











Ecological restoration

Wetland ecological restoration in the Ukrainian Danube Delta as a climate adaptation measure





The Danube Delta has lost cca. 35% of its floodplain due to the conversion of wetlands into agricultural land. Extensive areas of active floodplains were transformed into polders, surrounded by dykes and disconnected from the river system. In time, the existing infrastructure has proven to provide limited protection.

An assessment study of wetlands restoration potential of the Ukrainian part of the Danube Delta has been developed under the "Climate proofing Danube Delta through integrated land and water management" project. 24 territories were investigated in order to identify the potential of and demonstrate the benefits of wetland ecosystems restoration.

Pilot - project: Zarza Polder

Zarza Polder, near the Orlovka village has been selected as the pilot project for restoration. This means it has been selected to further develop the feasibility study and to agree with the community on all the necessary steps needed for implementing it. The technical solutions proposed include connecting different channels with Zarza polder and Kartal Lake by opening dykes and planting willows. The restoration works will also include partial dredging of the channels, as well as reopening the flow between two now disconnected polders (Orlovka and Orlovskiy).

Implementing the proposed technical scenario for Zarza Polder would provide the following benefits for the ecosystems and local communities:

- 8. Favourable conditions for developing green tourism in the area will also result.
 - tourism
 a will
 increase. This water is used
 for drinking and irrigating
 small yards from surrounding villages.
- 2. 68 hectares of pastures, hay meadows, floodplain habitats for plants and animals will be restored.



istian Mititelu Raile

- 7. Support the development of local traditional ways to use natural resources.

 One example would be to use the willow plantations and reeds, as a renewable source of energy.
- 3. Water losses from evaporation in the area will decrease by up to 8 times. This will happen after 35 hectares of willow forest on the Zarza Polder are going to be planted.
- 4. Natural purification processes will intensify for 81 mln m3 of water which in the end will be discharged into Kartal Lake and Kugurlui-Ialpug Lake The water from these lakes is used as a drinking water supply to the Bolgrad town and adjacent rural settlements.
 - **6.** The lake's silting rate is going to decrease.
 - 5. There will be more spawning places in lakes which could lead to an increase of fish productivity.

Orlovka

Canal Lizarsa

Danube



Why we are here

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.