

SLOVAKIA

Biodiversity restoration, preservation & enhancement

Location

Nizna Boca

Programming period

2014 – 2020

Priority

P4 – Ecosystems
management

Measure

M8 – Investments in forest
areas

Funding (EUR)

Total budget 942 723.62
EAFRD 707 042.71
National/Region. 235 680.91

Project duration

2015 – 2019

Project promoter

Urbarsky spolok obce Nizna
Boca, pozemkove
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Restoring the production potential of damaged forests through clearing, afforestation and preservation of young forest stands.

Summary

Forests of spruce largely replaced the originally mixed-species forests in the area of the municipality Nizna Boca. This change took place in order to supply the mining and construction industries with charcoal. In 2004, the monoculture spruce forests in the area were damaged by severe winds and subsequently by bark beetle species.



In order to restore the production potential of the damaged forests, the areas originally covered with the Norway spruce were afforested with a mixture of different tree species including Silver fir, European larch, Sycamore maple and European beech. The works were carried out by locals, most of them were from marginalised Roma groups who experience issues with high long-term unemployment.

Results

An area of 144.97ha was afforested with 593 371 forest tree seedlings with five different tree species over a four year period.

Protection measures against weeds and damage caused by forest animals were undertaken on 247.07 ha and repeated over four years.

The project resulted in a more stable and healthier forest, resistant to damage caused by weather and pests.

Provided employment for approximately 35 locals from the Roma community.

Lessons & Recommendations

- ❑ In order to be able to design a successful project, it is crucial to study the area very well and have support from experts in forestry.
- ❑ Flexibility to modify a project during its implementation is needed, especially if the project takes place over five years.

Context

Forests of spruce largely replaced the originally mixed-species forests in the area of the municipality Nizna Boca. This change took place in order to supply the mining and construction industries with charcoal, especially in the 19th and early 20th centuries. Non-coniferous timber was harvested and faster growing spruce trees were planted.

In 2004, the monoculture spruce forests in the area were damaged by severe winds and subsequently by bark beetle species. As a result large areas of forest were dying. The affected areas needed to be urgently revitalised. Based on an assessment of these areas, a project was designed to prepare them for afforestation by planting forest tree seedlings and undertaking protective actions against weeds and damage caused by forest animals.

According to the plan, the areas originally 100% covered by the Norway spruce (*Picea Abies*), were to be afforested with a mixture of different trees species including 30% Norway spruce, 10% Silver fir (*Abies alba*), 30% European larch (*Larix decidua*), 10% Sycamore maple (*Acer pseudoplatanus*) and 20% European beech (*Fagus sylvatica*). Such a composition of trees species was designed to create more varied and stable forest vegetation, and have a positive impact on the biological diversity of forest ecosystems.

Objectives

The main objective of the project was to restore the production potential of forests damaged by biotic, abiotic and anthropogenic agents during 2004. This was to be achieved through a range of actions, including clearing, afforestation and preservation.

Project activities contribute to improving the environment by increasing the resistance of the forest to harmful biotic and abiotic agents, improving the water quality and preventing soil erosion.

Activities

The project was launched in autumn 2015 and completed in autumn 2019. Approximately 30-40 locals from the Liptov region are involved. Most of them are from marginalised Roma groups, who experience issues with high long-term unemployment.

In 2015 the chosen areas were prepared for afforestation. The damaged trees were cleared and forest tree seedlings were protected from animals.

In Spring 2016 the afforestation/planting of selected forest tree seedlings took place at altitudes of 820-1600 metres above sea level.

The seedlings needed constant protection from weeds and forest animals.

In 2017, 2018 and 2019 the afforestation continued. The seedlings need constant protection from weeds and forest animals.

The work had to be timed appropriately, as each activity had to be implemented within specific timeframes in order to achieve the desired effect. The project changed the character of local forests, creating the foundations for future mixed-species forests.

Main results

An area of 144.97ha was afforested with 593 371 forest tree seedlings with five different tree species over a four year period.

Protection measures against weeds and damage from forest animals were undertaken on 247.07 ha and repeated over 4 years.

The project led to more stable and healthier forest, resistant to damage caused by weather and pests.

Provided employment for approximately 35 locals from the Roma community.

Key lessons

In order to be able to design a successful project, it is crucial to study the area very well and have support from experts in forestry.

Flexibility to modify a project during its implementation is needed, especially if the project takes place over five years.