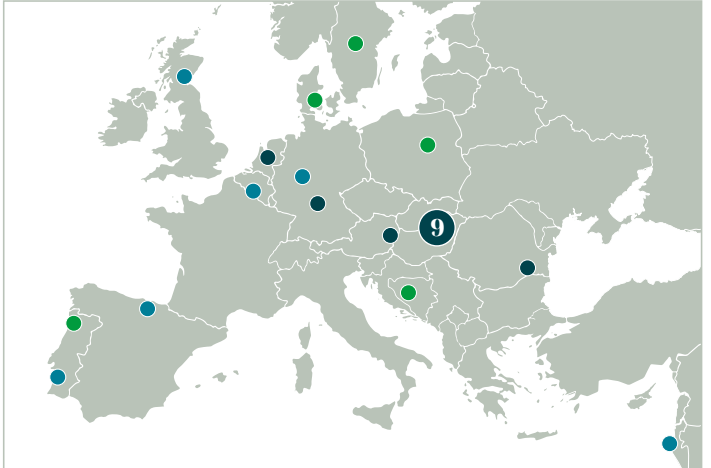




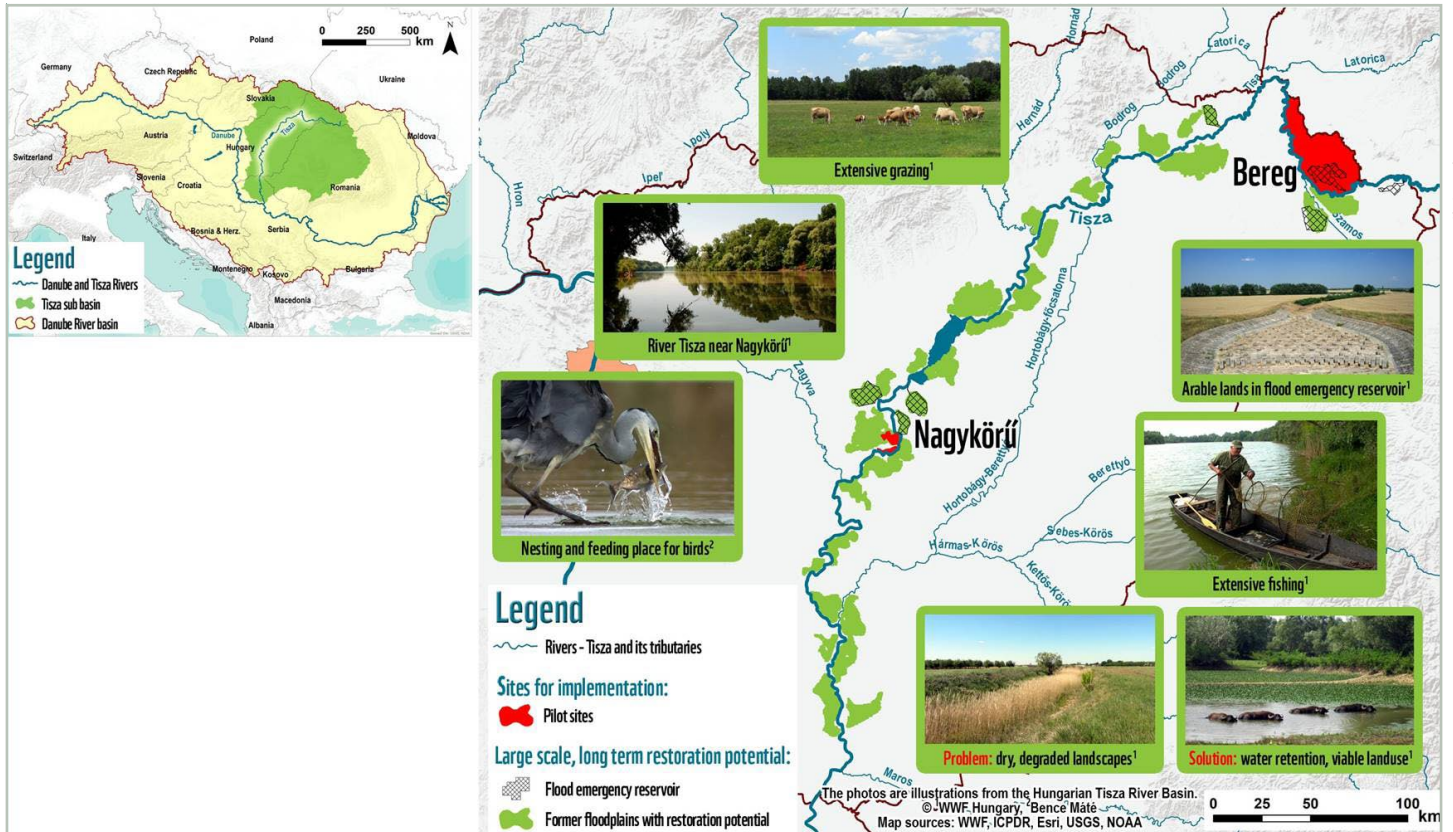
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CS number and name: 9 – Tisza
Case study cluster: large transboundary rivers
Country: Hungary
Scientific partner: WWF Hungary
Implementation partner: WWF Hungary
Twinning case study: restoration of the Botar river morphology and its hydrological regime (WWF UA)
Website: wwf.hu



