

Результати / Project Results



Succow Stiftung

Implemented by



Succow
Stiftung



Centre for Economics and
Ecosystem Management



Eberswalde University
for Sustainable
Development

Under the auspices of the

biosphere.center

a partnership between

Nationale
Naturlandschaften



Succow
Stiftung



Eberswalde University
for Sustainable
Development

"Екосистемна адаптація до зміни клімату та регіональ- ний розвиток шляхом розширення можливостей біосферних резерватів України" (2018-2021)

„Ecosystem-based adaptation to Climate Change and regional development by empowerment of Ukrainian Biosphere Reserves“ (2018-2021)

Partners



Ministry
of Environmental Protection
and Natural Resources
of Ukraine



БИОСФЕРНИЙ РЕЗЕРВАТ



Біосферний резерват "Розточчя"
Biosphere reserve "Roztochya"

Supported by:



Federal Ministry
for the Environment, Nature Conservation
and Nuclear Safety

based on a decision of the German Bundestag

Nika Malazonia - Project Manager, Dr. Anatoly Smaliychuk - Country Coordinator

Цілі проекту та бажані результати Project goals and desired outcomes



Succow Stiftung

Implemented by



Succow
Stiftung



Centre for Ecnics and
Ecosystem Management



Under the auspices of the

biosphere.center

a partnership between



- I. Розширення місцевих знань про зміну клімату, її наслідки та адаптацію на основі екосистемного підходу (EbA)
Increasing local knowledge on climate change, its impacts and Ecosystem-based Adaptation (EbA) by

- II. Розвиток стратегій, людського потенціалу та мереж шляхом розширення можливостей біосферних резерватів, що забезпечить їхню провідну роль
Developing strategies, human capacities and networks by empowering biosphere reserves to assume a leading role

- III. Розробка політичних пропозицій щодо інтеграції принципів EbA в екологічне законодавство та управління довкіллям.
Working out policy proposals for integrating principles of EbA into environmental legislation and ecosystem management.

Результати проекту / Project Results



Succow Stiftung

Implemented by



Under the auspices of the



- Веб-сайт
- *Website*

- Матеріали публікацій
- *Publication materials*

- Правові дослідження, робота на політичному рівні, Заклик до дій та Полісі-бріф
- *Legal studies, Policy level work, Statement Paper and Policy Brief*

- Конкурс ідей EbA
- *EbA Idea Contest*

Веб-сайт / Web Site



**Succow
Stiftung**

A screenshot of a web browser displaying the website eba-ukraine.net. The browser's address bar shows the URL https://www.eba-ukraine.net. The page has a dark teal header with the main title "Biosphere Reserves for Climate Adaptation in Ukraine" and the subtitle "An Ecosystem-based Approach to Climate Change and Sustainable Development". There are language options "ENG" and "UKR" in the top right. A navigation menu below the header includes "Home", "About", "Challenges", "Solution Approach", "Activities", and "Media". On the right side of the menu, there are links for "Legal Notice" and "Data protection". The main content area features a large photograph of a river flowing through a lush green forest, with two people on a small wooden raft in the water. White arrow icons are visible on the left and right sides of the image, indicating it is a carousel slide.

← → ↻ 🏠 🔒 https://www.eba-ukraine.net ☆ 🛡️ ⚙️ ☆ 📁 Other favourites

Suggested Sites YouTube - new art... Commerciant umwelt gegen wass... Trockenfrüchte - De... CIM. Regionen Free Software Dow...

Biosphere Reserves for Climate Adaptation in Ukraine

An Ecosystem-based Approach to Climate Change and Sustainable Development

ENG UKR

Home About Challenges Solution Approach Activities Media

Legal Notice
Data protection

← →

eba-ukraine.net

Матеріали публікацій Publication materials



Succow Stiftung

BIOSPHERE RESERVES AND CLIMATE ADAPTATION

Volume 10: "Natural Ecosystems"

Berodnyy

DESNIANSKYI BIOSPHERE RESERVE NATURAL ECOSYSTEMS SET THE SO

Nature consists of units that perform work and process scarce resources - the ecosystems.

