Development of the Nature-Reserved Fund of Ukraine on the Basis of the Best Polish Experience

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Abstract: Nature loss presents risks to future human prosperity and well-being of all nations. That is why every nation, sector and person play a key role in protecting the nature. Taking into account the fact that nature protection is a global problem, adaptation of national standards with European directives will make it possible to unify the financial support for the development of natural-protection fund (NPF) in Ukraine. Today the priority direction of Ukraine's foreign policy is the ratification of the agreement with the EU, the harmonization of national legislation on the nature protection preservation with European directives. COVID-19 and other high-threat destabilizing factors combine to constitute to the negative impact on economic condition of the EU states. The main objectives of this work are to integrate different knowledge and research from diverse sectoral, geographical, historical, political, managerial and institutional perspectives and to develop an efficient system of preserving ecosystems, in particular to implement of international experience and to improve the socio-cultural development level of Ukraine in the context of sustainable development. The object of study is nature-protected fund as the country's national wealth, while the subject of study is the process of development of Ukraine's nature-protected fund on the example of Poland's financing and positive experience under the conditions of climate change. The factor analysis of indicators on financing of NPF in Ukraine and Poland has been carried out. The main factors of NPF financing efficiency in the Republic of Poland and Ukraine have been compared. The main problems of state financing of nature-protected fund in Ukraine have been revealed. The measures to improve state financing of nature-protected fund in Ukraine on the best Polish experience base have been proposed. The correlation-regression modeling of environmental expenditures conducted in the work allowed to identify certain reserves for improving the economic and financial indicators of nature conservation in Ukraine in the long run to offset the negative impact of the COVID-19 pandemic. Furtheremore, on the basis of correlation-regression analysis between current environmental costs and innovation costs, conclusions were made on the effectiveness of environmental costs in Ukraine.

Keywords: Nature-Reserved Fund, Economy, Covid-2019, Development, Correlation-Regression Analysis

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Introduction

Nature loss presents risks to future human prosperity and well-being of all nations. Today there must be comprehensive, worldwide efforts for protecting and restoring nature. The nature-reserved fund (NPF) ensures human life, maintains the ecological balance of territories and creates a safe ecological environment. Only losses of all pollinators (including moths, bees, butterflies and other insects) would lead to a drop in annual agricultural output of about US$ 217 billion []. To prevent losses from the destruction of the nature reserve fund by 2030, the world's total annual cost of maintaining ecosystems should be about $ 800 billion. This means that the deficit of funding for the conservation of the nature reserve fund in the coming years will be about $ 700 billion a year. Today, not all countries are ready to spend such funds on nature conservation. That is why, every nation, sector and person play a key role in protecting the nature.

The main objectives of this work are to integrate different knowledge and research from diverse sectoral, geographical, historical, political, managerial and institutional perspectives, and to develop an efficient system of preserving ecosystems, in particular to implement international experience and to improve the socio-cultural development level of Ukraine in the context of sustainable development. The *object* of study is nature-protected fund as the country's national wealth, while the *subject* of study is the process of development of Ukraine's nature-protected fund on the example of Poland's financing and positive experience under conditions of climate change. The main *purpose* of this article is to compare the economic impact of current expenditures on environmental protection in Ukraine and Poland with the main economic indicators of innovation spending in the country and assess their impact on the economy as a whole and nature protection in particular.

Theoretical premises

The state of the environment has always worried the great minds of the planet. After all, the future of each person depends on the state of nature. The famous scientist of ancient times, Cicero, emphasized the «great power of nature» (Cicero, 2022). And Charles-Louis Montesquieu said: "Nature always acts slowly and economically in its own way" (Montesquieu, 2022). Prominent people appreciated the power of the forces of nature.

Many famous quotes and sayings of great people about the need to preserve nature have become textbooks. For example, J. Goethe said: «Nature is always right. Mistakes happen because of people's actions» (Goethe, 2022). Indeed, everyone feels how harmonious the laws of nature are. It is the responsibility or vocation of modern man to preserve nature as pristine. Most importantly, it is necessary for the existence of humanity itself.

