvilovsky

*Belarusian State Medical University,
Minsk, Republic of Belarus
alexbutv@rambler.ru*

Annotation: one of the tasks of the Biology Department in the educational institution "Belarusian State Medical University" (BSMU) is the ecological education of future doctors which is carried on according to the program of the discipline "Medical biology and General genetics". Many topics of the program contain the ecological issues and problems of ecological ethics. Current educational problems of the mentioned aspects are discussed in the article.

Keywords: medical biology, ecological literacy, environmental literacy, teaching ecological disciplines in English, medical ecology.

Currently, the main problems of the health care system are the increase in the number of non- non-infectious diseases (including hereditary disorders), the deterioration of the overall health state of the nation, the increase in health risk factors, which leads to physical disability, permanent disability and increased mortality. An important role in this is played by environmental problems caused by environmental pollution, deforestation, irrational consumption of natural resources, the use of chemical and toxic substances, heavy metals, radioactive substances. This fact significantly increases the requirements for environmental literacy of doctors.

Objectives of environmental education of medical students are: the formation of knowledge about environmental problems and ways of their resolution; formation of motives for ecologically regardful behavior and healthy lifestyle; development of intellectual and practical skills allowing to assess and comprehend the im-