

ANNUAL REPORT – 2020

Dear friends, nature lovers and supporters of the ECOSPHERA NGO!

We are happy to report on our work for the whole year, our successes and results. In connection with the introduction of quarantine restrictions in March 2020, the number of educational events has significantly decreased. Excursions and research of the Uzh River and the Tysa River with children were suspended. Children's camps and international youth exchange summer schools did not take place. However, the NGO "Ekosphera" was able to implement most of the planned projects, observing safety measures.

We continued our activities in the areas of increasing energy efficiency, development of RES in communities and prevention of climate change, sustainable waste management, environmental education work within the framework of the program "Green School" for school-age children, scientific studies of the biodiversity of water ecosystems of the region.

This year, we again addressed the issue of rational use of the region's forest resources. As a result, an online tool for recording and visualizing forest offenses on the map was created. With the help of a mobile application, anyone who sees a crime in the forest will be able to report the incident. After two levels of verification of this information, it becomes public on the site. We study the role of dead wood in conservation and exploitation forests to increase their resistance to disease, natural disasters and climate change 2020, work was also started in the direction of organizing a composting system in educational institutions. And they also successfully completed the work on setting up a system of selective collection of solid waste in the villages of the Tereblya River valley, which are located on the territory of the NATIONAL NATURE PARK «SYNEVYR».

Read about each of these projects in our report».

Sincerely, **The team of the NGO «Ekosphera»**

DIRECTION OF WORK: ENVIRONMENTAL EDUCATION AND UPBRINGING

o "Green School"

Project 1: Green School (2020)

Modern youth need to master new

competencies. It can be technical, artistic and worldview competences. The mission of the NGO "Ekosphera" is to educate children and young people with a responsible attitude towards nature and an active attitude towards environmental protection. We involve children in environmental protection activities, offering them the mastery of new competencies that every modern child needs. Children can participate in bird watching by working independently with binoculars and identifying bird species. They are learning to take photos



and videotape, choose the right subject of the photo and use the rules of photography to make the photo look good. They also learn to create cartoons, video stories. Furthermore, they can talk about their environmental protection activities publicly through their own website created by themselves. This is the Green School



Territory of activity: Zakarpattia region. **Purpose:** to form environmental awareness among schoolchildren and involve them in environmental protection activities.

Result:

In **2020**, the Winter EcoSchool "Water ecosystems. Photo". For several days, students of Uzhhorod schools were taught to observe birds, photograph the river and coastal ecosystems, birds, and edit photos using the Gimp editor.. You can learn more about the workshops in the video on UA:Suspilne.

In October 2020, we held an Autumn EcoSchool in the Kolochava community. As part of the "Green School" program, we worked with the youth of the Tereblya River valley to develop the skills of sorting garbage and rejecting single-use items. The training sessions are aimed at analyzing the causes of total clogging of the Tereblya River with plastic and other household waste and finding effective solutions together with the local authorities. And the master classes offer to create a thing for multiple use with your own hands.

You can watch the video from our event here: https://www.youtube.com/watch?v=jHbleri3NP4&t=6s



Also, the Autumn EcoSchool was held in the village of Korolevo, during several days students learned how to deal with solid waste.

You can see more details here: <u>https://www.youtube.com/watch?v=sDFeV6jdmIE</u>

The final was the Winter EcoSchool in December 2020 in the Vynohradiv region. Trainings and master classes were held with the students, where they explained the importance of waste sorting, how to extend the life of things and why you can't pollute rivers with household waste, and what consequences spontaneous dumps on the banks of reservoirs lead to.

You can see more details here: <u>https://www.facebook.com/ekosphera.ua/posts/2726760714305211</u>

Activities within the Green School program will continue in 2021.

