## ОХОРОНА ПРИРОДИ І ПРИРОДО-ЗАПОВІДНІ ТЕРИТОРІЇ

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## TRANSBOUNDARY BIOSPHERE RESERVE CONCEPT AT WORK: THE CHALLENGE OF THE DANUBE DELTA

# A. Giorgio<sup>1</sup>, O. Melen<sup>2</sup>

<sup>1</sup>UNESCO Regional Bureau for Science (ROSTE), Venice, Italy <sup>2</sup>"Ecopravo-Lviv", Kostushko str., 65, Lviv, 79000 Ukraine

The purpose of this article is to contribute to the debate on the design of spatial models in international conservation programmes, moving beyond the idea that policies reflect 'rational' choices, following uncontroversial scientific principles. Instead, using the example of the biosphere reserves model designed by the United Nations Educational, Scientific and Cultural Organisation (UNESCO), it is argued that the process of design is dynamic and contested through time, resulting from repeated negotiations situated within specific social and political contexts. Like many international programmes, the Man and Biosphere (MAB) Programme, and its biosphere reserve model, has undergone a series of changes since it first appeared in the early 1970s. A critical discussion of the surge in enthusiasm for transboundary biosphere reserve 'Danube Delta' constitutes the second part of the article, pointing at some of the legal and institutional issues as emerged by the recent events.

Key words: biosphere reserve, nature protection, international cooperation.

**The Biosphere Conference.** In 1968, an international conference was set up by UNESCO as a way of stimulating a larger undertaking of international scientific cooperation, in association with the Food and Agriculture Organisation of the United Nations (FAO) and in collaboration with IUCN – the International Union for the Protection of Nature and Natural Resources<sup>1</sup>. This became, in due course, the Intergovernmental Conference of Experts on the Scientific Basis for the Rational Use and Conservation of the Resources of the Biosphere, shortened, not surprisingly, to 'The Biosphere Conference' (Holdgate 1999 : 97).

In 1968, Michel Batisse, assisted by Waddington, the Secretary of the International Biological Programme, drafted a resolution during the Biosphere Conference creating the Man and the Biosphere (MAB) programme. The mandate was spread between

<sup>&</sup>lt;sup>1</sup> IUCN was rebranded The World Conservation Union in the 1990s

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use and conservation, separating the protection of genetic resources – traditionally the role of the FAO – from the protection of nature. Batisse said that "one day, and here I don't know who nor when, someone started to talk about biosphere reserves. And usually people say that I did, and I don't have any memory of this. (...) In any case I'm not sure that it's a very good expression. The word 'reserve' may not be so... Anyway, we didn't come up with an alternative"<sup>2</sup> (Batisse 2000, *pers.comm.*). The concept of biosphere reserves (BR) formally appeared in 1971, when the idea for a World Network of biosphere reserves that combined conservation and research was formalised (UNESCO 1971 : 21)<sup>3</sup>. In practice, due to the objective of linking conservation with research, the first BRs were usually national parks in which there was some level of research.

**1971–1982 Defining the first framework.** Following the International Coordinating Council, biosphere reserves were addressed in a meeting on the 20-24<sup>th</sup> May 1974, in Paris, within an international panel of scientists, including representatives from American and Russian state departments, as well as representatives from FAO and IUCN. This working group produced the first spatial model for BRs (Fig. 1). Experts from the natural sciences played a key role in shaping the initial idea of the MAB Programme and biosphere reserves. "We, as scientists from different disciplines and backgrounds, felt the need to preserve some of the most valuable ecosystems to be able to study them in detail and to develop new explanatory theories" (Di Castri 2002, *pers.comm.*<sup>4</sup>). From the start, the idea of buffer zones, or buffer mechanisms, was regarded as crucial<sup>5</sup>. Participants decided that BRs should have one or several buffer zones, dependent on local conditions and locations. These were assumed to be concentric rings around core areas, as drawn in the accompanying figures.



