ANALYSIS OF INSTITUTIONAL AND FINANCIAL CAPACITY FOR THE MANAGEMENT OF PROTECTED NATURAL AREAS IN ROMANIA

TABLE OF CONTENTS

I. INTRODUCTION

II. CURRENT STATE OF RESEARCH

III. RESEARCH OBJECTIVES

IV. RESEARCH METHODOLOGY

1. STRATEGIC PERSPECTIVES IN THE BIODIVERSITY FIELD 2030

1.1. NATIONAL STRATEGY AND ACTION PLAN FOR BIODIVERSITY CONSERVATION 2014-2020

1.2. EUROPEAN STRATEGIC OBJECTIVES IN THE BIODIVERSITY FIELD 2020-2030

1.3. THE NATIONAL STRATEGY FOR SUSTAINABLE DEVELOPMENT OF ROMANIA 2030 - OBJECTIVE 15: TERRESTRIAL LIFE, ENVIRONMENTAL, BIODIVERSITY AND ECOSYSTEMS PROTECTION

1.4. CHAPTER SUMMARY

2. STUDY OF THE INSTITUTIONAL FRAMEWORK AND OF THE NATIONAL NETWORK FOR PROTECTED NATURAL AREAS IN ROMANIA

2.1. THE NATIONAL INSTITUTIONAL FRAMEWORK FOR THE MANAGEMENT OF PROTECTED NATURAL AREAS

2.2. THE NATIONAL NETWORK OF PROTECTED NATURAL AREAS IN ROMANIA

2.3. MANAGEMENT OF PROTECTED NATURAL AREAS ON A NATIONAL LEVEL

2.4. CHAPTER SUMMARY

3. ANALYSIS OF EXTERNAL FINANCIAL RESOURCES ALLOCATED TO BIODIVERSITY CONSERVATION FIELD - 2014-2020 PROGRAMMING PERIOD

3.1. GENERAL ASPECTS REGARDING THE FUNDING THROUGH THE POCA AND POIM OPERATIONAL PROGRAMS

3.2. ANALYSIS OF THE IMPLEMENTATION OF THE PROJECTS FINANCED THROUGH POCA

3.3. ENSURING THE MANAGEMENT OF PROTECTED NATURAL AREAS THROUGH POIM 2014-2020

3.4. ANALYSIS OF THE ABSORPTION OF EUROPEAN FUNDS ACCESSED THROUGH POIM 2014-2020: ENVIRONMENTAL PROTECTION - BIODIVERSITY CONSERVATION FIELD

3.4.1. Challenges in the implementation of the funds accessed through POIM - Priority Axis 4

3.4.2. Estimation of the likelihood of achieving the targets of the POIM program

3.4.3. Current progress in the implementation of the funds accessed through POIM - Priority Axis 4

3.5. CHAPTER SUMMARY

4. ANALYSIS OF THE DYNAMIC OF PROTECTED AREAS AND OF WOOD RESOURCES IN ROMANIA: DYNAMIC ANALYSIS AND FORECASTS

4.1. DATA AND RESEARCH METHODS

4.2. RESULTS AND DISCUSSIONS

4.2.1. Results of the analysis based on the ARMA model

4.2.1.1. Testing the stationarity of the time series regarding the "Surface of protected natural areas in Romania" indicator

4.2.1.2. Modeling the time series for the " Surface of protected natural areas in Romania" indicator

4.2.1.3. Testing the possibility of making forecasts for the surface of protected natural areas in Romania – the Box Jenkins model

4.2.1.4. Forecasts regarding the surface of protected natural areas in Romania for the 2023-2027 period

4.2.2. Results of the regression analysis

4.3. LIMITS OF THE STUDY

4.4. CHAPTER SUMMARY

5. MODELERS OF THE SURFACE VARIATION OF PROTECTED NATURAL AREAS: A BAYESIAN APPROACH

5.1. DATA AND RESEARCH METHODS

5.2. RESULTS AND DISCUSSION

5.2.1. Results of the Bayesian correlation analysis

5.2.2. Results based on graph analysis

5.3. LIMITATIONS OF THE STUDY

5.4. CHAPTER SUMMARY

CONCLUSIONS

Keywords: Biodiversity, Protected Natural Areas, Conservation, European Funds, Econometric analysis

This doctoral research explores the importance of environmental sustainable development considered as a subsystem of the economy and highlights the current challenges in the management of the natural environment. In this context, this paper aims to analyze in detail how institutional and financial capacity impacts the management of protected natural areas (PNAs) in Romania.

This paper analyzes the current challenges and shortcomings in the management of PNAs and how they influence biodiversity conservation. Based on an extensive literature review, the research highlights the complexity of the relationship between the environment, humans and economic development. At the same time, the research approach of investigating the institutional capacity to manage protected natural areas (PNAs) and the implementation of national and EU strategies suggests the need for significant improvement in ecosystem management and protection.

A central aspect of this doctoral thesis is the analysis of the management of external funds allocated through Operational Programs, such as POCA and POIM, which support the development and implementation of biodiversity conservation policies and strategies. In this context, projects that have contributed to optimizing the public policy process and improving access to information about PNAs, developing systems and mechanisms that support the sustainable use of the economic potential of these areas are analyzed.

The 2014-2020 programming period has shown complementarity and linkage with the global objectives regarding the infrastructure and the management of the COVID-19 health crisis. However, there have been delays and difficulties in achieving biodiversity protection and conservation objectives, mainly due to legislative changes.