Partners: Department of Youth and Sports of Zakarpattia Oblast, club "Window on America"

DIRECTION OF WORK: ECOLOGICAL STUDIES FOR MONITORING

• Forest ecosystems, sustainable forest management, forest policy and FSC forest certification

Project 2: Promote deadwood for resilient forests in the Romanian-Ukrainian crossborder region (RESFOR)

Dead wood (i.e. semi-dying, standing dead or dying trees, fallen logs and branches, fallen trees that are already decomposing) is the most important component in the structure and functioning of the forest. It plays a key role in maintaining forest productivity, natural regeneration, biodiversity conservation, increasing resilience to the effects of climate change and providing a range of ecosystem services to local communities and the public at large. Adequate management of deadwood thus makes an important contribution to sustainable forest



management and certainly helps to mitigate some of the effects of climate change.



However, the issue of sustainable management of dead wood is a relatively new concept in forestry in Romania and Ukraine, which has been advancing little by little since 2000 and which is still generally not understood in practice. For decades, in the forestry industry of Romania and Ukraine, it was considered that dead wood is the "enemy of the forest", and efforts were made to systematically remove it from the forests, observing forest norms and rules (for example, sanitary rules in Ukraine allow no more than 5 cubic meters of wood to per 1 ha). This practice led to a critical decline in numbers and, in some cases, to the disappearance of many forest species (for example, the whitebacked woodpecker Dendrocopos leocotus or the

stag beetle Lucanus cervus, which are currently included in the Red Book of Ukraine). The disappearance of many species greatly simplifies the structure of biotic groups of the forest ecosystem, which makes it vulnerable to external factors, incapable of natural renewal and self-regeneration. These vulnerabilities ultimately led to additional costs in the forestry industry for artificial reforestation and to serious economic losses from the loss of large areas of forest as a result of natural disasters, the spread of pests, and the effects of climate change.

Area of activity: Zakarpattia Oblast and Ivano-Frankivsk Oblast of Ukraine and Maramures and Suceava Counties of Romania.

Objective: To provide an environment for collaboration, innovation and research on the topic of harmonized responsible forestry practices for dead tree management. Gain recognition of the importance of dead tree management and demonstrate an innovative approach to improving forest resilience by implementing the best dead tree management practices in production forests in the project's target area.

Ensure the promotion of the results of scientific research on the long-term productivity and resilience of forest

ecosystems to climate change to regulatory documents, lobby and create prerequisites for the continuation of specific research.

Result:

1) A cross-border network of researchers and experts was created, which included at least 22 institutions and organizations and 30 researchers and experts. The network works in the target area of the project with the aim of ensuring long-term cooperation in the field of responsible forest management.

2) Developed methods and prepared a report on the study of dead forests and sustainable management of forest ecosystems in the Romania-Ukraine border region. The report will be developed by researchers and experts of the cross-border network.

3) Recommendations on dead wood in the Carpathian forests have been developed, which will later become by-laws.

Partners: The project is implemented by the partnership between WWF Romania – Danube Carpathian Programme, Maramures Branch,

and "Stefan cel Mare University" of Suceava in Romania, the Research Institute of Mountain Forestry P.S. Pasternak and Ecosphera in Ukraine.

Project 3: Creating an online tool for capturing and visualizing on the map of forest offenses

During 2019, the NGO "Ecosphera" worked in the field of involving active citizens of Zakarpattia in public control over the use of forest resources of the region. As a result of expert work of the organization's

specialists, as well as field information collected in the framework of the established public information network, the main problems in forestry of the region (and country) were identified, including the causes of these problems. Among the reasons were: 1) inefficiency of the state body of environmental control – the State Environmental Inspectorate; and 2) the



inaction of law enforcement agencies, including the National Police (<u>http://ekosphera.org/category/publications/documents/</u>).

As the experience of our work has shown, it is possible to influence the situation through 1) maximum publicity and quality coverage of cases in the media; 2) professional and qualified work with the use of various methods, such as the use of remote sensing of the earth, geolocation in photo documentation, analysis of maps of the technological process of logging, video recording by quadcopter. These methods make it possible to gather irrefutable evidence for state control and law enforcement agencies.