Figure 1. Design principles for biosphere reserves 1974

The core areas were designated as 'sanctuaries', quasi-religious vocabulary implying areas free from all human intervention. However, defining a spatial configuration

<sup>&</sup>lt;sup>2</sup> All quotations from Michel Batisse are taken from an interview carried out with Dr Michel Batisse, on the 23rd February 2000, in his office in Paris, unless stated otherwise. The quotations are freely translated by the author from the original French.

<sup>&</sup>lt;sup>3</sup> The terms used by UNESCO are all rather unfortunate by current standards, leading some to comment that "biosphere reserves have perhaps suffered from a rather uncertain image – compounded no doubt by the userunfriendly title" (Philips, 1998 : vii), and while 'reserve' still conjures up images of marginalised Indians, Man and the Biosphere hardly gains points for inclusiveness.

<sup>&</sup>lt;sup>4</sup> Interview carried out by G. Andrian, during the EuroMAB meeting, October, 11, 2002.

<sup>&</sup>lt;sup>5</sup> For more on protected areas and the design of boundaries, see Fall J.J. 2004, "Divide and rule: constructing human boundaries in 'boundless nature'", GeoJournal, (58) 243-251

for BRs did not mean that this was easily applied or followed on the ground. In fact, "most reserves had been superimposed on existing protected or research areas, and the idea of formal buffer zones involving other administrative entities had rarely been implemented" (Price 1996 : 647). There was no formal procedure for designating BRs and selection was left to individual countries. In practice, therefore, little was new in planning, design or management, notwithstanding the establishment of an international list. The precedence given to biophysical arguments implied that no populations would be allowed to settle in the buffer zone(s), reflecting the prevalent 'conservation dominant' (Price 1996 : 646).

**Facing growing criticism.** Despite the shortcomings, the list of BRs around the world continued to grow during the second half of the 1970s, with little changes in the basic philosophy. Between 1976 and 1981, 208 BRs were designated in 58 countries (Price 1996 : 647). Yet criticism of the model started to emerge. "Some people say that 'this is not the way it should be done, because that doesn't improve conservation in any way, zones should be chosen where there is nothing, where there is no protection'. If there is no protection, then it becomes more complicated, there need to be zones where people are participating" (Batisse 2000, *pers.comm.*). Slowly, therefore, awareness of a new role for local populations emerged, in parallel to that within the wider protected area movement.

**1982–1994 Widening and clarifying the concept.** In the early 1980s, UNESCO produced an attractive poster showing two opposing models for conservation: on one side a picture of animals and plants jammed in a bottle and on the other an open landscape, with people and nature interacting, reflecting the BR philosophy. This marked a clear departure from the previous paradigm. At the same time, in 1983, another international conference was organised in Minsk, Russia, in a climate of intense political tension following the gunning down on suspicion of spying of a South Korean civilian plane above Kamtchatka. Despite the logistical complications of getting international delegations to attend, often requiring travel by road and not by air, the conference took place.

An Action Plan for Biosphere Reserves. Despite the adverse circumstances, an Action Plan for Biosphere Reserves was adopted, even if "in reality we cheated a bit, because the conference adopted babble, and we made up the action plan afterwards as though it had been adopted by the conference... a little bit later!" (Batisse 2000, *pers. comm*). This Action Plan was also endorsed by the United Nations Environment Programme (UNEP) and IUCN, although this did not mean that they committed any resources to implementing it. The result was a list of suggestions of what BRs could do, rather than a list of minimal fulfilments of what they should do: "An action plan with no action" (Batisse, October 2000, *pers.comm.*). At the same time, the Scientific Advisory Panel on Biosphere Reserves was established with the mandate to clear up some of the confusion and lay some clear guidelines for the future.

