Case study: Conservation and management of Danube floodplain forests, Slovakia (No. 455)

Adapted from the Project LIFE03NAT/SK/000097 conducted by Regional Association for Nature Conservation and Sustainable Development (BROZ) in Slovakia. The project was financed from EU LIFE funding scheme

Introduction

Giant power of the Danube River (one of the longest European rivers crossing 12 countries) has enabled development of the various life forms in floodplain forests. Danube has created network of river branches, swamps, islands covered by dense forests with climbers and creepers and thousands of plant and animal species. Floodplain forests are equivalent of rainforests in Central Europe. And they are also equally endangered.

Recently the Danube floodplain forests cover only the narrow belt along the Danube River and present only fragments from the area which they covered in the past. Floodplain forests belong to the most threatened forest ecosystems. Danube floodplain represents the largest area of floodplain forests in Slovakia. Majority of floodplain forests has been destroyed by regulation of water courses and construction of big dams. Excessive logging, large scale clear- cuts and plantation of non- native hybrid poplars caused, that only last fragments of the natural floodplain forests remained. These forests are still endangered.

System of river branches, oxbows and forests located on the section of the Danube River downstream from Bratislava capital city represents the largest inland delta. After the real Danube delta at the Black sea coast in Romania, this was the second biggest wetland in Europe. Danube floodplains were jungle full of life of fishes, amphibians, insects and paradise for birds.

Beauty and wilderness of Danube floodplains was continuously deteriorated by human impacts. Construction of the Gabcikovo water dam caused direct clearance of minimum 2 500 ha of floodplain forests and influence of water regime of other areas. Intensive forestry has in few decades rapidly changed the face of the Danubian landscape. Unique forests have been destroyed, natural and diverse forests have been replaced by monocultures of only one species – non-native hybrid poplar, planted for maximal wood production. Last refuges of the rare species of fauna and flora were endangered.

1. Hydrology and ecosystems of Danube floodplain

1.1. Natural conditions

The territory of Danube floodplains consists of well-developed branch system, oxbow lakes, river islands, sand and gravel banks, and is covered mainly by residual alluvial forests, mixed oak-elm-ash forests, swamps, oxbow lakes, lowland meadows and agricultural land. The project site represents the large trans-border wetland along the Slovak-Hungarian section of the Danube River. Danube floodplains play a substantial hydrological, biological and ecological role of this section of the Danube River.
Danube floodplain was designated as a Ramsar site in 1993 because of several reasons: System of river branches, oxbows and forests represents the largest inland delta in the Central Europe. The site hosts large amount of rare, vulnerable and/ or endangered species of plants and animals. Wide variety of ecosystems is present, according to hydrological conditions, ranging from aquatic, wetland, forest and meadow ecosystems till xerotherm ecosystems on extremely dry stands of big gravel depositions.

1.2. Flora and habitats

Type of the floodplain forest habitats depends on the level of ground water and floods. Floodplain forest naturally originates at the new fluvial deposits. The wettest areas, which are flooded for longest period are occupied by habitat Alluvial forests, also called as softwood floodplain forests. Higher and dried stands, with rather rare floods are naturally covered by Riparian mixed forests, so called hardwood floodplain forests.

On the most extreme stands of the big gravel deposit, capillary action of the ground water is not possible. These has formed typical "Danube forest- steppes", represented by habitat Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (important orchid sites). Tree cover is almost missing, dominating are shrubs of (*Crataegus monogyna*). Several rare orchid species occupy this habitat - *Orchis militaris*, *Orchis morio*, *Orchis coriophora*, *Orchis ustulata* and unique, autumn blooming orchid *Spiranthes spiralis*, which has its most important sites of its occurrence just in Danube floodplains.

There are 13 habitat types of so-called EU Community interest, protected by proposed SCIs. Apart from above mentioned, these habitat types are present within the project site:

- 3130 Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the *Isoëto-Nanojuncetea*
- 3140 Hard oligo-mesotrophic waters with benthic vegetation of *Chara* spp.
- 3150 Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition* – type vegetation
- 3260 Water courses of plain to montane levels with the *Ranunculion fluitantis* and
- *Callitricho-Batrachion* vegetation
- 3270 Rivers with muddy banks with *Chenopodion rubri* p.p. and *Bidention* p.p. vegetation
- 6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels
- 6510 Lowland hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*)

Number of rare plant species is fixed to these habitat types. Noteworthy flora species: *Leucojum aestivum, Thalictrum flavum, Galanthus nivalis, Viola elatior, Blackstonia perfoliata, Galium parisiense* subsp. *anglicum, Hippuris vulgaris, Nyphoides peltata, Orchis coriophora, Spiranthes spiralis, Hottonia palustris, Nuphar lutea, Nymphaea alba, Salvinia natans, Trapa natans, Sagittaria sagittifolia*, etc.