The idea of the project is to create a website and a mobile application through which anyone who sees the offense in the woods will be able to publish it. After two levels of verification of this information, it will become public and online. The mobile application and website will be a quality information resource for the media, law enforcement agencies, SEI and other public authorities. According to the facts of offenses, our experts form official appeals to the State Ecological Inspectorate in the Zakarpattia region and the National Police. The results of these appeals are displayed on the site. In this way, we will keep online statistics on the *implementation / non-implementation of control actions* provided by law. The materials of these statistics will be

presented at a press conference, as well as at a round table with the participation of all stakeholders. This approach will reduce the ability of the SEI and law enforcement agencies not to respond to our appeals, and thus reduce the possibility of corruption by these state regulatory agencies.

Territory of activity: Zakarpattia region of Ukraine.

Objective: to help reduce the ability of law enforcement agencies and the state environmental inspectorate to commit acts of corruption in the form of online mismanagement through the creation

of an online tool for recording and mapping forestry offenses and to provide extensive coverage of illegal logging and misuse of forests. in the Zakarpattia region.

Results:

1. An effective and efficient mobile application Legal Forest has been created, as the main tool for publicity and reducing the ability of state regulatory authorities to act against corruption. There is also a website <u>www.savecarpathianforest.org</u>, harmonized with the mobile application, which displays complete information on all recorded incidents.



- 2. The new online resource in the media space was popularized (1-3 thousand visits per month were achieved) as a reliable source of information and a resource for entering your own data.
- A round table was held to discuss the problem of abuses and offenses in the forest sector and the
 effectiveness of the response of state regulatory authorities with the participation of all stakeholders 15
 people. You can read more about the resource here:

https://goloskarpat.info/society/5fd9bc2387caf/?fbclid=IwAR34Ozck6oFTm-A6fJu1iBUtOlbFy mHfnHtkwWsxVBIPw07zx-T1QshhY

https://www.facebook.com/ekosphera.ua/posts/2721647441483205

Partners: International Renaissance Foundation.

In July 2020, we <u>published the facts of violations</u> of environmental legislation in the Kedryn Forestry State Enterprise "Brusturyansk Forestry Enterprise".

After the on-site inspection of the logging sites indicated by us by the state environmental inspectors in Zakarpattia region, all the facts indicated by us <u>were confirmed</u>, in particular, the illegal felling of trees. Estimated damage to the forest in the amount of UAH 23,455.

This incident was covered in the regional mass media: <u>https://zakarpattya.net.ua/News/204958-U-lishospi-na-Tiachivshchyni-zavdiaky-hromadskosti-ekoinspektsiia-zafiksuvala-nezakonnu-rubku-derev-DOKUMENT-VIDEO?fbclid=IwAR3ssCI7gK4dtpkDQ9tx8iC22VIxEdJ8Mgr_TSBgM3iQ31Z8r0o32wD3wqk</u>

• Water ecosystems

Проєкт 4: Joint actions for the prevention of natural disasters in the transboundary basin of the river Uz (FloodUZH)! (2019-2022)

The main problems of the Uzh basin, which is 2750 square kilometers in Ukraine and Slovakia: floods that occur at any time of the year, causing significant environmental and economic damage, at the same time there is an anomalous shortage of water during droughts, which leads to many problems, including the deterioration of water quality.

The project measures are in line with the requirements of the current European water policy, in particular the EU Water and Flood Framework, which Ukraine has committed to fulfill after signing the Association Agreement with the EU in November 2014. Thus, the mapping of flood risks within the project will be

performed according to a new national methodology that takes into account the requirements of the EU Flood Directive. This means that the project will develop maps and documents for the safety of residents of



Uzhhorod based on the same standards currently applied in the European Union.

Areas of activity: over 2000 square kilometers in Ukraine and 740 square kilometers in Slovakia. The total length of the Uzh River within the project is 133 km.

