

# **Report EuroMAB 2002**

## ***Contents***

### **1. Introduction**

### **2. Opening session**

### **3. Background and Objectives of meeting**

### **4. Statements on behalf of cooperating organisations**

4.1. Council of Europe

4.2. European Union

### **5. Reports of EuroMAB thematic meetings 2001-2002**

5.1. Changing cultural and ecological values in Eastern and Central Europe (October 2001)

5.2. Urban and peri-urban science (11-13 April 2002, Birmingham, UK)

5.3. Ecotourism and sustainable development in biosphere reserves: experiences and prospects (24-25 May 2002, Quebec, Canada)

5.4. Financial instruments on funding in biosphere reserves for accession countries (September 2002, Vilm, Germany)

5.5. Training workshop on conflict resolution in biosphere reserves (3-5 September 2002, Vosges du Nord, France)

5.6. Traditional knowledge and management of arid lands (May 2002, Syria)

### **6. Presentation of forthcoming EuroMAB meetings**

6.2 The role of wetlands in biosphere reserves (Palava Biosphere Reserve, Czech Republic)

6.3 Discussion

### **7. EuroMAB Workshops**

7.1. Handling biodiversity data and BRIM

7.1.1 Introduction

7.1.2 First workshop session (Theme 1) Baseline status – experience, constraints and solutions in relation to data and metadata gathering and handling

7.1.3 Second workshop session (Theme 1): Building information systems to support biosphere reserve data and metadata

7.1.4 Third workshop session (Theme 2): The broader context of BRIM.

7.2. World Heritage sites and Biosphere Reserves

7.2.1 Introduction

7.2.2 Workshop

7.2.3 Conclusions and recommendations

- 7.3. Urban ecosystems and biosphere reserves
  - 7.3.1 Background
  - 7.3.2 Introduction
  - 7.3.3 Workshop
  - 7.3.4 Conclusions and recommendations
- 7.4. Ecotourism
  - 7.4.1 Background
  - 7.4.2 Introduction
  - 7.4.3 Workshop
  - 7.4.4 Conclusions and recommendations
- 7.5. Legal and management issues (including transboundary biosphere reserves)
  - 7.5.1 Background
  - 7.5.2 Rationale and expected outputs
  - 7.5.3 Workshop
    - 7.5.3.1 The national level
    - 7.5.3.2 The site level
  - 7.5.4 Follow up activities for EuroMAB
- 7.6. Cooperation in South East Europe
  - 7.6.1 Background
  - 7.6.2 Workshop
  - 7.6.3 Conclusions and recommendations
- 7.7. Coastal marine biosphere reserves
  - 7.7.1 Introduction
  - 7.7.2 Workshop
  - 7.7.3 Conclusions and recommendations
- 7.8. Quality economies in biosphere reserves
  - 7.8.1 Background
  - 7.8.2 Plenary introduction
  - 7.8.3 Workshop
  - 7.8.4 Conclusions and recommendations

## **8. Closure of meeting**

### Annexes

- I - List of participants
- II - Address by Prof. Scarascia Mugnozza

## REPORT EUROMAB 2002

### 1. INTRODUCTION

The EuroMAB 2002 meeting was held in the National Research Council (CNR) in Rome, Italy, on 7-11 October, 2002. This meeting benefited from the high patronage of the President of the Italian Republic. It was hosted by the Ministry of Foreign Affairs, the Ministry of the Environment, the Ministry of Agricultural Policy and Forests, the National Research Council, the National Academy of Sciences, the Italian National Commission for UNESCO, the State Forestry Corps, the Region Lazio, and the Municipality of Rome.

The EuroMAB meeting was attended by some 98 participants from 32 countries of the EuroMAB region, 47 observers, 1 representative of ArabMAB, and representatives of the following cooperating organisations: Council of Europe, European Science Foundation, IPGR (International Plant Genetic Resources Institute), CIESIN (Center for International Earth Science Information Network), National Biological Information Infrastructure (NBII), US Geological Service, and the ITIS (Integrated Taxonomic Information System). The Chair of the MAB Council, Mr Driss Fassi (Morocco) could not attend but sent a message of goodwill. A list of participants is attached in annex.

The structure and the programme of the meeting were conceived through an International Steering Committee, which formally met on 22 March 2002, in the afternoon following the 17<sup>th</sup> MAB International Coordinating Council session (18-22 March, 2002). This Committee was composed of the following members:

Gian Tommaso Scarascia Mugnozza, Chair MAB Italy, and Mirilia Bonnes, MAB Italy  
John Ingram, Secretary, MAB-UK (for outgoing Chair EuroMAB)  
Javier Castroviejo, Chair, MAB Spain  
Robert Barbault, Chair, and Catherine Cibien, Scientific Secretary, MAB France  
Jan Kvet, Chair, and Eva Jelinkova, Secretary, MAB Czech Republic  
Fred Roots, Chair, MAB Canada  
Angheluta Vadineanu, Chair, MAB Romania  
Peter Bridgewater, Secretary of the MAB Programme, UNESCO (*ex officio*)  
Pierre Lasserre, Director, UNESCO Venice Office (*ex officio*)  
Jane Robertson, UNESCO-MAB (*Secretariat*)  
Maité Lacan, UNESCO-MAB (*Secretariat*)

The Italian Organizing Committee was responsible for organizing, in collaboration with the Italian MAB Committee, the Italian contribution to the meeting and the logistic arrangements. This Committee was composed of the following members:

Gian Tommaso Scarascia Mugnozza (Chair of Italian MAB Committee)  
Mirilia Bonnes (past Chair and Member Italian MAB Committee)  
Mario Panaro (Italian Ministry of Foreign Affairs)  
Angelo Piero Cappello (Italian Ministry of Foreign Affairs)  
Piera Valenti (Member of Italian MAB Committee nominated by Italian Ministry of Foreign Affairs)  
Giampaolo Cogo (Italian Ministry of the Environment)  
Aldo Di Biagio (Italian Ministry of Agricultural Policy and Forests)  
Maria Raffaella Benvenuto (Italian National Commission for UNESCO)

Matteo Di Salvio (Italian National Commission for UNESCO)  
Mario Apice (CNR)  
Anna D'Amato (CNR)  
Giancarlo Avena (University of Rome "La Sapienza")  
Giorgio Cesari (National Agency for Environmental Protection)  
Marco Panella (State Forestry Corps)  
Vincenzo Vomero (Municipality of Rome)  
Giulia Trimani (Italian National Academy of Sciences) (Secretariat)  
Alessandro Jovinelli (Italian National Commission for UNESCO) (Secretariat)  
Stefania Zitelli (CNR) (Secretariat)

The meeting was structured into plenary sessions and simultaneous thematic workshops. Each workshop was introduced in plenary by a short presentation by a specialist, who served as moderator for the subsequent workshop. The workshops consisted of short presentations illustrating the issues and solutions raised by the plenary introduction. The main conclusions of the workshops were reported back into plenary and served as an input for the final discussion, so on the EuroMAB work plan. In addition, some 30 posters were presented in a room next to the plenary hall.

In the morning of 8 October, participants were received by His Excellency Carlo Azeglio Ciampi, President of the Italian Republic, in the Quirinale Palace, in the presence of the Italian Minister of Environment and Land Protection, Mr Altero Matteoli. On this occasion, the Chair of the Italian MAB National Committee, Mr Gian Tommaso Scarascia Mugnozza, made a statement, which is presented in annex

On 9 October, participants were invited by the Italian Organizing Committee to take part in a field trip. This consisted of a visit to the Castel Porziano, an estate of 62 square km, which is the official summer residence of the President of the Italian Republic, and also to the Circeo Biosphere Reserve. This latter is one of the "old" generation of biosphere reserves, consisting for the moment of a core area only within the Circeo National Park. The Director, Mr Mario Priolo, indicated that the "biosphere reserve" would be soon expanded to cover the entire national park, including an offshore island and a marine zone.

## **2. OPENING SESSION**

The meeting was opened by Chair of the Italian MAB National Committee, Prof. Gian Tommaso Scarascia Mugnozza who welcomed participants on behalf of the host country. He thanked all persons and organizations who had made the meeting possible, especially the CNR as the host organization, the Ministry of Foreign Affairs and UNESCO ROSTE (Regional Bureau for Science in Europe) for its support, notably for the travel of participants, and the Ministry of Environment and the General Secretariat of the Presidency of the Republic for the important financial support.

Prof. Lucio Bianco, Chair of the Italian National Research Council, recalled that the CNR had been involved with the MAB Programme since the 1970s, with a particular emphasis on MAB work on urban systems. He highlighted that many Italian scientists had made and continued to make key contributions to MAB activities. These included for example Mr di Castri as the former Secretary of the MAB Programme, Mr Iaccarino as the former ADG of the Science Sector and now member of MAB Italy, Ms Bonnes for her work on urban systems, and Mr Scarascia Mugnozza as Chair of MAB Italy.

Sen. Prof. Tullia Caretoni, President of the Italian National Commission for UNESCO, recalled the commitment of her organization to the MAB Programme. She noted in particular the highly symbolic and even philosophical value of MAB in seeking to reconcile people with nature, and finding practical ways to address this objective.

Ambassador Marcello Spatafora, Director-General for Multilateral Economic and Financial Affairs of the Ministry of Foreign Affairs, emphasized the importance of the issues discussed at the EuroMAB 2002 meeting to the work of his Ministry. It was vital for every country to attain a positive relationship between the sustainable use of natural resources and economic development, for example through tourism, for which Italy was a major international destination. He recalled the fear expressed by Kofi Annan of “Summit fatigue” whereby countries were loath to subscribe to large-scale programmes. He therefore welcomes the more focussed and action-oriented type of agenda of EuroMAB 2002. He pledged the support of his Ministry to UNESCO MAB in the implementation of follow up work.

Mr Peter Bridgewater, Secretary of the UNESCO MAB Programme, on behalf of the Director-General of UNESCO, Mr Koïchiro Matsuura, thanked the Italian authorities for their generous hospitality in hosting the EuroMAB 2002 meeting. He conveyed the formal regrets of Professor Driss Fassi, Chair of the MAB International Coordinating Council, who could not attend. He also wished to acknowledge the support of the US National Biological Information Infrastructure (NBII) to the meeting. On a personal note, he indicated his pleasure to work again with the former MAB Secretary, Mr Pierre Lasserre; the former ADG for Science, Professor Maurizio Iaccarino; as well as Prof. Francesco di Castri, Secretary of the MAB Programme in its founding years. In addition, he mentioned Prof. Sandro Pignatti, with whom he had worked in Trieste, at the first meeting of the working group on data processing in phytosociology. He finally expressed his personal thanks to Prof. Mirilia Bonnes who had helped guide this meeting from its original proposal in the EuroMAB meeting in Cambridge in 2000.

Mr Pierre Lasserre, Director of the UNESCO Venice Office, first expressed, in Italian, his thanks to the Italian authorities for their support to the Office and in particular for its work in rebuilding scientific cooperation in South East Europe. For this, he indicated that work under MAB was proceeding stepwise, with an initial meeting held in Romania in December 2001. The host of that meeting, Prof. A. Vadineanu, would be chairing a special session in the EuroMAB 2002 meeting on MAB cooperation in South East Europe. The results would be used to elaborate a sub-regional project, to be submitted to a donor conference in Spring 2003 in Paris. He indicated that Transboundary Biosphere Reserves (TBRs) were a key element of such a project, as a tool to build solidarity and peace.

The Mayor of Rome, Hon. Walter Veltroni, welcomed participants to Rome, hoping they would have the opportunity to visit the city. He indicated that the general public in Europe was increasingly conscious of environmental matters, due to events such as the autumn 2002 floods in cities such as Dresden and Prague, and also in northern Italy. Rome, one of the oldest cities of the world, had tried over the years to elaborate environmental protection polices, with the result that the city possessed an exceptionally high number of green spaces, including farm land and nature reserves with a wealth of flora and fauna. Measures were now being taken to reduce air pollution, with an aim for example to cut internal combustion motor traffic by 25% and encouraging the use of solar energy. This lead to promoting the idea of nominating Rome as a biosphere reserve, serving as a model for other cities in promoting sustainable development.

### **3. BACKGROUND AND OBJECTIVES OF THE EUROMAB 2002 MEETING**

Mr Peter Bridgewater, Secretary of the MAB Programme first recalled that the MAB Programme was 30 years old, and was the first intergovernmental platform for studying how to improve people's relationship with their environment, under the 'S' of the UN in UNESCO. Over 130 countries participated in MAB. Practically speaking, it operated through groups of countries by geographical region, linked by history and culture. He noted with pleasure that Andorra was in the process of joining the Programme, with the fascinating possibility of the whole country being designated as a biosphere reserve. This was perhaps a perfect example of the application of the biosphere reserve concept to shape sustainable thinking. He noted that EuroMAB was the oldest (1991) and the largest of the MAB regional networks, with no less than 42 countries, including Canada and the USA. EuroMAB also operated through more than 200 biosphere reserves, i.e. special places for people and nature where the MAB ideas were tested out and demonstrated.

MAB had to be seen in the context of multilateral environmental agreements such as the Convention on Biological Diversity (CBD) and in particular the European initiatives including the European Union (EU) Directives, the Emerald Network and the Pan European Biological and Landscape Diversity Strategy. The countries engaged in the MAB Programme were also committed to implement these agreements.

Mr Bridgewater referred to the recently held World Summit on Sustainable Development, indicating that although its success was debatable, it nevertheless had given a new impetus to forging new partnerships between governments, civil society and the private sector to reach the objectives of Agenda 21. The WSSD wished above all to move from rhetoric to action, to actually start meeting the goals defined at Rio ten years ago, as well as new ones. Pertinent for MAB was the aim of slowing the rate of biodiversity loss by 2010, which interacted with the Millennium Development Goal of ensuring environmental sustainability through increasing the area of forest and other ecosystems under protective management. One problem with these recommendations was that there were no real indicators of this process, and this was an area where MAB could perhaps help.

Mr Bridgewater was certain that the MAB Programme, in a modest but realistic fashion, could provide the tools for truly putting these agreements into practice. The World Network of Biosphere Reserves covered more than 400 sites in 94 countries and was growing quantitatively and qualitatively every year. MAB was now exploring innovative issues such as managing urban areas as ecological systems, and exploring the institutional and legal frameworks for integrated land and water management. He announced an upcoming conference in Sweden in 2004 on urban sustainability, which would be advertised through among other places the UNESCO MAB net.