1.3. Fauna

Great diversity of natural conditions and habitats results also in high number of animal species. Either depending on water, wetlands, broadleaf forests or even dry forest steppes, they all find suitable living conditions in the project site. Different types of forests, from wet softwood floodplain forest to xerophilous oak forests even more increase this diversity.

The most abundant is fauna of insects. Very noticeable are dragonflies, which are present in tens of species, represented e.g. with the rheophilous *Gomphus vulgatissimus*, *Ophiogomphus cecilia* and *Gomphus flavipes*, or rare inhabitans of stagnant, vegetation-rich oxbows, such as *Epitheca bimaculata* or *Leucorrhinia caudalis*. Upon the ca.1800 species of beatles (Coleoptera), recorded in Danube floodplains habitats are many remerkable – as the giant *Lucanus cervus* and *Cerambyx cerdo* or the tiny soil inhabiter *Thinobius korbeli,* which has been described exactly from the project site, and until know not found elsewhere.

Rich in species is the fauna of fishes, which is the result of unique combination of vast water bodies and their diversity – fast or slow flowing, standing, different overgrown and drying out waters. Typical is the native wild carp (*Cyprinus carpio*), rare dog fish (*Umbra krameri*) or queen of Danube waters – Danube salmon (*Hucho hucho*). Natural condition are ideal also for amphibians and reptiles, including *Triturus cristatus, Hyla arborea, Pelobates fuscus, Bufo bufo, Bufo viridis, Rana arvalis, Rana dalmatina, Rana ridibunda, Rana lessonae, Rana kl. Esculenta, Bombina bombina*, *Elaphe longissima, Coronella austriaca* and *Anguis fragilis.*

No wonder, that Danube floodplain is also an Important Bird Area (see EU Directive). Site of international importance in winter regularly hosts population of more than 20,000 waterfowl, consisting of large numbers of ducks and geese.

High density of bird species, nesting in floodplain forests, are incomparable with other type of forests Forest birds are represented by *Silvia atricapilla*, *Passer montanus*, *Sturnus vulgaris*, *Cuculus canorus*, *Dendrocopos medius*, *Jynx torquilla*, *Dryocopus martius*, *Parus montanus* and *Muscicapa striata*. Reed beds and coppices at water edges are attractive for *Remiz pendulinus*, *Acrocephalus palustris* or *Locustella fluviatilis*.

Rare nesting bird is a black stork *Ciconia nigra*. Typical raptors of floodplains are black kite (*Milvus migrans*) and white tailed eagle (*Haliaetus albicilla*).

Mammals are represented by all species typical for broadleaf forests, e.g. *Erinaceus concolor*, *Martes martes*, *Vulpes vulpes*, *Meles meles*, *Capreolus capreolus*, *Sus scropha* and *Cervus elaphus*. Old and hollow trees provide shelter for number of bat species - *Nyctalus noctula*, *Eptesicus serotinus*, *Myotis daubentoni*, *Pipistrellus pipistrellus*, *Myotis bechsteini* and *Plecotus auritus*.

Rarity is the glacial relict – small mammal *Microtus oeconomus mehelyi*. Originally wide spread during the ice ages, nowadays living only in a few marshland areas. Typical water mammals are fish otter (*Lutra lutra*) and beaver (*Castor fiber*).

2. Anthropogenic factors

The main threats identified by key stakeholders (among which NGOs took an important advisory role) are as follows:

1. Unsustainable forest management
2. Expansion of invasive species
3. Lack of awareness of forestry authorities, decision-makers and public
4. Unregulated recreation and tourism
5. Deterioration of the water regime due to inappropriate water management

Forest management is the most serious impact which, during the past 5 decades, has led to the large scale destruction and degradation of vast majority of Danube floodplain forests. Recent forest management practices are focused only on maximization of wood and pulp production, using large scale clear-cuts (up to 5 ha), removal of the top soil layer by using heavy bulldozers and planting of plantations of hybrid poplars and other non-native tree species. Remains after logging were often deposited into old river arms and depressions by heavy machinery. This results in changing of the natural micro-relief shape and loss of different microhabitats.

