

**Final Wetlands Workshop of the
UNDP/GEF Danube Regional Project
18-20 April 2007, Tulcea, Romania**

**Flood protection and Wetlands Restoration in the Ukrainian
part of the Danube Delta**

Tatyana Galyutkina, Oleg Dyakov, Roman Sizo



Tacis CBC SPF

**Предотвращение чрезвычайных ситуаций и
защита от паводков в Еврорегионе “Нижний
Дунай”**

**Emergency Planning and Flood Protection in the
Lower Danube EuroRegion**





Предотвращение чрезвычайных ситуаций и защита от паводков в Еврорегионе «Нижний Дунай»

Emergency Planning and Flood Protection in the Lower Danube EuroRegion

- **Начало проекта / Project Start:** 21 June 2005
- **Продолжительность / Duration:** 18 months
- **Финансирование проекта** осуществляется Европейской Комиссией через программу ТАСИС – приграничное сотрудничество
The **project is funded** by the European Commission through the Tacis Cross-Border Co-operation Small Project Facility Programme

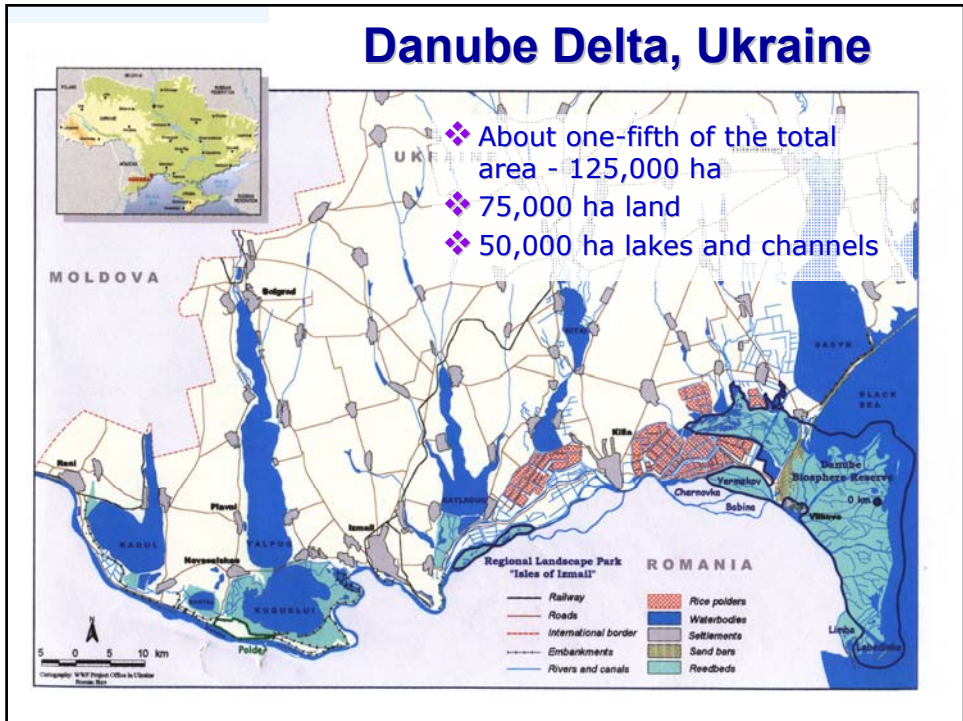


Project objective

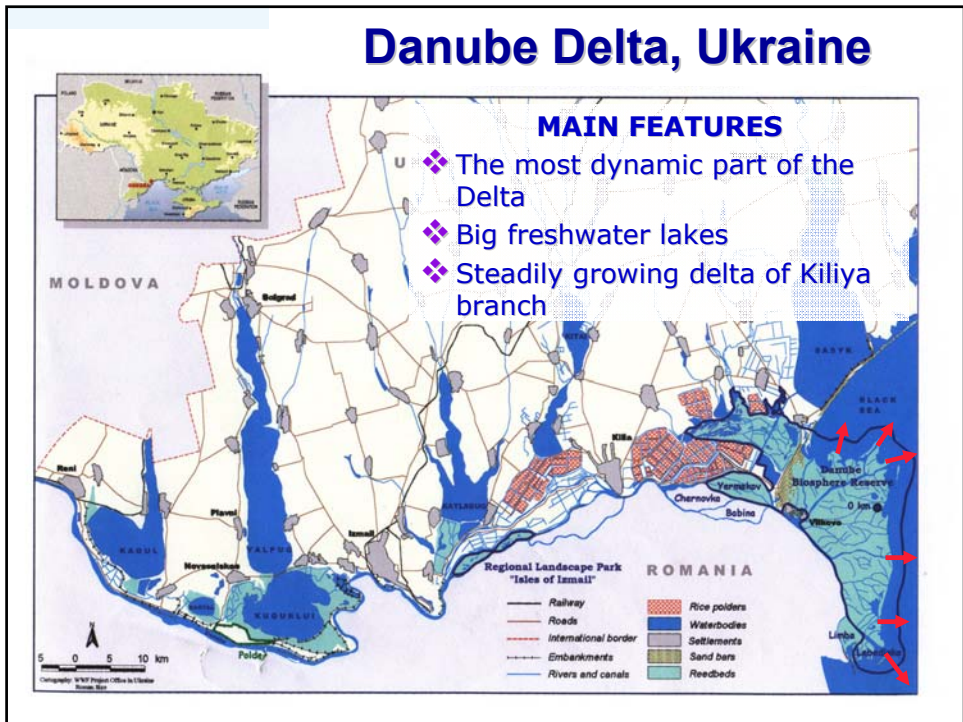
The **overall objective** of the project is working out and implementation of appropriate measures and practice of management for flood prevention and protection respecting the needs of people's security, public health, economic development of the area and management of the environment in sustainable manner in the Lower Danube floodplain.