Ecosystems are complex systems that use energy, which is primarily received from the sun and circulates in the system. Energy is captured, transformed, stored and, above all, used to do work with it. They therefore perform work in the physical sense. They are created by living beings interacting with each other and with non-living resources as system components. Thereby, ecosystems develop properties that sustain or even promote their continued existence as self-organizing bioreactors through their interactions of their components. Results of ecosystem work are, for example, the production and growth of biomass, cooling and moistening of the landscape, and the creation of resources for many species of plants and animals. These processes and functions are inherent need for the existence of the ecosystem itself, but also are the foundation of human existence as well-being. Therefore, the conservation and development of ecosystem services is one of the



Територія хазисової у селі Воля-Старцянка

German-Ukrainian Cooperation Project: "Ecosystem-based Adaptation to Climate Change and Regional Sustainable Development by Empowerment of Ukrainian Biosphere Reserves"

<https://eba-ukraine.net/>

Biosphere Reserves and Climate Adaptation

Ecosystem-based Adaptation in Ukraine based on three UNESCO Biosphere Reserve cases



Cover picture: Water buffalo husbandry as an alternative form of land use for wetlands instead of drainage or after rewetting. Source: Copy free provided by pixabay.com

Eberswalde and Greifswald, 2021

The project is part of the International Climate Initiative (ICI) and financed by the German Federal Ministry for Environment, Nature Protection and Nuclear Safety based on a decision of the German Bundestag. The project

Henry Environmental Protection Natural Resources Ukraine



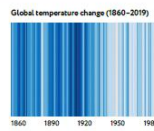
ПЕРЕФОРМУВАННЯ ХВОЙНИХ МОНОКУЛЬТУР В МІШАНЕ, РІЗНОВІКОВЕ НАСАДЖЕННЯ

ПРОБЛЕМА
В теперішній час, переважає більшість проблем пов'язаних з рекреативним управлінням лісових територій, санітарний стан лісів погіршується. Аномальні погодні умови призводять до мордів. Проблема лісів

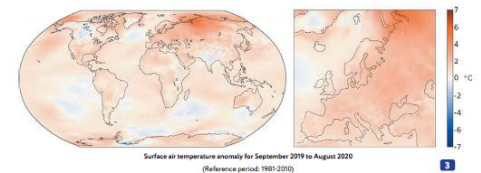
РІШЕННЯ
Підвищення санітарно-оздоровчих заходів із залученням підприємств лісового господарства, санітарний стан лісів погіршується. Аномальні погодні умови призводять до мордів. Проблема лісів

ЦІЛІ
Ціль 1. Зберегти структуру лісової ділянки та знизити ризик поширення вибіркової санітарної рубки (заповнення адекватними способами цих рубок)
Ціль 2. Сформувати під пологом

Climate Change The biggest challenge for humanity



Climate change is not a scenario anymore. Humans are increasingly influencing the climate system by burning fossil fuels, cutting down forests, and practicing increasingly intensive and large-scale agriculture. These harmful activities add enormous amounts of greenhouse gases to those naturally occurring in the atmosphere, leading, with a time lag, to global warming and other climate changes.



Surface air temperature anomaly for September 2019 to August 2020 (Reference period: 1981-2010)

Planet Earth is unique. The interplay of its properties allows water to exist on its surface in liquid form, which is essential condition for life. The globe of approximately 12,700 km thickness is surrounded by the biosphere as if it were a microscopic biotin. This fragmented and delicate film, which even in the areas of the highest forests corresponds to less than 0.0005% of the earth's diameter, contains all known forms of life.

produces our food, and thus forms the basis of our existence. The composition of the atmosphere surrounding it and the global greenhouse effect are also significantly influenced by the biosphere. The Great Acceleration For several hundred thousand years, humans have been just some of the numerous actors in this delicate biosphere layer. But it is only in the last 150 years that technological and social developments have led to the incomparably rapid growth of a wide variety of factors, which have significantly changed the state of both the biosphere and atmosphere (the small graphs show examples of some of the most important exponential developments). It becomes clear that, in the history of humankind, the last 50 years have without a doubt

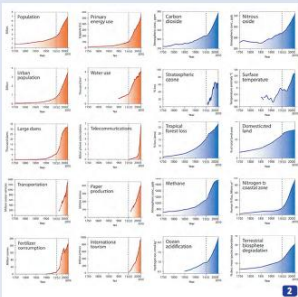
seen the most rapid transformation of the human relationship with the natural world. This escalating trend of environmental problems, which has thus become a symbol of our world today, causes not only the climate but also the global change affecting a wide range of different levels and sectors. The year 2019 was the second warmest year in the 140-year record, with global land surface temperature deviating from the average by +1.44°C. This value is 0.11°C less than the record-value of +1.52°C set in 2016 and only 0.01°C higher than the third-highest value set in 2017 and 2015 (+1.43°C). The five warmest years in the 1850-2019 record have occurred since 2015, while nine of the 10 warmest years have occurred since 2005.

pollution of air, water and soil, and the spread of invasive species. These impacts will further reduce the resilience of ecosystems to climate change as well as the capacity to deliver essential ecosystem services to humans.