Objective: To provide effective flood protection for the residents of the Uzh River Valley on its Ukrainian part, and to develop flood control measures in the low-water period and the drought period, taking into account the results of studies of the river ecosystem itself.

The results of the NGO "Ekosphera" as part of the project implemented in 2020:

- 1. A preliminary study of the microscopic hydrofauna of the Uzh River was carried out, as well as a study of the seasonal biodiversity of fish, amphibians, reptiles, birds and mammals in the section from the upper side of the dam in the village of Kamianitsa to the Bozdo bridge in the city of Uzhhorod. Fauna research will continue in 2021. At the same time, studies of the flora of the river banks and its channel will be conducted.
- 2. Educational and informational work was carried out with Uzhgorod schoolchildren. The program includes not only interesting interactive activities and games, but also walks along the river, bird watching, and photography of coastal plants and animals.

3. Conducted informational work in the mass media about river research and activities with schoolchildren.

More details about the excursion along the banks of Uzh can be viewed in the stories of regional TV channels:

https://www.youtube.com/watch?v=_m9WKG1XEDQ

https://www.youtube.com/watch?app=desktop&v=KE7dmMt3Kdg&feature=youtu.be&fbclid=IwAR0aXM56m XVM-iv18wzZ8-YMFfYhg8rF8hOUSe4TIuizHf7ee2hpRYoOJ8s

https://zakarpattya.net.ua/News/203805-V-Uzhhorodi-ekoaktyvisty-orhanizuvaly-dlia-ditei-ekskursiiu-pro-Uzh-VIDEO?fbclid=IwAR1AIZqFrbqPw440DyVRoAYkXSsTBGZuwYByM5xwnid-ytZPbd8lahZpiJw

https://www.facebook.com/ekosphera.ua/posts/2626853980962552

Partners: Hungary-Slovakia-Romania-Ukraine Cross-Border Cooperation Program ENPI 2014-2020, Basin Water Management of the Tisza River, Kosice Water Management (Slovakia), Uzhhorod City Council.

Project 5: Strengthening of transboundary security by joint actions aimed at flood prevention and inland floods in the rivers Tisza and Tours! (SAFETISZA)

The 1998 flood in Transcarpathia is a natural disaster caused by heavy rainfall on November 3-5. Then the banks of the Tisza River, Tereblya, Teresva, Borzhava, Latoritsa and others flooded almost 120 settlements. About 350,000 people were in the disaster area. The villages of Vynohradiv district were most affected at that

No less catastrophic for the region was the flood of 2001. In order to further prevent natural disasters, a

project of transboundary cooperation "SAFETISZA" – "Safe Tisza" was created between Ukraine and Hungary, which is aimed at protecting the territories and population of the Vynohradivskyi district of Transcarpathian region and the region of Szabolcs-Szotmar-Bereg and the flood waters. No less catastrophic for the region was the flood of 2001. In order to further prevent natural disasters, a project of transboundary cooperation "SAFETISZA" – "Safe Tisza" was created between Ukraine and Hungary, which is aimed at protecting the territories and population of the Vynohradivsky district of Zakarpattia region and the region of Szabolcs-Szotmar-Bereg and the flood waters.



The main infrastructural element of the project in the Ukrainian

territory is the reconstruction of the 9.5 km left bank of the Tisza River dam in the area between the villages of Tekovo and Gethenya, as well as the construction of a flood center in the village of Tysobiken in the Vynohradiv district.

Area of activity: Joint Ukrainian-Hungarian Batar Reclamation System (Vynohradiv district of Zakarpattia region and in Szabolcs-Szotmar-Bereg region in Hungary).

Objective: To strengthen the transboundary management of water resources and reduce the risk of flood damage within the framework of the Batar Reclamation System. The project is aimed at strengthening the stability of the regions in the border area of Ukraine and Hungary through the implementation of integrated

flood control activities, which will lead to increased adaptation to climate change and improve the joint management of natural disasters in the Tisza River basin.

