





# MODULE 4 ENVIRONMENTAL ACTIVITIES WHERE INDIVIDUALS OR GROUPS INVITE OTHERS TO HELP PREVENT OR SOLVE ENVIRONMENTAL PROBLEMS

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#### **PART ONE-** Introduction to The Topic

The school should develop educational collaborations with the town hall, the local community, various NGOs, the business environment, etc. In addition to the coordinator of school and extracurricular educational projects and programmes, which exists in every school, there should be a teacher responsible for integrating the principles of sustainable development at school level, and the two should work together to open up the school to the community.

⇒Environmental NGOs have played an important role in climate change and environmental education in Romania in recent years. Thus, much of the expertise in this field is now to be found in NGOs.

- NGOs can organise outdoor activities for students, contribute to the development of resources to be uploaded on online platforms for teachers and students to support climate change and environmental education.
- NGOs can provide protective equipment for pupils, teachers, involved families and volunteers before or after practical activities in school or nearby; they can provide free of charge equipment and accessories to encourage walking and cycling: neighbourhood maps for personalised routing, reflective vests and flags, etc.

#### **⇒**Local government can contribute by:

- purchasing clean school transport and hiring the necessary drivers;
- investing in electric vehicle charging station projects near schools;
- developing bike lanes, paths around schools;
- providing facilities for cyclists in the vicinity of schools: changing rooms (where cyclists can change), bicycle loan, storage and repair facilities;
- organisation of infrastructure for separate waste collection in schools: bins separated into different fractions in classrooms/corridors; infrastructure allowing efficient transport of waste by class fraction from classrooms to school bins, dedicated bins for different types of materials; conclusion of appropriate contracts with sanitation companies for the collection of waste by school fractions;
- setting up a separate collection centre in some localities for objects and materials that can be reused as resources for educational projects in schools (programmes such as Trash for Teaching);
- creating facilities for educational establishments that are more sustainable.

#### ⇒The community can get involved in climate change and environmental education by:

- purchasing clean school transport and hiring the necessary drivers;
- investing in electric vehicle charging station projects near schools;
- developing bike lanes, paths around schools;
- providing facilities for cyclists in the vicinity of schools: changing rooms (where cyclists can change), bicycle loan, storage and repair facilities;
- organisation of infrastructure for separate waste collection in schools: bins separated into different fractions in classrooms/corridors; infrastructure allowing efficient transport of waste by class fraction from classrooms to school bins, dedicated bins for different types of materials; conclusion of appropriate contracts with sanitation companies for the collection of waste by school fractions;
- setting up a separate collection centre in some localities for objects and materials that can be reused as resources for educational projects in schools (programmes such as Trash for Teaching);
- creating facilities for educational establishments that are more sustainable.
  - ⇒**Parents** There are many ways parents can get involved:







- Accessing grants/non-reimbursable funds e.g. to fund projects or programmes through parents' associations to support both education and school infrastructure;
- brokering sponsorship or collaboration with specialists;
- participation in courses as guest speakers or as volunteers accompanying pupils to outdoor educational activities.

#### **⇒** Private companies can get involved by:

- financial support for the implementation of the measures in this report, e.g. funding in-service training for teachers, non-teaching staff and support staff to complement publicly funded programmes61;
- financial support to support NGOs and developers of online resource platforms for climate change and environmental education;
- creation of communities of support for schools to carry out infrastructure investment programmes for energy efficiency, building sustainability and sustainable consumption practices in schools. They can help, for example, to obtain flexible funding schemes from partners and sponsors, depending on performance in implementing technical solutions in schools; equipping disadvantaged rural/small town schools with smart labs/technology workshops for interdisciplinary and integrated study of science, technology, design and engineering;
- implementation of projects to compare energy and water consumption in several schools (energy produced/energy consumed/non-renewable energy saved); creation of an online platform to present the results in real time (building dashboard type);
- partnering with local farmers to set up vegetable gardens, vegetable gardens, greenhouses, solariums or fruit gardens on school grounds or grounds; growing certain plants, vegetables and fruit on school grounds, in the school garden, in greenhouses or on the green roof of the school can be a curriculum topic;
- specialised companies can engage in additional voluntary actions to facilitate separate collection in schools

The role of the media in raising awareness and education on climate change and the environment at large should also be mentioned.

#### **⇒** Mass media can contribute by:

- Implementing promotional campaigns (print, radio, TV and online) such as: "Recycle!", "Turn off your engine when you stop!", "Sustainable Transport to School Day";
- Organising, in partnership with certain radio or TV stations, competitions for slogans or advertisements on sustainable waste management;
- promoting environmental projects, programmes, campaigns and competitions involving schools, pupils' families and representatives of public and private institutions.