Following this, a meeting in Czechoslovakia in 1985 further clarified the objectives of a BR. Batisse recalls that: "there was a point when I said 'this is all rather confused', and so I went to the board, and I drew a triangle. And that is the triangle of conservation, development, logistics. Before that, we didn't have a triangle. (...) There was no rigour between the main functions. So making a triangle was my main contribution. What have you done with your life? Me, I've designed a triangle" (Batisse 2000, *pers. comm.*). The birth of this conceptual triangle, separating yet connecting the three functions, was not enough to make BRs operational on the ground, even despite further clarifications of the outer buffer zone, defined as a 'transition area' or 'area of cooperation' (UNESCO 1986 : 73).

In 1992, once the Scientific Advisory Panel had been disbanded, a new Advisory Committee on Biosphere Reserves was established. This followed the recognition that the innovative planning principles were failing in practice and the discrepancies between what conservation-orientated academics dreamt up and what managers actually did on the ground was becoming something of an embarrassment. In 1993, a review mechanism was designed on the recommendation of the Advisory Committee, based on an expert assessment of the effectiveness of the concept's implementation on the ground (Price 1996 : 649). This was only formally adopted in Resolution 28 C / 2.4 by the UNESCO General Conference, at its  $28^{th}$  session in 1995, after the Seville conference.

**1995** The Seville Strategy for Biosphere Reserves. In March 1995, an International Conference on Biosphere Reserves was organised in Seville, Spain, to lay a more formal framework. Although the principles discussed were broadly similar to those raised in Minsk, the Seville conference brought together a much more representative set of people, both from the field and from national MAB committees. The result was the Seville Strategy, a set of recommendations for "developing effective biosphere reserves" (UNESCO 1996) as well as the Statutory Framework of the World Network of Biosphere Reserves.

"Each reserve is intended to fulfil three functions: a conservation function, to preserve genetic resources, species, ecosystems and landscapes; a development function, to foster sustainable development, and a logistic support function, to support demonstration projects, environmental education and training and research and monitoring related to local, national and global issues of conservation and sustainable development" (UNESCO 1996 : 4).



Figure 2. Design principles for biosphere reserves 1999, UNESCO 1999.

Of the three zones, only the core area required specific legal protection (Fig. 2) Individual biosphere reserves remained under the sovereign jurisdiction of the countries in which they were situated. In certain cases, countries enacted legislation specifically to establish biosphere reserves<sup>6</sup>. A formal mechanism for a periodic review for BRs was established (Robertson Vernhes 1997:3), stimulating a revision of existing biosphere reserves in several countries.

The potential territorial flexibility of the original BR model, in which the extension of the three zones was expected to be eventually modified, got lost in the rigid planning procedures through which the various BRs have been designed. In fact, only in a

<sup>&</sup>lt;sup>6</sup> This led to the designation of certain BRs not formally recognised by UNESCO and thus not part of the World Network, notably in India and Mexico.

very few cases have buffer and transition zones been modified after the first nomination.<sup>7</sup> The subsequent urban interpretation of the biosphere reserves recently received emphasis during the EuroMAB 2002 session dedicated to 'Urban ecosystems and biosphere reserves', highlighting the potential of the original BR concept in dealing with more complex territorial dynamics, far from the remote and undisturbed lands stereotypically evoked by the term 'reserve', and far different from traditional discourses on protected areas.

**Transboundary Biosphere Reserves.** Initially, BRs were designated within single countries, but the global trend within protected area planning of designing more coherent ecological units irrespective of political boundaries has led to the designation of 'transboundary' biosphere reserves<sup>8</sup> (Fall 1999). The MAB programme officially endorsed these in 1993, designating the first two in the Tatra mountains between Poland and Slovakia and in the Krkonoše/Karkonosze mountains between what was then Czechoslovakia and Poland, in line with Objectives I.2 (1) and IV.2 (5; 6; 16) of the Statutory Framework (UNESCO 1996). Of the 16 adjoining BRs around the world (UNESCO 2000), six were designated as 'transboundary' by UNESCO, despite an absence of formal procedures both for evaluating standards and for attributing this status:

- Danube Delta Biosphere Reserve (Romania / Ukraine).
- East Carpathians Biosphere Reserve (Poland / Slovakia / Ukraine).
- Krkonoše / Karkonosze Biosphere Reserve (Czech Republic / Poland).
- Pfälzerwald / Vosges du Nord Biosphere Reserve (Germany / France).
- Tatry / Tatra Biosphere Reserve (Poland / Slovakia).
- 'W' Region (Benin / Burkina Faso / Niger).

