

HUNGARY

Carbon conservation & sequestration

Location

Zemplén Mountains

Programming period

2014 – 2020

Priority

P5 – Resource efficiency & climate

Measure

M08 - Investments in forest Areas

Funding (EUR)

Total budget) 50 780

EAFRD 20 312

National/Regional 5 078

Private 25 390

Project duration

2017 – 2019

Project promoter

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n/a

Introducing a new forest management method that ensures the rapid and natural rejuvenation of harvested forests.

Summary

Péter Laczkó, a forester in northern Hungary's Zemplén Mountains, used support from the Hungarian Rural Development Programme (RDP) to introduce a new type of forest management; to develop a process suitable for the new management method; and to acquire modern, forest-friendly machinery.



Forestry trailer

The essence of the new method is to open-up a minimum of one 'break' per hectare in the forest, to leave gaps where direct sunshine can reach the forest floor. This allows the most locally viable, genetically valuable vegetation to flourish, ensuring the continuous renewal of the forest. In connection with this new method, the so called 'Eternal Forest' target programme, Péter Laczkó also received support under the 'Nature-friendly material handling methods' project call. The essence of which is to cut down trees in such a way as not to damage the remaining stock. This requires the use of professional and suitably small machines; Péter Laczkó therefore applied for a third type of support, which he used to purchase the necessary machinery to carry out this new type of forestry management.

Results

This new forest-friendly type of management will allow the development of a diverse, habitat-rich forest structure.

Seedling groups of numerous tree species have emerged to provide natural reforestation.

Expenditure on planting and growing young forests and seedlings has decreased by 90% compared to traditional forestry.

Forest owners now have a steady flow of income.

The use of modern and task-specific machinery has reduced the environmental impact of the forest management and the workers' physical workload.

Lessons & Recommendations

- ❑ The invitation to tender for training on how to handle nature-friendly material is not published every year, so support opportunities are sporadic. The beneficiary thinks it would be advantageous to issue these calls on an ongoing basis.
- ❑ The record-keeping process is thought to be complicated, as maintaining a continuous work log imposes a high administrative burden on the beneficiary, especially in comparison the size with the area managed.

Context

Forests are seen to have three core functions: protecting soil and preventing floods; serving as a public good; and being a source of economic activity. In recent years, the economic activity has gradually been put aside. The demand for wooden objects has decreased and as a result, wood processing plants have been closed. Meanwhile, most of the wood produced from the forest is used as firewood with only a small amount used to produce paper or barrels. In this context, traditional forest management methods, such as clear-cutting of forests for industrial use, no longer meet societal demands. Forests now tend to be mostly seen as places for leisure activities like hiking. Furthermore, traditionally managed forests cannot perform their protective functions.

Péter Laczkó is a third-generation forester. He graduated from the Vocational Secondary School of Forestry in Mátrafüred in 1991. He has been working as a self-employed forester since 1999, managing private forests. In 2009, thanks to a new Forest Act and an open tendering process, Péter leased a 300 ha forest ownership company in Füzérkaja. The area is located at the Hungarian-Slovak border, is part of the Zemplén Mountains and a Natura 2000 area. Noticing the excellent work of Péter Laczkó, more and more forest owners hired him to manage their forests. As a result, on top of his own property, he now manages 400 ha of forest owned by 130 proprietors. In addition, he undertakes work as a contractor on another 500 ha of forest. He has six employees and works with 10 subcontractors.

Inspired by a European forestry conference in 2002, Péter decided to put into practice the results of current forestry research and his own ideas, by trying to mimic the processes that took place in primeval forests. Based on his experience of the last 18-20 years, the forests can be operated profitably. In 2009, the Hungarian Ministry of Agriculture recognised the potential of this new method and allocated RDP resources to it. Péter has been continuously applying this new management method on an expanding area of land since 2009. He has also been involved in a newly leased forest project since 2017, for which he has received support from the European Agriculture Fund for Rural Development (EAFRD).