He recalled that this EuroMAB 2002 meeting had been conceived through an International Steering Committee which met at the occasion of the MAB ICC in March this year. The programme had been designed such that it should be of an intergovernmental nature, as this is the case of other MAB regional networks. This meant that there were country delegations established by MAB National Committees, consisting of specialists in the various subject matters on the agenda and also a number of BR managers with field experience. EuroMAB 2002 was therefore not a scientific conference consisting of presentations with the aim of a "state of the art" of the latest research results in specific fields. It was a meeting which was a hinge between the past and the future: examining the results of specific meetings and activities undertaken since the last EuroMAB meeting in Cambridge in April 2000, elaborating

on ongoing work and also exploring some new topics . This was not the time nor the place to examine any of the topics in depth -- the idea was simply to point to topics of relevance to the EuroMAB region that need further work through joint collaborative projects and /or meetings among countries, and particularly in collaboration with other organizations and programmes. The meeting would thus identify activities for the countries of EuroMAB for the next 2-3 years, indicating partners, activities, financial resources and timelines. This would be reported to the Bureau of the MAB Council – by Bureau members the Czech Republic and France – at its meeting on 6-8 November this year. The Bureau would use this and other material to advise on the content of the MAB Programme for 2004-2005.

In developing the work of EuroMAB, Mr Bridgewater recalled that the regional and global movements in the broad theme of environment and development should be taken into account for reasons both intellectual and practical. MAB was a relatively modest programme within a UN specialized agency, which itself had limited budgets and personnel. Countries were also cash-strapped and yet had to meet their international obligations under, for example, the Convention on Biological Diversity, or the Plan of Implementation of Agenda 21 which resulted from the Johannesburg Summit.

In addition, EuroMAB 2002 needed to take account of the results of the International Year of Ecotourism, 2002, for which a Summit meeting took place in Quebec in May 2002. The International Year of Mountains had also been celebrated in 2002, for which the summit meeting would take place in late October 2002 in Bishkek in Kirghystan. For historical reasons, a large majority of biosphere reserves were located in mountainous areas, and therefore could provide excellent places for exploring some of the follow up action to this summit and International Year. In addition, 2003 would be the International year of Freshwater. While attention would properly be focussed on water for human needs, it was possible that MAB, among others, could help in drawing attention to the issue of ecological water, i.e. water needed for ecosystem functioning, and *ipso facto* the supply of water for human needs. In this sense the work plan of MAB with the Ramsar Wetland Convention and the workshop to be held in the Czech Republic on wetlands immediately after EuroMAB 2002 were all possible ways of support.

It was also necessary to think ahead to the World Parks Congress in September 2003 and its input to the Conference of Parties to the CBD in 2004 when the topic of protected areas would be on the agenda. What role should MAB take in preparing for this? Mr Bridgewater indicated that he had been invited to lead one of the seven workshop “streams” for the Parks Congress on the subject of “linkages in the landscape”. He aimed to make this an opportunity for promoting biosphere reserves as a tool for conserving biodiversity in the larger landscape, with protected areas as their core areas and with attention to dimensions such as the Ecosystem Approach, the conservation of cultural heritage (especially of living languages), and the notions of landscapes, riverscapes and seascapes. There would be further discussion on this with the MAB Bureau, and ideas from EuroMAB could therefore be transmitted through its European members.

As concerned the future of the structure and operations of EuroMAB, Mr Bridgewater first recalled that it consisted of a very large and disparate set of countries, without a common language. Since the Cambridge meeting, the role of the various UNESCO Offices in the field had changed, such that the Moscow Office was now responsible for Russia and Belarus and the countries of the Caucasus. The Venice Office was charged especially with the countries of South East Europe. The UNESCO Office in Quebec had been closed and President Bush had announced on 12 September 2002 that the USA would be rejoining UNESCO. This meant that

the idea of a NAFTA MAB could become more pertinent in the coming future. In addition, the former Chair of EuroMAB, the UK, had changed institutional base and it had been agreed that the UNESCO Paris Office should take on the role of maintaining the EuroMAB web site. The Secretariat for coordinating EuroMAB as a whole was now *de facto* being provided by Paris. There were therefore many reasons to ask whether one should continue to hold meetings every two years of this group as one EuroMAB. Added to this was the legitimate question of how to stimulate and maintain the network of contacts of the biosphere reserve managers, as was successfully achieved at the Florac (France), Stara Lesna (Slovakia) and Finland meetings. He concluded by proposing that the MAB Bureau meeting in 2003 should in fact make a stock-taking of all the regional MAB networks and study for example how to make them more cost-effective, more relevant to national and regional priorities, and more efficient in building synergies with partner organizations, NGOs and in certain cases, the private sector.

#### **4. STATEMENTS ON BEHALF OF COOPERATING ORGANIZATIONS**

##### **4.1. COUNCIL OF EUROPE**

Mr Gianluca Silvestrini, of the Council of Europe, addressed participants on cooperation between his organization and UNESCO on the protection of natural heritage and biodiversity. He first recalled that the Council of Europe was a regional organization aiming to achieving greater unity of its member states by safeguarding their common heritage, and facilitating their economic and social progress. As these ideals were shared by UNESCO, a Memorandum of Cooperation had been signed as early as 1952.

In the field of the protection of natural heritage and biodiversity within a context of sustainable development, there was a clear need to improve coordination and synergy amongst existing initiatives. UNESCO-MAB and the Council of Europe had recently identified some activities for a coordinated work programme within the Memorandum of Cooperation. These activities included:

- setting up the Council of Europe Ecological Networks (Emerald Network and the Pan-European Ecological Network) and the World Network of Biosphere Reserves. This would include especially the core areas of biosphere reserves in the Emerald Network, the promotion of transfrontier cooperation on shared ecosystems (TBRs); dissemination of information such as lists of sites or maps of networks;
- the awarding of the Council of Europe “European Diploma of Protected Areas” and biosphere reserve designation, including exchanges of information on sites concerned, and, as appropriate, site-based expert appraisal to monitor the efficacy of conservation measures;
- the Bern Convention’s activities on protected areas and biosphere reserves, in particular concerning assistance to State having difficulty in implementing site-related issues of the Bern Convention and assistance to States where natural or human-induced disaster had occurred;
- cooperation on specific sites, for example for testing the Council of Europe Code of Practice for the for the Introduction of Biological and Landscape Diversity into the Transport Sector, the Model Law on sustainable management of coastal areas and a European Code of Conduct for Coastal Zones, the Recommendations for sustainable agriculture, sustainable tourism etc.;
- cooperation on contributions of the Council of Europe and UNESCO to the COP of the CBD, especially COP VII on protected areas;

- cooperation for public awareness, information exchanges and education , especially in the framework of the CBD-UNESCO global initiative. This could include information in *Naturoopa*, the Bulletin for the World Network of Biosphere Reserves and a fully maintained link between the CoE and MAB web sites;
- promotion of the European Landscape Convention.

All the above activities would be discussed by annual meetings of the two Secretariats.

## **4.2. EUROPEAN UNION**

The work of the EU Thematic Topic Centre on Nature Conservation was introduced briefly by Mr Julius Ozslanyi, Chair of MAB Slovakia and Director of the Institute of Landscape and Ecology of Slovakia . This Institute was a partner organization with the Paris-based Thematic Topic Centre for providing information on biodiversity conservation for the EU Accession countries. Biosphere reserves were highly useful sites for collecting data on near natural system (core areas) and the same systems increasingly influenced by human activities (buffer zones and transition areas). More information was being provided by Ms Dominique Richard of the Thematic Topic Centre for the BRIM discussions at the EuroMAB meeting (see workshop on Handling Biodiversity data and BRIM).

In response to a question from the floor on cooperation with the EU *per se*, Mr Bridgewater recognized the need to step up cooperation, especially to demonstrate the added value of biosphere reserves for EU work and ensure that biosphere reserves could benefit from EU funding. In this respect, he noted that the EU in fact was supporting MAB outside Europe, for example to the ERAIFT Post-Graduate School in Kinshasa (DRC). In response to a question on the appropriate UNESCO Field Office to work with the Central Asian Republics, he indicated that this was the role of the Almaty Office. The various grouping for MAB in Asia was evolving however, as demonstrated by the recently instituted South and Central Asian MAB Network (SACAM).

## **5. REPORTS OF EUROMAB THEMATIC MEETINGS IN 2001-2002**

### **5.1 CHANGING CULTURAL AND ECOLOGICAL VALUES IN EASTERN AND CENTRAL EUROPE (October 2001, Slovakia)**

Mr Julius Ozslanyi reported on this two-day meeting, which had given the opportunity to exchange views among neighbouring countries. The proceedings of this meeting would be available shortly. Some of the points in common discussed at the meeting were:

- the aging of populations in biosphere reserves in rural areas and the need to create conditions to halt depopulation of rural settlements;
- the need to promote income-generating alternatives in transition areas of biosphere reserves that are ecologically, economically and socially balanced;
- the need to redevelop traditions, cultural events and spiritual manifestations;
- the need to broaden scientific research to cover the social sciences in relation to local communities and also visitors to biosphere reserves;
- the call of all participating countries to raise the legal status of biosphere reserves in their respective national legislation;
- the need to raise local awareness of biosphere reserve status;
- the need to link with opinion-making institutions to promote environmental awareness in general.

## **5.2 URBAN AND PERI-URBAN SCIENCE (11-13 April 2002, Birmingham, UK)**

Ms Hilary Neal, the Chair of MAB UK reported briefly on the ESF/URGENT/EuroMAB/UK Urban Forum workshop, designed to explore the interest in and the potential content of a collaborative project. Three working groups addressed: the characterization of the urban environment; the development of an integrated European research programme on urban and peri-urban environments, and communicating urban science issues to the general public. She indicated that the report was being compiled and would be available on the web ([http://www.ukmaburbanforum.org.uk/ESF\\_URGENT\\_EuroMAB\\_UF/Agenda.htm](http://www.ukmaburbanforum.org.uk/ESF_URGENT_EuroMAB_UF/Agenda.htm)) .

## **5.3 ECOTOURISM AND SUSTAINABLE DEVELOPMENT IN BIOSPHERE RESERVES: EXPERIENCES AND PROSPECTS (24-25 May 2002, Quebec City, Canada)**

Mr Fred Roots, the Chair of MAB Canada, reported on this EuroMAB workshop, which was held immediately after the World Summit on Ecotourism organized by UNEP and the World Tourism Organization as the culmination of the International Year on the same subject. This workshop had been small, drawing 25 people from 15 countries notably from Eastern and Central Europe. The report had been published by MAB Canada in English and French. The workshop had first examined the Quebec City Declaration on Ecotourism in relation to its relevance to biosphere reserves. Presentations included: sustainable tourism development in biosphere reserves in Central and Eastern Europe using the UNEP-CBD International Guidelines; sustainable tourism certification; a comparison of ecotourism opportunities in “rural” versus “urban” biosphere reserves with different tourism appeal; and the challenges of sustainable tourism in Russian biosphere reserves.

Some of the main conclusions were:

- ‘ecotourism’ in biosphere reserves implied heightening awareness of not only the natural values of the core area, but also the active social and development questions addressed by the buffer zone and transition area;
- organizing ecotourism in a biosphere reserve with multiple units and differing legislations posed different challenges to that of organizing ecotourism in a protected area under a single management authority;
- tourism is an economic activity which was worthy of a special focus of research and monitoring in its own right.

## **5.4 FINANCIAL INSTRUMENTS ON FUNDING IN BIOSPHERE RESERVES FOR ACCESSION COUNTRIES (September 2002, Vilm, Germany)**

Mr Jürgen Nauber, Secretary of MAB Germany reported briefly on this workshop, stressing the fundamental political and legislative changes for the accession countries when they joined the EU. Biosphere Reserves could act as models promoting and demonstrating the advantages of sustainable development for these (and other) countries. This workshop involved 30 participants from 12 countries: Mr Nauber observed that the many presentations used English as the common language and this pointed to the need to help specialists to master English to improve international communications. The report of the meeting was being compiled and would be available from the contact: [seibfn@bfm.de](mailto:seibfn@bfm.de)

## **5.5 TRAINING WORKSHOP ON CONFLICT RESOLUTION IN BIOSPHERE RESERVES (3-5 September 2002, Vosges du Nord Biosphere Reserve, France)**

Ms Catherine Cibien, Secretary of MAB France presented the report on this activity. It originated from the EuroMAB meeting in Cambridge in 2000 which recognized that, while biosphere reserves were the arenas for airing different points of view and for seeking long-lasting solutions to conflicts of interest for the benefit of a maximum of people, biosphere reserve coordinators lack training on how to manage such situations. The workshop was organized with the following objectives:

- training biosphere reserve coordinators in approaches to conflict analysis and management;
- enabling biosphere reserve coordinators to exchange experience in addressing conflicts within their biosphere reserves;
- analysing case studies and different approaches to conflict management used by biosphere reserves;
- identifying gaps in knowledge and the needs for new skills on conflict management.

The success of the workshop was attributed to the fact that considerable time and care had been invested in its preparation (3 days in the Vosges du Nord BR and at UNESCO HQ), and thanks to the professionalism of the trainer, Mr Scott Jones of the University of Wolverhampton (UK). Fifteen participants from 11 countries attended (Armenia, Austria, Czech Republic, France, Germany, Moldova, Poland, Romania, Russian Federation, Yugoslavia) consisting of coordinators of biosphere reserves, scientists and representatives of conservation agencies. There had been a good gender balance and a good mixture of experience versus young people. The MAB Secretariat had been represented by Meriem Bouamrane. The workshop focused on topics such as: what is a conflict? different types of conflict (institutional, legal, those related to customs); stakeholder analysis and conflict analysis; negotiation, mediation and facilitation; reaching and implementing agreements. Group exercises on case studies and role playing had been used as training methods. The training workshop ended with an evaluation by participants on its content and conduct. Participants had now returned to their countries and were trying to apply the lessons learned to resolve conflict situations in their own biosphere reserves. It was agreed however that six months after the training course, i.e. in February 2003, a stock-taking would be conducted as to the real impact of the training and to assess what would be needed as a follow up.

