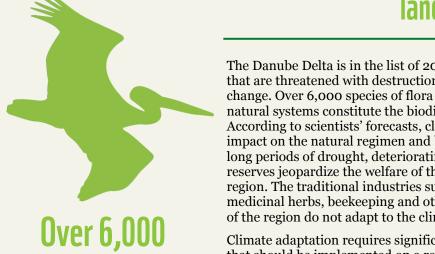


Climate proofing the Danube Delta

through integrated land and water management



SPECIES OF FLORA AND FAUNA INHABIT THE DANUBE DELTA

Goal of the project – to lay the foundation for timely and thorough adaptation of Ukrainian, Moldovan and Romanian parts of the Danube Delta region to changing climatic conditions. Adaptation to new environmental conditions must be holistic and systematic and occur at all levels, including the government administration, local businesses, communities and natural systems.

The Danube Delta is in the list of 200 most valuable ecoregions of the world that are threatened with destruction by extensive human activity and climate change. Over 6,000 species of flora and fauna and 30 different types of natural systems constitute the biodiversity of this unique region of Europe. According to scientists' forecasts, climate change will have a significant impact on the natural regimen and biodiversity of the Delta. Frequent floods, long periods of drought, deteriorating water quality, and declining fish reserves jeopardize the welfare of the communities living in the Danube region. The traditional industries such as fishing, gardening, collecting medicinal herbs, beekeeping and others will face a decline if the inhabitants of the region do not adapt to the climate change promptly.

Climate adaptation requires significant restructuring of business practices that should be implemented on a regular basis involving efforts of relevant specialists. A wide informational and educational program also needs to be carried out in order that the region of the Danube Delta could adapt to new environmental conditions.

Also, due to the lack of qualified management personnel and limited awareness of the key interested parties, Ukraine and Moldova are experiencing significant difficulties in implementation and compliance with environmental legislation in the most important areas (conservation of biodiversity, land and water management, climate change, power generation), which spoils the international image of the countries greatly.

About the project

A new regional project, aimed to prepare the Danube Delta to the possible impacts of climate change, was launched in March 2011. The three-year project "Climate proofing the Danube Delta through integrated land and water management" brings together 3 countries: Ukraine, Moldova and Romania. The project is supported by the International Commission for the Protection of the Danube River. The project provides for a unified approach to solving common problems, which is more effective than separate efforts of each country.

Components of the project: 4 modules



Increased cooperation between Ukraine, Moldova and Romania to develop and implement a regional transboundary Climate Change Adaptation Strategy and Action Plan. 1.1. Establish and facilitate a Danube Delta Expert Working Group. This structure has to facilitate communication, coordination and collaboration between the key institutions and authorities involved in research and management of the natural sub-basin of the Danube Delta. The working group will include scientists and specialists from the relevant scientific and engineering institutions and local administrations of the 3 countries participating in the Project. The Working Group will take part in collecting and analyzing information about impacts of the climate change on the vulnerable region of the Delta and in preparation of the main project documents.

1.2. Conduct a Climate Change Vulnerability Assessment Study for the Danube Delta sub-

basin. A detailed assessment of the Danube Delta wetlands will include biological, environmental and socio-economic elements, and GIS databases will also be created. Results of the study will become the basis for the trans-boundary Climate Change Adaptation Strategy and Action Plan.

1.3. Develop a trans-boundary Climate Change Adaptation Strategy and Action Plan. These documents will help governments and environmental organizations of the 3 countries to better understand the general picture of the expected changes and the work required to adapt the region to them. They will lay the foundation for a comprehensive solution that will be more effective than individual actions on climate adaptation.



Strengthened capacity of local nature and water managers and increased awareness of local stakeholders in the Danube Delta subbasin to address climate change and apply methodologies for adaptation and mitigation in pilot areas.

- 2.1. Develop an efficient communication strategy and conduct an awareness raising campaign on Climate Change adaptation and mitigation at regional and local levels. The campaign, which will be held in 20 communities of Ukraine and in 3 communities of Moldova, will provide residents of the Danube region with information on solutions of the climate issues relevant for welfare of the region.
- 2.2. Implement a training programme on Climate Change adaptation for selected target groups. Representatives of the local administrations, institutions, business organizations, heads of the communities, farmers and fishermen from Ukraine and Moldova will receive theoretical training on climate change and practical tips, techniques and tools that will facilitate adaptation of

economic and managerial practices of the region to new environmental conditions.

- 2.3. Conduct an assessment to evaluate restoration potential within the Danube Delta sub-basin and develop a Danube Delta Wetland Restoration Action Plan. Recovery of wetlands can be one of the most effective measures of climate adaptation, as the wetlands are a natural buffer system that is able to adapt to change and mitigate the impact of severe weather conditions.
- 2.4. Foster implementation of wetlands restoration works at one pilot area, selected based on assessment of its potential for restoration of the Delta areas, aimed to enrich natural resources of the region and demonstrate the effectiveness of the approach.