The result achieved by the NGO "Ekosphera" in 2020:

1. 12 trainings were held for schoolchildren of rural schools of Zatisyan district and gymnasiums of Vynohradiv on matters of solid waste sorting, research of river ecosystems, photo and video recording techniques.

As part of training on the basic techniques and rules of photography and videography, we encourage children to be creative. The calendar for next year will be illustrated with the best photos, and every school in the Vynohradiv district will receive such a publication with photos of its students.



- 2. 2 types of magnets were issued with photos of representatives of the variety of species of plants and animals of the Tisza river basin, made by the training participants.
- 3. An information campaign about the project on the Tisza was carried out in mass media and social networks.

The illustrations were made by students of the 5th grade of the secondary school in the village of Cherna of the Vynohradiv district.

Partners: Tisza River Basin Water Management (main contractor), Upper-Tiszai Water Management Directorate (Hungary), Vynohradiv Interregional Water Management, Vynohradiv Regional State Administration.

In October 2020, the NGO "Ekosphera" held a "Green School" in Zatisyan District. Students of the 4th and 6th grades of secondary schools in the village joined the classes. Khyzha et al. Novoselitsa, Vynohradivskyi district. We talked about exploring the river and its inhabitants through photography. Students of the

Vynohradivska gymnasium were also visited.

See more about this event in the video: <u>https://www.youtube.com/watch?v=sDFeV6jdmIE</u>

How and why floods happen, is it possible to reduce the destruction caused by a natural disaster, is it worth spending money on a flood control system, and why is deforestation involved? Oksana Stankevich-Volosyanchuk, an environmentalist from the NGO "Ekosphera", told about all this in the "U merezhi" program:

https://www.facebook.com/Umerezhi/videos/703526077097013

DIRECTION OF WORK: SUSTAINABLE DEVELOPMENT OF COMMUNITIES

o Energy efficiency and RES development

Project 6: Energy opportunities for Zakarpattia communities

Ukraine currently has a monopoly on energy in the energy sector. This not only does not contribute to the rapid development of the country's economy, but also often creates serious problems for remote communities in the Carpathians, where power grids are worn out. Thanks to new technological opportunities, political will and activism of citizens, energy democracy is developing in many countries – a system in which local communities are actively involved in the selection and creation of their own local micro networks of electricity generation with private capital, in particular, through the creation of energy cooperatives.

The basis of energy democracy is the technological capacity to generate electricity from disparate, publicly available renewable sources, such as the sun, wind, water or ground heat. In this way, more and more communities are moving towards becoming energy independent. Created models of local micro-networks can be both completely autonomous and connected to common power grids. Such examples are the most attractive for communities living in mountainous areas of the Carpathian region of Ukraine, in particular, remote from regional and district roads, in remote villages and hamlets. Today in Ukraine there are legal prerequisites for the development and development of models of energy generation with the lowest costs for security of energy supply from local natural resources, which are based on the ideas of energy democracy. The aim of this project is to spread this idea to improve the access of the inhabitants of the most isolated settlements in the Carpathians to quality energy supply services from renewable energy sources.

Territory of activity: Zakarpattia region



Goal: to demonstrate and disseminate the ideas of energy democracy to provide residents of remote communities in the Carpathian mountains with affordable, reliable, sustainable and secure energy by increasing the production of renewable energy.

Results:

1. We conducted a series of seminars and consultations in 10 mountain communities on the possibilities of creating their own micro-networks of RES based on existing natural resources (sun, wind and water) with the participation of private capital based on cooperation. The events took place in Dovzhanska, Vilkhovetska, Neresnytska, Velykobychkivska, Tyachivska, Solotvynska, Nizhnevoritskaya, Keretskivska, Dubivska and Kholmkivska territorial communities. We also ran a media campaign among the inhabitants of Zakarpattia on energy democracy and ways to implement it: wrote about <u>american nodel of energy cooperatives</u>, <u>decentralization of energy market services in Germany</u> and <u>about the way to increase the energy independence of communities in Zakarpattia</u>.