Formalising transboundary biosphere reserves. The meeting of the EuroMaB network in April 2000 included a workshop on international and national communications and linkages. Within this workshop, the issue of TBRs was addressed as part of international cooperation. Subsequently, TBRs were considered a stand alone topic, discussed within a separate global ad hoc Task Force. Calls to "encourage countries with biosphere reserves or potential biosphere reserves on each side of an international boundary to start exchanges to explore possibilities of creating a transboundary biosphere reserve" (Price 2000 : 93) were made within meetings in Europe and Asia (Kim 2000), and were further strengthened during the Seville + 5 International Expert Meeting on the Implementation of the Seville Strategy of the World Network of Biosphere Reserves 1995-2000. Held in Pamplona, Spain, this meeting offered a venue for the ad hoc Task Force that brought together representatives from Africa, North and South America, the Asia-Pacific Region and Europe, offering a global platform to TBRs. A set of 'Recommendations for the Establishment and Functioning of Transboundary Biosphere Reserves' (UNESCO 2000) was prepared on the basis of a draft report, partly drafted within a workshop and subsequently pulled together by the Secretariat, with two people working on a laptop in the corridor, cobbling together and drafting principles to be approved in the final plenary session. In July 2003, a series of case studies of the existing TBRs were published, based on field studies carried out by two consultants in 2000-2001 (Fall et al. 2003).

<sup>&</sup>lt;sup>7</sup> See for instance the BR data base available at the MAB Secretariat web-site (http://www.unesco.org/mab).

<sup>&</sup>lt;sup>8</sup> Different terms have been used in the literature to describe initiatives linking different forms of land planning and protected areas spanning several countries, including 'transfrontier' (Zbicz and Green, 1997), 'transborder' (Hamilton et al., 1996), 'transboundary', 'peace parks', or even the more inclusive 'internationally adjoining protected area' (Zbicz 1999 : 2).

However despite this apparent increase of interest, the enthusiasm was short lived. The ad hoc Task Force never met again and no more global meetings on TBRs were scheduled. Budget and time restrictions were invoked; other more pressing agendas took over. Subsequent meetings such as the EuroMAB one held in Rome in autumn 2002 made little mention of TBRs. Discussion was mostly driven by case-studies presentations and the diversity of local solutions reflected the difficulties in converging towards a unified framework). Further attempts to link up UNESCO's work on transboundary biosphere reserves with other global initiatives such as that run by the IUCN Task Force on Transboundary Protected Areas failed. The MAB Secretariat, fearful of being absorbed by and confused with other initiatives, particularly IUCN, chose not to send formal delegates to international meetings, such as that held in La Maddalena, Sardinia, in 2004. As for the past 30 years, varying institutional logics, competing mandates and the need to carve out separate turfs within and between international organisations maintained the split between the BR programme and other initiatives. With a Secretariat run by a handful of people, of whom no more than four or five senior staff, individual choices and priorities and responding to immediate deadlines, meant that transboundary issues no longer held centre stage. Delocalised UNESCO regional offices, such as the Regional Bureau for Science in Venice (ROSTE) developing a regional strategy for South-Eastern European countries, has taken over the innovative role in developing "tools to reconcile biodiversity protection and local sustainable development, by facilitating territorial negotiation across the borders" (Andrian 2003).

