

The Carpathian Mountain ESD Training Tool Kit Concept

Rationale:

Mountain areas throughout the world, such as the Carpathians or the Caucasus, often face similar problems of underdevelopment, lack of/difficult connection to information and resources, lack of opportunities and diversity of livelihoods, migration of the young population to urban centers.

At the same time, they are often centers of natural and cultural diversity, preservation of traditions, which are important components the national and global heritage. However, many unique natural and cultural features are left undiscovered due to lack of information exchange and interconnectivity among the rural mountain areas, and their disconnection to the urban centers.

The challenge is to enable the mountain populations to improve their livelihoods while preserving the unique cultural and natural features and in their areas.

One of the ways of meeting this challenge is:

- to encourage the population living in the mountain areas to appreciate their surroundings, become aware of the special features, problems and challenges of sustainable development in their communities, and learn how to use the unique local resources in a responsible way;
 - o to make the populations of each area aware that their communities are not isolated, but are part of a larger mountain ecoregion, and to establish connections between the communities
 - o to unveil multiple interconnections and interdependencies, which exist both among the mountain communities and between the mountain/lowland parts of the region; these interconnections offer opportunities of experience exchange, but at the same time challenges of resource sharing, which need to be taken into consideration
- by establishing the awareness and connections, to enable the populations of the mountain areas to develop their communities in a sustainable way.

Focusing efforts on schools, in a form of teacher training, is a sustainable long-term way of addressing the challenge of sustainable development in a community: as the teaching has a direct affect on the younger generation (students), and at the same time can be extended through students to their families (through home assignments and community/school events), thus integrating the whole communities.

Main Aims:

- o To provide a gate to the existing ESD materials and activities
- o To Encourage the teachers to look for connections and resources: such as natural parks and protected areas
- o Encourage the teachers to use the existing resources with the view of the Carpathian Sustainable Mountain Development
- o To encourage critical thinking and active participation of the communities

- To facilitate interaction and experience exchange between the mountain communities within each country, as well as on a regional level
- To collect local information on existing natural and cultural resources and sustainable development challenges, in order to provide local input into the natural and cultural resource inventories, and to form recommendations for national governments and international developmental efforts,.

Means:

Connections will be established, through joint work, between the local educational authorities, the activists in the field of Education for Sustainable Development, and the protected areas.

- Provided resources and information, the teachers will be guided and encouraged to work with the students to find unique natural and cultural components, positive and negative features, and to reflect these on the blind map of the community/country/region by creating a tourist trail through the local area.
- The students will be encouraged to discover the resources offered by the local area and challenges for sustainable development and to think of what they can do to improve their community and to profit from the resources they discover in a sustainable way.
- The teachers and students will be guided to upload the local inputs into the training tool kit (the maps of the trails created, other projects/exercises) electronically on the project web-site, to create a regional database of natural and cultural resources and sustainable development challenges discovered by the participants in each community. Thus, the compiled information will be available to share it with interested stakeholders, for potential additions to the cultural and natural resource databases and to form recommendations to the national ministries and intergovernmental bodies working in the field of Sustainable Education and Sustainable Development .
- Follow-up national and regional experience - sharing meetings will strengthen connections between the participating partners, teachers and students from different counties in a country and later between the countries, thus encouraging connectivity between the mountain communities.

Target Audience:

teachers of various disciplines:

- Sciences
- Literature
- Foreign Languages
- Arts and crafts
- Physical education

Form of the Tool kit:

Electronic and Printed

- The printed tool kit will be in a form of a binder, with removable pages, in order to allow to photocopy. Each binder will contain a collection of resource maps of the region and of the country, and large blind maps of the region and of the country for the main exercise.

The first printed version will be produced in Romanian, and printed in Romania

- An electronic version of the tool kit will be created on a UNEP Move4Nature project web-site, which will serve to support a network of communication and experience exchange on ESD in the mountain areas between experts, teachers, and activists in the field.

The English version of the tool kit will exist only in the electronic form, and will be used for translation to the other Carpathian language/adaptation to other regions, such as the Caucasus.

