



Funded by the  
Erasmus+ Programme  
of the European Union



**Environmental Knowledge and Policy Innovation  
between East and West.  
Lessons Learned and not?**

**Open Science Conference  
Proceedings**

**May 28–30, 2019**

**Minsk, Belarus**

РЕПОЗИТОРИЙ БГАГУ



UDC 504.75 (043)  
LBC 20.18  
A12

The book is published in the frame of the project  
553439-EPP-1-2014-1-RU-EPPJMO-MODULE «Governance of  
natural resources — EU experience and challenges for Russia»  
(Erasmus+, Jean Monnet modules)

A12     **Abstracts Proceedings of the Conference “Environmental  
Knowledge and Policy Innovation between East and West.  
Lessons Learned and not”.** Minsk, Varaksin A.N., 2019. 144 p.  
ISBN 978-985-7220-23-6

This volume includes abstracts of papers accepted to the  
conference “Environmental Knowledge and Policy Innovation between  
East and West. Lessons Learned and not” (Minsk, May 28-30, 2019) as  
well as the summaries of keynote speeches. Conference contributions  
provide a comprehensive overview of the challenges in environmental  
knowledge transfer between the EU and its Eastern neighborhood  
region, and discuss the implications for environmental management,  
governance, research and education in Eastern Europe and Russia. They  
also reflect on how global policies on sustainable development, such as  
the Sustainable Development Goals impact the transfers or context.

The proceedings include 74 scientific abstracts from 20 countries.

UDC 504.75 (043)  
LBC 20.18

ISBN 978-985-7220-23-6

© SSPA "SPC OF THE NAS OF  
BELARUS ON BIORESOURCES",  
2019  
© Publisher A.N Varaksin, 2019



Co-funded by the  
Erasmus+ Programme  
of the European Union

The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

Репозиторий БарГУ

## Table of contents

<b>Keynote talks</b> .....	<b>11</b>
LESSONS LEARNED AND LESSONS TO BE LEARNED: WHO AND FROM WHOM WILL BE LEARNING AND WHAT WILL BE TAUGHT IN THE NEXT 25 YEARS? <i>R. Mnatsakanian</i> .....	11
THE EUROPEAN LANDSCAPE CONVENTION AT 20 – REFLECTIONS AND OPPORTUNITIES FROM LANDSCAPE PLANNING PROCESSES IN ITALY <i>D. La Rosa</i> .....	12
ENERGY TRANSITIONS IN A FRAGMENTED WORLD <i>A. Cherp</i> .....	13
INTRODUCTION TO THE INTERGOVERNMENTAL SCIENCE-POLICY PLATFORM ON BIODIVERSITY AND ECOSYSTEM SERVICES (IPBES) AND OPPORTUNITIES/CHALLENGES FOR STAKEHOLDER PARTICIPATION <i>M. Timpte</i> .....	14
THE PROJECT TEEB-RUSSIA: MAIN RESULTS AND PROSPECTS <i>E. Bukvareva</i> .....	15
<b>Panel 1. Governance of urban nature-based solutions: challenges and opportunities in policy, planning and practice</b> .....	<b>17</b>
THE SIGNIFICANCE OF LANDSCAPE AND RECREATIONAL TERRITORIES FOR THE ALLOCATION OF NATURAL FRAMEWORK IN CITIES <i>E. Sanets, V. Khomich, L. Krauchuk, M. Struk</i> .....	18
ASSESSMENT OF URBAN ECOSYSTEM SERVICES IN GERMAN CITIES <i>K. Grunewald, R.-U. Syrbe</i> .....	19
NATURE-BASED SOLUTIONS FOR SUSTAINABLE AND RESILIENT URBAN FABRIC: AN INDIAN SMART CITIES EXPERIENCES <i>S. K. Mandal</i> .....	20
GOVERNANCE OF URBAN NATURE-BASED SOLUTIONS: LESSONS FROM PUBLIC-, PRIVATE-, AND COMMUNITY-LED INITIATIVES IN GYÖR, HUNGARY <i>A. Katona</i> .....	22
EVALUATIONS AND MODERN URBAN REVITALIZATION STRATEGIES FOR UNIVERSITY CAMPUS IN CITY CENTRE <i>M. Čibík, R. Štěpánková</i> .....	24
MINSK SCHEMES OF THE PUBLIC GREEN AREAS – AN EXAMPLE OF VIOLATING THE LAW <i>D. Tushinsky</i> .....	25