These forest management practices have been commonly used almost in all forests at the Danube floodplain territory. All forest stands within the project area would be seriously affected or completely clear-cut by these practices, if this way of management will be not changed.

These artificial forests are being harvested in the age between 20 - 40 years, and this practice severely limits the chances for survival for all species depending on the old trees and dead wood. Recent unsustainable forest management practices were even threatening the last remaining natural floodplain forest stands within the Danube floodplain, and continuously destroying these priority and non-priority forest habitats. This affects wide range of the plant and animal species, many of them listed in the Annexes of EU Habitat and Bird Directives and Bern Convention Resolution. Large scale clear-cuts and removal of the top soil layer support massive spreading of invasive non-native plant species. Artificially planted forests, even if the native tree species are used, are homogenous and with reduced diversity of microhabitats, therefore their biodiversity is substantially reduced in comparison with the natural forests.

3. Administrative measures towards natural conservation

Unique natural values of the former Danube inland delta attracted attention attracted nature lovers and scientists since the early beginnings of nature conservation in Slovakia. First efforts for designation of National park "Danube floodplain" started in late 60s and were repeated in 80s. Proposals for national park were submitted both by professional and voluntary nature conservation bodies.

Plans for establishment of the national park were not implemented because the (planned) construction of water works Gabcikovo – Nagymaros (a large scale dam at Slovak – Hungarian border). Large parts of the Danube inland delta were destroyed during the construction of Gabcikovo water works. Other parts have been deteriorated by negative changes of water regime.

Floodplain forests have been intensively exploited by forestry and most of natural forests have been replaced by plantations of hybrid poplars.

Finally, the area was designated as Ramsar site "Danube floodplains" No. 605 in 1993 and as the Protected Landscape Area (PLA) „Danube floodplains" since 1998.
Within PLA there are 13 protected areas in following categories:

- Protected site (2 - Polovnícky les, Bajdel)
- Natural monument (2 - Panský diel, Kráľovská lúka)
- Nature reserve (7 – Kopácsky ostrov, Gajc, Topoľové hony, Ostrovné lúcky, Zlatniansky luh, Dunajské ostrovy, Starý háj)
- National nature reserve (2 - Ostrov orliaka morského, Cicovské mrtve rameno)

4. Actions taken

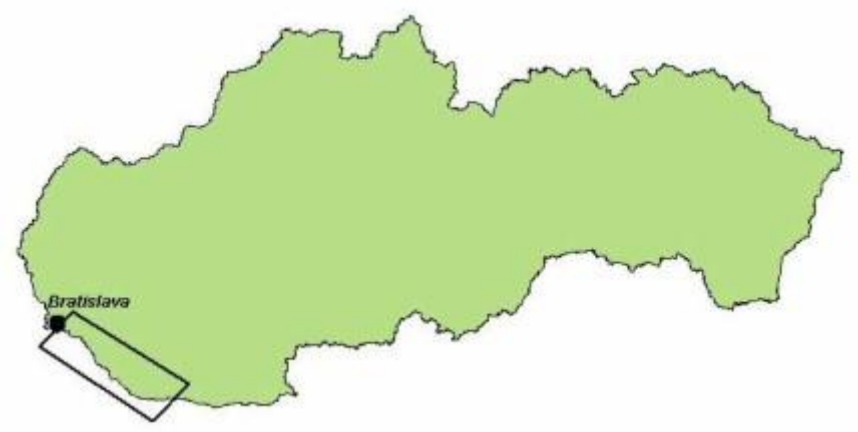
A regional NGOs located in Slovakia, has developed a project to be submitted for financing from the EU funding scheme LIFE. The main objective of the project is to preserve last remaining natural floodplain forests in Slovak part of the Danube floodplain and to introduce sound, sustainable forest management in the area. Project actions were focused especially on changing of unsustainable forest management practices and stopping the loss of natural floodplain forest habitats due to forestry.

Project actions are focused to stop loss of the natural floodplain forest habitats due to forestry activities, applying of the sustainable forest management and raising awareness of the key stakeholders as well as general public.

4.1. Project site

Project site surface area (ha): 12,450 ha

Map of the general location of the project site – location in the country



Danube floodplains project site has 7 sub-sites

Project sub-sites cover fragments of floodplain ecosystems (mostly floodplain forests) along the Danube River. Project site is almost 100 km long, starting from Bratislava capital city and ending near Zlatna na Ostrove (before town Komarno).

