Factsheet

Bottleneck: Romania

Project: ISPA

Name: Technical Assistance for the improvement of the Navigation Conditions on the Danube – Calarasi – Braila section (ISPA 2002/RO/16/P/PA/011)

Danube Km: 375-175

Budget: 1,640,000 €, of which 1,230,000 € is ISPA contribution

Final Beneficiary: River Administration of the Lower Danube – Galati

Contractor: JV Technum N.V. (Belgium), Trapec S.A. (Romania), and Tractebel Development Engineering S.A. (Belgium).

WWF Recommendations

It is WWF's position that the precautionary principle is applied, and no new projects for inland navigation on the Danube are initiated until a basin-wide strategic environmental assessment is carried out. That means that this project should be halted and re-evaluated, since all potential local and basin-wide impacts must be assessed prior to project implementation.

WWF strongly recommends that alternatives, which imply minimum, or no, negative impacts be proposed.

The EIA study must include a detailed assessment of impacts at each proposed project site. Special attention must be given to biodiversity, including the status of protected areas. The impact on sturgeon should be assessed by experts, namely the Danube Delta National Institute (the CITES Scientific Authority in Romania).

Project location

The project section is the section of the Danube River located between the cities of Calarasi and Braila in Romania. The stretch amounts to about 200 river-km.

Background

Inland navigation on the Danube stretch between Calarasi and Braila is considered difficult due to the following reasons.

At low water levels, during the summer, 80% of the Danube's water is discharged to the **Bala** arm (one of the Danube's secondary branches), and only 20% remains in the main (navigable) branch.
Several obstacles (mainly islands) require that vessels navigate in a single direction (at low water levels, the vessels must make a detour of about 100 km). Large convoys have to be broken apart and barges are passed through one-by-one.

Therefore, the project aims to:

1. Achieve a minimum navigation depth on the eastern, "Old Danube" branch of 2.5 m, at 160-180 m wide, for 94% of the year (according to the Danube Commission).
2. Improve bank erosion.
3. Reduce dredging works from 700,000 m^3/year (on average) to 300,000 m^3/year.

Project details

Although, the project aims to reduce dredging work, it will still involve dredging to achieve the navigation requirements at 11 critical points:

1. Caragheorghe sand bar (km 345-342)
2. Lebada (Km 341-336)
3. Mirleanu (Km 329-325)
4. Fermecatu (upstream and downstream Km 323-318)
5. Cochirleni (Km 310-307)
6. Cernavoda (Km 297-296)
7. Fasolele islet (Km 292)
8. Alvanesti (Km 276)
9. Harsova (Km 250)
10. Giurgeni (Km 245-242)
11. Lupu island (Km 196))

The following works are also planned in the project:

- Closing and disconnecting some of the lateral arms.
- Dredging to achieve an extra depth of 0.5 m to compensate for sedimentation in the first year.
- Construction of a guiding wall at the Bala arm, as well as construction of a bottom sill at the mouth of the arm and 300 m downstream.
- Bank reinforcement (4000 m), including Turcescu island and in "critical" sections.
- Bottom sills and bank protection at the islands of Epurasu, Seica, Ceacaru, Tiu, Fermecatu, and Fasolele.
- Excavation at Parjoaia cliff.
- Annual maintenance dredging between the Bala mouth and Giurgeni.
- Annual maintenance dredging in the Borcea arm (downstream of Calarasi) to facilitate local traffic.

Ecology

The eastern branch of the Danube, the so-called "Old Danube", which is subject to this project, is characterised by active erosion and sedimentation processes. The river forms many meanders and a large number of islands along this stretch. Due to its hydromorphological features, this sector is particularly important for **biodiversity**.

There are seven **nature reserves** along the Romanian stretch of the Danube River, which includes islands and the riverbanks. In this section alone, 95 globally protected bird species, 7 globally protected species of reptiles, 4 globally protected fish species, and 26 nationally protected plants were identified and recorded. All of these protected areas have been proposed as **Natura 2000** sites. There are other sites also under the designation process.

The section between Calarasi and Braila is considered one of the most important spawning areas for **sturgeon** due to the habitat characteristics, i.e. hard sandy substrate.

Impact & Conflict

The proposed works of this project are expected to generate the following negative impacts.

Dredging works and closing lateral arms

- will affect the **fish population** in the Danube due to the loss of the main **spawning grounds, i.e. for sturgeon**. These are already reduced as a direct consequence of the loss of the Danube floodplain
- will affect various **fish species** (incl. sturgeon) and **bottom fauna** (incl. benthic macro-invertebrates, an important food resource) particularly in the vicinity of the islands.
- will **modify the water's natural flow regime**, which **affects the natural floodplain** that still exists on parts of the right bank of the most eastern arms of the Danube between Calarasi and Braila, i.e. the Danube between Calarasi-Ostrov-Harsova and the Dunarea Veche (Macin) arm in Tulcea and Constanta counties.
- will **harm the natural erosion-sedimentation processes that form the islands** and their sandy beaches. These areas are considered important feeding and resting areas for many important bird species, such as **Dalmatian and Great White pelican, Pigmy cormorant, and herons**.

Increased navigation traffic will lead to an increase in the already-existing, negative impact of this activity on protected species, habitats and nature reserves, due to **higher pollution levels of water, air, and noise**.

Bank reinforcement will lead to the **loss and fragmentation of riparian habitats** particularly important for riparian birds like the Bee-eater, Kingfisher and Sand martin.

The economic benefits of this project are questionable, as the costs of dredging the Danube frequently (or permanently taking into account the very fast sedimentation process) may not exceed the benefits of inland waterway transport between Western and Eastern Europe, or within Romania.

Project status

The feasibility study was finalized and submitted to the regional and local Environmental Protection Agencies according to legal procedures. The next step will be preparation of the EIA study.

Contact

For more information about this project, please contact one of our colleagues at the WWF Danube-Carpathian Programme office in Bucharest, Romania:
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