# PART TWO- Specification of the elements to learn under this topic including learning tasks:

In terms of climate change and terrestrial life, students should learn about:

- Climate change, an anthropogenic phenomenon resulting from increased greenhouse gas emissions
- Human activities that contribute to climate change at global, national, local and individual levels
- Climate change at local, national and global levels and how they can become catalysts and drivers of climate change due to ecological, social, cultural and economic consequences
- Ways to prevent, mitigate and adapt at global and individual level, but also in different contexts







- Main safety measures in case of extreme weather events and disasters caused by climate change: natural disasters, violent storms, floods, landslides, etc.
- Components of the environment; local and global ecosystems; biodiversity
- Reasons for environmental damage and threats to biodiversity
- The fundamental role of nature for human life
- Negative effects of human activities on the environment, both individually and collectively
- Strategies for conservation/restoration of the natural environment (e.g. how to protect nature reserves)

As a result of educational collaboration with the town hall, local community, various NGOs, business, etc., students should **be able to**:

- Use specific climate change terminology
- Understand why climate change has both global and local impacts
- Analyse the environmental, social, economic and ethical impacts of climate change, including on the local horizon
- Be aware of personal contribution to climate change occurring globally
- Recognise that limiting global climate change is an essential task for everyone and that we need to re-evaluate our daily behaviours in this regard
- Support others to get involved in limiting climate change by personal example
- Collaborate with others and develop jointly agreed strategies to limit the effects of climate change
- Support biodiversity with arguments

#### At a **behavioural level**, students:

- Propose solutions to reduce his and his family's impact on climate change
- Engage in community outreach on climate change
- Implement simple action steps to limit the effects of climate change
- Promotes climate-friendly economic activities
- Shows care and empathy for plants and animals
- Adopt environmentally protective and conservationist behaviour in their daily lives
- Take a stand against the behaviour of other natural or legal persons that endanger nature or humans
- Initiate voluntary actions to protect the environment, restore flora and fauna, afforestation, creation of green spaces
- Actively involves itself in the actions of local groups for the conservation of terrestrial life

# PART THREE- Best practices we have in our institution, in our city or country even in the partners' countries

The best way to find out more about **Lunca Mureșului Nature Park** is to visit the **Ceala Visitor Centre**, where you will be greeted with a "Welcome!" friendly welcome and a wealth of information about the protected area. This is the headquarters of the Lunca Mures Natural Park Administration.

The **Ceala Visitor Centre** is located in the eastern end of the protected area, about 5 km from the centre of Arad. The **Ceala Visitor Centre** is one of the first buildings of its kind in Romania and aims to provide information about the **Lunca Mures Natural Park**, thus highlighting the uniqueness and beauty of nature in this area. The Visitor Centre, named **Ceala** after the forest in which it is built, was completed in 2007 and since 2013 it offers an interactive exhibition. It also hosts several outdoor







events and activities, guides tourists to the park's attractions and is the perfect place to carry out educational activities about nature with pupils and students.

The **Ceala Visitor Centre** is involved in a series of educational programmes for pupils and students, which aim to raise awareness that limiting global climate change is a key task for everyone and that we need to re-evaluate our daily behaviour in this regard. These programmes also motivate young people to get involved in limiting climate change through personal example.

Among the projects of this institution, we give as an example:

#### 1. Protecting and promoting the Mures Valley

#### Objectives:

- To protect biodiversity in the Romania-Hungary border region
- Scientific monitoring of different ecosystems;
- Protection of the Mures River Plain;
- Implementation of educational and informational programmes on nature protection for the local community.

Argument: The aim of this project is to ensure a sustainable development of the area and the conservation of biological diversity. Accidental pollution situations will be more effectively prevented and controlled by permanent water quality monitoring. An inventory of plant and animal species in the area will be carried out and existing problems will be highlighted. At the same time eco-tourism will be promoted for the area. These objectives correspond to the strategic development principles as outlined in the Regional Development Strategy for the Western Border Area.

## 2.Improving the infrastructure needed to raise awareness and sensitize the population of the Lunca Mures Natural Park

The *overall objective* of the project is to invest in the infrastructure of the Lunca Mureșului Nature Park for better management of habitats and species and to increase awareness of the local population and visitors. This general objective will be achieved through a series of *specific objectives*:

- reducing the impact of visitors on the habitats and species of the Lunca Mureșului Natural Park by concentrating them at the Ceala Visitor Centre and limiting access to one of the integral protection areas

-increase by 20% the awareness of local people, local public authorities and other stakeholders by

Environmental education workshops promoted by the Ceala Visitor Centre:

#### 1. Ink production

*Programme description*: Using the abnormal growths of oak trees, called galls, together with water and one more (secret!) ingredient, quality ink is produced right before the children's eyes. Participants will write their names on their own bookmark using feathers, just like in the old days. (Indoor activity).

Duration: 50-60 min;

Recommended age group: 7 - 18 years; The activity is suitable for: 25 - 30 pupils.