(3) The new depicts global and European surface air temperature anomaly for September 2019 to August 2020 relative to the average for 1981-2010. It does not show absolute temperatures; instead, it shows how much warmer or cooler each region of the Earth was compared to that baseline average.
Data source: ERA5-Climate Copernicus Climate Change Service (C3S)

(4) Drought in European Greenhousebelt
The map shows shallow groundwater storage in Europe as of June 22, 2020, as measured by the Gravity Recovery and Climate Experiments Follow On (GRACE-FO) satellites. The colours depict the wetness prospects, that is, how the levels of groundwater compare to long-term records for the month. Blue areas have more abundant water than usual, and orange and red areas have less.
The dark red areas represent dry conditions that should occur only 2 percent of the time (about once every 50 years).
NASA Earth Observatory image by Lee DeChapin, using GRACE data from the National Drought Mitigation Center.

- (1) Warming stripes of the globe
© Bill Steinhilber (University of Reading)
Data: Berkeley Earth, NOAA, UK Met Office, MeteoSwiss, DWD, SHN, USF, Meteo France & ZAMG
- (2) The Great Acceleration Graphs
Updated version by WU Steffen et al. "The Impacts of the Anthropocene: The Great Acceleration" The Anthropocene Review, March 2015



Greenhouse gases
CO₂ is the greenhouse gas most commonly produced by human activities and responsible for 64% of man-made global warming. Its concentration in the atmosphere is currently 40% higher than at the beginning of industrialisation. As populations, economies, and standards of living grow, so does the cumulative level of greenhouse gas emissions.

ШАЦЬКИЙ БІОСФЕРНИЙ РЕЗЕРВАТ

Проекти реалізуються в рамках Міжнародної кліматичної ініціативи (ІКІ). Федеральне міністерство довкілля, збереження природи та ядерної безпеки Німеччини (BMU) підтримує цю ініціативу на основі рішення, прийнятого Бундестагом Німеччини.

Проект впроваджується Фондом Міхаеля Зуккова та Університетом сталого розвитку м. Еберсвальде з Німеччини разом з місцевими ГО.

Щоб дізнатися більше інформації про наш проект, віддайте, будь ласка, веб-сайт: www.eba-ukraine.net

Адаптація нових рослинних культур

Муніципальна природи

Екологічна парковка для авто

Сuccow Stiftung

Centre for Economic and Ecosystem Management

Eberswalde University for Sustainable Development

INTERNATIONAL CLIMATE INITIATIVE (ICI)

Сover photo © Anna Spratt

«ЕКОСИСТЕМА АДАПТАЦІЯ ДО КЛІМАТУ ТА СТАЛІЙ РОЗВИТОК І РОЗШИРЕННЯ МОЖЛИВОСТЕЙ УКРАЇНСЬКИХ БІОСФЕРНИХ РЕЗЕРВАТІВ»

ПІЛОТНІ ПРОЕКТИ,
РЕАЛІЗОВАНІ В
РАМКАХ ПРОЄКТУ
«ЕКОСИСТЕМА
АДАПТАЦІЯ ДО ЗМІНИ
КЛІМАТУ ТА СТАЛІЙ
РОЗВИТОК ШЛЯХОМ
РОЗШИРЕННЯ
МОЖЛИВОСТЕЙ
УКРАЇНСЬКИХ
БІОСФЕРНИХ
РЕЗЕРВАТІВ»

опосередковано при
доброті з покращення
вони теорії, наслідки, ч
лагули освіти, дослідж

ere center

Сuccow Stiftung

Centre for Economic and Ecosystem Management

Eberswalde University for Sustainable Development

INTERNATIONAL CLIMATE INITIATIVE (ICI)

Сover photo © Anna Spratt



- Заклик до дій (Еберсвальде 2020), розроблений спільно 26 учасниками міжнародного тренінгу «Екосистемна адаптація до зміни клімату»
- *Eberswalde Statement 2020 jointly elaborated by the 26 participants of the international training on “Ecosystem-based Adaptation to Climate Change”*

- Полісі-бріф
- *Policy Brief*

Introduction of the approach and principles of Ecosystem-based Adaptation to climate change in Ukraine's 2030 Strategy to Climate Change Adaptation

Introduction

In Ukraine, climate change has increasingly negative impacts on ecological, socio-economic, and political systems and severely alters cultural landscapes. Shifting seasons, an increasing number and severity of extreme weather events (like storms, excessive precipitation, droughts, and heatwaves, etc.) are already causing harm to people and the nature of Ukraine. For example, wildfires have been increasing not only in Europe (see Figure 1), but also globally.