In order to obtain practical results on the effective management of protected natural areas, the research carries out an econometric analysis of the profitability of PNA areas. The obtained results suggest that forecasting can be carried out efficiently, providing a viable tool for managing Romania's valuable natural resources. The research emphasizes the positive influence of PNA expansion on environmental protection, indicating the need for adaptive strategies in environmental management to ensure sustainability and sustainable development. At the same time, in order to identify and evaluate the impact of socio-economic and environmental variables on the extension or reduction of these areas, in different time periods, this research continues with the application of the Bayesian methods that allow the estimation of dependency relationships between the selected variables.

The results of this doctoral research show the importance of maintaining and expanding the protected natural areas for both the conservation of natural resources and the maintenance of

biological diversity. These results can serve as a starting point for the formulation of public policies leading to long-term sustainable outcomes.

Silviu Adrian Iana

Date of birth: 10/12/1992 | **Nationality:** Romanian | **Phone:** (+40) 0730058845 (Mobile) | **Email:** adrianiana92@gmail.com | **Skype:** iana.adrian |

Address: Bd. Mircea Voda, Sector 3, BUCURESTI, Romania (Home)

WORK EXPERIENCE

01/01/2024 – CURRENT Targu-Jiu, Romania
FINANCIAL MANAGER TERRAMAX

15/02/2022 – 31/12/2023 Bucuresti, Romania
FINANCIAL EDUCATION SPECIALIST INSTITUTUL DE STUDII FINANCIARE

1. Identifies the needs for development and improvement of the online platform for education financial;
2. Identifies externally/internally funded programs for which ISF is eligible to apply;
3. Identifies potential educational or institutional partners for the development of the activity ISF according to the provisions of the Coordinator of the Financial Education Department;
4. Starts the steps necessary to conclude partnerships in order to develop international programs with other international organizations according to the provisions the coordinator of the Department;
5. Is responsible for the management of these partnerships proposing further developments of them, according to the requirements of the Department;
6. Plan and organize financial education events, including activities related to enrollment of participants in financial training/education programs, tracking receipt registration documents, other documents specific to the program, as the case may be;
7. Coordinates experts who are part of the partnership projects in order to achieve the objectives proposed by each partnership, according to the tasks set by the Coordinator Department / or ISF management;
8. Ensures the communication of partnerships and their results in written and online media, with the interested parties;
9. Performs documentation, study activities, according to the tasks given by the Coordinator Department / or ISF management;

12/08/2022 – 10/10/2022 Bucuresti, Romania
ASSISTANT MANAGER MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT

Assistant manager within the POCA project - Strengthening MADR's capacity to develop specific policies and regulations in order to implement a national strategic system for the traceability and integrity of agri-food products

23/07/2018 – 14/02/2022 București, Romania
CONSTRUCTION INSPECTOR STATE INSPECTORATE IN CONSTRUCTIONS

01/12/2017 – 20/07/2018 Bucuresti, Romania
ADVISOR TO THE VICE PRESIDENT THE COURT OF ACCOUNTS

01/10/2016 – 01/12/2017 Targu-Jiu, Romania
ENGINEER SC TERRAMAX SRL

Analysis of technical and economic documentation for the execution of construction works
Programming and management of civil, industrial and agricultural construction works
Monitoring the completion of the works and the fulfillment of the quality requirements imposed by the specifications

01/06/2016 – 01/10/2016 Targu-Jiu, Romania
ECONOMIST SC TERRAMAX SRL

Performing economic-financial analyses, calculating economic-financial indicators. Preparing statements for various institutions for which the company had declarative obligations.

EDUCATION AND TRAINING

01/10/2018 – CURRENT București, Romania
PHD CANDIDATE Bucharest Academy of Economic Studies

01/10/2017 – 01/10/2020 BUCURESTI, Romania
MASTER`S DEGREE Technical University of Civil Engineering of Bucharest

01/10/2015 – 01/07/2017 Targu-Jiu, Romania
MASTER`S DEGREE Titu Maiorescu University

01/10/2012 – 10/06/2016 BUCURESTI, Romania
BACHELOR`S DEGREE Technical University of Civil Engineering of Bucharest

Competente in domeniul constructiilor (inginer constructor) dobandite prin absolvirea unei facultati de specialitate. Competente in domeniul managementului si marketingului prin specializari post universitare.

Field of study Inginerie şi tehnici înrudite

01/10/2012 – 04/05/2015 Targu-Jiu, Romania
BACHELOR`S DEGREE Titu Maiorescu University

15/09/2008 – 25/05/2012 Targu-Jiu, Romania
BACCALAUREATE DIPLOMA VIRGIL MADGEARU COMMERCIAL COLLEGE

LANGUAGE SKILLS

Mother tongue(s): **ROMANIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	B2	C1	B2	C1	B2
FRENCH	A2	A2	A2	A2	A2

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user

DIGITAL SKILLS

European Computer Driving Licence (ECDL) : Microsoft Office (Word, PowerPoint, Excel) | AutoCad și BricsCad

ORGANISATIONAL SKILLS

Organizational skills

Management and negotiations skills

COMMUNICATION AND INTERPERSONAL SKILLS

Communication and interpersonal skills

- team communication
- active listening

SKILLS ACQUIRED AT WORK

Skills acquired at work

- solving problems
- resistance to stress
- managing projects and following the good progress of things