It was clear that this type of investment in capacity building of the basic skills required for a biosphere reserve coordinator was in great demand, and that MAB should respond and take leadership in this field. Hence, it was necessary to reflect on a longer term perspective on the type of strategy to follow, for example whether there should be more such EuroMAB training workshops, whether they should be organized for other regions, and who exactly should be the target recipients of such training.

## **5.6. TRADITIONAL KNOWLEDGE AND MANAGEMENT OF ARID LANDS (May 2002, Aleppo, Syria)**

Mr V. Neronov of MAB Russian Federation reported briefly on the meeting organized in Syria in May 2002 by UNESCO MAB with IUBS, ICARDA and IUCN, focusing on rehabilitation. This meeting proved useful especially to link the work undertaken in central Asia with that of Northern Asia around the Caspian Sea.

## **6. PRESENTATION OF FORTHCOMING EUROMAB MEETINGS**

### **6.1. THE ROLE OF WETLANDS IN BIOSPHERE RESERVES (15-18 October 2002, Palava, Czech Republic)**

Mr Jan Kvet, Chair of MAB Czech Republic, indicated that this meeting would take place in Palava Biosphere Reserve the following week as a contribution to EuroMAB and the work of the Ramsar Convention. The location of this meeting had been chosen to help move forward the negotiations on enlarging this biosphere reserve and possibly creating a TBR with neighbours sharing the Mura –Drava river basins. The meeting would address the following topics: the sources of biodiversity in wetlands; buffering effects of wetlands on water budgets; management and restoration of wetlands for their sustainable functioning; and resolution of conflicts to ensure the “wise use” of wetlands in line with the Ramsar Wetland Convention. Sixty-one contributed papers were expected. Mr Kvet also indicated that INTECOL’s working group on wetlands was intending to hold a workshop on biosphere reserves and wetlands in Utrecht in the summer of 2004.

### **6.2. DISCUSSION**

Participants underlined the importance of enhancing synergies between MAB and other programmes within UNESCO, notably with the social sciences programmes such as MOST, and also between MAB and the International Council for Science (ICSU). Mr Bridgewater indicated that a meeting of the Chairs of the five UNESCO scientific programmes had just taken place, with recommendations for joint activities which promised to be more productive than in the past. Participants noted that such synergies between MAB and MOST should in particular be sought at the national level.

Mr Karl Baadsvik of Norway informed participants that, after several years of inactivity, Norway was re-establishing a MAB National Committee and was considering the nomination of two sites as biosphere reserves. Several years before, Norway had in fact requested its only site designated as a biosphere reserve (Svalbard) to be withdrawn since it did not and could not meet the Seville criteria, due to the fact that it was uninhabited. Today, he noted that one major obstacle in promoting biosphere reserves was the term “reserve” which immediately conveyed the notion of restrictions of human activities. The term “biosphere area” was being used instead.

## **7. EUROMAB WORKSHOPS**

### **7.1 HANDLING BIODIVERSITY DATA AND BRIM**

The workshop on ‘Handling biodiversity data and BRIM’ was co hosted by UNESCO MAB and the NBII (National Biological Information Infrastructure). It addressed two themes. The first on ‘Building information systems to support biosphere reserve data and metadata’ was introduced by Mr Sandro Pignatti from University of Rome “La Sapienza” and MAB Italy Committee, and was moderated by Mr John Mosesso from the NBII, with two workshop sessions. The second theme on ‘The broader context of BRIM’ was moderated by Mr Don MacIver from the Meteorological Service of Canada, with one workshop session.

### **7.1.2 First workshop session (Theme 1) Baseline status – experiences, constraints and solutions in relation to data and metadata gathering and handling**

Mr Mosesso introduced the first session and made a brief presentation on the NBII, which was mainly operating in the Americas but is widening in scope. NBII works through nodes aimed at making existing biological information available to those who required it, such as students, scientists and policy-makers. He introduced the four bioinformatics experts that were specially invited by NBII, who briefly introduced themselves and their work: Mr Roman Bukacek from the Czech Republic, Ms Madlena Pavlova from Bulgaria, Mr Varor Petrosyan from the Russian Federation and Ms Dorota Cieslakiewicz from Poland. By inviting these bioinformatics experts, NBII hoped to embrace them in the MAB forum permanently, and encourage them to share their unique informatics perspectives in discussions about moving BRIM forward.

The following three presentations were made during the first session:

- Mr Robert Turner, of the National Biological Information Infrastructure/Southern Appalachian Information Node (NBII/SAIN) gave a presentation on “Local/national level: NBII’s Regional Information System for the Southern Appalachian Biosphere Reserve”. Mr Turner explained that there was a need for an information system that integrated all data/information from the different agencies working in this Biosphere Reserve. The goals for such a system were:
  - a) Understanding what is already available with regard to data and information;
  - b) Education and outreach activities;
  - c) Application and demonstration to illustrate the use of this information to decision-makers.

One important question for SAIN was how to communicate different problems to the people living in the area. One attempt was the volunteer science programme that aimed at involving volunteers to monitor different factors along the Southern Appalachian Trail (2000 km). Three main questions asked as a basis for that work were: what indicators should be monitored; what was already available; and what needed to be monitored that was not already available? The Southern Appalachians Biosphere Reserve needed a system to handle this information which would be web-based, user-friendly, and easily accessible through a normal browser. This was the basis for the SAIN/NBII cooperation. It consisted of a series of computer systems or nodes including information about biological and related resources. A strong support infrastructure was provided by the US Geological Survey (USGS). The SAIN now worked with the local communities that monitored, for example, invasive species. The communities obtained assistance on how to add their information to the system and, in return, the communities received a map with this information. Mr Turner stressed the importance of the benefits to the communities and this was one example on how they could see the added-value of their efforts. Finally, he stressed the importance of compatibility in order to share information and data, and particularly mentioned standards and metadata as key issues.

- Mr Julius Oszlanyi, representing Ms Dominique Richard of the European Environmental Agency (EEA), made a presentation on “The European level: The European Biodiversity Monitoring and Indicator Framework (EBMI-F) and the International Working Group on Biodiversity Monitoring and Indicators (IWG BIO-MIN)” The aim of both of these networks was to enhance coordination and synergies in biodiversity monitoring. The EBMI-F covered 55 countries, including the EEA member countries and the ten EU accession countries. It was coordinated by the European Centre on Nature Conservation located in the Netherlands. One of its main tasks was to assess the gaps in monitoring.

The IWG BIO-MIN on the other hand covered 35 countries, i.e. the EEA member countries and the ten EU accession countries. It was coordinated by the EEA. One of its main tasks was indicator development and it had drafted a limited core set of biodiversity indicators for short- and long-term monitoring purposes.

In the subsequent discussion, it was proposed that a questionnaire should be sent to EuroMAB Biosphere Reserves asking which three main issues of particular interest to each individual site needed to be monitored. A common thematic list of monitoring issues should be drawn up and one could then identify what parameters should be monitored for these issues, find out what was already available and what needed to be done.

- Mr David Nicolson of the Integrated Taxonomic Information System (ITIS), made a presentation on “The Global level: the example of ITIS”, describing the Catalogue of Life (<http://www-sp2000.nies.go.jp/AnnualChecklist.html>), a cooperative effort of ITIS and Species 2000 under the framework of GBIF. It focused on the requirements for submission of data to ITIS, interoperability issues and lessons learned within ITIS when using different approaches (such as regional versus global approaches, single name versus multiple applications, data quality versus data quantity, etc.). The main interest for biosphere reserves lay in the fact that they can link their taxonomic databases to ITIS in order to use the same vocabulary and ensure quality control.

In the summary discussion for session one, it was stressed that there was a need for taxonomic expertise when monitoring biodiversity and that this was often lacking. In this connection, it was proposed that the Global Taxonomy Initiative under the Convention on Biological Diversity be supported. The need for a methodological base for biosphere reserves was highlighted, i.e. what should be monitored and what should be sent to the regional and global level monitoring systems. Guidelines on how to implement monitoring in biosphere reserves were also seen as necessary.

### **7.1.3 Second workshop session (Theme 1): Building information systems to support biosphere reserve data and metadata**

The second session was moderated by Mr John Mosesso (NBII). The following six presentations were made during this session.

- Mr Claudio Piccini of APAT (Italian Environment Protection Agency - formerly known as ANPA) made a presentation on “The National Topic Centre on Nature Conservation: the starting point for a National Information System on Nature and Biodiversity”. He described the coordination of APAT with regional and European counterparts. An illustration of the DPSIR approach (drivers-pressure-state-impact-response) was given.
- Ms Laura Carranza of the University ‘La Sapienza’, Rome, Italy made a presentation on “Land Ecological Network of Rome” illustrating the green areas (core and buffer) and ecological corridors (mosaic, linear and stepping stone) in the city of Rome. The importance of this approach in terms of sustainability of the municipality of Rome and in terms of conservation issues was highlighted.
- Mr Claudio Piccini of APAT made a presentation on “The Italian system of sustainable forest management indicators”, describing how the indicators proposed at the European level were tailored to the Italian situation. An example was the forest expansion in former

agricultural areas. More information was available on the web sites [www.sinanet.anpa.it](http://www.sinanet.anpa.it) and: in particular [www.sinanet.anpa.it/aree/Biosfera/Documentazione.asp#INDICATORI](http://www.sinanet.anpa.it/aree/Biosfera/Documentazione.asp#INDICATORI) DI GESTIONE FORESTALE SOSTENIBILE IN ITALIA 11/2000).

In the discussion that followed, the representative of MAB France explained that a similar project had been initiated in France in order to adapt indicators proposed at the European level to the biosphere reserve concept. A bottom-up approach had been used, working with biosphere reserve “forest group” consisting of coordinators of six biosphere reserves, forest managers and private foresters. In this way, each biosphere reserve would work with its own set of indicators.

- Mr Christopher Lenhardt of the Center for International Earth Science and Information Network (CIESIN) of Columbia University, USA made a presentation on “Standards and non-biodiversity databases” covering data development and data management, focusing on what needed to be taken into account at the ‘back end’ when setting up information systems. Some of the issues mentioned were documentation of data (metadata standards, quality of data), data integrity, confidentiality issues (particularly for social sciences), etc. It was noted that for efficient data interoperability, it was necessary to consistently apply recognized metadata standards. Practical considerations when developing information systems were to work in close relation with scientists and as well as with end-users. The need for standardization of data -- or at least the harmonization of data-- was stressed, along with the importance of capacity-building and consensus-building.
- Ms Catherine Cibien of MAB France made a presentation on “Experiences on a national survey on existing biodiversity data in the French biosphere reserves”. MAB France had decided some years ago to develop a national biodiversity database for French biosphere reserves. The aims were to evaluate what data/information were available in biosphere reserves with regard to flora, fauna, landscape and habitats and in which formats, and also to improve the recognition of biosphere reserves at the national level. The project used a bottom-up approach, taking into account the needs of local biosphere reserves, while at the same time ensuring consistency with national initiatives. Project implementation had been long and difficult due to obstacles, such as financial support, questions on future management of the database, and means and methodologies to carry out the project itself. In order to relaunch this initiative, these obstacles would have to be addressed and it would be necessary to establish links with other institutions which had now been made with the Natural History Museum in Paris.
- Mr Marcos Silva of the CBD Clearing House Mechanism had submitted a presentation on “Formats, protocols and standards – current work of the Convention of Biological Diversity (CBD)”, which was made on his behalf by Ms Katarina Vestin of the MAB Secretariat. This paper covered background information on the Clearing House Mechanism, its recent development and priorities. The focus was on the ‘Informal meeting on formats, protocols and standards for improved exchange of biodiversity-related information’ that had been held in Montreal, Canada in February 2002 resulting in a set of recommended formats, protocols and standards.

#### **7.1.4 Third workshop session (Theme 2): The broader context of BRIM**

The third and final session was chaired by Mr Don MacIver (Meteorological Service of Canada). The following three presentations were made during this session:

- Ms Lucilla Spini, MAB Secretariat introduced “The broader context of BRIM”. This provided an overview of the BRIM activities, first by illustrating the history of BRIM, cooperative initiatives and presenting the work plan for 2002-2003. Emphasis was placed on current web site development (e.g. BRIM web-pages, Biosphere Reserve Directory, the MAB Flora MAB Fauna site) and possible improvements. The work underway to identify methodologies and indicators in terms of abiotic, biotic and (mostly) of social monitoring was also described. Regional activities were also being promoted, such as the Yaoundé workshop in 2001 for Western Africa, and the present EuroMAB workshop. The new BRIM Series Publication was also announced.
- Mr Pablo Eyzaguirre of the International Plant Genetic Resource Institute (IPGRI): presented “IPGRI’s experience in socio-economic monitoring” emphasizing the role of people in creating ecological niches and promoting higher genetic diversity, and also the role of farmers as biodiversity conservationists. The conservation role and value of home-gardens were especially important for allowing gene flow between wild and cultivated species, and for monitoring, education and public awareness. Mr Eyzaguirre expressed IPGRI’s wish to further develop collaborative efforts with UNESCO/MAB.
- Mr Don MacIver of the Meteorological Service of Canada presented “Biodiversity monitoring plots – proposal for global database of SI/MAB”. In Canada, the concept of SI/MAB plots had been well developed: more than 80 long-term monitoring plots have been set up all over the Canadian territory. He emphasized the role of the local communities and of training activities in monitoring (e.g. worm watch initiative). Mr MacIver presented a proposal for a global database of SI/MAB and indicated the possibility of the Smithsonian Institution and Canada organizing a side event on SI/MAB plots at the World Forestry Congress in Quebec City in 2003

The floor was opened for questions/comments and a brief presentation was given by the representative of ArabMAB, Ms Boshra Salem (ArabMAB Executive Director) on the ArabMAB web site (<http://www.arabmab.net/>). Themes identified at the Special BRIM Meeting in September 2001 were discussed by participants, and emphasis was placed on human-nature interactions. The representative from Estonia described the monitoring initiatives in his country. The importance of a survey of monitoring initiatives “within each biosphere reserve” was considered to be a priority. The representative of Andorra offered to coordinate a survey of indicators and monitoring in coordination with the Secretariat. The USGS proposed to contribute with financial and human resources by holding a workshop in Eastern or Central Europe.