Figure 1. Area burnt by wildfires in Europe. Source: Greek Reporter

While significant efforts should be made to mitigate (stop further) global warming, it is also essential for countries, including Ukraine, to start adapting to changing climate to minimize potential harm to the well-being of people.

To implement the adaptation goal of the Paris Agreement and comply with the Action Plan for the implementation of the Concept of the State Policy on Climate Change, Ukraine has to develop and approve the country's 2030 Strategy on Climate Change Adaptation (Adaptation Strategy).

In autumn 2020, the Ministry of Environment of Ukraine has restarted the process of Adaptation Strategy development and the present paper is prepared as a submission from the Ecosystem-based Adaptation (EbA)-Ukraine project to feed into the Strategy's development process.

The EbA-Ukraine project aims to **introduce the approach and principles of Ecosystem-based Adaptation to climate change in Ukraine**. We think the strategy for adapting Ukraine to climate change must consider taking care of natural ecosystems' functionality and resilience. **The regulating, provisioning, and cultural services that ecosystems provide are essential for the survival of humans and for ensuring further socio-economic development**. For this, EbA comes handy as it allows to both decrease climate-related risks for people, using the potential of natural ecosystems, and, at the same time, protect these important ecosystems and biodiversity. In this context, the regulating ecosystem functions and services are of special importance.

Within the EbA-Ukraine project, 9 EbA demonstration projects in 3 Ukrainian biosphere reserves were implemented, which are already showing promising results and can easily be replicated in other areas of Ukraine. However, strong political support is required to upscale the EbA approach beyond the project and introduce it at the national policy level, while

finding, they are equipped with a highly qualified staff, who can promote sustainable approaches to nature use, raise environmental awareness, involve the youth and locals by varied activities and environmental education programs. The BRs are home to diverse landscapes and rich in the provision of important ecosystem services, increasing the region's visibility and attractiveness. By this, they offer perspectives for investments in the sector of sustainable land use and other businesses and therefore can have a positive influence on the socio-economic development of regions.

Recommendations

Based on the above mentioned, we recommend:

- to include the approach and principles of Ecosystem-based Adaptation to climate change in the national Adaptation Strategy as the first step for further introduction of EbA approach in practice in Ukraine. The strategy should be supplemented by the Action Plan with the list of measures, which is necessary for the implementation of the Strategy and supported by sufficient financial resources and separate institutional guidance over its implementation;
- to integrate EbA related research into programs and plans within scientific research activities for biosphere reserves
- to support the development and implementation of EbA projects within the biosphere reserves, to further showcase EbA measures and collect scientific information on their effectiveness in all key ecosystems;
- to support and strengthen Ukrainian biosphere reserves and to adjust respective legal framework and regulations for matching the UNESCO MAB biosphere reserve principles and requirements (such as zoning, integrated governance, etc.)
- to introduce changes that are necessary to lay legal grounds for EbA in respective legislation and by-laws regulating nature-protected areas management, agricultural land use, forests management, and water basins management.

The policy brief was jointly developed within the project: Ecosystem-based Adaptation to Climate Change and Regional Sustainable Development by Empowerment of Ukrainian Biosphere Reserves

Implemented by:
Succow Stiftung
Center for Science and Innovation
Uberswalde University for Sustainable Development

Under the auspices of:
biosphere.center
a partnership network
Uberswalde University for Sustainable Development
Uberswalde University for Sustainable Development
Uberswalde University for Sustainable Development

Supported by:
International Centre for Policy Studies, Bonn Convention
International Centre for Policy Studies, Bonn Convention

Based on a decision of the German Bundestag

INTERNATIONAL CLIMATE INITIATIVE (ICI)