Components:

The tool kit will consist of the following components:

- **Introduction:**

- Sustainable Development and the mountain areas
 - Interdependency between the mountain areas and the rest of the country (Water resources, etc)
- Carpathian Convention
 - **Possibly: The world heritage convention info?**
- How to use/read the toolkit
 - Explanation of use by teachers of various disciplines
- Educational/political rationale behind the toolkit
- Creative/critical thinking
- Complexity/system thinking
- Sustainable practices: explanation what is sustainable practice and what is not sustainable practice
- School development in a mountain area

- **Main activity of the tool kit:**

“Designing a Carpathian nature/cultural trail” – The teachers are guided to work with the students to make a “trail” representative of their local part in the Carpathians, taking into consideration resources and information provided by every chapter, such as:

- natural resources of the Carpathians the trail presents,
- the transport to/through the trail,
- cultural components the trail can offer (local products that can be produced there, such as medicinal plants/crafts),

- existing parks and protected areas
- environmental problems/sustainable development challenges of their local area (plant/animal species decline, changes in the landscape, energy challenges and opportunities, loss of traditional culture).

- **Chapters**

- Introduction
- Biodiversity
- Infrastructure (energy and transport)
- Land use, waste
- Cultural heritage
- Water management
- Local indicators of environmental problems
- Craft and technology
- Public participation
- Sustainable tourism

- **Chapter structure:**

5-15 page in length maximum, including information and activity sheets.

The main component of the chapters are critical thinking questions guiding the teachers and students to creatively use facts and references presented in the chapter in designing the trail on the blind map.

- Intro – Aims of the chapter
- Activity
- Factsheet
- Concept map
- Questions: referring to the critical thinking about the topic covered in the chapter in connection with the respective local area, leading to the reflection of each aspect on the map
- References, links, references to the curricula
- Case studies
- **Maps**
 - Maps of the region (Carpathian) and of the respective country
 - Blind maps: of the region, of the country, and of the local area: large size, in folded form.
 - Blind maps of the area: unless provided, information will be given on how to find/access the maps of the local area

- **Chapter authors**

Introduction (critical thinking, sustainability, Carpathian Convention, how to read, how to use)	Ana Seke and Miroslav Tadik Inputs from ISCC
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Biodiversity	CERI ¹ could provide the English version of the World of Carpathians for adaptation to the toolkit Andrea Kralovicova Bratislava kralovicova@daphne.sk
Infrastructure (Energy and transport)	Climate Action Network – Romania
Landuse, waste	Climate Action Network – Romania
Cultural Heritage and Traditional Knowledge (sustainable tourism component?)	ANPED (with inputs from Iлона Morzol)
Water Management (How to use, how to save, indicators of quality)	Maria Toth
Local indicators of environmental problems	Hubert Hilbert
Craft and technology	Luminita Chicinas
Sustainable Tourism and Parks	CNPA Romanian partners Input from Serbia (ethnovillages) – Ana Seke Input from Romania: LuminitaChicinas
Potentially - Traditional Agriculture/Soil	<i>CEFIDEC/Rodica Stanescu/ Approach SARD?</i>
o Public participation	Katalin Czippan and Luminita Chicinas

Some remarks for authors:

As the project name is "Move4Nature" and was initiated in the context of Mobility please reflect on mobility in the chapters where possible.

Also some reflection on agriculture is needed as most of the training will be hold on such locations where agriculture is the main economic activity.

The main focus is on the protected areas, and the toolkit can be also used with the adults. Toolkit should encourage local entrepreneurship and provide some viewpoint about how to build on it in a responsible way. Internalization of these concepts into the way o life of the children and their parents is needed.

- Proposals to identify a sustainable living in nature: using the resources by not destroying them are important.

-Give positive and negative examples

Example: to search on the map river which is polluted by waste and with is clear.

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- o ¹ **The Carpathian EcoRegion Initiative (CERI) and Daphne institute for applied ecology** are developing the World Of Carpathians Handbooks
The Handbooks are strictly focused on the ecosystems: wetlands, forests, grasslands and contain exercises of different degree of difficulty. The handbooks will be produced in Polish and Slovak.
The hope of the CERI is that there will be organizations in Romania/other countries, which can get funding and use the toolkit

Mountain areas; can not survive alone without the rest of the country integrated policy of a country or a region is needed.

Deadlines:

UNEP – CASALEN will provide as soon as possible.:

1. The report and conclusions of the meeting
2. A template of a letter describing the project and the book
3. Maps: Romania has 7 regional agencies, and each agency oversees 6 counties: some digital maps are available Luminita will find out if the maps can be used, Hubert offered to prepare the correction of the maps by GIS system,

End of February	First draft materials Attila will provide examples for evaluation questionnaire
Mid March (15-22)	Editing and reviewing
March 22 nd – end	Adaptation and finalization
April 1-22	Translating, adding local examples:
April 10	Luminita will provide the adapted versions in Romanian Attila and Luminita will develop a questionnaire for the Romanian participants.
April 23-24	Training of the trainers in Romania, Distribution of the material to the trainers
7 May	First training course