Opportunities for income and energy generation from sustainable biomass production (linked to wetlands restoration) as a green energy source are enabled and demonstrated in Ukraine and Moldova.

- 3.1. Conduct strategic assessment of Danube Delta potential for renewable energy sources. Reed, that has been traditionally used in the Delta for roofing, building fences and feeding cattle, can be successfully used for energy production by the local communities.
- 3.2. Build capacity at local level (decision makers, inhabitants, entrepreneurs) on small scale biomass production and utilization at one pilot location. Biomass as a source heating instead of fossil fuels will not only let people make profit or get cheaper heating of buildings but also help local communities to reduce emissions of greenhouse gases.
- **3.3.** Develop a business plan for pilot application in cooperation with interested

investors and provide support for producing local biomass and generating green energy at one pilot location.

Harvesting biomass will also contribute to the restoration of wetlands. The project will be implemented in the Ukrainian Danube Delta.

3.4. Organise a workshop with key representatives of local Danube Delta communities and business sector to investigate magnification potential of biomass production and use in the region. After implementation of the pilot project, the final meeting will be conducted for the interested parties (local administrations, businessmen, representatives of Danube communities) to share experiences of implementation of such projects.



4.1. Communication and visibility of project results and objectives. Project Communication plan will be developed, web pages of the project will be launched on the sites of partner organizations, extensive media outreach will be conducted, and a brochure about the project goals and activities will be published.

4.2. Organise an international conference to share lessons learned, project's results and promote Danube Delta as a model for Climate Change adaptation and

sustainable development. The conference will bring together all project participants and representatives of international organizations, national authorities, and other interested parties.

4.3. Dissemination of project results in International Commissions and Fora (including The International commission for the Protection of Danube River, The Black Sea Protection Commission, The Eastern Partnership Civil Society (EC), RAMSAR Regional Initiative on Black Sea Coastal Wetlands (BlackSeaWet).

EXPECTED RESULTS

It is expected that local communities will benefit from the project that will affect the main quality of life factors:

- INCREASE IN REVENUES the project demonstrates the model of receiving sustainable profits through the use of reed biomass for heating buildings (job creation, development of local businesses).
- RESISTANCE TO NATURAL DISASTERS (floods, droughts, etc.) the
 project will involve restoration of wetlands an effective way
 of climate adaptation in one pilot region of the Danube
 Delta.
- ACTIVE PARTICIPATION IN A DECISION-MAKING PROCESS is achieved through meetings and working groups at the level of communities, including the local residents and officials.
- SUPPORT FOR IMPROVING STANDARDS OF LIVING the project will provide support to two selected regions in restoration of wetlands and implementation of a small project of "green" energy generation.

In addition, the project will directly contribute to the restoration of natural ecosystems in the region, as well as facilitate inclusion of actions related to addressing climate risks into regional and crossborder development plans.



Project partners

- Danube Biosphere Reserve
- Reserve "The Danube Delta"
- World Wide Fund for Nature (WWF)
- "Center for Regional Studies" (Odessa)
- "Ecospectrum" (Chisinau)

Term of the project

• 2011-2013





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.

wwf.panda.org/dcpo

For further information please contact: Mikhaylo Nesterenko, project manager

Email: mnesterenkowwf@gmail.com

More about the project:

wwf.panda.org/dd_climate_adaptation

NΘ	Activities	Year 1						Year 2						Year 3					
		Sem 1			Sem 2			Sem 3			Sem 4			Sem 5			Sem 6		
1.	Increased cooperation	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36
1.1	Establish an Expert Working Group																		
1.2	Conduct a Climate Change Vulnerability Assessment Study for the Danube Delta sub-basin																		
1.3	Develop a trans-boundary Climate Change Adaptation Strategy and Action Plan																		
2.	Strengthened capacity	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36
2.1	Develop a communication strategy																		
2.2	Conduct an awareness raising campaign																		
2.3	Conduct a series of trainings																		
2.4	Conduct an assessment to evaluate restoration potential potential within the Danube Delta sub-basin																		
2.5	Develop a Danube Delta Wetland Restoration Action Plan																		
2.6	Foster implementation of wetlands restoration works at one pilot area																		
2.7	Exposition in DBR Visit centre																		
3⋅	Biomass heating	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36
3.1	Conduct strategic assessment of Danube Delta potential for renewable energy sources																		
3.2	Build capacity at local level																		
3.3	Develop a business plan for pilot application																		
3.4	Foster implementation of pilot project																		
3.5	Organise a workshop to dissiminate project results																		
4.	Effective communication	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36
4.1	Develop a Communication plan																		
4.2	Project web-pages on the project partners web-sites																		
4.3	Brochure about goals and activities of the project																		
4.4	Media work																		
4.5	Dissemination of project results in International Commissions and Fora																		
4.6	Organise an international conference																		