As a result, we selected 4 pilot communities – Dubivska, Neresnytska, Vilkhovetska and Nyzhnyovoritska –

with which we will continue to work. Together with the local experts discuss strategic directions for the development of distributed RES generation in communities and improving the energy efficiency of communities. The implementation of ambitious projects requires a Community Development Strategy and relevant programs.

Thus, the NGO "Ecosphera" promotes the ideas of energy democracy in local energy policies of territorial communities.

2. In July 2021, the NGO "Ecosphera" took part in signing a memorandum of cooperation on the establishment and operation of the Regional Hub "Danube Energy". In the official part, in addition to the organization's experts, the Department of Euroregional Cooperation of the Transcarpathian Regional State Administration, the Department of Economic Development of the Uzhhorod City Council, the Transcarpathian Regional Branch took part. Association of Ukrainian Cities, Uzhhorod National University, NGO "Center for European Initiatives", International Association of Regional Development Institutions "MAIRR", Agency for Regional Development and CrossBorder Cooperation "Zakarpattia".

Oksana Stankevych-Volosyanchuk, an ecologist at the Ecosphera NGO, presented to the participants the experience of working in the field of sustainable energy. In particular, the prospects for the development of RES and energy democracy in the framework of the project "Energy Opportunities for Transcarpathian Communities". One of the tasks of the Danube Energy Regional Hub is to lobby the interests of communities in order to attract investment and finance projects in the field of energy efficiency and energy saving. In promoting our ideas, we have gained many partners who also work in the field of energy efficiency.

Partners: USAID Energy Security Project (ESP)

The Energy Opportunities for Zakarpattia Communities Grant Initiative, implemented by the Ecosphera NGO, was made possible by the support of the American people through the United States Agency for International Development (USAID) under the Energy Security Project (ESP).

o Sustainable waste management

Project 7: Composting – Save the Earth!! (2019-2020)

According to the Waste management law, since January 1, 2018, in Ukraine, it is prohibited to bury solid waste in landfills, especially those fractions that are subject to disposal. However, in fact, this provision of the law does not apply and tons of garbage end up in landfills and landfills, the lion's share of which can and should be recycled by making new items and materials. These wastes include actual organic waste - "green waste", that is, the remains of tree pruning, biomass after weeding flower beds, fallen leaves; as well as food waste - peels after cleaning vegetables and fruits, and leftover food.

One resident of Uzhhorod accounts for more than 650 kg per year of waste disposed of at the landfill where they are disposed of. This landfill is located near the city – in the village of Barvinok. It was opened about 20 years ago and hoped it would serve the city for decades. However, this landfill has already been filled by 97% and will need to be closed in 3-4 years.

According to research by a student at the University of Darmstadt, Julia More, 40% of the total mass of garbage is in the wet fraction (food and organic waste). Organic debris decays, promotes the spread of rodents, epidemiological outbreaks and, as a result of the decay process, raises the temperature inside the garbage pile to 60-80 C, and during the hot period it can lead to spontaneous combustion and large-scale fire.

The Uzhhorod Development Strategy by 2030 provides for the



establishment of a system of organic waste collection from the population and by 2030 it is planned that this system will cover at least half of the population.

If the waste sorting and waste management system is properly organized, the organic waste will not enter the landfill and will become the raw material for the production of quality fertilizer. The result of this pilot project

will be an example of the sustainable management of biological waste that will be proposed by the applicant to city authorities for implementation throughout the city. This practice of bio-waste management will reduce the amount of garbage that gets to the landfill to 40% within 5 years. City beds will receive free fertilizer. Residents will stop burning dry leaves polluting the air in the city.

Territory of activity: Uzhhorod.