Objectives

The objectives of the RDP supported forest management practices are to:

- Maintain the triple function of forests (protective, public welfare, financial) according to today's needs;
- Introduce a forest management method based on natural processes, without clear-cutting areas;

- Perform forestry work in such a way that the remaining wood and forest soil are not damaged;
- Cultivate forests resistant to damage (wind, snow, insects); and
- Manage the forests in a way that provides a continuous income for forest owners.

Activities

In 2017, the Ministry of Agriculture re-launched the Forest Environment Target Programme for Forest Environments covering a 10-year maintenance period. The essence of the target programme is to bring forward a new approach to forest management in forests that have been intensively managed under logging principles for centuries. The trees to be felled here are not harvested systematically, or over a large area, but are selected individually, or in small groups. Using the results of the latest forest dynamics research, the forester who selects the trees considers the role of the forest in addition to the economic value of the given trees. The forester considers the maintenance of biodiversity and strives to create a mix that will foster the conditions for the renewal of the forest with native tree species. In the forests where the work takes place, disturbance of the special micro-habitats (springs, rock outcrops, nests and birdhouses, stream banks, wood weed, dead trees) is avoided. The forest is not dealt with as a multitude of tree species, but as the most complex terrestrial ecosystem. For this diverse and complex planning and management work, Péter received professional help during the events and from publications of the Pro Silva Hungária Association. He participated in the nature-friendly material handling target programme for one year in 2017-2018.

During logging, Péter's company tried to transport the felled trees from the forest by cutting them into pieces and using modified road vehicles. It soon became clear that this work was very physically demanding for the workers and technically rudimentary and inefficient. While the idea proved to be good, it was necessary to acquire the right technical equipment.

In 2018, he submitted an application for support under the project call for 'Development of Forestry Technologies' (with a five-year maintenance obligation). In 2018 and 2019, three chainsaws, a forestry trailer and a mini forwarder (an eight-wheel drive machine, designed and built in Sweden to reach difficult and sensitive areas of forestry) were purchased with the support received. For chainsaws, the main consideration was to select a low-vibration machine prioritising the worker's health and safety. The trailer and mini forwarder can move the harvested wood so that the forest soil is not compacted or left with deep wheel tracks. In this way, the forest habitat will only be slightly disturbed.

Main Results

- This new forest-friendly type of management will allow the development of a diverse, habitat-rich forest structure.
- Seedling groups of many tree species have emerged to provide natural reforestation.
- Expenditure on planting and growing young forests and seedlings has decreased by 90% compared to traditional forestry.
- The attitude of forest workers has changed, and their businesses have stabilised.
- Forest owners now have a steady flow of income.
- The use of modern and task-specific machinery has reduced the environmental impact of the forest management and the physical load on the workers.
- The EU support contributed to the stability of the activity and adequately complements the foresters and forest owner's income. It provides stable jobs for both employees and subcontractors..

Key lessons

A strong commitment from forest owners and the forester is needed to switch to this new forest management method and the forester needs a thorough knowledge of it. The forester requires to have the capacity to pass on information to forest owners and forest workers. The importance and difficulty of shaping the attitudes of forest workers should not be under-estimated.

The new method, surprisingly, led to a significant reduction in the time spent managing young forests.

Particular attention needs to be paid to the control of damage from game animals.

The invitation to tender supporting nature-friendly material handling is not published every year, so the possibility of support is sporadic. The beneficiary thinks it would be advantageous to issue these calls on an ongoing basis.

The application to purchase new machinery was prepared by a consultant, thus reducing the administrative burden for the applicant who was satisfied with the process. The other two funding applications, which required more serious forestry expertise, were prepared by the applicant himself, with the help of a small professional group. This group constantly helps each other, working together regularly.

There have been many audits in recent years, and Péter Laczkó has always been satisfied with the auditors' preparedness and knowledge. The audits went well.

The record-keeping process is thought to be complicated, as maintaining a continuous work log imposes a high administrative burden on the beneficiary, especially in comparison with the size of the area managed. If, for example, due to storm damage, he needs to visit different parts of the forest, a separate worksheet must be prepared for each part he explores, and the damage must be registered. It would be good to change this method, because in practice, in total, it takes six-months to do the administrative work for the 10-year support period.



Mini forwarder



Post - harvest condition

Additional sources of information

n/a