Methodology

The methodological basis of the study are the publications of domestic and foreign scientists in the field of nature reserves and environmental protection. In particular, a significant contribution to the development of nature reserves was made by such well-known scientists as A. Jaszczak, N. Małkowska, K. Kristianova, S. Bernat, E. Pochodyła (2021); W. Zgłobicki, S. Kukiełka, B. Baran-Zgłobicka (2020); I. Shkola, T. Orehovska, V. Kozmenko (2003); O. Korkuna, I. Korkuna, O. Kulyk, (2020). The issues of financing the conservation of the nature reserve fund were dealt with by such specialists as S. Bernat (2019); A. Yakymchuk, N. Popadynets, A. Valyukh, T. Skrypko K. Levkov (2021); P. Pasierbiak (2016). However, the trajectory of financing the territories and objects of the nature-protected fund of Ukraine is still undefined. The research is based on such methods as systems theory, organization theory, dialectical and analytical methods as well as the modeling method. An interdependence between current costs for environmental protection and innovation expenditures in Ukraine (2000-2020) have been found on the basis of correlation-regression model. The selective linear regression function in this case will look like:

(1)
$$\hat{y} = b_0 + b_1 x$$

where $\hat{y}$ – estimation of mathematical expectation of the dependent variable model (number of tourists); x – independent model variable (GDP per capita); b_0, b_1 – selective regression parameters. The statistical significance of the model was tested on the basis of Fisher's and Student's criteria. The following F-statistics (Fisher's F-criteria) have been used for verification:

(2)
$$F = \frac{R^2}{1 - R^2} \cdot \frac{n - k}{m}$$

which has a Fisher distribution with degrees of freedom $v_1 = m$ i $v_2 = n - k$.

To determine the significance of which parameters of the model provide its overall statistical significance, the statistical significance of the model parameters was checked by *t*-statistics were used (Student's criterion):

(3)
$$t_{b_j} = \frac{b_j}{\sigma_{b_j}}, \; j = \overline{0,m}$$

whereas b_j – estimation of the parameter β_j of the theoretical regression, σ_{b_j} – standard error of the *j*-th parameter of the model.

The relationship between the current financing for environmental protection and innovation expenditures in Ukraine is close to linear, so in this case, as a relationship between variables, it is advisable to choose a linear function.

Literature Review

"Nature has granted the use of life like a loan, without fixing any day for repayment" – this statement of the famous philosopher and scientist Cicero has a deep meaning in our time, namely that nature gives us the basis for life – natural resources, environment and health, which are real treasures. Therefore, the preservation of nature for future generations is at the same time an indisputable condition for the existence of mankind in general.

Currently, ecotourism in Poland and Ukraine very well imbibes into sustainable tourism as a means of maintaining the social, cultural and natural environment of the community. It is worth noting that ecotourism sustainability also aims to increase the awareness and understanding of local cultures and environments through the participation of local people. J. Glenn Eugster (Nature writers and natural area, 2011) notes the importance of the line of work of professional ecologists. As the protection of our natural heritage is becoming increasingly difficult and more and more people are concerned about the loss of natural areas and species of plants and animals, it is necessary to find ways to actively involve ecologists in protecting other natural areas. By encouraging people to make personal connections with nature, environmentalists can really help change the way people feel about reserved natural areas and ultimately influence the future of these important natural systems and all their inhabitants.

The authors A. Deutz, G. M. Heal, R. Niu, E. Swanson, T. Townshend, L. Zhu, A. Delmar in their scientific work (Financing Nature, 2020) emphasize that the natural resources of the nature-reserved fund are still nonvalued financially, as a result of which the economy loses its income every year. Famous scientists E. Plambeck, G. Daily and D. Hoyt argue that any human activity reduces the quality and quantity of water flowing downstream to consumers, but maintaining natural ecosystems in good condition and managing their conservation can help ensure a clean and reliable water supply for downstream water users. By spending money on the restoration and preservation of natural ecosystems, water users can maintain a quality water supply (Water Funds, 2022).

R. Chami, T. Cosimano, C. Fullenkamp, and S. Oztosun (Nature's Solution to Climate Change, 2022) study the effect of carbon dioxide on the state of wildlife. Scientists believe that there is no time to lose in identifying and implementing new methods to prevent or reverse harm to the global ecosystem. That is why clear economic conservation measures must now be put in place, without waiting for decades, because society and our own survival can't afford to wait this long.

Results

Global financial crisis had consequences for almost every country, and resulted in serious economical losses. Unreasoned fiscal and financial politics causes collapses at the macro economical level, which lead to huge financial problems for all the economical subjects – of state and private sector. Influence of military-political instability on financial state safety has special consequences and cannot be ignored by any conditions, that is why the methodology of financial safety calculations should be adapted to modern conditions.

The environmental management instruments comprise several dozen positions. This is a diversified spectrum of detailed management instruments. There are several classifications of these instruments. The most frequently used one is divided into the following instruments: economic, administrative, legal, voluntary and instruments of social influence. Management subject is the widely perceived natural environment, i.e. the following levels of life: ecosystem, bio-geographical, species and genetic, as well as environment elements – space and land surface, wastes, atmospheric air, noise and vibrations, water, as well as pollution, radiation and ionizing radiation. The main

management instruments could be: economic entities and various organizational units, individuals, groups and communities.

Global community faces numerous threats, problems and local, regional and worldwide challenges:

- Covid-19 Pandemic,
- Debt crisis,
- The threat of global financial collapse,
- Uncontrolled demographic development,
- Poverty and social inequality as well as drug abuse and present-day civilization diseases.

The peculiarity of the system of environmental protection financing in the Republic of Poland is that each voivodship has a separate account for environmental protection expenditures, from which nature protection measures are financed. Polish National Fund for Environmental Protection and Water Management Fund has a rich financial offer tailored to the expectations of a wide range of beneficiaries: local governments, public entities, social organizations, individuals and enterprises. This National Fund conducts independent financial management, acting on the basis of the Environmental Protection Act and in accordance with the EU principle that «the polluter pays». The system of financing nature conservation involves banking institutions, public authorities and local governments, various environmental funds at various levels and foreign corporations and partners. Grant project financing is especially well developed here, which is an extremely valuable experience for the current conditions of Ukraine.

Figure 1. Characteristics of the environmental financing system in the Republic of Poland
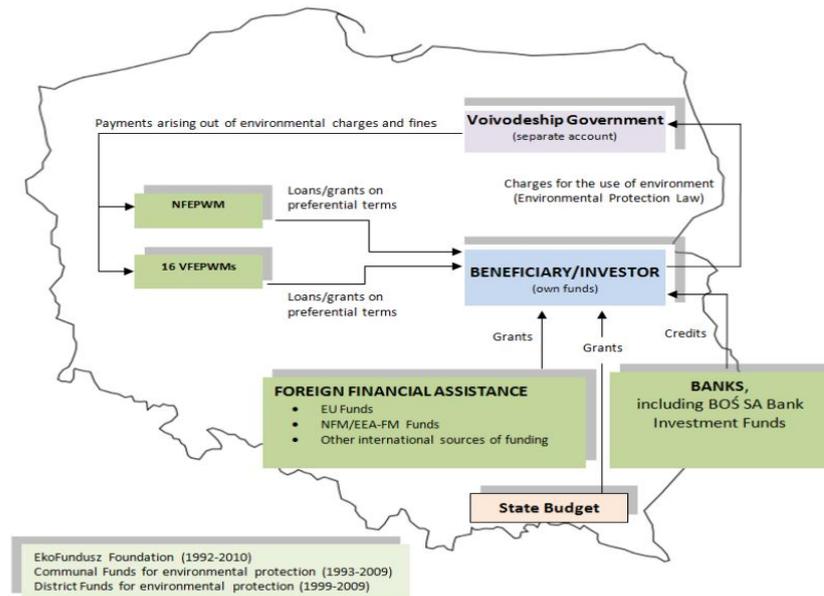
Source: adapted from data (Poland, 2019; Official Site of the European Statistics Service, 2022).

Common instruments for financing nature protection in Poland are loans, credits, grants, taxes, incentives – assistance or restrictions on the market, promotion of environmentally friendly products, preferences, trust funds. The authors compare the number of main categories of nature reserves in Poland and Ukraine, which showed that Poland has a much larger area of nature reserves and the number of nature reserves (Table 1). The number of national parks and area of forests in Poland are twice as large as in Ukraine. The number of nature monuments there are more than four times more in Poland – 36,293 objects and only 8,245 objects in Ukraine.

Table 1. Comparison of the number of objects of the nature reserve fund

Category of nature-protected fund	Poland	Ukraine
National Parks	23	49
Landscape Parks	121	81
Nature monuments	36,293	8,245
Forests constitute of the state area	30 %	15 %

Source: own work based on data from (Poland, 2019; Official Site of the European Statistics Service, 2022).

Compared to other <u>middle-income countries</u>, Poland became a high-income nation in a short time. According to the data of the World Bank, between the years 2009-2019, Poland's annual growth rate has averaged a consistent 3.6%. This is due to steadily increasing productivity, investment in human capital, strengthened institutions and

successful macroeconomic management. In 2019, Poland's GDP (gross domestic product) grew by 4.1%, spurred by higher wages and increased domestic consumption. In 2020, however, growth was dramatically reduced to 0.4%. The worldwide outbreak of COVID-19 has had far-reaching impact on Poland's economy , when businesses closed down amid a temporary border lockdown. The World Bank is provided a gradual return to growth for Poland, with growth estimated at 2.2% in 2021 and expected to be at 2% in 2022. That is why effective economic growth and positive examples of nature conservation in Poland are extremely useful and promising for Ukraine. Ukraine needs to use innovative nature conservation tools that have been effective in Poland in recent years. From these positions, a scientific and practical interest is the analysis of environmental costs in Ukraine and, accordingly, the costs of implementing innovative development, including industrial enterprises (water treatment, decontamination of air emissions and discharges into water bodies, the introduction of the use of closed environmental cycles of natural resources, etc.). Ukraine has places with unique ecosystems: Ukrainian Carpathians; Gorgany, a mountain range of the Outer Eastern Carpathians in Western Ukraine, Roztochya Biosphere Reserve, one of the hidden natural reserves in Ukraine; Medobory Natural Reserve, created for preservation and popularization of unique natural beauty; Podilski Tovtry Natural Park in Chemerivstsi; Rivne State University. Some of them offer activities, attractions, facilities and excursions in their parks and reserves, so that visitors can enjoy and learn. Sometimes the private sector can manage them more efficiently, effectively or flexibly, as foreign experience shows. It is important that the public and private sectors work together to manage professional operations in a coordinated manner and to provide these quality and innovative services to the public. Only significant investments in the nature reserve fund of Ukraine will help protect these valuable places for future generations. However, today, in order to preserve all these ecosystems, it is necessary to develop financial instruments that work well in developed countries.

In this work an interdependence between current costs for environmental protection and innovation expenditures in Ukraine in the years 2000-2020 has been described (Table 2).

Table 2. Interdependence between current costs for environmental protection and

innovation expenditures in Ukraine in the years 2000-2020

Years	Current costs for environmental protection, thousand UAH (X)	Innovation expenditure, million UAH (Y)
2000	2,618,375	1,760.1
2001	2,903,747.3	1,979.4
2002	3,080,131.5	3,018.3
2003	3,361,979.5	3,059.8
2004	4,152,245.6	4,534.6
2005	5,313,588	5,751.6
2006	5,172,413.1	6,160.0
2007	66,10318	10,821.0
2008	8,444,589.9	11,994.2
2009	8,032,734.5	7,949.9
2010	10,366,565.5	8,045.5
2011	12,039,439.5	14,333.9
2012	13,924,654.3	11,480.6
2013	14,339,060.4	9,562.6
2014	13,965,726	7,695.9
2015	16,915,535.2	13,813.7
2016	19,098,224.8	23,229.5
2017	20,466,423.3	9,117.5
2018	24,317,991	12,180.1
2019	27,480,190.3	14,220.9
2020	28,092,551.9	14,406.9

Source: own work based on data from (State Statistics Service of Ukraine, 2021).

It was found that increasing the cost of nature protection increases the cost of innovation, i.e. preventive measures, instead of just eliminating the negative consequences. The results of the verification of the model of dependence current costs for environmental protection and innovation expenditures in Ukraine (2000-2020) are presented in Table. 3.

Table 3. Regression statistics and model values

Regression statistics of the model					
Multiple R		0.735389037			
R-square		0.540797035			
Normalized R-square		0.516628458			
Standard error		3.654967366			
Observations		21			
Indicator	df	SS	MS	F	Significance F
Regression	1	298,916,733	298,916,733	22.37603948	0.000145611
The rest	19	253,816,942.5	13,358,786.45	Fcr	4.380749692
Total	20	552,733,675.5		tcr	2.093024054
Standard error	t- statistics		P- Meaning	Lower 95%	Upper 95%
1,431.437285	b_0=2.56284135		0.019033056	672.5139939	6,664.579333
9.95689E-05	b_1=4,.730331858		0.000145611	0.000262594	0.000679394

Source: calculated by the authors.

Since Fisher's criterion is F=22.376, which is more than its critical value of F_{cr} =4.38, the model is adequate and statistically significant. Since the values of b_0=2.56284135 and b_1=4.730331858 are greater than its critical value, t_{cr}=2.09, this also confirms the adequacy and significance of this regression model. To find estimates of the parameters of the model b_0, b_1 used the value of the current costs for environmental protection and innovation expenditures in Ukraine for the years 2000-2020 (Table 2). As a result of calculations, the values of the model parameters were obtained b_0=2.56284135; b_1 = 4.730331858.

The economic interpretation of the model is that with the increase of current expenditures on environmental protection in the country as a whole, the expenditures on ecological innovations in Ukraine also increase, which is an extremely positive phenomenon. As a result, it increases the chances for the effectiveness of nature conservation, the formation of adequate preventive measures in nature protection. Accordingly, the correlation model obtained in this study of the dependence of current expenditures on environmental protection and innovation expenditures in Ukraine has the form:

$$Y= 4.7303x +2.5628$$

The correctness of the choice of the model structure of the dependence of current costs on environmental protection and innovation costs in Ukraine was assessed on the basis of statistical testing of the model for significance, adequacy and quality. Determination and

correlation coefficients have been used to assess the quality of the constructed model. The statistical significance of the model was tested on the basis of Fisher's and Student's criteria.

To assess the adequacy of the model with statistical data, the value of the coefficient of determination R^2 has been calculated. The value of the coefficient of determination is $R^2 = 0.54$, that means that the impact of current costs for environmental protection on innovation expenditures in Ukraine (2000-2020) is quite significant. The degree of closeness of the linear relationship between the model variables was estimated using the correlation coefficient. Based on the value of $r = 0.73$, it was concluded that there is a close linear relationship between the indicators of the model.

According to the statistical tables of Fisher's F-distribution (Pryshchepa, 2020) at a given level of significance $\alpha = 0.05$, the critical value of Fisher's criterion $F_{cr} = 4.3808$ has been found. Because the actual value of Fisher's criterion ($F_f = 22.376$) is more than critical, this indicates the statistical significance of the constructed model as a whole and its adequacy. According to the selected level of significance $\alpha = 0.05$ and degrees of freedom according to the statistical tables of Student's t-distribution, the critical value of Student's criterion $t_{cr} = 2.09302$ was found. Since $t_{b0} = 2.5628$ and $t_{b1} = 4.73$ are greater than t_{cr}, we concluded the statistical significance of the parameters b_0 and b_1. The results of the verification of the model of dependence of the current costs financing for environmental protection and innovation expenditures in Ukraine indicate the adequacy of the model to statistics and the existence of a close linear relationship between its variables, as well as the significance of the model as a whole and its parameters.

In this paper, the authors summarize the state of the nature-preserved fund of Ukraine in order to implement the best Polish experiences. The results of the analysis are represented in Table 4. The target value of the nature reserve in Ukraine was 10.8% of the state area by 2021, but this value was not reached and today it is only 6.8%. The forestry target in Ukraine, set for 2021, is 17%, but now it is lower and amounts to 15.9%. According to experts, timber reserves in forests amount to 2.1 billions of cubic meters. The area of agricultural lands of extensive use (hayfields, pastures) in 2000 was 2.36 million hectares, but this is three times less than the established target – 8.4 million hectares. In Ukraine the share of research and development expenditures in GDP is only 0.4%, which is three times

less than the target of 1.5% and five times less than in the Republic of Poland. In recent years, a positive trend is that the area of nature reserves of national importance has increased slightly, which in 2020 amounted to 4.27% of the total territory of the country, as compared to 3.72% in 2015.

Table 4. The analysis state of the nature-reserved fund of Ukraine

Indicator	Years					
	2015	2016	2017	2018	2019	2020
The area of territories and objects of the nature reserve fund, thousand hectares	3,803.13	3,985.60	3,985.02	3,991.64	4,082.2	4,105.5
The share of the area of territories and objects of the nature reserve fund in the total territory of the country, %	6.3	6.6	6.6	6.61	6.76	6.80
The share of the area of the national ecological network in the total territory of the country, %	38.16	38.16	38.16	38.16	38.16	38.17
The forest cover of the country, %	15.9	15.9	15.9	15.9	15.9	15.9
The area of agricultural lands of extensive use (hayfields, pastures), thousand hectares	7,840.5	7,833.8	7,820.8	7,577.0	7,534.2	2,362.7
The share of research and development expenditures in GDP, %	0.55	0.48	0.45	0.47	0.43	0.41
The number of cultural and natural heritage sites included in the UNESCO World Heritage List, units, including by type of heritage:	7	7	7	7	7	7
-cultural	6	6	6	6	6	6
-natural	1	1	1	1	1	1
The area of nature reserve fund of national importance, % of the country's territory	3.72	4.10	4.10	4.10	4.24	4.27

Source: own work based on data from (State Statistics Service of Ukraine, 2021; Ministry of Culture of Ukraine, 2022).

Tourism in Ukraine has been a direction of peaceful encounters between people and cultures, it has been an important element of peace building. Now ecotourism in Poland and Ukraine very well imbibes into sustainable tourism as a means of maintaining the social, cultural and natural environment of the country. The concept of sustainability generally is one in which a new development does not damage natural, social, economic or cultural diversity. The view of sustainable tourism development has been one that uses resources

sustainably, that reduces overconsumption and waste, that maintains cultural, social and natural diversity, and that integrates tourism development into national development policy (Tkachenko T., 2006; Yakymchuk, 2017). It is worth noting that ecotourism sustainability also aims to increase the awareness and understanding of local cultures and local environments through the participation of local people. Tourism focuses on natural and mixed World Heritage Areas and tracks the extent of tourism planning. Tourism can contribute positively to nature conservation. Tourism in both terrestrial and marine protected areas depends on a healthy environment, and good planning ensures the sustainable use of these natural resources. This indicator raises awareness of the important role of tourism in nature conservation and may catalyse other types of protected areas to engage more proactively in visitor management, biodiversity protection and conservation (Tourism industry of Ukraine, 2021).

Summary, recommendations

The destruction of nature-reserved fund today is a loss not only of plants and animals. It creates enormous risks to the prosperity and well-being of the population. Science is only now beginning to correctly interpret and assess the scale of this impact, not only quantitatively, but also economically. Global loss of pollinators, including bees, butterflies and other insects that is caused by excessive use of pesticides and herbicides in the fields leads to a drop in annual agricultural production by about 217 billion dollars. First of all, this negative phenomenon is associated with such social risks as increased hunger in poor countries, which is potentially more serious, but more difficult to assess economically. Poland's growth was 2.2% in 2021 and is expected to be at 2% in 2022. That is why effective economic growth and positive examples of nature conservation in Poland are extremely useful and promising for Ukraine. Ukraine needs to use innovative nature conservation tools that have been effective in Poland in recent years.

Authors summarize the state of the nature-preserved fund of Ukraine in order to implement the best Polish experiences. The results of the analysis are show that the target value of the nature reserve in Ukraine was 10.8% of the state area by 2021, but this value was not reached and today it is only 6.8%; the forestry target in Ukraine, set for 2021, was 17%, but now it is lower and amounts to 15.9%; the area of agricultural lands of

extensive use is three times less than the established target; the share of research and development expenditures in GDP is three times less than the target and five times less than in the Republic of Poland. A positive trend is that the area of nature-reserved fund of national importance has increased to 4.27% in 2020, from 3.72% in 2015.

The correlation-regression modeling of environmental expenditures conducted in the work allowed to identify certain reserves for improving the economic and financial indicators of nature conservation in Ukraine in the long run, in order to offset the negative impact of the covid-19 pandemic. With the increase of current expenditures on environmental protection in the country as a whole, the expenditures on ecological innovations in Ukraine also increase, which is an extremely positive phenomenon. As a result, it increases the chances for the effectiveness of nature conservation and the formation of adequate preventive measures in nature protection. To assess the adequacy of the model with statistical data, the value of the coefficient of determination R^2 has been calculated. The obtained value of the coefficient of determination (R=0.54) indicates that the impact of current environmental protection costs on innovation costs in Ukraine (2000-2020) is quite significant. The degree of closeness of the linear relationship between the model variables was estimated using the correlation coefficient (R=0.73), and it was concluded that there is a close linear relationship between the indicators of the model. Furthermore, on the basis of correlation-regression analysis between current environmental costs and innovation costs, conclusions were made on the effectiveness of environmental costs in Ukraine.

Tourism is maintaining a stable development in the Republic of Poland. Even the maintenance of nature reserves increased by 32%, and these are essential for the recreation of Polish tourists, as well as the development of environmental education. Tourism has been a major economic activity in the European Union with wide-ranging impact on economic growth, employment and social development. The costs of tourism development in recent years are constantly increasing. Addressing the major challenges faced by the tourism industry of today, tourism's full economic potential requires an integrated and multi-faceted approach to tourism policy development across many government levels and departments.

Tourism has been now recognized as one of the key sectors of development in both countries and a major source of income, jobs and wealth creation. It can be a powerful tool in fighting the economic decline and unemployment. It also plays a wider role in promoting

the image and international perception of Poland and Ukraine, as well as influencing complementary domestic policies. This range of influence and importance creates challenges in measuring competitiveness in tourism. EU countries see considerable benefit in co-operating to address economic, sustainability and employment issues, and promote tourism policy performance and evaluation, innovation and liberalization of tourism. In the coming years, cooperation between Poland and Ukraine will be important in the development of tourism, which will improve the economic situation of both countries.

Conservation finance is an important task for the governments of Poland and Ukraine of today, and over the years many mechanisms have been developed and tested. To that end, rigorous approaches have been developed to determine, validate and monitor the conservation impact on nature-reserved fund. Yet, for most of the last 30 years, the discussion has been geared toward the conservation objective and focused on how to meet the financing demand for conservation programs and strategies, i.e. finding investments to activate particular conservation mechanisms and scaling them up to broader programs and eventually whole markets. Using financial incentives, payments for ecosystem services are a form of conservation finance that rewards people for maintaining these ecosystem services. In order to facilitate these transactions, the service provider must clearly define the service and secure an ecosystem which needs those particular resources. In addition, service purchasers carefully monitor the providers to ensure that conversation has been efficiently carried out. Only significant investments in the nature-reserved fund of Ukraine will help protect these valuable places for future generations. However, today, in order to preserve all these ecosystems, it is necessary to develop financial instruments that work well in developed countries.

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