4.2. Implementation activities

Interventions for planning processes

- Elaboration of the Sustainable Forest Management Framework Strategy for the whole area, based on the field inventories and database information, as a basic document for the updating of the respective Forests management plans.
- Elaboration of new Forests management plans (for 5 forest administrative districts), in detail for all forest stands concerned.

Interventions regarding changes in management

- Create model example of “close to natural” forest management, favourable for the long-term preservation of biodiversity.
- Inventory of local sources of genetic material for afforestation – selected individual trees of native species.
- Designation of new nature reserves and enlargement of existing ones
- Applying proper forest management on selected sites – control and elimination of invasive plant species, promoting of natural regeneration, selective tree cutting (instead of clear-cutting).

Stakeholder involvement and public participation activities

- Education and training of personnel of State Forest Administration and State Nature Conservation institutions, including the study visits abroad (to the Czech Republic – Morava

and Dyje river floodplains, and Austria - National park Donau- Auen, Naturreservat Marchauen)

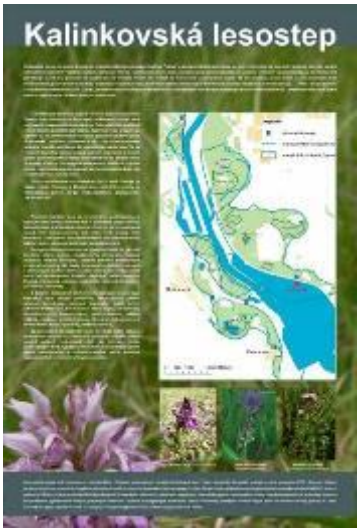
- Raising the public awareness on the conservation of floodplain ecosystems – preparation of information materials, talks and field trips for students and public, slide presentations, publicity campaign in local, regional and national media, installation of signposts.

Due to low public awareness and unwillingness of bear the environmental cost of protection, the beneficiary of the project decided to purchase and lease the forest lands from private owners.

5. Achievements

Elaboration of the Sustainable Forest Management Framework Strategy

The Sustainable Forest Management Framework Strategy was elaborated. It was based on the field inventories and database information, as a basic document for the updating of the respective Forests management plans. The principles of sustainable forest management and biodiversity conservation was incorporated into the Strategy.



The Strategy is now used as a basic document formulating the standpoint of State Nature Conservancy on the forests management plans. According to the new Slovak Act No. 543/2002 Coll. on Nature and Landscape Protection, such statement of State Nature Conservation authority is obligatory for the approval of new Forest management plans.

Under recent legislation, no detailed study (Sustainable Forest Management Strategy) is compulsory for the process, so this output document goes far beyond the statutory obligations of nature conservation bodies.

Strategy deals also with forest on non- forest land, the so called “white plots”. “White plots” are officially non - forest land (e.g. officially arable land) which are covered by forest. The national Forest Act is not applied for these lands. Many of the “white plots” have been afforested by natural succession and represent very interesting floodplain habitats from biological point of view. Including these “white plots” in regular forest management could have a negative effect on quality of habitats, which has been developed, thank to missing regular forest management.

Elaboration of new forests management plans

New forests management plans were elaborated for 4 forest administrative districts – Rusovce, Samorin, Gabcikovo and Calovo; covering the whole project area.

Former forest management plans did not respect sufficiently the nature conservation interests and needs. According to Forest Act, the forest management plans are obligatory document for any forest management of all forest stands. During the project duration, new Forest management plans were elaborated for the whole area concerned.

Apart from the main project objective (stopping loss of natural floodplain forests habitats due to forestry) we were able to increase the size of natural floodplain forest habitats and apply softer forest management methods in selected areas. In all forestry management plans, most valuable forests stands have been left with “no management”. Leaving of individual standing trees on the area of clear-

cuts is no more rarity, as it used to be in the recent past. After consultation with foresters, we can mark the trees which will be preserved when logging concerned forest stands.

Designation of new nature reserves and enlargement of existing ones

Sites proposed to be designated as new nature reserves represent largest areas of natural floodplain forest in rather good ecological state. Their strict protection as nature reserves is necessary precondition to prevent further negative impacts of forest management and of the other human activities (development and construction, intensive recreation etc.). Size of some existing nature reserves is insufficient to achieve favourable conservation status and therefore their enlargement is needed.