Demonstration

- **Type of restoration:** Planning and implementing a floodplain farming system in the floodway of river Tisza near Nagykörű based on water retention in former wetlands, and restoring habitats (Pilot Site A). A local farmer irrigation community will be established at another site, in the floodway fringe of the Tisza to create the infrastructure for providing water for farming and habitat restoration, reconnecting former floodplains to the river (Pilot Site B).
- **Size:** 1,800 ha (affected areas: Pilot Site A approx. 300 ha, Pilot Site B approx. 1,500 ha; directly restored areas will be smaller). Case Study 9 has an upscaling potential to 150,000 ha of the deep floodplains along the Hungarian part of the river Tisza
- **Locations:** two sites (Pilot Sites A and B) near the village Nagykörű in the middle reach of the Tisza river
- **Value of the case:** floodway used for drought risk reduction, preventing drying of habitats, floodplain restoration/reconnection, ecological status restoration, enhancing biodiversity, lateral connectivity, wetland reconversion, enhance recreation potential for eco-tourism
- **Stakeholders involved:** local municipalities, local small and large scale farmers, Middle Tisza Regional Water Directorate, local NGOs, small scale local product producers in Nagykörű (e.g. cheese, jam etc.), Municipality of Jász-Nagykun-Szolnok County, Jász-Nagykun-Szolnok County Government Office, Hortobágy National Park Directorate, Ministry for Agriculture, Ministry for Interior, Hungarian Chamber of Agriculture
- **Sectors involved:** agriculture, water resources, fishery, forestry, cross sector (governance, regulation, etc.), environment, climate and disaster, tourism actors, bio-based sectors (processors, retailers)
- **Innovations to be applied:** designing and implementing a modern way of the traditional floodplain farming, harmonising irrigation infrastructure with nature-based water retention measures



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Implementation plans

- **Type of restoration:** regular inundation within the Bereg Flood Risk Reduction Reservoir System, transition in land use, floodplain reconnection and rewetting, introduction of floodplain farming, biodiversity enhancement by the upper reach of river Tisza, in the Bereg landscape (Pilot Site C).
- **Size:** min. 200 ha to be restored. Affected area of the Hungarian part of the Bereg landscape is 38,000 ha (27 municipalities, mostly belonging to the Vásárosnamény district by the river Tisza). Pilot Site C, the Bereg contributes to the 150,000 ha upscaling potential of Case Study 9.
- **Scope:** local, regional
- **Vicinity:** rural
- **Stakeholders to involve:** local NGOs, Upper Tisza Valley Rural Development Association, VIZITERV Environ Plc, Hortobágy National Park Directorate, Upper Tisza Regional Water Directorate, Nyírerdő ZRT. (local forestry company), Tourinform Bereg Office, Vásárosnamény Farmers' Club, Bereg Multi-purpose Microregional Association (26 municipalities), Bockerek Hunting Company, Hungarian Chamber of Agriculture (HCA) Szabolcs-Szatmár-Bereg County Organization, Farmers' Consultant Office of HCA in Vásárosnamény
- **Innovations being applied:** using a flood risk reduction reservoir for water retention, designing and implementing a modern way of the traditional floodplain farming



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Additional information

The Tisza sub-basin is the largest one in the Danube River Basin. The Tisza was strongly regulated, floodplains were cut off from the river in the 19–20th centuries. Landscapes are dominated by intensive arable farming, draining the waters dries landscapes. We will develop economically and ecologically viable land-use systems to increase biodiversity, enhance livelihood and climate resilience of communities by natural water retention based floodplain farming.