The **main activities:** sectoral studies & risk assessment of disastrous floods; elaboration of an integrated plan for measures to reduce flood risk in the Ukrainian part of the Lower Danube; training of water managers; workshops; creation of the Office for early flood warning in Izmail; dissemination of information and public awareness.

Danube Delta, Ukraine



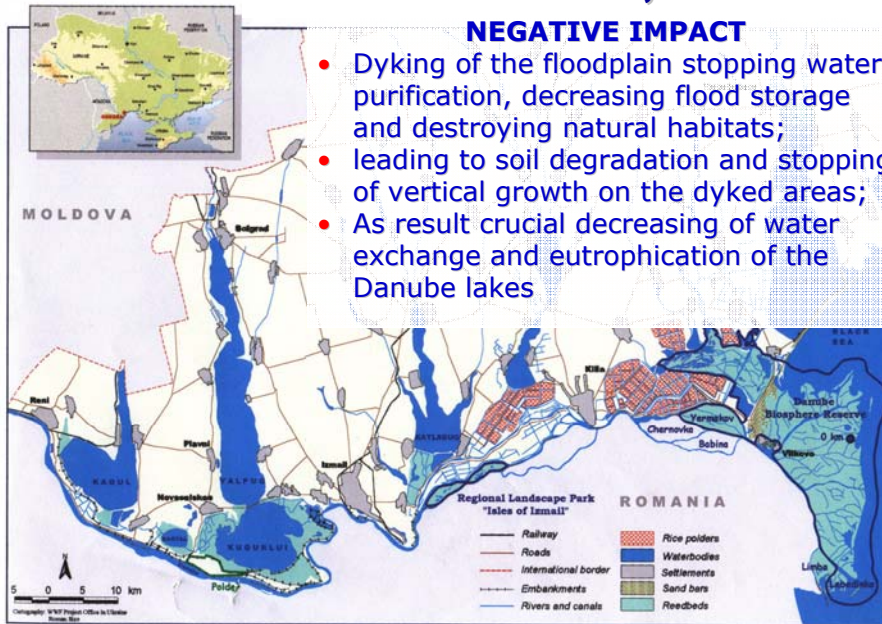
Danube Delta, Ukraine



Danube Delta, Ukraine

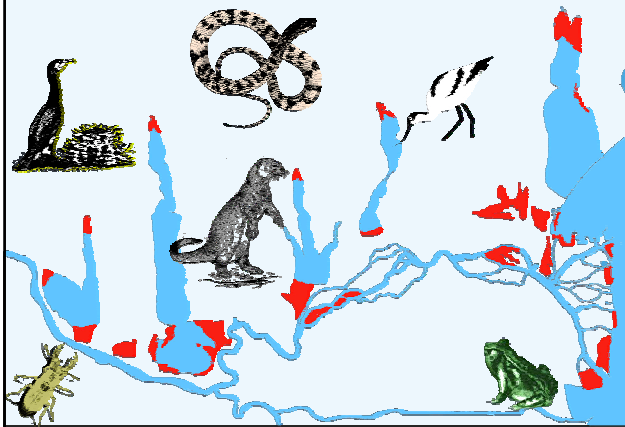
NEGATIVE IMPACT

- Dyking of the floodplain stopping water purification, decreasing flood storage and destroying natural habitats;
- leading to soil degradation and stopping of vertical growth on the dyked areas;
- As result crucial decreasing of water exchange and eutrophication of the Danube lakes



Danube Delta

Unique biodiversity



- ◆ 4,318 species of plants and animals, including:
 - 950 – higher plants;
 - 717 – planktonic single-cell algae;
 - 277 – aquatic invertebrates;
 - 91 – fish species;
 - 5 – reptiles;
 - 10 – amphibians;
 - 252 – birds;
 - 39 mammals

Assessment of flood protection dykes:

- 32 km of the dykes is in emergency situation
- 108 km are inadequate to the 1% flood level



POTENTIALLY FLOODED DYKED AREAS



Potentially endangered objects located in the flood risk area between Reni and Vilково