Objective: To promote the sustainable management of organic waste and reduce waste in Uzhhorod by familiarizing the locals with the possibilities and methods of organizing a composting system in the yards by creating a demonstration site for the disposal of organic waste on the basis of the "Prolisok" primary educational complex. Change the perception of waste locals as unnecessary to the realization that waste is a resource that should not be disposed of in a landfill through educational work and a powerful information campaign.

Results:

- 1. 14 composters for composting fallen leaves and food waste have been installed on the territory of the "Prolisok" primary educational complex in Uzhhorod.
- 2. Information booklets with a circulation of 500 copies were published.
- 3. An information campaign <u>was conducted</u> in Uzhhorod.

Partners: Agentura in support of regional development Košice, Uzhhorod Development Agency, EU.

In September 2020, the NGO "Ekosphera" handed over a set of composters with a volume of 1,600 cubic meters to the "Prolisok" primary educational complex in Uzhgorod and 1000 cubic meters m for composting leaves and kitchen waste, as well as a shredder for shredding branches. This is the first

educational institution in the city that started composting "green" waste and does not practice burning it every season.

Leaves have been composted for almost a decade in an open way, and the resulting soil is used to grow vegetables, berries and fruits for the lunch table of preschoolers and younger schoolchildren.

See more in our video:

https://www.youtube.com/watch?v=jxj0Ih0OJ58

Partners: Agentura na podporu regionalneho rozvoja Košice, Uzhhorod Development Agency, EU, Uzhhorod IT company PettersonApps.



In August 2020, we held an online conference on the topic of green waste composting in the city. During the discussion, various successful experiences of composting were presented: in apartments, in the private sector. At the same time, various methods of composting were used.

Read more about successful composting practices on our website:

<u>https://ekosphera.org/kompostuvannya-yak-rishennya-pozbuvayemos-organichnyh-vidhodiv-ta-</u> <u>stvoryuyemo-yakisnyj-grunt/?fbclid=IwAR35-</u> <u>PGFa2Vj5I3XAeskezVqACCZDc9nZTiHRUZeNvsbcvuyGfB31g9ne1E</u>

Project 8: Tereblya Valley without trash! (2020)



The main problem that our project aims to solve is the preservation of natural heritage on the territory of the Synevyr NPP, namely the protected forests and rivers of the Tereblya river basin and their inhabitants, in particular species listed in the Red Book of Ukraine, which are currently suffering from spontaneous landfills. Hundreds of thousands of tourists from all over the world who come to admire the 7th natural wonder of Ukraine - Lake Synevyr observe the littered shores and channel of the Tereblya River, spontaneous garbage dumps in forests and ravines, which does not contribute to the preservation of biodiversity and the successful development of tourism in the park.

The issue of total pollution of the environment in the mountainous regions of Zakarpattia Oblast is today the most significant problem, both for nature and nature-reserved objects, and for local communities. The biggest problem for mountain settlements, where this waste is generated, is the lack of a system of centralized collection of solid waste from the population, and its removal to places of waste removal and disposal. There is currently only 1 landfill in the village of Mizhhirsky District. Mizhhirya, where according to the agreement, garbage is centrally transported only from the village. Synevyrska Polyana, where the most tourist facilities (hotels, estates, restaurants, cafes) are located. All other villages remain with their problem alone.

In September 2019, NGO "Ekosphera" purchased 8 containers for separate collection of waste (glass and PET bottles) with the help of grant funds and placed them in the villages of Synevyr, Synevyrska Polyana and

Kolochava. At the same time, informational posters and booklets were produced and distributed. Negotiations were held with entrepreneurs who take recycled materials for further processing.

The model of centralized collection of recyclables for further sending it for processing will be successful only if there is a stage of pressing it to increase volumes. Only large volumes are attractive for business and for local communities to be interested in this model. Therefore, the implementation of this model requires the creation of an infrastructure for the collection of recycled materials through containers, the presence of a site for storing raw materials and a baling press for sorted recycled materials. It is also important to form radically new behavioral habits for the inhabitants of the villages regarding waste sorting, which can be done through the educational and informational component of the project.