### **7.1.5 Conclusions and recommendations**

1. Based on the 'core set' of biodiversity indicators of the European Environmental Agency, a core set of indicators should be proposed by the MAB Secretariat for biosphere reserves in the EuroMAB region. A bottom-up approach should be applied in the process. Andorra proposed to take the lead to make inventory of indicators currently in use in biosphere reserves in the EuroMAB region and coordinate work to make a selection of indicators for biosphere reserves in cooperation with the MAB Secretariat.
2. A survey should be conducted by MAB Germany and MAB France within EuroMAB on the three most important issues and questions to address with regard to human-nature interactions in biosphere reserves. The results should be reviewed and common issues identified in order to decide what parameters should be monitored (e.g. with the help of

- an informal group of experts). Conduct a survey on *in-situ* current monitoring activities (see work plan) in order to make a gap analysis. Based upon these results, the MAB Secretariat should make a selection of appropriate methodologies / indicators for EuroMAB (see BRIM work plan).
3. Based on current work undertaken by European Centre for Nature Conservation (ECNC), the MAB Secretariat should make a list of existing site-based monitoring programmes and publish it on the MABNet to encourage EuroMAB Biosphere Reserves to link up to these initiatives.
  4. The MAB Secretariat, should organize -- on the condition of finding a sponsoring country and/or Regular Budget or extra-budgetary funding -- a technical meeting of EuroMAB Biosphere Reserve managers/coordinators to exchange information on monitoring experiences.
  5. The MAB Secretariat should draw up a list of the data managers and data experts for EuroMAB's Biosphere Reserves: this could form the basis of a database of EuroMAB Reserve Data & Information Experts which would facilitate participation in BRIM activities.
  6. The US Geological Survey and the National Biological Information Infrastructure should hold a MAB/BRIM workshop in Eastern or Central Europe in 2003 within the framework of the ongoing collaboration with the MAB Secretariat; specifically, by engaging European data managers and informatics experts from reserves.
  7. Within the framework of the Mountain Research Initiative (MRI) and the planned meeting on mountain research in biosphere reserves in 2003, the invited EuroMAB Biosphere Reserve managers should discuss parameters for research, monitoring and long-term assessments in mountain biosphere reserves.
  8. The Smithsonian Institution and Canada should explore the possibility of organizing a side event on SI/MAB plots at the World Forestry Congress in Quebec City 2003. They should invite EuroMAB Biosphere Reserve managers to this event, which would be global in scope.
  9. Individual biosphere reserves should use, if possible internationally recognized metadata standards in order to facilitate comparison and exchange of data and information.
  10. Individual biosphere reserves are encouraged to include traditional knowledge in monitoring activities (for example on the control of invasive species).

## **7.2. WORLD HERITAGE SITES AND BIOSPHERE RESERVES**

### **7.2.1 Introduction**

The purpose of this workshop was to clarify the two notions of World Heritage and biosphere reserves, which have both a "UNESCO" label, and which are often confused by the public and the press. They are also both considered by some authorities as a tool to provide publicity to the site concerned in order to increase tourism and hopefully to generate benefits for the local communities.

It was therefore considered important to recall the definitions and objectives of each of these designations, in order to ensure that both instruments are applied in a suitable and complementary way.

As a background document, an article by Michel Batisse published in the IUCN publication PARKS Vol. 11 (1) in 2001 was distributed to participants and which provided a good analysis of both world heritage sites and biosphere reserves, stressing their differences as well as their complementarity.

An introduction in Plenary was given by Mr Maurizio Iaccarino (Italy), who recalled the definitions of both designations and explained how the workshop would be organized.

**World Heritage sites:** these were properties inscribed on the World Heritage List under the 1972 Convention on the Protection of the World Cultural and Natural Heritage. They therefore concerned either cultural or natural sites. These sites should be of outstanding, universal value and respond to precisely defined criteria. For natural sites, these criteria were:

- examples representing major stages of the earth's history, ongoing geological processes;
- on-going ecological and biological processes;
- natural phenomena and areas of exceptional beauty, and
- natural areas of outstanding value for natural habitats and *in situ* conservation.

In addition, the Convention also protected cultural landscapes, which were defined as the combined works of nature and man. These included landscapes intentionally created by man, organically evolved landscapes and associative cultural landscapes.

Many national parks and some unique cultural landscapes in Europe and North America qualified for designation.

One of the main characteristics of a World Heritage site was its uniqueness. The main obligation under the Convention was adequate conservation. The most obvious consequence of the inscription of a site on the World Heritage List was the prestige of being recognized as part of the heritage of mankind. The relationship of local population with the listed site was not a specific aspect of the designation.

**Biosphere reserves** were initially intended for biodiversity conservation in representative ecosystems but today they should be designated and managed to combine three complementary functions: a conservation function, a sustainable development function and a logistic function which included research, monitoring, education and training. A zoning system and a system for the integrated management of the whole area were also required, with a strong involvement of the local communities. Biosphere reserves were not designated for prestige but as a means to foster land-use planning and socio-economic development compatible with specific biodiversity conservation objectives. Collectively biosphere reserves constituted a World Network for research and information exchange.

Mr Iaccarino indicated that it was expected that the workshop would allow to compare the opportunities provided by both designations, show how they could be usefully used as convergent and complementary tools for certain important sites, and contribute to enhance their respective efficiencies.

### 7.2.2 Workshop

Mr Iaccarino served as Moderator for the workshop, organised under the following topics:

- *National approaches to world heritage sites and biosphere reserves*  
Presentations were made by countries involved in the implementation of both instruments. An issue of interest here is how a given country defines its policy vis-à-vis two instruments which were radically different in nature. The World Heritage Convention was a binding legal instrument while the biosphere reserve concept was flexible, guided by the Seville Strategy and the Statutory Framework for the World Network of Biosphere Reserves adopted by the UNESCO General Conference considered only as “soft law”
- *Management of sites having received the two designations (32 biosphere reserves in Europe are wholly or partially World Heritage sites)*  
Examples presented showed how the obligation of strict protection under the World Heritage Convention could be associated with the implementation of the biosphere reserve concept, and in particular with the fulfilment of the three functions. Emphasis was given to the fact that World Heritage sites and biosphere reserves imply different commitments on behalf of the national authorities and different management structures.
- *Benefits of both designations*  
Concrete examples of benefits from these two designations were discussed, whether to local communities through increased employment, to scientists as secure sites for long-term observations, or to the international community as a whole.

Concrete illustrations were presented under each topic, which are summarized in the following paragraphs:

- Ms H. Neal, Chair of MAB UK referred to the periodic review process which had led to the removal of 4 biosphere reserves from the network, including St Kilda, which was at the same time a World Heritage site. She explained the difficulties the MAB UK had faced to explain to the competent authorities that this removal would not diminish the protection of the site, which was ensured by its World Heritage status.
- Mr K. Baadsvik of Norway explained that, from the experience of western heath lands in his country and in spite of the fact that the differences between a cultural landscape under the Convention and a biosphere reserves were not obvious, their perspectives were indeed different, biosphere reserves serving as laboratories for sustainable development, with research and monitoring, while cultural landscape had a strong heritage perspective.
- Mr I. Jelev, Chair of MAB Romania took the example of the Danube Delta to show how the two instrument can be complementary and mutually reinforcing: The core area was strongly protected with a World Heritage status, while the biosphere reserve was used as a management tool for the entire area, integrating conservation and socio-economic development, and for consultation with local communities. It was suggested that this model could be more widely used.
- The example of Donaña was presented by Mr I. Ballarin of Spain. He referred to the spillage accident from the upstream mine and described the mitigating measures that had

been taken by the Spanish authorities. The fact that Donaña was both a World Heritage site and a biosphere reserve stimulated the authorities to react quickly and take measures to avoid a repeat occurrence. The site had also benefited from the Council of Europe Development Bank, as it had also received the European diploma.

- Ms N. Rybianets of Belarus took the example of Beloveskkaya Pushcha, both a biosphere reserve and a world heritage site, to show how the two instruments were used for the conservation and research in this very important transboundary ecosystem with Poland.
- The example of another transboundary site was given by Ms C. Cibien of France, who explained how the Mont Perdu World Heritage site in the French Pyrenees would be incorporated into a large biosphere reserve to ensure better management. There was also the possibility of it becoming part of a future transboundary biosphere reserve with the adjacent Ordessa Biosphere Reserve in Spain, which would also be extended to follow the periodic review recommendations.
- A representative of Italy introduced the work being done under the Alpine Convention by a data gathering project called Alpinsieme and explained how it could serve for future establishment of World Heritage and biosphere reserves in the Alpine region.
- The situation in Canada was illustrated by Mr F. Roots, the MAB Chair: the two instruments were under different administrations and the distinction between the two instruments was quite clear. Both instruments were considered as very valid for their own purposes, but this point had to be continuously explained to the concerned stakeholders and authorities.
- An illustration on how World Heritage sites and biosphere reserve can interact was provided by Mr G. Puhlmann of Germany, with the example of the Garden Kingdom of Dessau-Wörlitz World Heritage site located within the Middle Elbe River Landscape Biosphere Reserve. Cooperative arrangements between the competent institutions had been put in place and joint activities were undertaken to promote both world heritage and biosphere reserve status.
- The case of Rome, “a world heritage site which could become an urban biosphere reserve” was illustrated by the work undertaken by a team of scientists on botanical surveys in archaeological sites.

### **7.2.3 Conclusions and recommendations**

All the interventions highlighted that there were linkages but also clear distinctions between the two instruments. World Heritage status was more iconic, bringing with it the prestige of being recognized as part of the heritage of mankind, while the biosphere reserve concept dealt with management solutions and was more dynamic. Synergies between the two should be further explored, as they can be mutually reinforcing: the binding force of the Convention made it a powerful instrument for conservation while biosphere reserve was a innovative tool for management, which could be adapted to local conditions. These synergies should be reinforced not only at the level of the UNESCO Secretariat but also by the Member States themselves, especially at the time of nominations. The Secretariat proposed to inform the MAB Bureau about this discussion and the Chair of the MAB International Coordination Council would be invited to meet with his colleague, the Chair of the World Heritage Committee to discuss how linkages could be reinforced. It was also proposed that a MAB

circular letter be distributed with the purpose of informing member states on the differences and complementarity of the two instruments in order to ensure synergy for the protection of cultural and biological diversity.

### **7.3. URBAN ECOSYSTEMS AND BIOSPHERE RESERVES**

#### **7.3.1 Background**

In November 2000, the MAB Council set up the MAB Ad Hoc Working Group to explore the application of the biosphere reserve concept to urban areas and their hinterlands. In March 2002, the MAB Council decided to extend the duration of the Working Group for another 2 years until September 2004 and asked it to provide:

- recommendations concerning the appropriate application of the biosphere reserve concept to urban areas and their hinterlands;
- suggestions for collaboration among established biosphere reserves with an interest in urban/peri-urban issues;
- options on how MAB could best recognize efforts towards more sustainable urban development and management;
- outline elements of a possible future interdisciplinary research agenda on the biosphere reserve concept in relation to urban, areas and their hinterlands.

Examples of past, present and planned future MAB Urban Group-related activities and partnerships can be consulted on [www.unesco.org/mab/urban/urbanhome.htm](http://www.unesco.org/mab/urban/urbanhome.htm)

A limited number of biosphere reserves have actually been established outside major cities, for example the Mata Atlantica Biosphere Reserve in Brazil in the green belts of Rio de Janeiro and San Paulo, or the Fontainebleau Biosphere Reserve near Paris. Several other cities are involved in the preparation of new biosphere reserve proposals, including Rome.

EuroMAB 2002 was invited to examine this topic as well as to take into account the results of a meeting which did not focus on biosphere reserves but was specifically relevant to EuroMAB. This was the European Science Foundation/URGENT/EuroMAB/UK MAB Urban Forum Workshop held in April 2002 on developing an integrated European Research programme on the urban and the peri-urban environment. Discussions at Rome could lead to inputs from EuroMAB to the International Conference on Urban Sustainability to take place in Gothenburg, Sweden in May/June 2004 organised by the Swedish Research Council for Environment, Agriculture and Spatial Planning, together with MAB Sweden and the UNESCO MAB Urban Group. ([www.mab.vr.se](http://www.mab.vr.se))

#### **7.3.2 Introduction**

This topic was introduced by Ms. Mirilia Bonnes of Rome University “La Sapienza” and Past-president of the MAB Italy Committee. She recalled that the *ecosystem approach* to urban systems, and thus on “urban ecosystems”, was the subject of one of the original MAB project areas of the 1970s, designated as MAB 11. The MAB11 Rome Project had been developed during the 1980s as part of this project area. All MAB projects areas were wound down in the 1990s with the new focus provided by UNCED, such as the Convention on Biological Diversity, and this in spite of the growing trend of a more urbanised world population. Several countries nevertheless continued their national MAB work on the ecosystem approach to urban areas, for example the UK MAB Urban Forum led by Mr George

Barker and also the MAB Rome Project in Italy. This latter effort was illustrated by several contributions to the EuroMAB 2002 meeting from natural scientists, social scientists and local authorities.

The time was perhaps right for re-launching MAB work on urban and peri-urban areas, as had been indicated at the MAB ICC session in 2000. Ms Bonnes presented a possible framework for moving into this direction . She discussed the risks , for biodiversity conservation and sustainability, to follow the *partial ecology* paradigm -- often typical of natural sciences -- instead of the *full ecology* paradigm, which includes among environmental sciences, social and human sciences (such as environmental economics, anthropology, sociologists and also environmental psychology). Thus she stressed the importance of not contrasting the MAB attention on *nature-dominated ecosystems*, such as biosphere reserves, with attention on *human dominated ecosystems* such as urban ecosystems. She suggested using the biosphere reserve concept, as specifically developed through the Seville Strategy, for paying attention to both the natural and the cultural diversity of ecosystems and thus to the continuity and interdependencies between the more natural or rural areas and the more urban areas.