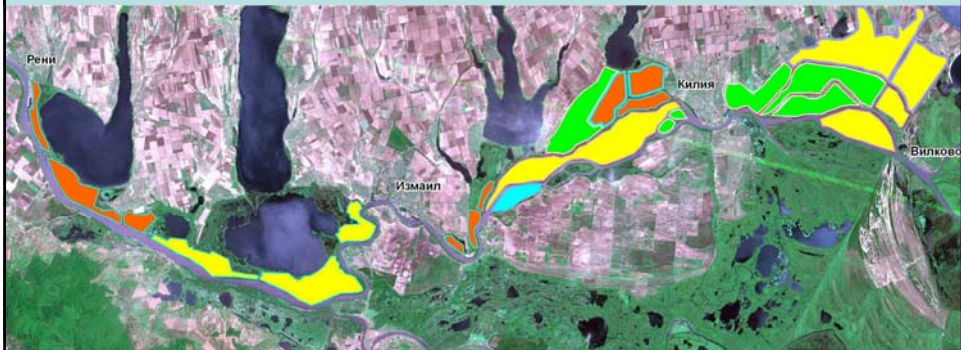


- 9 населенных пунктов Ренийского, Измаильского и Килийского / 9 settlements in Reni, Izmail and Kiliya Districts
- 2581 жилых домов / houses, где проживают 11847 человек / residents
- 31852 га с/хозяйственных земель / hectares agricultural lands
- 4533,7 га рыбпрудов / fishponds
- скважины питьевых водозаборов гг. Рени и Измаила, насосные станции водоснабжения гг. Болград и Килия и др. объекты народного хозяйства / water intakes of Reni and Izmail, pumping stations of Bolgrad and Kiliya
- Автодороги Рени-Одесса, Измаил-Килия-Вилково / Motor roads Reni-Odessa and Izmail-Kiliya-Vilkovo
- Ущерб только лишь от затопления сельскохозяйственных земель (10 тыс. грн. за 1 га), составляют 318,5 млн. грн. / Estimated losses from inundation of agricultural lands – 318,5 mln. UAH.

What has been done?

Recommendations on creation of flood protection polders and wetlands restoration

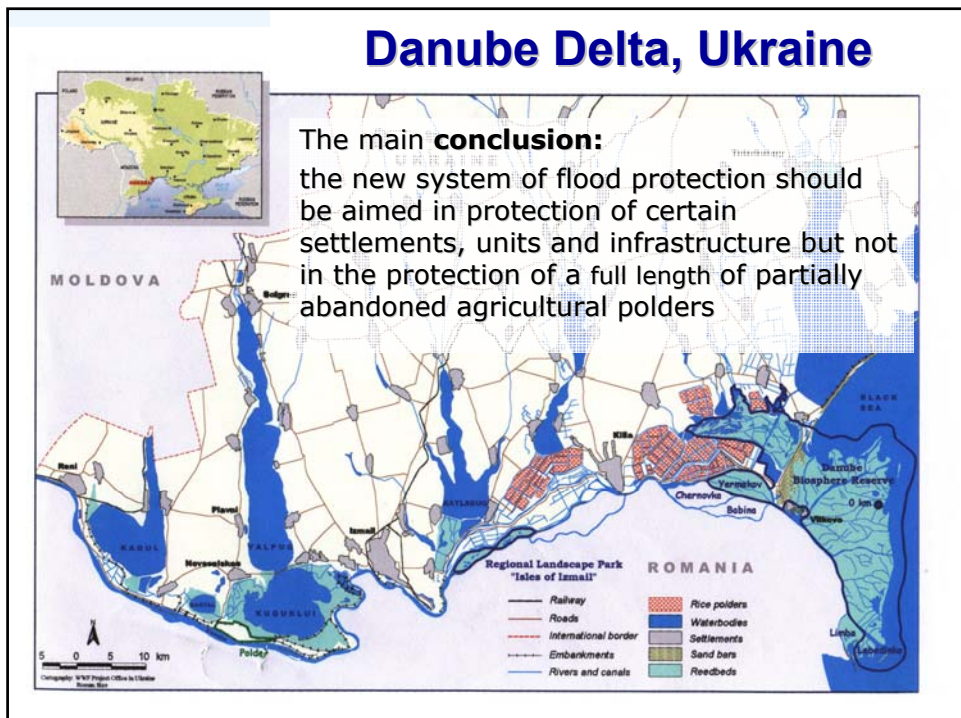
WETLANDS RESTORATION STAGES (20 - 25 years)



BEFORE RESTORATION

- ❖ Elaboration and application of a long term integrated program for modernisation of the current flood protection system;
- ❖ Detailed inventory of wetlands and dyked areas (polders)
- ❖ Create a legal mechanism for withdrawal degraded lands located on agricultural polders for wetlands restoration and increasing flood storage capacity;
- ❖ Detailed inventory of potentially dangerous units located behind of the Danube flood protection dyke;
- ❖ Removal potentially dangerous units and creation of local embankment of settlements located on the potentially flooded areas.
- ❖ Allocation measures to avoid an accidental toxic pollution of the Danube including transboundary aspect

Danube Delta, Ukraine





THANK YOU FOR YOUR ATTENTION!