Рекомендації / Recommendations



**Succow
Stiftung**

- підтримувати розробку та реалізацію проектів EbA в біосферних резерватах, для подальшої демонстрації заходів EbA, **інтегрувати дослідження пов'язані з EbA у свої програми та плани** та збирати наукову інформацію про їх ефективність у всіх ключових екосистемах
- *to support the development and implementation of EbA projects within the biosphere reserves, to further showcase EbA measures, to integrate EbA related research into their programs and plans and collect scientific information on their effectiveness in all key ecosystems*
- підтримувати та зміцнювати **українські біосферні резервати** та вдосконалити відповідну **законодавчу базу та нормативні документи** для відповідності принципам та вимогам біосферного резервату ЮНЕСКО МAB (такі як зонування, інтегроване управління тощо)
- *to support and strengthen **Ukrainian biosphere reserves** and to adjust respective **legal framework and regulations** for matching the UNESCO MAB biosphere reserve principles (such as zoning, integrated governance, etc.)*



- **внести необхідні зміни** для створення правових основ EbA до відповідного законодавства та підзаконних актів, що регулюють управління природоохоронними територіями, використання сільськогосподарських угідь, управління лісами та водними басейнами
- ***to introduce changes that are necessary to lay legal grounds for EbA in respective legislation and by-laws regulating nature-protected areas management, agricultural land use, forests management, and water basins management***

Національний рівень / National Strategy Process



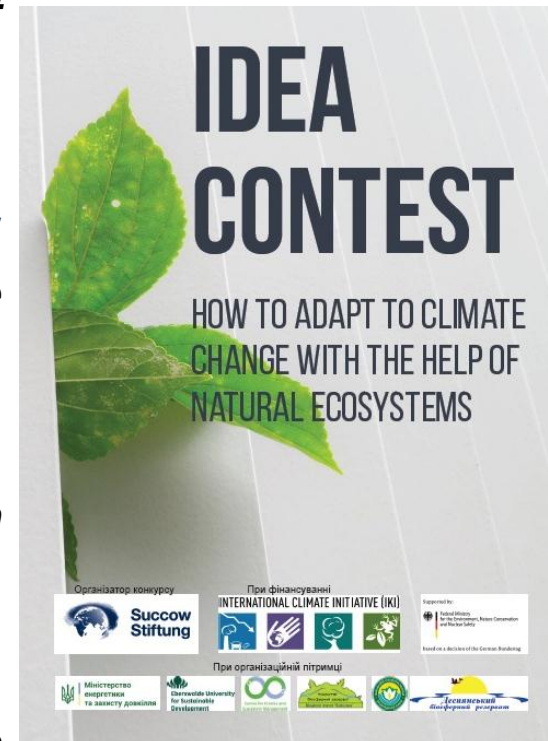
Succow
Stiftung

- Участь у розробці Стратегії екологічної безпеки та адаптації до зміни клімату до 2030 року (прийнята 20 жовтня 2021 р.) та Стратегії адаптації для сільського, лісового та рибного господарства (проект підготовлено в 2019 р.) / *Contribution to development of National Adaptation Strategy (adopted on 20 Oct 2021) and Strategy of Adaptation for Agriculture, Forestry and Fishery (draft prepared in 2019)*
- Еба, а також ПоР (подібна концепція), досі не згадуються в національних та регіональних політичних документах / *Eba, as well as NBS (similar concept), still not mentioned in national & regional policy documents*
- Проте є багато заходів, які відповідають Еба, які містяться в існуючих стратегічних документах, а також тих, що знаходяться на стадії розробки (наприклад, проект Державної стратегії управління лісами України до 2035 року) / *However, there are many measures that are in line with Eba found in existing strategic documents as well those under development (e.g. draft of National Strategy for Forest Management of Ukraine until 2035)*



Адаптація до зміни клімату на практиці / *Adaptation to Climate Change in Practice*