### 7.3.3 Workshop

Ms. Mirilia Bonnes and Mr. Carlo Blasi from the University of Rome La Sapienza and the MAB Italian Committee served as Moderators of the workshop. The presentations are summarised in the following paragraphs:

- Several presentations were made addressing different aspects of the case study of Rome, as continuation of the Rome MAB Project 11, and as a basis for the current project to establish a biosphere reserve in the Rome area. Mr C. Blasi of Rome University “La Sapienza” addressed the “Natural landscape in the area of Rome and a new urban biosphere reserve”. A preliminary proposal for Rome as a biosphere reserve had been drafted by the Rome Municipality in collaboration with MAB Italy in 1997, but finally it had not been submitted at that time to the MAB Secretariat. The current Mayor of Rome, Mr Walter Veltroni, had created a working group on this topic, chaired by Mr Carlo Blasi, for which an international meeting could be foreseen in 2003. Rome was remarkable for the number and size of natural areas, i.e. not planted gardens or parks, but areas with a wealth of locally occurring flora and fauna. In addition, there were relatively much less alien species present in Rome compared with other European cities. These natural values and the public awareness and concern for the values which had grown over the last decades among Roman inhabitants and city managers justified the present attention to Rome as a potential biosphere reserve. These aspects were described by M. Bonaiuto of Rome University in a presentation on “Inhabitants perceptions and behaviours towards residential environment and green spaces in the City of Rome”; Messrs. P. Giuntarelli and A. Somaschini of Roma-Natura on “Management and people enjoyment of Rome protected areas: the experience of RomaNatura”; Mr. S. Mastrangelo of Rome Municipality on “The Ecological Network of the Municipality of Rome as a basic part of the New General Master Plan”. Several other contributions on related topics concerning the Rome area and also other Italian urban areas were presented as posters.
- Ms Svenje Mehlert of the European Science Foundation made a presentation on “A Forward Look on Urban Science in Europe”. The ESF was an association of research councils and funding agencies in some 27 countries aimed at promoting scientific work through the provision of funding for exchange programmes, conferences, and

collaborative research. In the field of urban science, the ESF had supported the Birmingham meeting with a view to further work in Europe, but with a holistic view covering environmental, social and cultural aspects of urban systems. Topics defined for subsequent research included quality of life, sustainable development, risks, decision-making structures and the cultural heritage. This framework now had to be completed with projects and activities for the next few years and an invitation was extended to the MAB community to help the ESF in doing so.

- Mr Peter Frost of the UK presented the “UK-MAB Urban Forum and the application of the biosphere reserve concept to urban areas in the UK – the case of the Dyfi Biosphere Reserve”. The MAB UK Forum had defined three situations in relations between biosphere reserves and urban areas:
  - a) a biosphere reserve bordering a city: this was the case of the Mata Atlantica in Brazil, and also of a potential biosphere reserve area encompassing the New Forest and the Solent as core areas and farmlands as transition areas in the vicinity of the city of Southampton;
  - b) where a biosphere reserve permeates a city, with the example of the Manchester-Liverpool conurbation with Ramsar wetlands along the Mersey estuary forming a core area, and the buffer areas consisting of country parks and farmlands lying between the two cities;
  - c) where a city was itself the biosphere reserve, for example the city of Telford with high quality nature reserves within its boundaries which could act as core areas, or the city of Rome, with its numerous natural areas.

A perceived advantage of the biosphere reserve approach in these different situations was the holistic view, which could bring together a multiplicity of sectoral plans in a rational manner. The case of the Dyfi Biosphere Reserve in Wales, an “old generation” biosphere reserve under revision, highlighted the importance of any action being “demand driven” by the actors concerned, and at a scale suitable to meet their present and future needs. Emphasis was on renewable energies and community projects. It was hoped that there would be a future extension which could include an urban area. More information was available on: <http://www.ecodyfi.org.uk/>.

- Mr Sven-Erik Magnussen of Sweden presented “Kristianstad – a town in the centre of a Ramsar wetland area: urban and peri-urban considerations in the development of the Kristianstads Vattenrike Biosphere Reserve”. This potential biosphere reserve was located in South Sweden, covering a systems of lakes and wetlands next to the Baltic Sea renowned for its bird life, designated a Ramsar wetland (see web site: [www.mna.hkr.se/~ene02p8/wetlands/kristianstadsvattenrike.htm](http://www.mna.hkr.se/~ene02p8/wetlands/kristianstadsvattenrike.htm)) Today, the Swedish Environmental Protection Agency, The County Administration Board of Skåne, WWF and the municipalities, were all working together to restore the watery environment around this modern urban centre. Wet grasslands were cleared to encourage bird species (e.g. stork) to use the area and some species of fish were being reintroduced. Maintaining the old wet grasslands was of great benefit both for the natural and cultural history of the region. New environmental protection methods, such as digging ponds and restoring water courses, were introduced to prevent eutrophication.
- Ms Tatyana Bochkareva, the coordinator of the follow up of MAB 11 project in the Russian Federation, made a presentation on “Urban ecosystems and applying the biosphere reserve concept in Russia”. Activities in 2000-2002 were undertaken in the Soros Programme on small cities (some 165 sites) in Russia, concerning for example the

linkages between cities and neighbouring national parks, green belts, urban model areas. Proposals were made for future EuroMAB work such as pilot studies on urban areas with “biosphere reserve type management”.

- Mr Fred Roots of MAB Canada presented a paper by Jim Birtch (Canadian BR Association) on “MAB Urban Demonstration Areas (MUDA)”. Mr Roots emphasized that MAB was not just limited to biosphere reserves and that MAB itself should work more with the other scientific programmes, as well as with the Education and the Culture sectors of UNESCO, especially on urban systems. He considered that the biosphere reserve concept should keep its biocentric focus, and not be forced too much towards an anthropocentric point of view. The MUDA concept was valuable in promoting MAB ideas in pilot urban systems which would be committed to cooperating on policy development and information exchanges on means to improve the quality of life and promote sustainability. Aspects of the programme proposal included: the need to look at urban areas in respect to their hinterlands, as well as regional and international linkages; the sustainability of urban-rural relationships; policies and actions to support nature in cities; how cities can help promote sustainable development on a global scale; enhancement of the quality of life in cities; and information sharing.

Workshop discussions showed a general consensus that the MAB Programme should indeed examine again urban systems, by applying the ecosystem approach to urban areas and thus in particular by:

- (i) applying the biosphere reserve concept as developed by the Seville Strategy , to urban ecosystems;
- (ii) examining urban ecosystems *per se*, and not necessarily from the view point of the biosphere reserve concept.

Work should focus on the question of urban sustainability (versus that of competitive destruction) also in terms of, for example, transportation, energy distribution, built environment, food supplies, waste control etc. Social and economic transformations including immigration and aging of inhabitants also need to be addressed. Governance was also considered to be very important, since cities tended to be managed by top-down regulation -- the inverse of what was promoted for biosphere reserves.

### **7.3.4 Conclusions and recommendations**

1. The MAB Bureau and ICC should create a new focus for MAB work in urban areas which should:

- take account of the Ecosystem Approach;
- use natural and cultural diversity as the “entry point”;
- take advantage of key results of the former MAB 11 project area;
- use an interdisciplinary approach (the natural, social/human, and organizational sciences, MAB and MOST communities) and bringing together multiple stakeholders;
- consider amongst its tasks investigation of ways to reconcile divergent views between various stakeholders, e.g. experts vs. residents; social/human scientists vs. natural scientists, zoologists vs. botanists, cities vs. regional local authorities, etc.; make a bridge between urban/ peri-urban areas and their rural/agricultural hinterlands at the regional level foster collaboration among different actors (local stakeholders, national, regional and local authorities, entrepreneurial systems, etc.).

2. Member States, through MAB National Committees, should develop a new focus for work on urban areas, notably through the establishment of national MAB urban working groups.
3. The MAB Secretariat and members of the MAB Urban working group should:
  - help to build up and facilitate information exchanges among national MAB urban working group and establish an initial European urban network among the countries which, in the course of this EuroMAB meeting, had shown interest and experience in applying and developing the BR concept in urban areas (Canada, Italy, Sweden, UK, Russia);
  - organize a workshop if possible at the end of 2003 in Rome, with financial support of the EFS/F.L and the Council of Europe, in order to exchange further experience of these countries on addressing these issues.
4. The MAB Secretariat should advise Member States on how the Biosphere Reserve concept could be applied in an increasingly urbanised world, taking account of:
  - the need to follow the principles of the Seville Strategy and fulfilling the criteria and objectives of the Statutory Framework, thus avoiding devaluation of the biosphere reserve concept while also promoting sustainable cities;
  - the possibility of using existing protected areas and land use designations in urban areas to create the zones of potential biosphere reserves;
  - the need to further study how a biosphere reserve can “operate” in urban areas;
  - the need for specific scientific work related to biosphere reserves in urban areas; thereby fulfilling their role as field research laboratories for sustainable development.

## 7.4. ECOTOURISM

### 7.4.1 Background

Participants were able to benefit from a background document entitled “Using the World Network of Biosphere Reserves to solve the ecotourism equation: *Tourists + Biodiversity + Culture + ? = Ecotourism* prepared by the MAB Secretariat. Sections of this document are reproduced in the following paragraphs:

Following several decades of rapid growth, the tourism sector is increasingly interested in sustainable development discussions. Due to its very nature, tourism is ambivalent - generating well-known advantages but also problems. By often targeting fragile ecosystems and local, traditional cultures, the ecotourism industry is a particularly challenging case in this context - the main reason why the UN has declared the International Year of Ecotourism 2002 (IYE).

Although the actual or potential benefits and disadvantages from tourism are becoming fairly well documented, there is no consensus internationally on how to best optimize the long-term net tourism benefits. This is therefore an area where EuroMAB could make a distinct contribution. Furthermore, tourism, including ecotourism, undoubtedly constitutes a major opportunity for Biosphere Reserve in Europe and North America to promote the development of quality economies - a key objective of the World Network of Biosphere Reserve following the Seville +5 meeting (and the topic for a separate, but closely linked workshop at the EuroMAB 2002 meeting).

The IYE has helped focus the international community’s attention to the need for sustainable tourism development and the opportunities and challenges for ecotourism to

contribute to such development. The culmination of the IYE was the Ecotourism Summit in Québec, Canada, and the adoption of the *Québec Declaration on Ecotourism* (see <http://www.ecotourism2002.org/anglais/declaration.html>). The Declaration calls on national, regional and local governments, the private sector, NGOs, community organizations, academic and research organizations, and intergovernmental organizations to help ensure sustainable tourism practices that supports and benefits local communities, biological and cultural diversity. The MAB Secretariat also made a statement focussing on the importance of the World Network of Biosphere Reserves as testing and demonstration sites

MAB [Circular Letter no. 6](#), issued in August 2001, included information on the IYE and encouraged Member States to participate actively in the in the World Ecotourism Summit Quebec, Canada, 19-22 May 2002, as well as in the associated preparatory regional conferences.

On the initiative of MAB Canada, and with the support of the MAB Secretariat, a EuroMAB Workshop on ‘Ecotourism and Sustainable Development in Biosphere Reserves’ was organized in Québec, 22-24 May 2002, shortly after the Summit. The Workshop focused on the outcomes and the discussions at the Summit and the different approaches and ongoing activities in Biosphere Reserves in EuroMAB in the area of ecotourism.

MAB Circular Letter no. 6 also included information on the draft [International Guidelines for Sustainable Tourism Development](#) drafted under the Convention on Biological Diversity (CBD). These guidelines make explicit references to the World Network of Biosphere Reserves and the biosphere reserve concept. Subsequently, the MAB Secretariat called for project proposal from Member States aiming at implementing these guidelines in efforts to promote sustainable tourism, including ecotourism. Several Member States have responded by proposing tourism project proposals for this purpose, for which the MAB Secretariat is now actively seeking external funding.

One example is the joint project ‘Conservation and Sustainable Use of Biodiversity through Sound Tourism Development in Biosphere Reserves in Central and Eastern Europe’ coordinated by Ecological Tourism in Europe (ETE). This project involves the Czech Republic (Sumava Biosphere Reserve), Hungary (Aggtelek Biosphere Reserve), Poland (Babia Gora Biosphere Reserve), Slovak Republic (Polana and Slovensky Kras Biosphere Reserve), Serbia (Golija Studenica Biosphere Reserve) and Germany (Bayerischer Wald Biosphere Reserve).

The CBD Guidelines (which have not yet been approved by the Conference of the Parties to the Convention) are presently under review by the CBD Secretariat. UNESCO-MAB participated in the ‘Mueritz Meeting on Sustainable Tourism and Biodiversity’, 16-20 September 2002, organized by Germany, aiming at assisting in the review process. Information on the CBD Guidelines, the Mueritz meeting and the project ‘Conservation and Sustainable Use of Biodiversity through Sound Tourism Development in Biosphere Reserves in Central and Eastern Europe’ will be provided at the EuroMAB 2002 meeting by MAB Germany and ETE. ETE will then also reflect the main outcomes of the International Workshop for CEE Countries “Tourism in Mountain Areas”, Sucha Beskidzka, Babia Gora Biosphere Reserve, Poland, 1-5 October 2002.

Suggestions for questions the EuroMAB participants may wish to address during the general discussion are:

- the IYE and follow-up to the Quebec Summit and the EuroMAB workshop in Quebec;

- the CBD Sustainable Tourism Development Guidelines – Development of a users manual;
- joint EuroMAB ecotourism projects and case studies on best practises in Biosphere Reserves;
- Tourism in the context of promoting the development of quality economies in Biosphere Reserves
- Training needs for promoting sustainable ecotourism in Biosphere Reserves”.

#### 7.4.2 Introduction

The Ecotourism workshop was introduced and moderated by Professor Francesco di Castri of Italy who had recently published a book contributing to the tourism debate which largely focused on the biosphere reserve concept and experiences from biosphere reserves, entitled '[Tourism, Biodiversity and Information](#)'. In his introduction, Mr di Castri first drew attention to the importance of tourism in the economic sector, creating more employment opportunities than any other activity, and amenable to decentralisation in remote areas and at the scale of a single family. Tourism had become the most important factor in cultural exchanges and was one of the most powerful driving forces in building a knowledge society. This underscored the important geopolitical dimension of tourism.

The definition of “ecotourism” was problematical, since it was recognised that the term needed to incorporate the idea of some combination of cultural and ecological features, the contrast with mass tourism, and a minimum of “middle-men”. This latter point implied that local communities became self empowered, with micro-investments and micro-capitalisation, based on a (re-)newed awareness of the value of their own environment. Another characteristic of ecotourism was that it was bi-directional, working through classic vertical lines of authority with the state government at the top, but also through transversal lines generated by individuals through computer linkages. In terms of the impact of ecotourism, if one took a definition restricting it to nature tourism, it represented some 10% of the tourism market. However, if one also took into account the “quality tourism” linked with the enhancement of cultural and biological diversity, this figure rose to some 25%.