Area of activity: Mizhhirskyi district of Zakarpattia region, NPP "Synevyr", villages of the Tereblya river valley.

Objective: To assist Synevyr NPP and Tereblya Valley communities in establishing a separate garbage collection system and clearing Tereblya River and National Park territory with debris.

Results:

- 1. Organizational and informational work was carried out among the employees of NPP "Synevyr", employees of schools and pre-school educational institutions, employees of village councils regarding the need to establish a system of separate garbage collection from the population. The MSW must be converted into raw material, then it can be sold or given away not as garbage, but as a commodity;
- 2. 8 paired containers for separate collection of glass and plastic were placed in the villages of Kolochava, Synevyr and Synevyrska Polyana;
- **3.** Involved local activists schoolchildren and young professionals in organizational activities to establish a separate garbage collection system in the settlements of the Tereblya Valley;
- **4.** Made information and educational printing products booklets and posters, which were distributed in public places on the territory of NPP "Synevyr" in the villages Synevyr, Synevyrska Polyana and Kolochava.

You can watch videos here:

https://www.youtube.com/watch?v=kZRpRNoFfD4

https://www.youtube.com/watch?v=egpn8J17mZU

In October 2020, we held a seminar at the "Synevyr" NPP, where we discussed the establishment of a system of separate collection of solid waste from the population in the communities of the Tereblya River valley. The highlight of the national park is the Synevyr mountain lake, which thousands of tourists come to see every year. Both the population and tourists produce tons of garbage that is not collected because there is nowhere to take it. So a lot of plastic ends up in the Tereblya River every year.

But a significant part of the garbage can be turned into goods if it is collected in separate containers and pressed into bales. The installation of 8 more containers for collecting glass and plastic and the purchase of a press, as well as educational and informational work among the population, is what our project "Clean up the Tereblya River Valley from garbage" is aimed at. Last year, as part of another project, we already installed 8 such containers.

The participants of the seminar were employees of Synevyr NPP, candidates for deputies of Synevyr and Kolochav OTGs, representatives of public organizations, entrepreneurs.

Read more about this event here:

https://www.npp-synevyr.net.ua/page127-



20.html?fbclid=IwAR0bqhNpYefAJQSO78XZypXU90D22fbwQyIiK1OWPblYWIxYZg3P8 A2JrE

On December 2, the NGO "Ekosphera" handed over 8 additional containers to the Mizhhirshchyna community. In total, "Ekosphera" purchased and handed over 16 containers to communities: 6 in Synevyrsk OTG, and 10 in Kolochavsk OTG.

At the same time, we are introducing an educational program in schools. We have developed coloring pages



for preschoolers "How mommy taught Peppa Pig to sort garbage" in order to form the habit of sorting waste in children from early childhood.

For high school, we have prepared a methodical guide "The ABC of Solid Waste Management". We have given these manuals to schools and teachers will be able to work with children using this program during educational hours.

You can read more about it here:

https://zakarpattya.net.ua/News/207769-U-Kolochavsku-ta-Synevyrsku-terytorialni-hromady-na-Mizhhirshchyni-peredalyshche-8-konteineriv-dlia-sortuvannia-smittia-

FOTO?fbclid=IwAR1UW3De0TqfYN0Bceeiyp9xPfTO-9wuGJF7t0LzstiIDIS0Ir1cfr46bWQ

https://www.facebook.com/ekosphera.ua/posts/2726217807692835

As part of the project, a promotional video was created:

https://www.facebook.com/ekosphera.ua/posts/2724759837838632

Partners: Ministry of Foreign Affairs of the Czech Republic, Ministry of Ecology and Natural Resources of Ukraine, ZURC, Synevyr NPP.

We are grateful to everyone who supports our activities and report on the funds received and spent during 2020.



2020 FINANCIAL REPORT:



