

Report on the regional workshop on the establishment of the

Lower Prut Biosphere Area

in the frame of the UNESCO-funded project “To strengthen capacity-building for establishment of the first biosphere reserve in Moldova”

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Introduction

Actual report is based on the results of regional workshop organized in the frame of the UNESCO funded project aimed at establishment of the first biosphere area in the Lower Prut region in the Republic of Moldova. Event was performed on 11 September 2011 on the premises of the Cahul district Council with participation of representatives of the rural magistrates of the localities situated in the region and Cahul district Council. List of participants is attached.

Main goal of the meeting was – to identify opportunities for the creation of biosphere area in the region and activities which could lead to establishment of this area in the region. In this context the role of local authorities in establishment of such area was discussed through identification of main goals, objectives, activities etc., necessary for successful functioning of biosphere reserve.

Meeting started with welcome speech of representatives of different institutions, which could contribute to the creation of the biosphere area. Regional district council confirmed its commitment to the creation of the biosphere area in the region. In his presentation he mentioned opportunities for sustainable development, which could arise from the functioning of the biosphere area, promotion of local trades, rural tourism, organic farming, infrastructure development etc. He also mentioned importance of biosphere area as a tool for further cooperation in the frame of the Lower Danube region, where Moldova, Ukraine and Romania cooperate on sustainable development.

UNESCO representative mentioned the role of this institution in creation of biosphere areas in other parts of the world and expressed further commitment for attraction of best UNESCO practices in functioning of biosphere areas to the Lower Prut region. He also mentioned necessity of conservation of cultural heritage together with a natural one and necessity of creation of a complex management program for biosphere area in the Lower Prut.

Participants of the event were welcome by the representative of the Academy of Sciences of Moldova, who talked about monitoring activities on the state of environment in the region and the natural value of proposed area for the Lower Danube region. He also mentioned essential particularities of the region in the Danube river basin context.

Representative of MaB Moldova outlined necessity to create and manage lower Prut region in cooperation with representatives of Romanian local authorities and development of common projects with Romanian MAB. Common activities in this domain could lead to the creation of biosphere area in the Lower Prut from both sides of the Prut river.

1. Results and discussions

According to the agenda of the seminar and on the base of the results of the consultation meetings core team of the project presented materials on the functioning of the biosphere areas in other parts of the world. Based on the results of the consultation meetings, where local

authorities expressed concern on the possible limited access of local population to the resources of the Manta, Beleu lakes and in general to the floodplains of the Prut river on which depend great part of local population. In this context main issues of the use of natural resources in the biosphere areas according the Sevilla strategy and Madrid guidance were presented to local authorities during event.

During discussions local authorities were informed on the functions of the biosphere areas, goals and objectives of the management of biosphere areas with explanations of the access regime to natural resources. On the base of discussions local authorities identified next issues in the Lower Prut region, which could be relevant to the presented items:

- promotion of cooperation on local level for common management of natural resources in cooperation with authorities from Romanian localities from the Lower Prut region
- development of adaptation practices in agriculture and other sectors of economy to possible climate change in the region
- further development of local infrastructure, which could contribute to pollution reduction (green carcasses, green agriculture, extension of sewer network in localities etc)
- educational issues on nature conservation for different target groups of population and improvement of facilities of actual nature protected area (Lower Prut) with the area of 1671 ha on the Beleu lake

Discussions on the Madrid guidance and Sevilla strategy showed great potential for local authorities to develop Lower Prut area according to main provisions of these documents and concrete activities in this domain should be included in the Action program for establishment of the biosphere area in the Lower Prut region.

Summary of the consultation meetings in the region was also discussed during regional workshop. An integrated situation in the region in regard to potential for creation of the biosphere area was presented. Main discussions were on the obstacles and activities needed for establishment of the biosphere area in the Lower Prut region. According to the opinion of participants an economic analysis together with evaluation of the natural potential should be performed. Discussions on the item showed that local authorities need next issues:

- information on state of environment in the area
- proposals for use of natural resources of the Lower Prut region and what trades could be developed
- better sharing of institutional responsibilities in the region and activities from local authorities needed for management of biosphere area
- modalities of involvement of local population in creation and management of the biosphere area
- economic analysis for development of certain trades in the region and cooperation with Romanian counterparts

Local authorities also expressed a strong commitment for cooperation with international organizations involved in natural resources management. In this context they were also informed on the activities under International Commission for Cooperation for the Protection of the Danube River (ICPDR) and main provisions of the Danube river basin management plan prepared by all Danube countries including Moldova. Main achievements of the projects funded in the region in the period 2005 – 2009 by other local and international institutions were also presented to local authorities.

Creation of the biosphere area in the Lower Prut region was also an issue for discussion during the workshop. Based on the results of the consultation meetings and analysis of available statistical sources next issues were presented to local authorities:

- developments in the Lower Danube (Prut) Green corridor and international cooperation in this domain from the year of 2000 (signed on 5 June 2000 in Bucharest)
- functioning of the Ramsar site (Beleu lake) in the region and opportunities for cooperation on extension of the Ramsar site with inclusion of new areas from the Lower Prut floodplains
- activities under national natural park Lower wetland of the Lower Prut (Iunca Joasa a Prutului inferior) in the Galati judet in Romania.

Based on the results of the presentation, participants of the workshop agreed on necessity for better cooperation with Romanian authorities in this domain. They also mentioned opportunities, which give them signing of agreements on cooperation between Moldavian and Romanian localities and include this item in future agreements.

National legislative framework was also presented during the workshop. According to legislative procedures environmental protection activities are under the Law on environmental Protection and other laws presented in the table 1.

Table 1. Laws relevant to the creation of the biosphere area in Moldova

Table 1. Main laws on water resources use of the Republic of Moldova

Legislative act	Year of adoption
• The constitution of the Republic of Moldova	1994
• Forest Code of the Republic of Moldova	1979
• Law on water protected belts	1983
• Land Code	1991
• The law on environmental protection	1993
• Water Code	1993
• The code on subsoil	1993
• The law on sanitary-epidemiological protection of population	1993
• The law on protection of fauna	1995
• The law on protection of Health	1995
• The law on state ecological expertise	1996
• The Law on hazardous and toxic substances	1999
• The Law on environmental impact assessment	1999

The Republic of Moldova has also signed and ratified a number of International Conventions in the field of water management. Totally 17 international conventions were ratified in the field of environmental protection and management. Next of them relate to creation and management of biosphere area in the Lower Prut region:

- Convention on protection of habitats, (Bern, 1979)
- Convention on transboundary pollution (Geneve, 1979)
- Convention on environmental impact assessment in the transboundary aspect (Espoo, 1991)
- Convention on protection and use of transboundary waters and international lakes (Helsinki, 1992)
- Convention on the protection and sustainable use of the Danube river (Sofia, 1994)

Local authorities expressed a necessity in development of local acts adopted by local Cahul district administration aimed at support of the initiatives of the Manta and Valeni village councils in regard to allocation of lands belonging to village councils to environmental protection needs and creation of the biosphere area. Local authorities from other villages also supported this activity and also expressed commitments from their magistrates to allocate lands to future biosphere area.

2. Main problems, objectives and activities for creation of biosphere reserve in the Lower Prut region

On the base of the discussions participants of the workshop were asked to identify main problems associated with the creation of the Lower Prut biosphere area. Next problems were identified:

***Problem 1.** Lack of experience on creation of the biosphere areas in Moldova and Lower Prut region in particular*

For the resolving of mentioned problem next objectives were identified by local authorities during the workshop:

Objective 1.1. Information on practices for creation of the biosphere areas collected and presented to the Cahul district Council

Activities needed for achieving of the objective 1.1:

- Activity 1.1.1. Launching of the environmental information centre near Cahul district Council in cooperation with local environmental inspectorate. According to the opinion of local authorities this activity should be organized together with national MAB committee and could be supported by local, national and international bodies. In this context facilities of Cahul University and local environmental inspectorate should be used. Academy of Sciences and national MAB should support implementation and inclusion of the Madrid guidance and provisions of Sevilla strategy in management of biosphere area.
- Activity 1.1.2. Organizing of public events on presentation of biosphere areas management and public hearings on management plan for creation of the biosphere area in the Lower Prut region with involvement of NGOs, private citizens, experts of the Academy of Sciences, MAB, sectoral Ministry etc
- Activity 1.1.3. Assistance on implementation of the collected information in the Lower Prut region in cooperation with MAB, UNESCO National Commission, Academy of Sciences, sectoral Ministry etc

Objective 1.2. List of necessary documents and relevant decisions of theirs' approval by local authorities on the regional level for the creation of biosphere area prepared.

Activities proposed by local authorities in the frame of objective 1.2

- Activity 1.2.1. Presentation of developed documents on the council meetings on locality and Cahul district level with invitation of the representatives of NGOs and public institutions.

- Activity 1.2.2. Preparing of the council decisions on implementation of the provisions of the management plan and action program for the creation of the biosphere area, including decisions on allocation of lands for inclusion in biosphere area
- Activity 1.2.3. Development of Program of measures for establishment of the biosphere area in the Lower Prut region. Local authorities proposed to have a target year for that 2010-2011. According to them this should be a document with estimation of costs, institutional responsibilities and identification of target period for each activity mentioned in the program of measures.
- Activities 1.2.4. Developing of project files needed for implementation of each measure presented in the program. Local authorities pledged for attraction of international expertise in the creation of the biosphere area in Moldova. They also stressed attention on such issues like promotion of regional cooperation and underlined necessity to develop projects, which could facilitate regional cooperation on the Prut river basin level as well Danube river basin level. In this context they welcome project proposal developed in the frame of the EU funded cross border cooperation program aimed at improvement of monitoring system and development of management plan for the Danube Delta in which Lower Prut region is an integrated part.

Objective 1.3. Educational programs for different target groups of population (especially for students of Cahul University) in the region developed.

Activities proposed for the implementation of the objective 1.3.

- Activity 1.3.1 Development of educational curriculums for Cahul University on management of biosphere areas. Local authorities proposed to have this activity in cooperation with experts from national and Romanian MAB committees. Another partner in this domain could Danube delta Institute from Tulcea, Romania. Local authorities also proposed to have programs for different target groups of population and present short presentations on management practices in the biosphere area on the meetings of local Councils. They expressed interest in participating in the work of river basin councils. Modalities of such involvement should be discussed further with council representatives.
- Activity 1.3.2. Development of the program for public consultations and involvement in the decision making process. Local authorities expressed concern on actual water management practices in the region. They outlined increased frequency of floods and droughts and were interested how creation of the biosphere area in the region could lead to the diminution of such phenomena.

Problem 2. Economic constrains and insufficient environmental management practices in the Lower Prut region

For the problem 2 next objectives were identified

Objective 2.1. Institutional framework on local level for the creation of the Lower Prut biosphere area developed.

Activities for the achieving of the objective 2.1

- Activity 2.1.1. Analysis of actual institutional responsibilities of local institutions involved in the environmental resources management. This activity needs detailed analysis of local labs to perform analyses on the state of environment, compatibility of obtained level of performance with authorised labs, identification of needs etc. In regard to responsibilities of local institutions to manage biosphere area local authorities

expressed a commitment to cooperate with local agencies in management of the area and to have clear responsibilities of local bodies to manage it. They also underlined necessity in cooperation with national institutions and to develop relevant normative basis for successful management of the biosphere area in the region.

- Activity 2.1.2. Estimation of financial needs for creation and management of the biosphere area in the region. Local authorities proposed to evaluate relevant experience in Romania and Ukraine in the financial management of the Danube delta biosphere areas on the territories of these countries. They also underlined that financial constraints in Moldova could be very severe and budgets available from local councils will not be able to cover expenses associated with management of biosphere area. Anyway Cahul Council administration expressed commitment to allocate some resources for creation and management of the biosphere area, but concrete figures should be discussed for each item in connection with objectives of certain activities. Participants also pledged for international cooperation in this domain and appreciated very much contribution of different projects in order to strengthen capacities of local agencies to perform environmental activities in the region.

Objective 2.2. Economic analysis on creation of the biosphere area in the Lower Prut area prepared.

Activities under this objective mainly refer to the opportunity on development of different sectors of local economy, local trades and infrastructure, which could support regional development.

- Activity 2.2.1. Performing of economic analysis of significant biosphere area management issues in the region. Local authorities expressed necessity in analysis of main sectors of regional and local economy, which could benefit from creation of the biosphere area and estimate economic impact of biosphere area for local population. They also expressed their unsatisfactory with unfair practices in the use of resources of the Beleu lake in regard to oil extraction activities. According to them more support to the creation of the biosphere area could come from companies dealing with oil exploitation in order to recover natural ecosystems and development of environmental friendly trades and practices in local sectors of economy in the region.
- Activity 2.2.2. Estimation of opportunities for development of organic farming. According to the opinion of local authorities there are favourable conditions for development of such sector of agriculture in the region. According to their estimations around 30% of adjacent agricultural lands could be used for this purpose. It could create new jobs (around 1000) and increase income of local population for 30-40%. Main obstacle – poor infrastructure, including irrigation system, certification of the products (labelling of biosphere area could be an asset), etc.
- Activity 2.2.3. Identification of investment portfolio for sustainable development in the Lower Prut region and creation of the biosphere area. Under this activity local authorities proposed to prepare list of priority measures and to include it in the local social and economic activities for regional plans.

Objective 2.3. Management plan for biosphere area and other planning documents created.

Activities needed for achieving of the objective:

- Activity 2.3.1. Analysis of existed materials on economic and social development, state of environment, plans etc. this document should serve as a base for development of relevant measures, which could be included in the plan. Creation of the data base and

proposals for its use in the day to day activities and in decision making process on all stages of document development was also outlined by participants of the event. Cooperation with international agencies was recognised as a high priority for development of this document.

- Activity 2.3.2. Creation of the biosphere area in the Lower Prut region included in the revised management plan for the Danube river basin (revising in 2013 in the frame of the Danube strategy, developed by ICPDR). This activity could be implemented in cooperation with central institutions like Ministry of Environment and Natural Resources, Academy of Sciences, National MAB committee etc. There is a very strong commitment from the ICPDR side to contribute to nature protection activities in Moldova, including development of the biosphere areas.

On the base of discussions during the workshop participants identified project files, which could contribute to the development of mentioned activities.

3. Conclusions (reflections and implications.)

The lessons learned from consultation meetings with local authorities in the Lower Prut region highlighted recent developments in commitment to strength institutional arrangements for capacity building in management of biosphere areas. One of the most important, they demonstrated in different ways that actual practices in environmental management in Moldova is not enough incorporated in integrated environmental resources management as well as regional cooperation in this domain is also strongly underdeveloped in the Lower Prut region. Lower Prut river basin example illustrate urgent necessity in development and implementation of management plans for their biosphere area and insufficient relevant experience in this domain on local level.

Consultation meetings also pointed to the conclusion that biosphere area management projects should incorporate a scientific process of stating different methodologies at all stages of plans implementation are likely to be more effective and efficient in a long term perspective (2010 – 2015). Consultation meetings approach is capable of identifying the most effective opportunities for involvement of local authorities in biosphere areas management and planning. These opportunities will inevitably be better to adapt to changing environmental conditions or societal expectations.

References:

1. Danube river basin management plan. Final draft, Vienna, October, 2009.
2. Statistical annual report of the Republic of Moldova for 2008, Chisinau, 2009
3. Moldova – EU Action Plan, Chisinau, 2005
4. T. Belous. Management plan for the protected area « Prutul de Jos », Chisinau, 2006
5. D. Drumea. Nutrient balances in the Lower part of the Prut river basin, Chisinau, 2007

Concept

For the creation of the biosphere area in the Lower Prut region of the Republic of Moldova.

Introduction

The issue of biodiversity conservation and sustainable development in the Lower Prut region is multilateral and covers local regional and european levels. According to the decisions of the Odessa conference in 2006 this area is considered to be a part of the danube Delta region and is included in the management plan for danube delta district, which is going to be developed in the frame of the Danube river strategy by 2012. According to the results of different studies this area has specific and unique biodiversity, which needs new measures aimed at its conservation in cooperation with different local, regional and international stakeholders. Success of the efforts aimed at conservation of nature heritage in this of the Danube basin depends on the sustainable use and management of the integrity of the ecosystems, which creates favorable conditions for the reproduction of different species (see table 1). Ramsar wetland area of the Manta and Beleu lakes which covers around 8500 ha includes very diverse complex of water, terrestrial, floodplains and forests ecosystems. In addition to it there are several historical monuments, which are also an integrated part of the Lower Danube (Prut) region landscape.

Table 1. Biodiversity in the Lower Prut region

Species	Nr of species	% from fauna of the Republic of Moldova	Nr of species included in the Red Book of Moldova
Mamals	34	49	5
Birds	180	67	21
Reptiles	7	50	2
Amphibia	11	85	1
Fish	27	34	5
Total	259		34

According to the plans of the regional development the construction of the network of roads, railways, reconstruction of the lands for irrigation and growing of the amount of mineral fertilizers use, etc. will increase. All these can affect the state of the ecosystems of the Lower Prut region. In this context the development and implementation of different programs aimed at

sustainable use of natural resources in the area will contribute to the conservation of the habitat in the Lower Prut region, lead to the achieving of the „good ecological status” of water ecosystems and will serve as a base for decision making.

1. Main objectives and activities for concept development

Lower Prut area also corresponds to a certain set of objectives for the national policy and decision making in the field of environment and activities of public institutions on:

- Evaluation of the state of environment in the protected area and its correspondence to the designated objectives presented in plans for social and economic development;
- Influence of the human activities on the state of the Lower Prut region and evaluation of pollution sources;
- Efficiency of the pollution control policy and environmental protection in the Lower Prut region.

At the same time the environmental activities have to provide necessary information and recommendations for implementation of the obligations of the Republic of Moldova for the implementation of international Conventions ratified by Moldova, international and bilateral agreements in regard to environment. Recently the countries from the central and Eastern Europe have signed a common agreement on providing the information to the European Environmental Agency on the state of environment and modalities for approaches to resolve main ecological problems in the country.

Another issue, which has to be taken into consideration in the designing of development programs in regard to environmental management and creation of the biosphere area in the Lower Prut region is EU Water Framework Directive (WFD). This Directive is a part of legislation on the ecology of the river basins. According to the Directive the management of waters has to be organized on the basin level. EU member states have to collect information on the state of rivers, lakes and shallow aquifer.

Countries outside EU do not have any obligations for the implementation of the EU WFD, but they commit to collect the data in the Danube river basin (including Moldova) for comparison of the results on the European level and introduce relevant basin management practices of the rivers common with EU.

National activities and monitoring systems have to be presented in a form, which will allow achieving of next goals:

- Determination of the influence of the sources of pollution on the state of Moldavian part of the Danube Delta (Lower Prut region);
- The use of relevant information for the development of the Management Plan for the Lower Prut region according to the provisions of the EU WFD, as integrated part of the biosphere area.
- Involvement of different level of authorities and NGOs in the elaboration of the plans for social and economic development in the Lower Prut region

These activities should be developed in cooperation with Romanian counterparts in large cooperation with international institutions. In this context Lower Prut river basin stakeholder conference could be organized in the region after creation of the biosphere area.

Creation of the biosphere area in the Lower Prut region is in line with the provisions of the “Environmental Concept of the Republic of Moldova” adopted in 2001 by the Ministry

of Ecology, Construction and Territorial Development. According to this document main aspects of the future actions could be:

- European integration with approximation of actual practices on environmental management including Lower Prut biosphere area according to the EU Environmental Directives
- Signing of bilateral protocols aimed at creation and common use of databases on the state of environment, including Lower Prut biosphere area
- Active participation in signed and ratified regional Conventions, including Danube River Protection Convention and other Conventions relevant to the biosphere areas management

Transboundary cooperation will be based on provisions of the Parliamentary Decision adopted in 2003 “On development of the transboundary cooperation in the frame of ecoregions”

Main activities in this domain could be:

- development of the mechanisms and tools for transboundary cooperation in management of biosphere areas
- harmonization of national normative on the state of environment in transboundary cooperation with EU standards and practices
- creation of the mechanisms for implementation of international conventions and agreements.

Legislative background in information exchange will be developed on the base of Law “On international agreements” (1999) and “On regulation mechanisms for international agreements” (2001).

Information exchange aspects are also presented in the Moldova - EU Action Plan adopted in 2005. In the frame of this plan a number of measures are aimed at consolidation of the administrative structure in the field of environment and development of procedures on access to environmental information, including implementation of the provisions of Aarhus Convention, ratified by Moldova in 1999.

2. Gaps in development of the biosphere area in the Lower Prut

On the base of consultation meetings with local authorities in the Cahul region next gaps in monitoring of water resources and information exchange could be identified:

- Lack of experience in management of biosphere areas in the region and in the country as a whole. Some experience is available on the management of the nature protected areas.
- Old analytical equipment (average age 20 years), which does not allow to perform necessary number of samples in order to cover actual need in environmental information.
- Special gap is hydrological measurements in the Lower part of the Prut river basin.
- Insufficient monitoring of the water, sediment etc quality of Manta and Beleu lakes, lack of hydrological observations on these water bodies.
- organizing of monitoring activities on the sediments of the lakes and soils in the wetland areas.

3. Conclusions and Recommendations

1. There is a great commitment of local authorities in the Lower Prut area to create a biosphere area in the Lower part of the Prut river basin. Based on the outcomes of the consultation meetings with local authorities one could identify strong necessity in strengthening of institutional capacities in the region

for organizing, management and monitoring activities at local level on the state of environmental and use of obtained data in management of the biosphere area in the region.

2. Monitoring network should include observations on the state of Lower Prut lakes Manta and Beleu. This will allow better environmental planning for development of the social and economic activities in the region and development of the Lower Prut biosphere reserve area.

3. Based on the analysis of plans for development of the Cahul region one could conclude that main sectors of local economy, which will influence state of water resources in the Lower Prut region are:

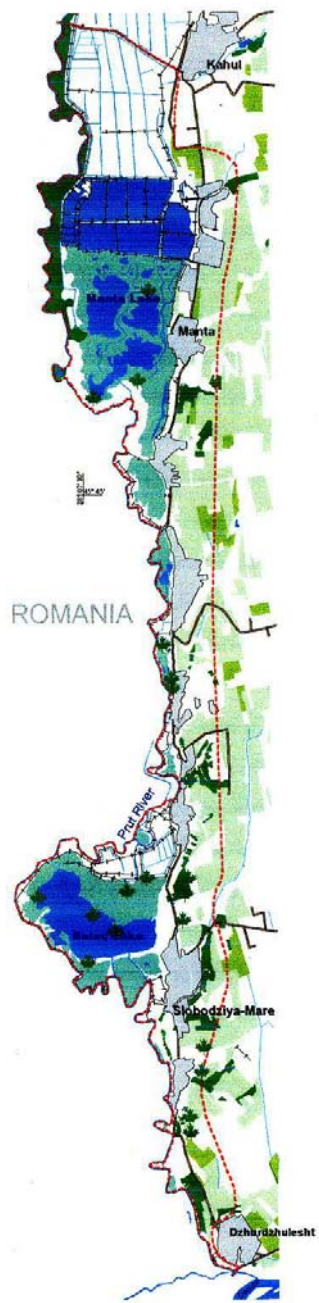
- agriculture, which could be responsible for 90% of nutrients achieving water ecosystems
- development of social infrastructure (drinking water supply and sewer network, roads)
- extension of the Djurdjulesti port facilities and relevant road infrastructure.
- creation of the biosphere reservation area with a nucleus of existed "Prutul de Jos" protected area
- tourism

4. GIS development is a strong gap and its development is very important for the management of the Lower Prut biosphere area.

5. Performing of analysis, monitoring stations network for sampling will be revised and completed according to the land use, social and economic activities in the Lower Prut and Danube Delta region important to harmonize management and monitoring activities and plans for social and economic development with Romanian authorities from the Lower Prut region.

Maps

Plan of the Lower Prut area in Moldova.



Lower Prut Lakes