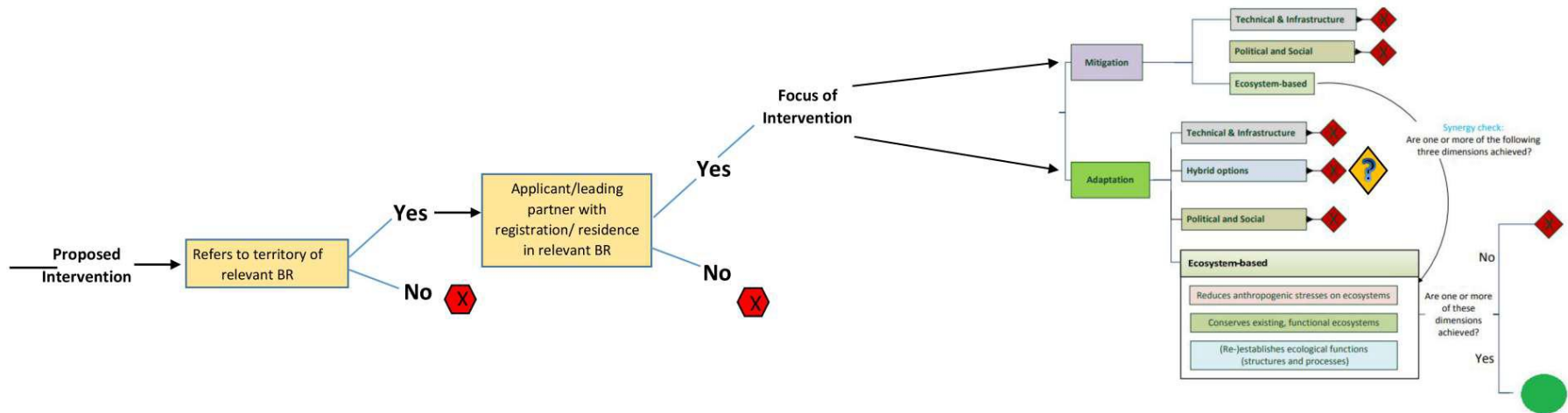
- Лютий 2020: **Запуск Конкурсу ідей** щодо EbA заходів в 3 біосферних резерватах / *February 2020: **Launch of an Idea Contest** for EbA activities in the 3 BRs*
- **Двоступенева процедура відбору** для забезпечення відповідності підходу EbA / ***Two-round selection procedure** in order to ensure compliance with Eba approach*
- Загалом отримано **29 заявок**, з яких 20 потрапили до фінального раунду оцінки / *In total **29 application** received out of which 20 passed to the final evaluation*
- Травень 2020: обрано **9 переможців** – по 3 найкращі ідеї на кожен резерват / *May 2020: **9 winners** of the contest were selected - **3 best ideas** per BR*





Процедура відбору / *Selection procedure*

1st Round of Application Assessment





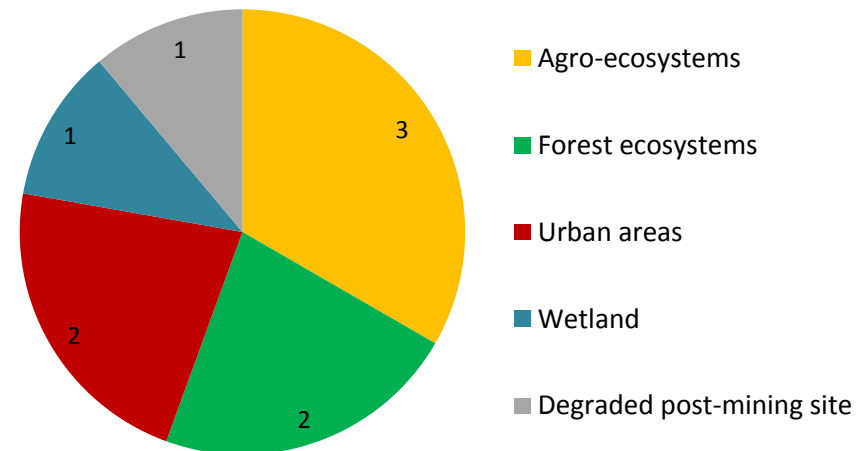
Процедура відбору / *Selection procedure*

