

Sustainable Forest Management for Carbon Sequestration

Background

Project No: SVK/SGP/OP4/Y3/RAF/2010/015

Grantee: NGO BROZ

Location: Velký Lél, Komárno district

SGP Contribution: 49,987 USD

Cash Co-Financing: 72,740 USD

In-Kind Co-Financing: 5,000 USD

Project Duration: 18 months

Focal area: Climate Change

The project site lies on the Slovak-Hungarian border in watershed of River Danube. Project is implemented in 10 villages (approximately 10.000 habitants) which lie within the boundaries of Protected area Dunajské luhy and Natura 2000 within Komarno District.

The site lies on the floodplain area of Danube River (floodplain forests). The main problem is degradation of old willow trees. The area had special type of forest management – producing “head” willow trees. The tree tops were regularly cut and provided habitants with fuel wood. However, 50 years ago the state policy introduced usage of fossil fuels for heating. Easy access to energy led local habitants to

lose interest in traditional forest management. The old willow tree forests started to degrade, both in terms of their productivity and biodiversity value (invasive species and loss of recovery of the vegetation). Due to the long term low economic and cultural development, the local people lost the traditional forestry management knowledge and skills. In addition, they have low awareness on climate change.

There is 16% unemployment rate in the area and lack of working opportunities. Habitants were mainly employed in agricultural sector, which is currently declining. This reduces working opportunities for local people and thus their income. Together with increase in energy prices this puts high pressure on local habitants. On the other hand, it creates good opportunities for project implementation.

Project Objectives and Key Activities



The goal of the project is to restore original willow woods in the Danube catchment area and to promote usage of wood biomass at the local level. In particular the project aims to increase fixation of CO₂ on 14,3 ha of degraded forests through the restoration of old willow trees forests and planting of original forests; to increase the participation of local community on climate change mitigation and biodiversity protection and to produce wood biomass as an income source.

Restoration will be done through cutting the willow tree-tops -thus restoring their productive function- and planting local trees. Another restoration activity will be cutting-off the invasive species which decrease the biodiversity value of such habitat. Removals will be used as fuel wood and the smaller ones



for pellet production. CO₂ accumulated in the removals as the switch from coal or gas heating is direct contribution towards reducing the climate change. Thus project will ensure rehabilitation of protected area and promotion of local renewal energy source.

Environmental Impact

To date the project has restored 15,9 ha of old willow tree forests, produced 342 tones of wood chips and planted 5000 trees (ash, oak, willow). The old willow tree forest after restoration will increase its sequestration potential by 23,6 t/year on 10 hectares of restored forest. New plantations will increase its sequestration potential by 14,1 t/year on 10 hectares.

It is expected that in total the project will produce 500 m³ of wood products per year. This will represent 95,6 tones of fixed CO₂ equivalent.

Socio-Economic Impact

65 habitants were trained in sustainable firewood collection and “close-to-nature” forest management and participated on cutting the woods. 50 local school children received training on the value of the floodplain forests and local livelihoods generating environmental awareness of future generations. In addition, communities will access the forest to collect dead wood for firewood and sustainably use non timber forest products at the household levels.

Policy Impact

This is the first pilot project in Slovakia that shows a sustainable forest management approach in a protected forest area. After establishing that the model works, other activities will be pursued to influence policy.

The environmentally friendly forest management protocols have already proved to be effective and thus can be replicated in other similar sites in Slovakia.