Since the events of 11 September 2001, the “classic” type of tourism had fallen sharply, whereas ecotourism was increasing, such that remote, small-scale facilities, often in developing countries, actually had benefited positively.

The development of ecotourism and of quality economies were in complete harmony, since activities such as gastronomy, line fishing, organic agriculture and floriculture were based on high quality products and environments which attract tourists.

A brief analysis of the development of ecotourism in the EuroMAB region showed:

- a) that ecotourism was the best tool to combat depopulation of rural areas, especially in the attractive traditional, cultural landscapes of Europe.
- b) that the level of ecotourism in Eastern European countries could be tripled or quadrupled and provide an economic boom to rural areas. *A sine qua non* however was ensuring personal security (against war, conflict, terrorism) and the provision of adequate services and infrastructures.
- c) that ecotourism could stabilise immigration, creating jobs where needed.

In the ensuing discussions, participants pointed out that the development of ecotourism pleaded in favour of the multifunctionality of agriculture, i.e. not simply as a production

systems but as a means to provide many products and services, including “agrotourism”, and the maintenance of genetic diversity of ancient breeds, cultivars, and medicinal plants. This latter aspect itself highlighted the inseparable linkage between biodiversity and cultural diversity. MAB was at the heart of this debate. Participants therefore welcomed the information from the MAB Secretary indicating that MAB was now closely working with IPGRI on *in situ* genetic conservation, and that MAB was exploring a new initiative for the 2004-2005 on cultural and biological diversity.

### 7.4.3 Workshop

Mr di Castri served as Moderator for the workshop session. In introducing the workshop, he made the following points:

- MAB work on ecotourism should be an integral part of work on quality economies;
  - his general, global introduction needed to be followed up by projects at the site level in different countries;
  - ecotourism projects were most successful when based on local initiatives, and not on top down imposition from governments;
  - success with ecotourism depended on attention to the smallest details of installations and facilities;
  - a basic electricity supply and an Internet connection to allow networking and information sharing were essential;
  - any ecotourism project should include the development of good web sites to attract tourists, paying attention to the image projected, and the language used;
  - biosphere reserves offered sites where government tourism policies could be usefully combined with local, individual initiatives and the expertise of private tour operators. Biosphere reserves should also inevitably address the issue of how to reconcile the “top down” approach of an intergovernmental programme with the essential “bottom up” and transversal approach of community-driven tourism based on local empowerment;
  - the level of a region within a country (such as Lombardy within Italy) usually offered the cultural homogeneity necessary for developing an ecotourism image.
- Ms. M.V. Giuliani of MAB Italy Committee made a presentation on the “*The Restoration perspective in leisure experiences: the role of natural environments*”, based on an empirical research on the assessment of leisure experiences during the life span. Nature seems to provide some kind of restoration, which was less possible in built up settings. Nonetheless, it was likely that an important component of restorative needs, i.e. stimulation, could not be well fulfilled by natural environment. The integration of cultural and natural diversity promoted by ecotourism could be an answer.
- Mr. Masone of Italy spoke on Ecolabels for natural protected areas and tourism, emphasizing their use in assessing performance, especially in the EU countries. The question was raised of the difficulties of certification of labels, especially at the international level. Designations as World Heritage, Ramsar site and MAB-biosphere reserve conferred a label of excellence which could be used by the sites concerned for marketing purposes: however the problem was that these designations were served by independent structures, often without reference to each other, causing overlap.
- Ms N. Rybianets of Belarus spoke on the Polessia region in southern Belarus and its need for an integrated water management strategy, including ecosystem restoration of non-

productive and ex-military land. A key element in the restoration would be the development of “ecological tourism” for boosting local employment.

- Mr Jürgen Nauber of MAB-Germany and Michael Mayer of the Ecological Tourism in Europe (ETE) made a presentation on the International tourism guidelines under the Convention on Biological Diversity and their application in biosphere reserves in Europe, a project conducted in close cooperation with the MAB Secretariat (Peter Dogné). These guidelines were being tested out in a number of biosphere reserves in central Europe, where there was little experience in local tourism initiatives. It was hoped that the results at the local level could help to formulate national tourism strategies and policies, as well as capacity building efforts. However, discussions highlighted that the aspirations and opinions of local entrepreneurs and the central government authorities could be very different, adding another layer of complexity.
- Mr Fred Roots of MAB Canada presented the report from the EuroMAB workshop held immediately after the Quebec Summit on Ecotourism. This report was available on <http://www.unesco.ca> and <http://www.unesco.org/mab/ecotourism/news.htm>. The workshop gave some insights to the development of ecotourism in the Eastern European contexts, and in biosphere reserves which have very different appeal for tourists. Cultural perception of nature by different social groups was highly important, especially for marketing.
- Ms Natalia Moraleva of the Russian Federation spoke on her experience to build up ecotourism enterprises in her country. As current domestic tourism was mainly of the type of car-based discovery, or sport-based tourism, there was a great opportunity for truly nature based tourism. Her work involved making associations with regional tour operators and specific tourist destinations, to find agreement on how to progress. Considerable investments needed to be made in capacity building and the provision of expert consultations were required.
- Mr Giuseppe Carrus from the University of Rome “La Sapienza” was invited by Mr di Castri to illustrate the study presented in the Poster Session on “ Biodiversity and ecotourism in small Italian settlements”.

Workshop discussions focussed on the need to balance the view held by certain local populations of tourism as an economic resource with the need for nature protection; the value of working in a step by step fashion using local knowledge to build up an ecotourism venture; the need for ecotourists visiting poorer countries to behave decently; the need for coherence in the various IUCN, WTO, CBD and UNESCO initiatives on ecotourism and protected areas.

#### **7.4.4 Conclusions and recommendations**

1. Participants agreed that the development of ecotourism and quality economies was absolutely vital for the future of the majority of biosphere reserves, since it is the main economic incentive for maintaining people in rural areas and improving their livelihoods, while at the same time enhancing cultural and natural diversity. This was acutely relevant in rural areas of Eastern Europe. In consequence, participants encouraged the MAB National Committees to give priority to capacity building in ecotourism in biosphere reserves in Eastern and Central Europe, including on the use of ICTs, web site creation and maintenance.

2. Since ecotourism was so closely associated with quality landscapes, quality agriculture, quality industry, quality housing, quality fisheries, quality forestry, etc. -- ecotourism was obviously a key element in MAB work on quality economies and should be taken into account accordingly.
3. Participants considered that EuroMAB's discussions on ecotourism and quality economies could not have meaningful and operational results without involving more of the actors concerned: i.e. the private sector including tour operators, the local communities, governmental authorities, the BR managers/coordinators etc. In consequence, it was recommended that any future MAB work on the development of ecotourism within biosphere reserves should ensure that the opinions of a wider spectrum of stakeholders be taken into account..
4. Participants underlined the importance of the formal recognition of biosphere reserves as a tool for testing out the guidelines on tourism formulated under the Convention on Biological Diversity. It was therefore recommended that MAB National Committees encourage work to test out and implement these guidelines in their biosphere reserves, as well as taking into account the guidelines of other relevant international and regional organizations.
5. Participants recognized that individual biosphere reserves do not necessarily have the critical size or mass to initiate the required marketing strategy and distribution channels for developing a quality economy based on ecotourism. Accordingly, it was recommended that the authorities of individual biosphere reserves associate themselves whenever possible with their neighbouring areas in order to stimulate development at the regional scale
6. Participants encouraged biosphere reserve managers to exchange information and experience, training material and expertise as much as possible with sites having similar development aspirations and patterns.
7. Participants encouraged MAB National Committee and biosphere reserve managers to consider biosphere reserves as areas for understanding the processes of biological and cultural evolution generating diversity (the basic resource of tourism) and for exploring the legal and institutional mechanisms to cope with this evolution.
8. Participants recognized that while ecotourism activities were to be developed in the buffer zone and transition area of biosphere reserves, the core area should be protected from the negative effects of tourism in all its forms.

## **7.5 LEGAL AND MANAGEMENT ISSUES (INCLUDING TRANSBOUNDARY BIOSPHERE RESERVES)**

### **7.5.1 Background**

During the Seville +5 meeting in Pamplona in 2000, it was recommended that the regional networks, with the assistance of the Secretariat, should undertake a survey and critical analysis of existing biosphere reserve co-ordination structures, with the objective of developing a set of guidelines on the creation, roles and functioning of such structures.

To implement this recommendation, the Secretariat conducted a general survey based on the available files, which confirmed that there was a great variety of situations. The ICC at its meeting on March 2002 examined this issue and decided that all MAB National Committees should be requested to nominate experts on legal and institutional matters and to propose case studies of biosphere reserves willing to participate in an extended study. A circular letter had been issued in June 2002 for this purpose and several biosphere reserves from the European region had already indicated their willingness to participate.

Although the detailed outline for the case studies had still to be elaborated, it was expected that the main issues which would be dealt with would be the following:

- zonation and competence of various bodies for each zone;
- competent authorities at various levels (national, regional and local) and how they interact;
- specific mechanism for the biosphere reserve as a whole and its competence (management structure);
- consultation with local communities (mechanisms, periodicity, issues of consultation);
- mediation mechanism, conflict resolution;
- representation of the scientific community
- scope, duration and limits of the management plan/policy.

### **7.5.2 Rationale and expected outputs**

In the general context described above, the workshop was expected to provide an opportunity to describe some examples of coordinating mechanisms and management plans of biosphere reserves in Europe, to discuss the issues at stake in the European region, compare experience both at the national and site levels, and identify specific activities that could be undertaken within EuroMAB in the next two years.

The expected outputs of the workshop were:

- to contribute to the finalisation of the outline for the case studies in the context of the global study on co-ordination mechanisms;
- to contribute therefore to the elaboration of guidelines on the creation, roles and functioning of co-ordinating structures as requested by ICC;
- to propose specific activities/studies within the framework of EuroMAB for the next two years

### **7.5.3 Workshop**

The moderator of the workshop was Dr Doris Pokorny, from the Rhön Biosphere Reserve in Germany. The workshop was divided into two complementary parts, discussing the issues listed below:

- 1) **The national level**, with a focus on biosphere reserves in the context of:
  - national legislation;
  - national conservation policy;
  - land use policy;
  - competence between central state and regions.

2) **The site level**, focusing on mechanisms and management issues, and in particular the issues listed above, i.e.:

- zonation and competence of various bodies under each zone;
- competent authorities at various levels (national, regional and local) and how they interact;
- specific mechanism for the biosphere reserve as a whole and its competence (management structure);
- consultation with local communities (mechanisms, periodicity, issues of consultation),
- mediation mechanism, conflict resolution
- representation of the scientific community,
- scope, duration and limits of the management plan/policy.

### 7.5.3.1 The National level

The presentations are summarized in the paragraphs below:

- Mr Vladimir Vladimirov, Secretary of the Bulgarian MAB Committee made a presentation on “The Management of the Bulgarian Biosphere Reserves”. He described the status of the Bulgarian Biosphere Reserves within the framework of the Bulgarian legislative system, explaining the difficulties in adapting the biosphere reserve concept to this legislative frame. He presented the long history of nature conservation in Bulgaria. He referred in particular to the Nature Protection Act, adopted in 1967, which was oriented towards international legal instruments. In 1976, a committee for the protection of environment was established, to ensure participation in international initiatives, including the World Heritage and Ramsar Conventions and MAB. Bulgaria was actually one of the first to join the MAB Programme with sixteen biosphere reserves designated in 1977.

In 1998, the first specialized law on protected areas defined the relationship between the various institutions responsible for a given protected area and enhanced participation of local populations.

This law defined six categories of protected areas, according to their degree of protection. As there was no specific category for biosphere reserves, they were listed as “reserves” in the national legislation. According to the legislation, the object of the management of a reserve should consist in protection, scientific research and educational activities. Human activities were strictly forbidden, except for scientific visits and the harvesting of seeds and plants, which was tolerated. Mr Vladimirov pointed out that such a management régime was not consistent with the Seville Strategy. It corresponded only to what should be done in the core area. Two other categories, namely national parks and nature parks, corresponded better to the Biosphere Reserve concept. The management structure consisted of a director and of councils which include stakeholders who acted as mediators and helped the director implement the management plan. According to the legislation, all biosphere reserves had a buffer zone, but problems remained with the transition/cooperation zone. The national situation of biosphere reserves in Bulgaria was therefore under revision in order to adapt the existing sites to the Seville criteria.

- Mr Frantizek Povolny of the Czech Ministry of the Environment described the National situation in the Czech Republic. The legislation on the protection of nature and landscape was currently being amended. As regards to the MAB Programme, there were currently two divergent attitudes. On the one hand, the Biosphere Reserve category was only a

label for special protection of a given area. As each biosphere reserve was protected under a national legal category, there was no need to create a new one. However, some people considered that a special category of protected areas should be created for biosphere reserves, as was the case in Romania.

However, if this were the case, the difficulty then would be:

- to avoid duplication with another existing categories;
  - to cancel the national legal category which until now had ensured the protection of the area, but without threatening the very existence of the biosphere reserve.
- Mr Ignacio Ballarin, Secretary of the Spanish MAB Committee made a presentation on “The Legal context of the Spanish Biosphere Reserves”. The Spanish legal system was described as a dual system. At the national level, there were four different, basic categories of protected areas and, at the regional level, there were seventeen laws regulating protected areas, i.e. one for each of the seventeen autonomous communities (*comunidades autonomas*). Thus, the national government and the autonomous communities shared competence over protected areas. The autonomous community had the main competence on the territory of its jurisdiction, but the government held competence on basic law. According to the constitution, the autonomous communities had jurisdiction over land planning and the management of environmental protection. The state kept the exclusivity of jurisdiction on basic legislation on environmental protection.

There were twenty biosphere reserves in Spain, which functioned quite differently. A first generation of biosphere reserves could be divided into two categories. The first category consisted of biosphere reserves which overlapped totally or partially with existing protected areas and which did not function according to the Seville criteria. The second category consisted of some biosphere reserves which, although they overlapped national parks as well, could be regarded as real biosphere reserves, since they respected the zoning system of national parks, which was quite close to the zonation of biosphere reserves. There were two main features of biosphere reserves, public participation (the *patronato*, which includes all stakeholders) and integrated planning. The *patronato* could be regarded as the instrument that ensured public participation in the management of the biosphere reserve. This was a collective body bringing together representatives of both public administrations and institutions and the private sector (e.g. local stakeholders and environmental organizations). Its main function was advisory. It could advise on projects and on investment priorities proposed for the area under socio-economic influence, but it had no decisional power. The management plan was elaborated by the manager(s) of the park and approved by a joint commission of the state and the autonomous community, which would take into account the advice of the *patronato*. The planning of a biosphere reserve was linked with urban planning and was reflected in the urban plans.

Two examples were given of a “new generation of biosphere reserves. One was **Urdaibai Biosphere Reserve**, located near Bilbao in a heavily populated and industrialized region. It was already one step forward in the process of becoming a functional biosphere reserve. The *patronato* was not just an advisory body but had the authority to make decisions. There was a programme for the harmonization of socio-economic activities. Sanctions and penalties were foreseen and public action was possible.

The second example, **Menorca Biosphere Reserve**, gave the best demonstration of the future orientation of biosphere reserves. A law for the management of the biosphere reserve had been adopted in August 2002. It was the only existing case of an integral law

establishing a specific organ for the management of a biosphere reserve as a whole. The management took into account the following issues:

- environmental protection (the natural protected area covered 43% of the biosphere reserve);
- historical heritage,
- urban planning,
- sustainable development strategic planning,
- instruments of public control (previous administrative authorization, given by the authority responsible for the biosphere reserve, was necessary),
- a regime of sanctions and penalties,
- a Menorca Biosphere Reserve Agency (a scientific and social council which ensures public participation).

Civil society was very well organized in Menorca: it participated in the Agenda 21 forum and was linked with the Council in charge of the entire island.

- Catherine Cibien, Secretary of the French MAB Committee and Carole Gruau of France made a presentation on “A Legal Study on the management of French Biosphere Reserves”. This recent study had been undertaken to define the best management structure for biosphere reserves in France. There were ten biosphere reserves in France, which could be divided into three groups:

- biosphere reserves which were not really functional and which should be revised (or delisted);
- biosphere reserves linked to national or regional parks;
- biosphere reserves which have no links with any protection systems.

Protected areas in France consisted of two main categories: national parks and regional parks. The main mission of a national park was conservation. The management of national parks was centralized, which meant that the creation of the national park and the designation of its director were the responsibility of the Ministry of Environment, which also decided on the budget.

National parks were zoned into two parts:

- the central zone, which was strictly regulated;
- the peripheral zone, which was designed to reinforce the protection of the central zone (i.e. to act as a buffer zone in the wording of the MAB programme). Certain social, economic and cultural projects to be undertaken in the peripheral zone, aimed at compensating for the restrictions imposed on the local population in the central zone, were also recommended.

The missions of regional parks were closer to those of a biosphere reserve, since they took into account both conservation and local development. Management was decentralized. The region decided on the creation of a new regional park, which would be based on the project defined in a charter, which was in turn elaborated by the municipalities, counties and regions involved. However, the central government was still responsible for the final decision on the creation of a regional park and the adoption of its Charter (by decree).

The question remained whether it would be useful to create a new category to accommodate biosphere reserves. According to the study, the number of existing legal instruments in France was already sufficient. Creating a new category of protected areas would

only bring more confusion. Designation as a biosphere reserve was nevertheless important because it conferred international recognition and admission into a scientific network.

These presentations were followed by a discussion, which dealt with questions such as:

- Is a national legislation on biosphere reserves needed, thus creating a legal category?
- Should a more binding instrument than the Statutory Framework be elaborated at the international level (a Convention for biosphere reserves?).

At the **national level**, it was concluded that:

- a) There is no need for specific legislation to establish biosphere reserves as a new category of protected areas. However, legislation can help to reinforce the role of biosphere reserves as a management tool and to highlight the international commitment that they represent.
- b) Biosphere reserves can use existing structures, including adding on to national parks or reserves, or be built upon regional nature parks. However, creating a biosphere reserve could be the occasion for setting up innovative structures, even with a specific local legislation in a federal state. The conclusion of this part of the debate was that biosphere reserves should find their own ways to apply the agreed principles of the Seville Strategy and the Statutory Framework.
- c) The question of whether a more binding instrument, such as a framework convention, should be elaborated to replace the Statutory Framework and the Seville Strategy was debateable. The advantage of a more binding instrument would be to increase national support in favour of biosphere reserves, but the workshop participants stressed the difficulties to elaborate and negotiate such an instrument. Furthermore, it could weaken the perceived strength of biosphere reserves in many countries, i.e. where their flexibility was their best asset. In order to increase the international recognition of the biosphere reserves, it was recommended that a special resolution be prepared at the COP VII of the CBD which would deal with the theme of protected areas in order to give a clear mandate to biosphere reserves as a tool for implementing the Convention. In the same spirit, biosphere reserves should gain a special recognition at the Parks Congress next year in Durban.
- d) Although a convention was not felt necessary, more guidance should be provided for the management of biosphere reserves, especially on the question of what should be permitted in the buffer zone and how the transition area should be designed. The methodological guide that the Secretariat had been requested to prepare by the ICC should respond to these concerns.
- e) Decentralisation structures appeared to be well adapted to the implementation of the biosphere reserve concept. A balance needed to be found between the intergovernmental commitment and decentralisation.
- f) The periodic review process constituted a good tool to evaluate the functioning and structure of each biosphere reserve every ten years.

### **7.5.3.2 The Site level**

The presentations are summarised in the paragraphs below:

- Mr Toomas Kokovkin of the Biosphere Programme Foundation made a presentation on the “Management structure of the West Estonian Archipelago Biosphere Reserve”. Until April 2002, a strict top-down system had been in place: the Ministry of Environment supervised the biosphere reserve offices in the respective regions of their competence. A national law regulated the Estonian Biosphere Reserve as if it were a conventional protected area (i.e. the emphasis was on nature protection) and funding was provided by the State. Thus, conservation could be ensured, and research projects could be conducted. However, there were the shortcomings of all biosphere reserves managed as national parks, i.e. local development and cooperation were not taken adequately into account.

In April 2002, the government realized that biosphere reserves were not to be mistaken for national parks and reformed the system. The main result was to remove the Estonian Biosphere Reserve from the national parks list. As a consequence, the Biosphere Reserve category became “outlawed” and funding was no longer secured. To make up for this loss of status in the national legislation and in order to secure some funding, NGOs from the three regions in which the West Estonian Archipelago Biosphere Reserve was located created the Biosphere Programme Association. This new structure did not take care of nature conservation as well as the former structure, nor did it encourage research. However, it was certain that local development and local participation were enhanced.

Looking at these two structures, Mr Kokovkin proposed an ideal model emanating from a combination of the previous and the new structures. In this model, the biosphere reserve coordinator from the previous structure (i.e. the one designated by a public or governmental institution) and the coordinator from the new structure (i.e. the one in contact with the consultative committee) should be one and the same person.

- Mr Giuseppe Carus of the University La Sapienza of Italy made a presentation on “Local conflicts and common resources use in protected area: applying the “social Dilemma” paradigm to biodiversity conservation”
- Ms Doris Pokorny (Germany ) made a presentation on “Mechanisms of biosphere reserve coordination beyond administrative boundaries, case study of the Rhön Biosphere Reserve”. As an introduction, Doris Pokorny recalled that there were fourteen biosphere reserves in Germany. The Ministry of Environment of each *Land* (region) was responsible for the management of the biosphere reserve(s) situated within its jurisdiction.

She briefly presented the Rhön Biosphere Reserve. In 1991 there were 120,000 inhabitants in the Rhön mainly concerned with agriculture and traditional land use. The added value of the Biosphere Reserve label came from the marketing of local products, and indirectly from tourism. The Rhön Biosphere Reserve was located in three different *Länder*. As a consequence, three different Ministries of Environment, one in each *Land*, were responsible for its management. The question which then arose is how to make the biosphere reserve work beyond these administrative boundaries. It had been agreed that a common vision among the administrators, the *Länder* and the municipalities involved in Rhön was necessary. Informal work groups were also needed., as well as an inventory of land use, a discussion on the ecology and economy , and designing the zonation of the reserve. Meetings gathering the various administrative units of the Rhön Biosphere Reserve were regularly held. A trilateral group for research and one for education had been created. Recently, a trilateral *Länder* agreement had been signed. There was also some coordination between the municipalities through three Biosphere Reserve

associations. At the regional level there was a working group with eight thematic sub-groups (beyond the biosphere reserve). There was a coordination committee of the districts, groups and the three BR associations. This structure had evolved, but the process of evolution was not always directed to a certain goal. The trilateral working group shifted responsibility from BR administrators to the local population.

- Zuzana Guziova, Secretary of the Slovak MAB Committee made a presentation on “A Special case of a transboundary biosphere reserve, the East Carpathian Biosphere reserve”. The East Carpathians Biosphere Reserve was one of the five transboundary biosphere reserves in Europe, but the only trilateral one (Poland, Ukraine and Slovakia). It was approved in 1998. The natural and human specificities of East Carpathians Biosphere Reserve were linked with the low density of population, specially in the Polish and Slovakian parts. The biosphere reserve was in part composed of beech and fir-beech virgin forests, but its rich biodiversity lay more in the mountain meadows (*poloniny*) that evolved as a result of former pastoral activities. The cultural particularities of the area were reflected in the well-preserved old buildings with peasant architecture and in the wooden churches.

As in any biosphere reserve, there were several different actors, including nature conservation authorities, the local population, state foresters, private foresters, farmers, scientists and NGOs (e.g. the Foundation for Eastern Carpathians Biodiversity Conservation).

At the international level the biosphere reserve needed to face several challenges:

- a pending cooperation agreement, still not finalized,
- a lack of formal coordinating structure,
- a lack of common management strategy or framework.

International cooperation was undertaken mainly through the Foundation for Eastern Carpathians Biodiversity Conservation, established in 1995. This NGO was the only formal trilateral structure existing so far for the biosphere reserve. It was composed of four representatives from each country. It allowed common activities to be conducted, including research.

A major problem at the international level lay in the different classifications used by each country (e.g. forest ecosystems). There was a need for harmonization there.

There were also problems at the national level, such as:

- a lack of a formal coordination mechanism for the area at the national level;
- an inadequate legal and regulatory framework at the macro (i.e. national) level to pursue effective implementation of international networks;
- the low awareness of local stakeholders, including the decision-making authorities, about the Biosphere Reserve concept (the biosphere reserve is thus driven by nature conservation authorities who do not have the capacity to fulfil the ‘real’ Biosphere Reserve criteria (i.e. the Seville Strategy);
- the lack of capacity of local nature conservation authorities to pursue transboundary cooperation.

Ms Zuzana Guziova concluded that common management should be the ultimate goal. This should be facilitated by an ‘intergovernmental agreement’ to guide cooperation. A formal coordinating committee should also be created.

The presentations were also followed by a discussion, which addressed in particular the following issues:

- What are the management/ co-ordination structures which best respond to the functions and objectives of a BR?
- Which process should lead to the preparation and adoption of a management plan/ policy, in particular to take into account of the various stakeholders' concerns?
- What should be the issues covered by a management plan (minimum content)?
- What is the ideal duration of a management plan (and procedure for revision)?
- How binding should the management plan be, in particular in the transition zone?
- Is it necessary/ desirable to put in place a special mechanism for conflict resolution?
- How can local stakeholders and local actors be actively involved and motivated in order to adopt the BR idea and put it into action?

At the **site level**, it was concluded that:

- a) A proper balance between the top-down and bottom-up approaches should be sought, in order to ensure that the three biosphere reserve functions are properly reflected. A purely bottom-up approach runs the risk that e.g. research and conservation are left aside for the benefit of socio-economic development only. On the other side a top-down approach does not respond to the philosophy of the biosphere reserve concept.
- b) In order to ensure adequate representation of all stake holders, a specific council or body should be put in place with a consultative role. It should be involved in the process of defining and implementing the management policy, including the use of funds.
- c) A good biosphere reserve would be one which would constitute a platform to reconcile sectoral policies and interests, or help to obtain agreement on a common policy for conservation and development of the area, i.e. in other words to constitute a tool for conflict resolution on natural resources.
- d) As a follow on from c) training on conflict resolution for biosphere reserve coordinators (such as the one organised in the Vosges du Nord BR in 2002) was considered very useful and should be repeated.
- e) Management policies should rather be strategic, defining objectives and the way to reach them. The elaboration and revision of management strategies should be an ongoing process involving all partners in the region. The question of who should take the lead in the elaboration of such management strategies was debatable: should this be a public administration or an external and neutral partner?. Advantages and disadvantages were seen in both solutions.
- f) The management policy for the biosphere reserve did not necessarily need to be legally binding but its elements should be integrated into existing planning tools and regulations (e.g. urban planning).
- g) Provisions should be made to make sure that informal communication with and among stakeholders takes place regularly e.g. by organising information forums.

## **7.5.4 Follow up activities for EuroMAB**

The last part of the workshop was devoted to the definition of activities on this specific theme of legal and management to be undertaken within EuroMAB in the next two years.

It was felt that the first need was to finalize the outline for case studies which would be undertaken in response to the circular letter sent by the MAB Secretariat on June 2002. Several participants (from France, Slovakia and Spain) volunteered to help the Secretariat to elaborate this outline.

As the training seminar on conflict resolution for biosphere reserve coordinators organized in Vosges du Nord had proved to be particularly useful, it was recommended that this type of training experience be renewed. France volunteered to host the next training seminar in a French biosphere reserve.

It was also recommended that a small task force on legal and management issues be constituted with experts having experience on MAB issues, including the management of biosphere reserves and experts knowledgeable in legal and institutions issues. The representative of Spain proposed that this task force meet next year in Menorca Biosphere Reserve (Spain).

## **7.6 COOPERATION IN SOUTH EAST –EUROPE**

### **7.6.1 Background**

Taking into account the results of the Venice Conference of Experts (24-27 March 2001) on the “Reconstruction of Scientific Cooperation in South East Europe”, the Round Table of Ministers of Science on Rebuilding Scientific Cooperation in South East Europe, held at UNESCO Headquarters, 24 October 2001, recognized that rebuilding scientific co-operation is a key element for consolidating social, economic and political stability in the area. The Round Table stressed that urgent needs such as the reduction of the brain drain could be met by a general consolidation of national science and technology systems, the provision of appropriate training fellowships and exchange grants for scientists and professors, as well as the facilitation of networking of research institutes and universities.