Designation of the proposed nature reserves is complicated due to external circumstances, which are beyond our control, such as changes in legislation and insufficient activity of the competent authority Regional environmental office in Bratislava (KÚŽP).

However, we have prepared proposals for designation of 5 new and enlargement of 3 existing protected areas with total size of 2086 ha.

Inventory of local sources of genetic material for afforestation

Individual trees of native species (*Salix alba, Salix fragilis, Populus alba, Populus nigra, Populus canescens, Quercus robur, Alnus glutinosa, Fraxinus angustifolia subsp. danubialis, Acer pseudoplatanus, Acer campestre, Acer platanoides, Tilia cordata, Pyrus pyraster*) were identified within the project area, which will provide the reproduction material for nurseries and for further afforestation (seeds, material for vegetative reproduction).

Individual trees of these species were selected based on criteria of habitus, size, health condition, origin, fructification and their suitability for commercial forestry, etc. The selected trees are fenotypical superior trees, which quality, wood production, resistance or other important attributes are substantially better, than of other trees of the same species, age and on the same stand.

Missing proper genetic material for afforestation is one of the reasons for planting of non- native tree species. Use of native species and sorts, which are well adapted to the local ecological conditions, is necessary for reaching of the good status of the new forests and preserving species genofond. These new forests should be planted instead of the recent plantations in future. Because of the lack of suitable reproduction material, non-native species and hybrids are being planted, with damaging impact to the natural forest composition and stability.

Measures to increase tree species diversity by planting of autochthonous tree species into monocultures of hybrid poplars have been implemented in cooperation with the State Forests in autumn and winter 2006. Areas with minimal occurrence of native tree species have been selected in project sub-site No. 5. In the open areas, gaps after dead trees, forest edges etc. between monocultures of hybrid poplars native trees of *Quercus robur* and *Populus x canescens.*

Purchase and long term lease of land

We use land purchase, if it is not possible to achieve nature conservation objectives by other effective (cheaper) way (e.g. agreement with land owners and land users) or if the owner is not willing or able (not) to manage the land in a proper way. Ownership/ long term use of the forest land by the environmental NGO allows to leave trees to live their whole biological age and to see the natural forest regeneration.

Owners of the forests are in the best position to suggest and actually also to reach the changes in the Forest management plans. Purchase or long term lease of land have enable applicant and partners to apply the necessary management and nature conservation measures (different from the regular forest management applied) and create model example of close to natural floodplain forests management, without time consuming negotiations with different stakeholders. It is often the best way how to stop the threat of complete logging of the area.

After series of negotiations with land owners, the NGO BROZ was successful to sign contracts and acquire land in different areas of Danube floodplains. At the moment BROZ has under total control 330 ha of the land in cadastres of municipalities Cunovo, Cicov, Velke Kosihy and Zlatna na Ostrove. From this, BROZ has 30 ha in ownership and 300 ha in long-term lease for 25 or 30 years.

The principles of sustainable forest management will be applied on every bit of land purchased or leased, creating a model examples of sound floodplain forest management and conservation. The activities will differ according the needs and conditions in each forest stand. For natural floodplain forests in favourable conservation status no management will be applied and free development of natural processes will be allowed.

The biggest complex of the land, which we have in use for 25 years, is 250 ha of the land at the Veľkolélsky ostrov Island. One of the biggest Danube islands hosting well preserved floodplain forest will now receive proper care and protection. In the protection of Veľkolélsky ostrov Island, we are closely cooperating with the municipality Zlatná na Ostrove and local inhabitants.

Purchase of the valuable natural areas is the way, on which we continue also after competing of the LIFE project. We are looking for other sources to finance purchase of the land for nature conservation purposes. If you would like to support us, please contact us!

Elimination of invasive tree species

At selected sites the invasive tree species (mainly *Negundo aceroides, Ailanthus altissima, Fraxinus americana, Fraxinus pensylvanica and Robinia pseudoacacia*) were eliminated to prevent their further spreading and to promote the growth of native tree species. This is a proved methodology, which has been working successfully in conditions of PLA ”Danube floodplains” in Slovakia as well as in National Park ”Donau- Auen” in neighbouring Austria.

Selective logging was done systematically to eliminate in first stage all fertile (seed producing) trees and to cover the whole area targeted. Elimination of invasive tree species in this project is considered as a non – recurring management - fertile trees as sources of invasions and further expansions will be eliminated, to stop or rapidly slow down spreading of invasive tree species. Creating natural condition preferred by native tree species and regular removal of young trees of invasive species is a long term process considered as a recurring management, which is not part of this project.