Using the law for transboundary biosphere reserves. BR at a whole are not seen to have their own legal status in the majority of countries. As Bioret et al. (1998) wrote: "This characteristic is at once a strength and a weakness, allowing considerable flexibility and putting new ideas into practice in a variety of contexts. But the lack of the legal regulation of BR, as well as transboundary BRs does not prevent a lot of countries

from making liberal use of the concept of TBRs. There are few international documents that are the tool for the establishment of

TBRs and for the protection of biodiversity in this areas.

The Statutory Framework of the World Network of Biosphere Reserves adopted in Seville in 1995 provides a basis for the organization of this Network with regard to biosphere reserves, originated in one country. But it is inadequate when transboundary biosphere reserves are created and it leaves more difficult issue of TBRS under the different jurisdictions of two or more countries.

Seville Strategy contains direct recommendations concerning transboundary TBRs:

Objective I.2 (1). Encourage the establishment of transboundary biosphere reserves as a means of dealing with the conservation of organisms, ecosystems, and genetic resources that cross national boundaries.

OBJECTIVE IV.2: Strengthen the World Network Of Biosphere Reserves (4) Lead the development of communication among biosphere reserves, taking into account their communication and technical capabilities, and strengthen existing and planned regional or thematic networks.

(6) Promote and facilitate twinning between biosphere reserve sites and foster transboundary reserves.

(16) Seek opportunities for twinning between biosphere reserves and establish transboundary biosphere reserves, where appropriate.

Absence of more detailed rules for TBRs gives the floor to many of the scientists and institutions to work towards drafting of separate international rules or amendment of the existing ones.

Poitr Dabrowski (Warsaw 2000) elaborated the list of special requirements (conditions), that the area should meet before it can be recognized as TBR, the recognition procedure and the benefits from being nominated as TBR.

Analysis of present legal tools in the sphere of environemnt protection gives the idea that there are two popular approaches in the legal tools, that can be used for TBRs: nature conservation and cooperation in border areas.

In international law, the area protection of nature mainly encompasses the tasks of the designation of naturally valuable areas, including the establishment of the criteria to underpin such choices, and the determination of the fundamental scope of protective measures. For example, Convention on protection of cultural and natural heritage (UNESCO, 1972) foresees the inclusion of the areas with cultural or natural value into the list of the World Heritage Sites. Ramsar Convention on Wetlands of International Importance especially as Waterfowl Habitat also protects wetland areas.

The regulation of principles of cross-border cooperation usually entails a determination of the objectives of such activity, as well as the establishment of the legal framework for it. These principles are fixed usually in a form of bilateral or multilateral agreements of neighboring countries or countries sharing natural resources or objects. For example, Agreement between the Ministry of Environment and Territorial Planning of the Republic of Moldova, the Ministry of the Environment and Water Protection of Romania and the Ministry of Environment of and Natural Resources of Ukraine on collaboration in the protected areas of Danube delta and in the lower river Prut area (Romania, 5 June, 2000).

**Danube Delta-need for joint protection.** The Danube Delta – shared by Romania and Ukraine is a labyrinth of water and land, made up of countless lakes, channels and islands at the end of the river Danube.

With water flowing across the border between two countries, birds flying overhead and fish swimming back and forth its easy to visualize in a very concrete manner that the whole of the Danube Delta is one unit, requiring a common management strategy.

Danube Delta is one of the largest biosphere reserves in Europe and the only delta in the world entirely declared as protected area.

### History of TBR Danube Delta.

### <u>Romanian part</u>

The transboundary biosphere reserve was designated in 1998, based on two biosphere reserves in Romania and Ukraine.

The Romanian side of the biosphere reserve was established in 1979, and extended in 1992. In 1993, a special law was voted by the parliament of Romania establishing the biosphere reserve at national level The establishment of DDBR was based on the former protected areas existing in this area before including one of the oldest protected area in Romania: the Letea forest, declared Natural Reserve in 1938.

## <u>Ukrainian part</u>

Dunaisky biosphere reserve, totaling 46.492 ha was designated by the decision of the Co-ordination Council for the MaB programme in December 1998 on the basis of the Natural Reserve "Dunaiski Plavni". Before that, since 1976, most of its area had comprised a branch of the Chernomorsky (Black sea) Nature Reserve (Chernomorsky Biosphere Reserve since 1982). In 1981 Nature Reserve "Dunaiski Plavni" was created, that in 1998

was encompassed in the territory of Danube biosphere reserve. Additionally biosphere reserve was declared Ramsar site in 1991.

The creation of biosphere reserve was supported by the money, consultancy, technical assistance from the Global Environmental Facility (GEF) project.

The original GEF project planned assistance only to the Romanian part of the delta, because Ukraine was not yet a member of the World Bank. During the project's identification, the scope of the project was amended to provide parallel support to the Dunayski Plavni Reserve Authority in Ukraine, to raise the level of national and international interest in the protection and management of the Ukrainian part of the delta. Project objectives and investments emphasized improvements in management of the protected areas at the local level and in the capacity building needed to implement the project and sustain project results after the project period.

The projects have improved the protection and use of the Danube Delta ecosystems and elevated the participation of the local communities in achieving this.

In addition to strengthening relevant national institutions, the objectives of the project included assisting the biosphere reserve management bodies to "manage the delta's biodiversity jointly" and coordinate with two other World Bank projects operation in the Danube and Black sea region at the same time. The impetus to cooperate thus did not come from the people working in the field, but rather from the MAB National Committees and the World Bank.

As in others TBRs, the project was inscribed in the World Network of BR in two stages, with Romanian side being recognized as a biosphere reserve in 1992, joined by the Ukrainian side in 1998.

## Advantages of TBRs.

#### Transboundary cooperation

First contacts between the two sides occurred in 1990s, with the collapse of the Soviet Union and the end of the Ceaucescu regime in Romania.

In 1991 the first "transboundary" meeting took place.

Compared to the years of GEF financed projects, cooperation and contacts between two sides is currently limited. The substantial budget provided by the World Bank projects for transboundary cooperation made contact between the two sides easier and meetings were more frequent at that time. However, although actual contacts are now less frequent, this previous level of contact provides a benchmark against which to measure current levels of cooperation and set important precedents.

Contacts are currently restricted to written correspondence, with very frequent email exchanges. Informal contacts between the two sides are good and characterized by a high level of mutual respect and friendliness.

### Joint coordination

There is currently no joint committee for coordinating the work of the DDTBR, although this is seen necessary by both sides. However the status of this body and rules of work still need to be agreed upon.

The Joint Commission on Transfrontier Cooperation on Nature Protected Areas may take over the role of coordination between the two sides of the TBR offering a forum for discussion.

On 13 December, 2000 the Romanian Ministry of the Environment and Water Protection, and the Romanian Danube Delta Biosphere Reserve Authority hosted a meeting dedicated to the transboundary cooperation in protected areas. This Joint Commission was established on the bases of an Agreement between the Ministry of the Environment and Territorial Planning of the Republic of Moldova, the Ministry of the Environment and Water Protection of Romania and the Ministry of Environment and Natural Resources of Ukraine. The objective of this body is to discuss further possibilities for transboundary cooperation within the zone of Danube Delta and the Lower River Prut, possibly working towards an extension of the TBR into Moldova. The Joint Commission has nine members – three from Romania, Ukraine and Moldova.

#### Joint projects

Possible common projects are useful and necessary and have been identified, but so far none been carried out jointly. Lack of funding is the main reason of failure in this field. Romania and Ukraine are not the part of the same group regarding EU funding, that makes transboundary funding more difficult to secure.

In the context of Green corridor for the Danube program, several pilot wetland restoration projects have been undertaken by WWF within TBR in both countries. The effectiveness of the project rise considerably because of the mechanism of joint cooperation and implementation of the project on the basis of joint consultations, management and information exchange.

**Challenges and plans.** On of the main problems causing some inconveniences in the full cooperation and coordination of activities of both countries are the absence of legal regulation in Ukrainian and Romanian legislation concerning transboundary biosphere reserves. The need of such laws in evident.

Neither Ukrainian, not Romanian administration of DDBR has sufficient possibilities, mainly financial, to implement constant cooperation in decision-making, necessary to sustain factual, but not formal existence of DDTBR. As the result, law drafting initiatives are absent and both Ministries of Environment didn't pay proper attention to this problem.

And, in turn, lack of full cooperation and coordination between two parts of TBR in the implementation of certain programs and projects didn't facilitate identification of certain problem issues of legal regulation. But the shortcomings of law prevent TBR from effective cooperation and functioning.

One of the issue, that could be solved firstly – is the simplified border crossing regime for DDTBR staff that will facilitate cooperation between different departments of DDBR administration in Ukraine and in Romania.

Conclusions. The BR programme laid out what were visionary ideas in the 1970s. The increased 'institutionalisation' of the initial ideal has substantially reduced the effectiveness of the original vision of a network, limited by the mono-disciplinary and intensely local investigations carried out at national level. Currently, however, despite over 440 biosphere reserves around the world (UNESCO 2004), a decrease in funding and staffing within the main Secretariat, as well as continuing institutional fragility mean that the programme is at something of a turning point. When retracing the steps that lead to an increased formalisation of biosphere reserves, choices taken and policies adopted appear much more haphazard than any official institutional history might suggest. Driving ideas and concepts were dreamt up on blackboards, central principles governing the definitions of different zones were drafted after meetings took place and global policies followed the enthusiasms and choices of individuals within the Secretariat. Rather than a science-led initiative of 'rational' planning, the biosphere reserve programme has to be understood like all international programmes - as the outcome of contested, politicised and dynamic processes, linked to individuals and socio-political contexts. Arguing that policies emerge in contested ways does not lessen their intrinsic value. The underlying design principles laid out in the BR model have undeniably contributed to contemporary protected areas paradigms: "the concept is accepted by all people call it 'bioregional approach', some

people call it 'corridors', others call it all sorts of things to avoid calling them biosphere reserves. So on a conceptual level, we've absolutely won" (Batisse 2000, *pers. comm.*).

Nevertheless, because biosphere reserves often coincide with or incorporate existing protected areas, or were superimposed on existing areas, they frequently inherited their established management philosophies, often substantially different from those laid out in programme. In some cases, comments made eight years ago still hold: "most [biosphere reserves] are merely old national parks dressed up in new jargon without any change in the management approach" (Gadgil 1996 : 358, see also Price 1996 : 647). Yet despite the shortcomings, initiatives around the world, including in transboundary contexts, reflect the shift of conservation paradigms in the way boundaries to protected areas are designed. The danger in the case of the BR programme is that desperate lack of funding and staffing is driving a wedge between innovations on the ground and policies promoted by the Secretariat. Constrained on a day-to-day basis, the Secretariat is often no longer able to respond to innovative ideas by granting practical support to individuals and organisations seeking to implement and explore new planning options. At a time when transboundary initiatives are gaining momentum, real exchanges – as would ideally happen within a functioning global network - become crucial. UNESCO's lack of formalised mechanisms for endorsing, recognising and supporting TBRs risks discarding the visionary tradition, born of a series of individual choices, that gave birth to the programme.

As borders between states are political and not ecological, ecosystems often occur across national boundaries and may be subject to different of even conflicting management and land use practice. TBRs provide a tool for common management . TBRs is an official recognition at an international level and by UN institution of a political will to cooperate in the conservation and sustainable use through common management of a shared ecosystem. It also represents a commitment of two or more countries to apply together the Seville Strategy for BR and its objectives. It corresponds to the increasing recognition of the appropriateness of the ecosystem approach, for conservation and sustainable use of biological diversity.

The creation of TDDBR (Romania/Ukraine) gives the chance to achieve the compatibility between preserving the natural values of the Ukrainian Danube Delta and its sustainable socio-economic development. The establishment of bilateral biosphere reserve was the logical result of the development of reserve management and studies in Ukraine and Romania and the demonstration of the world trend for growth of protected areas.

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2. Biosphere reserves on borders. Warsaw, 2000.

<sup>1.</sup> *Andrian G*. The MAB Programme in the South-Eastern European countries: analytical report. Venice: UNESCO-ROSTE, 2003.

- 3. *Fall J.* Transboundary biosphere reserves: a new framework for cooperation. Environmental Conservation 26(4): 1-3, 1999.
- Fall J. Planning protected areas across boundaries: new paradigms and old ghosts, in U. Manage Goodale, M. Stern, C. Margoluis, A. Lanfer and M. Fladeland (eds) Transboundary Protected Areas: The Viability of Regional Conservation Stategies, New York, 2003.
- 5. *Fall J., Jardin M.* Five Transboundary Biosphere Reserves in Europe, Paris: UNESCO, 2003.
- 6. *Gadgil M.* Managing biodiversity, in K. J. Gaston (ed) Biodiversity: a Biology of Numbers and Difference, Oxford: Blackwell Science, 1996.
- 7. Holdgate M. The Green Web, London: Earthscan, 1999.
- 8. *Kim K.-G.* East Asian Biosphere Reserve Network Experience on Transboundary Biosphere Reserve. Seoul: UNESCO-MAB National Committee, 2000.
- 9. *Price M.* People in biosphere reserves: an evolving concept. Society & Natural Resources 9, 1996.
- Robertson V. Biosphere reserves: old and new, in IUCN (ed) Protected Areas in the 21st Century; from islands to networks, Albany, Australia, 24 - 29 November 1997: IUCN - The World Conservation Union, 1997.
- UNESCO Groupe d'experts sur le rôle et l'analyse des systèms et des modèles dans le Programme pour l'homme et la biosphère (MAB) Rapport final. Paris: UNESCO, 1972.
- 12. UNESCO Biosphere Reserves: The Seville Strategy and the Statutory Framework of the World Network. Paris: UNESCO, 1996.
- 13. UNESCO Design principles for biosphere reserves, accessed 1999, http://www.unesco.org/mab.
- 14. UNESCO Seville + 5 International Meeting of Experts, Proceedings Seville + 5. Pamplona, Spain, 23-27 October, UNESCO, 2000.
- 15. UNESCO List of biosphere reserves, accessed 2004, http://www.unesco.org/mab.
- 16. *Федоренко В.А.* Международный биосферный заповедник в дельте Дуная. Вилково, 2002.

## КОНЦЕПЦІЯ ТРАНСКОРДОННОГО БІОСФЕРНОГО ЗАПОВІДНИКА В ДІЇ: ВИПРОБУВАННЯ "ДЕЛЬТИ ДУНАЮ"

# А. Джорджио<sup>1</sup>, О. Мелен<sup>2</sup>

## <sup>1</sup>Наукове регіональне бюро ЮНЕСКО (ROSTE), Венеція, Італія <sup>2</sup> "Екоправо-Львів", вул. Костюшко, 65 Львів, 79000 Україна

Описано нові ідеї з розробки просторової моделі в міжнародних природоохоронних програмах. Ці ідеї не підлягають принципу, що політика відображає "правильні" вибори, і пов'язані з беззаперечними науковими началами. На прикладі моделі біосферних заповідників, розробленої ЮНЕСКО, зазначається, що процес розробки динамічний, випробовується часом та є результатом численних переговорів із соціальним та політичним контекстом. Як і більшість міжнародних програм, програма "Людина та Біосфера" та її модель біосферного заповідника зазнали змін з моменту її появи на початку 1970- х років. Критично розглянуто ріст зацікавленості в ідеї транскордонного біосферного заповідника, зроблено порівняльний аналіз зі специфічною ситуацією в заповіднику "Дельта Дунаю".

*Ключові слова:* біосферний заповідник, охорона природи, міжнародне співробітництво.

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