Category	Nr.	Criteria	Max. Points
Ecosystem-based	1	Understanding of ecosystems, processes, variables	20
		Number/Amount of ecosystem types covered by intervention	15
		Enhancement of ecosystem services	15
		Usage of traditional methods/ knowledge	10
		Benefits for ecosystems from the intervention	15
Spatial	2	Size of project area	15
		Clearly defined project area	10
		Positive effects on neighbouring territories	10
		Potential to scale up the project on neighbouring territories	15
		Potential applicability on other territories	15
Political, social	3	Support from decision-makers	15
		Network of partners and stakeholders	20
		Ability to find compromises with local administration, business, stakeholders	15
		Visibility of EoA measures by practical examples	20
		Transparency of activities	15
		Potential level of acceptance	10
		Promotion of the concept of "biosphere reserve"	15
		Justice of adaptation benefits / co-benefits to vulnerable social groups	10
Economic	4	Economic benefits for region/stakeholders	20
		Opportunities for joint business/ activities	10
		Promoting (ecological) image of the BR	15
Feasibility/ Capacities	6	Feasible within the scheduled project period	20
		Professional capacities	15
		Material/ technical resources/ infrastructure	20
		Legal Capacities (ownership of land, other relevant rights)	20
		Adaptability to change	10
Cost calculation	7	Level of concreteness of cost calculation	15
		Consistency of cost calculation	15
		Cost-benefit ratio	20
		Possibility of own co-funding	10
Credibility	8	Experience in the field	15
		Formal composition of project proposal	15
Result	9	Concreteness of expected results	15
		Possibility to measure key indicators and results	15
		Potential to self-maintaining of intervention in ecosystems in a long-term perspective	15
Max. Points			525



Заявки / Applications

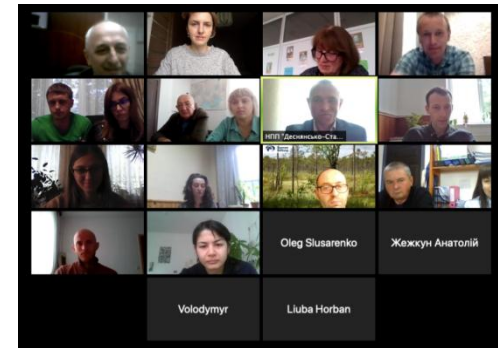
- Зазвичай подані кількома співвиконавцями / *Usually submitted by **consortium of stakeholders***
- Отримано заявки від фермерів, науковців, вчителів та викладачів, представників НГО, органів місцевої влади та простих мешканців / *Applications received from farmers, researchers, teachers, local authorities, NGO members, local citizens*
- **Соціальна складова** присутня у багатьох заявках / ***Social component** was present in many applications*





Хід реалізації / *Implementation timeline*

- Листопад-грудень 2020: Підписано контракти з переможцями Конкурсу ідей / *Nov-Dec 2020: **Contracts** with the contest winners were **signed***
- Березень 2021: Початок польових робіт з реалізації пілотних проектів / *March 2021: **start of the field work** of pilot projects*
- Постійна оцінка реалізації проектів шляхом надання звітів, регулярних он-лайн зустрічей та консультацій, а також моніторингу результатів в полі / *Regular evaluation of projects' implementation through submission of reports, on-line meetings and consultations + monitoring field visits*
- Листопад 2021: проведено підсумкові семінари за результатами реалізації пілотних проектів / *November 2021: **final workshops** on results pilot projects' implementation were held in 3 biosphere reserves*



Конкурс ідей та пілотні проекти / Idea Contest and Pilot Projects



Succow Stiftung

Публікації у медіа про пілотні проекти / *Media publications on pilot projects*

The screenshot shows a news article on the ZAXID.NET website. The article is titled "Німці допоможуть відновити українські болота" (Germans will help restore Ukrainian wetlands) and is categorized under "ПРИРОДА Й ЕКОЛОГІЯ | Європа". The author is Victoria Pryhid, and the date is 28.10.2020. The article text states: "За радянських часів болота в Україні висушували. Але користь для сільського господарства виявилась обмеженою, наслідки ж для довкілля - катастрофічними. Тепер болота хочуть відновити. Німеччина допоможе грошима." (During the Soviet times, wetlands in Ukraine were dried out. But the benefit for agriculture was limited, the consequences for the environment - catastrophic. Now they want to restore the wetlands. Germany will help with money.)

Other visible elements in the screenshot include the ZAXID.NET logo, navigation menus, a search bar, and a sidebar with a "СТРІЧКА" (Feed) section containing a post about "Три шацькі конкурсу ідеї" (Three Shachki idea contests) and a "До теми" (On the topic) section with a link to "Вчені закликають про різне прививдення глобального потепління" (Scientists urge for different mitigation of global warming).

Три шацькі екологічні проекти стали фіналістами конкурсу ідей, який організувала Succow Stiftung.

Чи подобається Вам бета-версія сайту dw.com/ ?



**Succow
Stiftung**

**Конкурс ідей та пілотні проекти /
Idea Contest and Pilot Projects**

Короткий огляд пілотних проектів / *Pilot projects at a glance*