Invasive tree species are very aggressive, often developing dense canopies which take over the natural vegetation, and slow down the natural regeneration of forests. Their elimination is therefore necessary to reach the favorable conservation status of the priority habitats “residual alluvial forest” and mixed “oak-elm-ash forests”.

This action was implemented in close cooperation with the State Forests - branch Palarikovo. Invasive tree species have been targeted and removed in project sub-sites 1, 3 and 4 at the total are of 430 ha.

Invasive trees of all ages have been removed by selective logging. Open areas in forest stands after removal of invasive species are being naturally afforested by native species. By logging of invasives, diversity of the forest stands have been supported in age and forest structure. Complete removal of invasive from large compact areas is considered to be the best approach how to eliminate all sources of the seed dispersal on the site. Possible regeneration of invasive tree species from root or stump shoots or from old seeds will be removed by common forest management.

Raising the public awareness on the conservation of floodplain ecosystems

This action was very important to reach the support of public and decision-makers for the project. With their support it would be much easier to ensure the implementation of the key project activities (changes in forest management plans, designation/enlargement of nature reserves, purchase/lease of forest lands), as well as long-term sustainability of the project achievements.

All information and awareness raising materials produced within this LIFE – Nature project contain a specific reference to Natura 2000 and the importance of the project to the establishment of this European network. Number of information materials has been produced within the project: poster, postcards (6 motives), stickers (6 motives), calendars (6 motives), brochure in Slovak and Hungarian language, layman´s report.

Number of presentations, slide shows and field trips for students and public, both from Slovakia and from abroad, have been organized. Issue of floodplain forests conservation has been promoted in local, in regional and national media. 12 signposts have been installed in field for visitors of protected areas. LIFE project web-site was launched. This web-site provides only very short information on the extensive project actions. Contact us if you are interested in more detailed information.

Education and training of personnel of State Forest Administration and State Nature Conservation institutions

To provide the forest managers and nature conservation personnel with the first-hand experience on the nature conservation oriented management of the floodplain forests, successfully implemented in neighboring Danube basin countries, under similar natural, social and economical conditions, we have organized 3 study visits abroad (2 visits to Austria - National park Donau- Auen, Nature reserve Marchauen and 1 visit to the Czech Republic – Morava and Dyje river floodplains).

The key persons and stakeholders responsible for forest management in the area have been selected to participate on the study visits abroad. This includes personnel of State Forests, -branch Palarikovo, personnel of the State Nature Conservancy of the Slovak Republic - Administration of PLA Danube floodplains and other branches, water management authorities, state administration of forestry and environment, Ministry of Environment, etc., to learn from the practical experience with the nature conservation oriented management of floodplain forests in these areas.

Participants of the visits could see the different alternative approaches of floodplain forest management in different stages of development and discuss their views and opinions with the personnel of the protected areas of floodplain forests abroad. Moreover, several one day excursions for smaller groups of stakeholders and two big expert seminars have been organized.

We consider this kind of activity very useful also for establishing and strengthening good relationships and fruitful informal discussions with our most important stakeholders.

Lessons learnt:

- Regular and frequent personal contact with project partners and stakeholder and dedication of the project team is a must. Personal presence in the project site and numerous accidental meetings with foresters in the field helped us to build the trust and change the image of conservationist "who come from the city with different silly ideas and do not know anything about the area and forest management". Also, several 2 days study trips in NP Donau -Auen in Austria for full bus of Slovak participants showed some alternatives but especially improved personal relationships and communication between nature conservationists, foresters, state authority staff.
- We learnt that it is essential to avoid partners which are not necessary and will suffer and make you suffering with administration of their participation. It was important to follow up actions/ control and cooperation is very important to maintain project achievements.
- The river restoration project is in line with IWRM principles, as the project resulted in multi-purpose water functions: restoring the natural ecosystem, securing provision of drinking water, and the enhancement of flood protection (improvement of flow capacity of the inundation zone).