DEVELOPMENT URBOSYSTEMS OF THE CITY OF BARANAVICHY <i>U. Zuyeu</i> .....	26
ANALYZING THE SPATIAL EQUITY OF THE BENEFITS OF NATURE BASED SOLUTIONS <i>D. La Rosa</i> .....	28
THE NEED TO ACCOUNT GEOLOGICAL FACTORS WHEN PLANNING URBAN TERRITORIES <i>M. Kalinin</i> .....	29
GEOGRAPHIC FEATURES OF ZERO-EMISSIONS URBAN MOBILITY: ELECTRIC BUSES IN MINSK, BELARUS <i>A. Bezruchonak</i> .....	30
ECOSYSTEM SERVICES ASSESSMENT – AN INNOVATIVE APPROACH TO THE SPATIAL PLANNING AND LANDSCAPE MANAGEMENT (CASE STUDY SLOVAKIA) <i>Z. Izakovičová, P. Mederly, J. ŠpuleroVá, P. Bezák</i> .....	31
ECOTOURISM AND SUSTAINABLE DEVELOPMENT <i>T. Freude</i> .	32
<b>Panel 2. Bottom-up governance in the cross-border contexts</b> .....	<b>34</b>
MODES OF REGIONAL ENVIRONMENTAL GOVERNANCE IN SITUATIONS OF PLURI-REGIONALITY AT THE RUSSIA-EUROPE INTERFACE <i>E. Koritčenko</i> .....	34
ENVIRONMENTAL ASPECTS OF EUROPE-RUSSIA CITY- TWINNING PROJECTS: THE CASES OF NARVA-IVANGOROD, IMATRA-SVETOGORSK AND KIRKENES-NICKEL <i>A. Sergunin</i> ..	36
AN EMERGING CROSS-BORDER REGION AROUND THE TRANSBOUNDARY RAMSAR SITE "OLMANY-PEREBRODY" <i>V. Kireyeu, A. Sidorovich, D. Grummo, N. Zelenkevich, A. Shkaruba, V. Ustin, A. Lukashuk, R. Zhuravchak, V. Fenchuk, E. Shushkova, V. Dombrovski</i> .....	37
SETOMAA: A LAND CUT BY THE BORDER <i>A. Manakov, T. Vasileva</i> .....	39
LAKE PEIPUS AND ITS ISLANDS ACROSS THE EU-RUSSIA BORDER: THE CASE OF PIIRISSARE, ESTONIA <i>J. Kliimask</i> .....	40
<b>Panel 3. Wildlife governance between East and West</b> .....	<b>41</b>
WOLVES IN BELARUS – FROM PERSECUTION TOWARDS MANAGEMENT PLANNING <i>V. Fenchuk</i> .....	41

## DEVELOPMENT URBOSYSTEMS OF THE CITY OF BARANAVICHY

*Uladzimir Zuyeu*

*Baranavichy State University, Baranavichy, Belarus  
nerush.ec@gmail.com*

In our research dynamics urbosystems the industrial city is considered. An example is the city of Baranavichy. It is in Belarus, in the Brest region, in Shchara river basin (the basin of the Baltic Sea).

Short characteristic of the environment providing development of the city is given. The main feature of the city is that it long time since foundation in 1871 as the railway station, developed as two settlements around railway stations. Systematic development of this settlement began only since 1920.

Now the territory of the city is characterized by the big area in the downtown of the individual housing estate. All modern inhabited residential districts are on the periphery in relation to the center. The territory of the city is compressed from the North by E30/M1 thoroughfare, from the South – military airfield.

The city represents the difficult ecosystem uniting natural components with artificial constructions and planning elements. In borders of such urbanized territory there is an active technogenic impact on all natural resources what leads to partial or full loss of their ability to self-recovery, and, finally, to degradation of urbosystems.

The urbanization has the most noticeable and considerable impact on a condition of atmospheric air, soils and water objects. The main sources of pollution of atmospheric air in the cities are automobile transport, the industrial enterprises, power stations.

In general understand as urbosystems spatially the limited natural and technogenic system consisting of the components creating the urban environment of human life.

The most important property urbosystems is the ability to become the center of critical condition which is expressed in constant, negative impact on the surrounding environment and oppression of all other parts of an ecosystem, and often its almost full deformation, unfitness for reproduction of a biota. At the same time the territory of influence and vital interests of an urbosystem extends at the expense of a secondary zone of pollution, increasing impact on adjacent agrarian areas, their impoverishment, alienations of biologically valuable lands in advantage urbostructures (under town-planning, technological objects and city dumps), exhaustions of raw material resources. Inside urbosystems overloads of natural protective mechanisms which degradation can generate conditions of instability of the equilibrium fluctuations of an environmental system capable to influence production, economic, social activity and degree of appeal of the city to accommodation in it are created.

Now development plans for the city of Baranavichy are directed to power – and resource-saving development, to modernization of transport and the industry, to implementation of the concept of SMART-city.

A number of the international projects, including COMMA, the project of modernization of street lighting, construction of the biogas station is implemented.