

About

It is the aim of the project to put basic strategies into practise that guarantee ecological and sustainable restoration or rehabilitation under extreme site conditions. Sustainable rehabilitation and restoration of ski slopes, road embankments and opencast mining areas should lead to an appealing landscape with satisfying ecological value, especially enhancing quality of life for people living in concerned regions.



Research realised at pilot areas will focus on indicators that allow to measure the expected increase of ecological value through ecological sound rehabilitation measurements. With the help of constant monitoring of economic and ecological parameters, the data gained from those pilot projects will convince local decision makers to put the improved know how into practice. To ensure that territorial operators and technicians of land rehabilitation receive up to date information, training activities will be organised.

Main Objectives

- **Restoration of endangered and destroyed high altitudes slopes in mountainous regions**
- **Rehabilitation of degraded embankments and slopes caused by improvements in infrastructure measurements**
- **Restoration of areas devastated by coal and other ores excavation**

Visual instruction will be given on established pilot areas. The creation of a network of experts of land rehabilitation and restoration will enable all partners to benefit from already existing know how and will guarantee a continual contact and exchange of experience between the participating regions beyond the projects duration.

Workpackages

Successful restoration of eroded slopes in high altitudes

Definition of the **current** and a **new** state of the art in restoration of mountain regions concerning seed mixtures and application techniques. Only the usage of site specific seed mixtures in combination with sophisticated application techniques will help to prevent erosion and create a self-sustainable appealing vegetation cover.



Sustainable rehabilitation and restoration of road embankments

Road embankments are extreme sites in terms of water availability and soil. With a combination of creating the right soil structure, adequate techniques, appropriate low fertilisation and site specific seed mixture, it is possible to create self-sustainable areas with a high value for nature conservation.



Restoration of open mining areas

Surface-mining of lignite leads to a complete destruction of the landscape. The public demand for a fast recultivation of the so-called "lunar landscapes" is enormous. Traditional recultivation methods often destroy the valuable ecological potentials of the sites (e.g. nutrient-deficiency). Alternatives must be tested and evaluated preserving this potential in areas reserved for recreation and nature conservation both in abandoned and active open-cast mining sites.



Economic evaluation of restoration and rehabilitation measurements

For a broad acceptance of new measurements presented here in this project, it is very important to show that improved measurements are not more expensive in a mid-term view.

Creating networks of experts and Dissemination of results

Knowledge is the key to success - Networks, a website, publications and workshops are possibilities to make the knowledge spread.

Pilot Areas

Pilot projects will reveal best practise methods of rehabilitation and restoration. Experience gained from earlier projects combined with the knowledge of the participating partners will help to avoid earlier mistakes.



High Altitudes

- Chopok, Low Tatra, Slovakia
- Forni di Sopra, Udine, Italy
- Mayrhofen, Zillertal, Tyrol, Austria
- Obertauern, Salzburg, Austria
- Paleohori, Central Greece

Road Embankments

- Cimpello-Sequals, Pordenone, Italy
- Karvina II, Ostrava, Czech Republic
- Polykastro, Northern Greece
- St. Veit/Glan, Carinthia, Austria
- Zvolen, Banska Bystrica, Slovakia

Open Mining Areas

- Karvina I, Ostrava, Czech Republic
- Profen, Saxony-Anhalt, Germany

Partners

Agricultural Research and Education Center Raumberg-Gumpenstein

Agricultural Research and Education Center Raumberg-Gumpenstein is a federal research facility, works in the field of agriculture in alpine regions and the Coordinator of this Project.

Settore Agricoltura Aziende Sperimentali Dimonstrative

The Agricultural Sector Experimental and Demonstrative Farms of the Province of Pordenone (SAASD) provides professional advice, experimental data and dissemination of information on main agricultural issues.

N.AG.RE.F.

N.AG.RE.F. is responsible for conducting and developing agricultural research and development in Greece, as well as for solving specific problems of agriculture in this country.

University of Applied Science Anhalt

The chair of vegetation science, University of Applied Science Anhalt, works on the field of restoration of former lignite mining areas and of nature conservation

Kärntner Saatbau

in general.

Kärntner Saatbau is a local seed company situated in the south of Austria. The company has a long lasting experience and know how in seed propagation especially of indigenous seed material for ecologically high grade

MIBRAG mbH

restoration.

MIBRAG mbH is a lignite producing and processing

OSEVA Pro Ltd

company based in Eastern Germany.

The main activities of OSEVA Pro Ltd. are research on genetic resources of grasses, seed multiplication, plant pathology, grassland management and biodiversity, non-

Grassland and Mountain Agriculture Institute

productive and alternative exploitation of grassland.

The Grassland and Mountain Agriculture Institute does research in the field of environmentally sustainable systems of management in upland and mountain regions with the objective to reduce energy inputs and to

Contact

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Successful and Restoration Rehabilitation

Accompanying Infrastructural Interventions



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