ANNEX:

Basic project data
Project title: LIFE03NAT/SK/000097 „Conservation and management of Danube floodplain forests"
Starting date: 01/09/2003
Ending date: 31/03/2007
Project beneficiary: - BROZ - Regional Association for Nature Conservation and Sustainable Development (Bratislavske regionalne ochranarske zdruzenie)

Total project budget: 570 000 EURO
EU financial contribution: 370 500 EURO (65%)
Financial contribution of beneficiary and partners: 199 500 EURO (35%)

Project partners
The project is being implemented jointly by 3 organisations (the beneficiary and two partners), who contribute to the project with their personnel, material and other resources, including know-how. BROZ - Regional Association for Nature Conservation and Sustainable Development as a beneficiary is legally and financially responsible to the European Commission for the implementation of the project. Both beneficiary and partners also contribute to the project with the co-financing from their own sources.

Project beneficiary:
BROZ - Regional Association for Nature Conservation and Sustainable Development (Bratislavské regionálne ochranárske zdruzenie) is the project beneficiary, responsible for most of the project actions. BROZ was established as a civic association (non-profit, non-governmental organisation - NGO)

in Bratislava in 1997. Most of its activities have been focused on the nature conservation and restoration of degraded natural ecosystems in the western part of Slovakia - Danube and Zahorie Lowlands, Danube, Morava and Rudava Rivers and Male Karpaty Mts. Protection of Danube floodplain forests and improving of water regime were one of the priorities since BROZ`s establishment.

Project partners:
State Nature Conservancy of the Slovak Republic (Štátna ochrana prírody SR) - is a public agency for nature and landscape protection. Supervised by the Slovak Ministry of Environment, it was established in June 2000, after restructuring the Slovak Environmental Agency, which was formerly responsible for nature conservation. SNC is an organisation with a national scope with a total staff of 415 personel in 2004. Its headquarters is located in Banska Bystrica, in central Slovakia. The SNC has administration units throughout the whole of Slovakia, including 9 national park administrations, 14 administrations for protected landscape areas and two regional nature conservation centres. It also operates a training centre - the Nature Conservation School in Varin.

The SNC is the principal agency entrusted with coordination of NATURA 2000 network in Slovakia. It contributes to setting national environmental standards and policies, co-ordinates the protected areas network, performs biodiversity monitoring and assessment, operates information system on species and habitats, maintains information networks, and organises environmental events. It also contributes to the preparation of State of the Environment reports in Slovakia. SNC is widely involved in various forms of international co-operation within nature conservation sector. It performs duties of the Scientific Authority of CITES - Convention on International Trade with Endangered Species of Fauna and Flora.

SNC - Administration of the Protected Landscape Area Danube floodplains - one of the administration units of SNC, located in district city of Dunajska Streda. It is responsible for the practical implementation of the nature conservation policies, strategies, programmes, projects, etc. in the region of Danube lowland (South- West Slovakia) and also for the implementation of practical conservation and management measures to protect the natural assets at the whole territory of its competence. The Administration of the Protected Landscape Area Danube floodplains was established in 1998 and it is responsible also for management of Ramsar site Danube floodplains.

National park Donau- Auen, Austria www.donauauen.at - The Danube floodplain National park was established in 1996. It covers the areas along the Danube River from the capital city of Vienna to the state border of the Slovak Republic.

National park is administrated by the National park Company, a non-profit organisation backed by the Republic of Austria and the Federal States of Lower Austria and Vienna as partners. The Managing Director of this organisation is the Director of the National park. The National Park Forest Administration Eckartsau of the Austrian Federal Forests and the National Park Forest Administration Lobau of the Forestry Office of Vienna are sub-divisions of the National Park Administration and, as such, are responsible for the implementation of management measures regarding areas owned by the Austrian Federal Forests and the City of Vienna. The Director of the National Park and the heads of the two forest administrations jointly form the Executive Committee.

Total area of National park at present is 9,300 hectares owned by the Austrian Federal Forests, the Republic of Austria (Directorate of Inland Waterways), the Municipality of Vienna, the WWF) and the Municipality of Hainburg. About 60% of this area are forests, approximately 25% are covered by water.

Project management, accounting and auditing

Project is managed by the full time project manager, who coordinates the work of the team based from the personnel of the State Nature Conservancy (the Administration of the Protected Landscape Area Danube floodplains and the Regional Centre of Nature and Landscape Protection in Bratislava), BROZ and National park Donau-Auen.

Information on the project development is provided to the European Commission in the regular progress reports once a year. Project performance is monitored and controlled also by the external monitoring team, contract by the European Commission.

Accounting of the project is regularly verified by the independent auditor. Final project report and project finance will be also verified by the independent auditor.