2. Recycling paper







*Programme description:* After a short introduction to recycling, participants are involved in a paper recycling process using old newspapers. At the end of the activity, the group receives as a souvenir a piece of recycled paper on which they can write. (Indoor activity).

Duration: 50-60 min;

Recommended age group: 7 - 18 years; The activity is suitable for: 25 - 30 pupils.

#### 3. Themed trail excursion

*Programme description:* The theme trail is 2.5 km long and runs through a rich meadow forest. Along the way you can admire climbing plants, ancient trees, hopefully even wild animals. Several stops are made to provide interesting information (Outdoor activity).

Duration: 80 - 90 minutes;

Recommended age group: 10 - 18 years; The activity is suitable for: 25 - 30 pupils.

#### 4. Bicycle tour

Description of the programme: The thematic route is about 12 km long, of low difficulty and can also be covered on bicycles (personal, or provided by the park administration at the Ceala Visitor Centre) by children, parents and grandparents. The park administration provides accompaniment and information, as with all other activities, but the trail can also be easily covered on your own, as it is well marked and, along its entire length, the trail has 6 interesting outdoor panels containing essential information about the habitats of the nature park, the species of plants and animals that live here, as well as advice on how to behave in nature.(Outdoor activity)

Duration: 100 - 120 min;

Recommended age group: 12 - 99 years; The activity is suitable for: 10 - 15 people. The activity is suitable for: 25 - 30 pupils.

One association, at national level this time, is **Nature Talks**, which does environmental education in Romania. How? It explains topics such as air pollution, food waste and recycling to children using models, experiments and games. Through the little ones, they also reach parents with the information.

The projects include:

- 1. Environmental School -a free environmental education project, carried out with schools and other educational institutions in Romania. This project organised interactive workshops where students learned how to take care of the environment.
  - 2. ECO FRIENDLY HOUR a free environmental education project with 3 activities:
- Air Pollution, which aims to learn about the sources of air pollution, raise awareness of the effects on life on earth and offer solutions.
- Food waste, in which young people learn which foods end up in the bin most often, how to store different types of food correctly and what they should do before going shopping.
- Separate collection is a programme that teaches young people how to prepare different types of waste for recycling, as well as how to reuse certain materials.
- **3. School in the forest** free environmental education project in the Cozieni Forest Nursery, Ilfov County. Thousands of students benefited from outdoor workshops, the most appreciated being the tree-planting activity, together with the employees of the Forestry Office.







# PART FOUR- Links to videos and further reading sources for the content of module

#### 1. Links to videos for the content of module

https://www.youtube.com/watch?v=W5bh1JFo43Uhttps://www.youtube.com/watch?v=8b2vC-ecUuUhttps://www.youtube.com/watch?v=fuDYMQSzVSUhttps://www.youtube.com/watch?v=t4GQqzmq9rA

#### 2. Further reading sources for the content of module

 $\frac{https://donorbox.org/nonprofit-blog/20-global-nonprofits-environment}{https://www.teachstarter.com/gb/blog/environmental-activities-for-students-sustainability-classroom/$ 

https://www.volunteerhq.org/blog/best-environmental-conservation-programs/https://oceanservice.noaa.gov/ocean/earthdav.html

# PART FIVE- The importance of the module in Youth Education

PART SIX- Implementation activities for the content of module

PART SEVEN- You can include a self-Check for the learner at the end, a checklist about competences they have got from the module.

The educational project is a series of activities aimed at achieving formative objectives and actively involving people: teachers, pupils, parents, representatives of institutions with a major impact on the education of the young generation. They are put in the position of taking







responsibility, deciding and organising. Produce a "Let's be green!" project with the following structure:

ROPOSER:
IMEFRAME:
AME:
BJECTIVES:
ARGET GROUP:
ARTNERS/SPONSORS:
ROPOSED ACTIVITIES:
XPECTED RESULTS/REALIZATION INDICATORS (numerical or percentage) :
XPECTED RESULTS/REALIZATION INDICATORS (numerical or percentage) :
MEANS REQUIRED:
MEANS REQUIRED:
MEANS REQUIRED:
MEANS REQUIRED:
VALUATION TOOLS:
MEANS REQUIRED:  WALUATION TOOLS:
VALUATION TOOLS:

#### **PART EIGHT- Conclusion**

Could we imagine a world without forests, parks, birdsong or buzzing bees? Biodiversity (the totality of living organisms on Earth) provides food and shelter for all living things, has always inspired humans and provided them with essential resources for life. In short - nature makes our lives possible and beautiful.

Although many of us probably agree with these points, we sometimes tend to forget how important the environment is, and due to increasing anthropogenic pressure, a lot of areas or species of plants and animals are at risk, a phenomenon called biodiversity loss.

Increasing access to environmental and climate change education requires the involvement of more than just central government or teaching staff. Involvement and harmonious collaboration between NGOs, local government, communities, parents, private companies and the media are essential for the success of climate change and environmental education.







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