The Round Table recognized also that specific priority measures should be taken in the following fields: life sciences, environmental sciences, computer sciences and information technologies, materials science, and selected aspects of social sciences. Complementary actions on research infrastructure and in favour of young scientists were also considered as essential prerequisites of this large-scale action, to enhance human capacities and benefit the social and economic development in the region in the medium and long-term.

In this perspective, the Regional Bureau for Science in Europe, ROSTE, had been entrusted with the task of fulfilling the necessary conditions for a Donors’ Conference which would implement the objectives of the Ministerial Round Table. In particular, *ad hoc* working groups for specific fields identified as priorities by the Ministerial Round Table had been established. The expected outputs were major regional cooperative project proposals to be submitted to potential donors.

In this context, a first meeting of MAB representatives from SEE countries was held in Sinaia, Romania, on 7-10 December 2001. This meeting was organized by the Department of Systems Ecology and Sustainable Development of the Bucharest University in close cooperation with the Romanian MAB NC and UNESCO-ROSTE. Its objectives were to:

- identify the main features of the current status of the environment at the national and the Balkan regional scales, as well as the main driving forces;
- identify the key constraints related to sustainable management and development of both environment and socio-economic systems in the SEE Region;
- assess the needs for improvement of the network of 'protected areas' and, in particular, the network of Biosphere Reserves in this specific region;
- identify and discuss the potential new areas to be organized and managed as biosphere reserves, with particular focus on those which may require the joint effort of two or more countries (TBRs);
- establish the framework for long term cooperation among SEE countries in the field of Biodiversity conservation<sup>1</sup> and sustainable socio-economic development based on principles of the Ecosystem Approach (promoted in the management of biosphere reserves);
- elaborate a set of potential joint initiatives or projects in the SEE region to be further discussed during EuroMAB 2002, for further consideration and possible support.

## 7.6.2 Workshop

Prof. Angheluta Vadineanu, from Romania, also responsible for the organization of the Sinaia meeting, was Moderator of this workshop.

- Mr P. Pypaert, on behalf of Mr Pierre Lasserre, Director of ROSTE, presented an introductory overview on the recent UNESCO-ROSTE initiatives in the SEE countries, focussing on the specific mandate that the Venice office to strengthen the technical and scientific cooperation in the Region. Emphasis was made on how the MAB Programme was viewed as a strategic tool to facilitate the initiatives of local sustainable development.
- Mr Vadineanu presented a report on the main output of the Sinaia meeting. He described the uniqueness of the area, since the Balkans form the meeting point of several biogeographical regions and were considered as one of the world's most interesting and important areas in terms of biodiversity. The region was also very much under threat from natural and anthropogenic changes, and urgent action was needed to counteract the effects of these changes. The participants of the Sinaia meeting agreed that a co-ordinated strategy for the sustainable management and conservation of biodiversity among countries represented one of the key elements which the UNESCO MAB Programme could help to define and develop. This strategy was expected to rely on already existing initiatives (especially the international ones promoted by the EU and the Council of Europe) and focus on joint inventories, conservation measures, common ecological research and specific activities in shared ecosystems. The Balkans region also possessed rich cultural/natural landscapes, where traditional agriculture had contributed to the maintenance of biodiversity. Strong links between natural and cultural diversity in the Balkans had been identified in all the national reports, expressing a need for a well-co-ordinated programme of inventory, research and monitoring.

---

<sup>1</sup> Biodiversity conservation in the broad sense as in Article 2 of the Convention on Biological Diversity

Part of the workshop session was dedicated to completing the presentation of the national country reports, which were missing in the Sinaia meeting. Particular attention was given to the important initiatives launched recently in the framework of bi-lateral agreements, as well as international programmes funded by UN agencies and the European Union. These reports confirmed the strategic importance of having a complete regional environmental assessment (the so-called “Sinaia Report”), with a view to seeking potential donors for future cooperative efforts under EuroMAB EuroMAB.

The discussion focussed on the key issues which the different countries expected to be specifically addressed by biosphere reserves. In this particular transitional economic phase, biosphere reserves were seen as flexible instruments for organising innovative, participative land use planning promoting the protection of both natural and cultural diversity. Specific projects on environmental education were considered by the participants to very necessary steps to move this effort forward. The creation of more biosphere reserves, and the specific relevance of transboundary initiatives, were commonly seen as strategic passages leading the regional consolidation of the MAB Programme. The multi-stakeholders’ scenario, which characterised the natural resources management approach in the region, was seen as being highly conflictual. Conflict negotiation and resolution were considered as one of the key priorities to be addressed in biosphere reserve management processes. Local capacity building had to be reinforced, and the role of the research and academic communities re-launched. Ultimately, it was expected that a more comprehensive vision of biosphere reserves as strategic instruments for planning sustainable resource use would be advocated, including such additional aspects as water resources management, and quality control and monitoring.

### **7.6.3 Conclusions and recommendations**

The workshop concluded by recommending that UNESCO should help in the following areas:

- supporting the process of reinforcing the MAB network at the sub-regional level and link it to the other parts of UNESCO’s Programme;
- strengthening the other cooperative frameworks, in particular with other international initiatives already operating in the Region (for example, the co-operation between the Council of Europe and UNESCO for the protection of the natural heritage and biodiversity);
- facilitating the creation of focal point to exchange information and share experiences at the specific sub-regional level (a dedicated web-site was considered to be a strategic starting point);
- completing and publishing the country reports, as agreed during the Sinaia meeting , by mid 2003; disseminating experiences and facilitating exchanges of views inside and outside the Region, by enhancing international visibility to specific activities, as appropriate;
- based on the identified needs, drafting project proposals to be addressed to potential donors in the favour of strengthening cooperation among SEE countries;
- supporting each SEE country to identify a constant focal point for information exchanges and updating.

## **7.6 COASTAL MARINE BIOSPHERE RESERVES IN THE EUROMAB REGION**

### **7.7.1 Introduction**

This topic was included in the programme at the request of the Italian MAB Committee with a view to take advantage of the considerable wealth of research in Italy on coastal marine systems. The topic was introduced in plenary session by Mr. Valerio Zupo from Zoological Station of Naples (Italy) who referred to the work on the inventory and mapping of the biodiversity of the coastal marine zone in Italy. This work served to highlight where coastal marine protected areas should be established as a priority. He highlighted that there was an added value for different research institutions to work together to ensure complementarity in effort.

### 7.7.2 Workshop

Mr. Valerio Zupo was moderator of the workshop. The presentations are summarized in the following paragraphs:

- Ms Jane Robertson of the MAB Secretariat gave an introduction in which she recalled that, in an attempt to counter the predominance of terrestrial systems, in 1989, MAB had organised, together with the UNESCO Coastal Marine Programme, the Intergovernmental Oceanographic Commission (IOC) and IUCN, a workshop in San Francisco exploring the application of the biosphere reserve concept to coastal marine areas. This had pointed to the need for special attention to the large-scale and connectivity of coastal marine systems, the three dimensional, dynamic water environment; the different and sometimes conflicting legal regimes and ownerships patterns; and the relative lack of experience in conservation in coastal marine areas. Examples of biosphere reserve zoning taking these characteristics into account: were given for a coastal barrier system and an archipelago.

In the EuroMAB region, the quality of some existing marine biosphere reserves needed attention, for example sites located on the coast but without a marine component, or sites corresponding to marine research stations without a transition area and/or a development function. Some good examples did exist, for example the biosphere reserves grafted on protected areas such as the Iroise (France), the Finnish Archipelago, the Commander Islands (Russian Federation); or those with an ecosystem approach covering entire catchments basins such as Urdaibai (Spain) or Mount Arrowsmith (Canada). Several islands were also successfully applying the concept, for example in the Spanish islands of El Hierro, Lanzarote, Plam and Menorca, or in Guadeloupe, France.

The advantages of the biosphere reserve concept were seen to be: providing a voluntary working tool for land and water management in the wider land-scape and sea-scape; enabling to link up protected areas along coastlines and rivers; and allowing holistic planning of urban areas with the hinterlands and marine zones of influence.

Under the Convention on Biological Diversity, a Marine and Coastal protected Areas *ad hoc* technical group had been created, with a view to design principles for marine and coastal protected areas for the 7<sup>th</sup> Conference of Parties in early 2004. This Expert Group had discussed two complementary approaches to biodiversity conservation and sustainable use: applying legal regulations such as establishing fish catch limits; or by establishing marine protected areas in which all damaging or extractive activities are prevented or strongly controlled. This dual approach could be applied through biosphere reserve in the respective zones: In addition, the Expert Group called upon principles such as adaptive management, respect for traditional uses and rights, public awareness etc, all of which are inherent in biosphere reserves. In short, there seemed to be a convergence of

opinion, which meant that biosphere reserves could be at the forefront of decision on coastal marine protected areas at COP VII in 2004.

- Mr Altan Turker and Ms Gulay Cetinkaya of Turkey presented the planning of the potential Gukurova Delta biosphere reserve within the framework of an EU-LIFE project, with a focus on the mapping of the various biotopes. This area of some 5000 km<sup>2</sup> in Southern Turkey was a key area for bird life and sea turtles. Using the Natura 2000 habitat types, the area was mapped using a GIS, allowing the identification of priority areas for protection due to international importance, and non-fishing zones. It was hoped that this work would lead to the legal protection of the area, and serve as a model for other parts of Turkey.
- Mr R. Serqui and Mr G. Persico of Italy presented work respectively in the Asinara National Park and in the Cilento National Park, which is a Biosphere Reserve on the Italian coast. The former site was established in 1997 on a small island off Sardinia, characterized by its abandoned prison which was now an environmental education centre. It had as a prison camp had preserved the environment, including invaluable seagrass beds which were to be proposed for Natura 2000 status. Management questions involved the negative impacts of feral animals such as cats. By contrast, the Cilento area was highly populated and under acute tourist pressure. Nevertheless the 88 inland villages had remained for a long time very isolated one from the other, such that there was a high incidence of inbreeding of the local communities and a concomitant high level of genetically linked diseases such as anaemia. In some ways, this was a “genetic park”.
- Mr Varnavas of Greece commented that Skiathos island in Greece was in some ways similar, with a high incidence of disease stemming from the high sulphate concentrations in the lagoon water resulting from dense car traffic.
- Mr Martin Ohman spoke on the challenges of the Archipelago Sea Biosphere Reserve in Finland. Here, only 10% was dry land and there were some 41,000 islands and islets over 0.5 ha. 1200 people lived there permanently, joined each year by the occupants of the several thousand summer cottages. Originally, the biosphere reserve was seen as a means above all to promote nature conservation, and for this reason, the larger more “developed” islands were excluded from the designation: this attitude was changing today. In Finland, where biosphere reserves had no legal status as such, the experience with this Biosphere Reserve showed that people were less “afraid” of this designation in comparison with a national park or Natura 2000 site, but did not really understand the concept; that the UNESCO label had enabled to obtain EU funding through various bodies but that such project-based type of funding made it difficult to support action in a long term vision. The Archipelago Sea Area Biosphere Reserve also highlighted that coastal-island biosphere reserves offer the MAB Programme with the following challenges:
  - island ecosystems and island societies are “micro-worlds” which were of interest for studies on “sustainable thinking” and livelihoods in balance with the natural resources;
  - the fact that the EU does not specifically recognise the issues facing small islands;
  - as small islands and coastal areas are highly sensitive to the condition of the seas, coastal and marine biosphere reserves could be used more systematically as sites for monitoring and understanding of global environmental problems;

- due to the intense interplay of interests and stakeholders in coastal and marine areas, coastal and marine biosphere reserves could serve as models to explore integrated coastal zone management;
  - following the saying “*Navigare necesse est*”, coastal cultures display certain common characteristics which would make it possible to build up exchanges and interactions amongst local people in different coastal areas.
- Mr Joan Rita presented the Menorca Biosphere Reserve in Spain, which covered the whole island. 43% was set aside as protected areas. Tourism was by far the main economic activity, not only concentrating on the 80 beaches, but also inland, depending on the quality of the landscapes. Beach tourism did cause unexpected environmental problems, for example heavy-duty beach cleaning and misguided seagrass removal in the period 1956-95 resulted in sand erosion. In consequence, the BR focussed on “managing” tourists from the environmental point of view, with a large scale environmental education campaign involving all stakeholders, the distribution of information brochures in 6 languages explaining beach ecology, the use of “soft” beach cleaning machines, launching sea-bottom rubbish clearing campaigns with schools and scuba diving clubs. The results have been satisfactory, as most tourists now appreciate the natural environment and the quantity of beach rubbish has been significantly reduced.
- Dr. V. Voloshyn and Dr T. Poltoratska described the wetlands of the coastal marine ecosystems of the biosphere reserves in Ukraine. The Dunainsky Biosphere Reserve, which formed part of the Danube Delta Biosphere Reserve with Romania on the Black Sea, was the largest of the 22 Ramsar wetlands in Ukraine. It was important as a migration stopover and wintering area for birds, and as a region for the fattening and spawning of many fishes, including Red Book species. The Chernomorsky Biosphere Reserve, in addition to mainland areas, also covered shallow bays, islets and coastal zones of the northern part of the Black Sea. In accordance with the National Action Plan on Wetlands for 1997-2002, the regions of the Danube Delta and the Dnieper Delta were being classified according to biological and socio-economic factors, with a view to have a database for setting up an “ecological corridor” between them to improve the conservation of genetic, biological and landscape diversity. Attention would be paid to the use of progressive technologies and actions in favour of sustainable development in the buffer and transition areas. Monitoring and the elaboration of alternative scenarios of possible economic activities would play a major role in the development of this ecological corridor. Dr. Poltoratska also drew attention to the proposed project to construct a deep water channel across the core area of the Danube Delta Biosphere Reserve, to which the Academy of Sciences of Ukraine had expressed its opposition, favouring an alternative route in the transition area. Several NGOs in Ukraine and in Europe had also expressed their disapproval of this project. Mr Ion Jelov of MAB Romania briefly commented on activities in the Romanian side of the Danube Delta Biosphere Reserve, such a summer camps, assessment of water quality, development of ecotourism opportunities, and the restoration of the cultural heritage.

In the ensuing discussions, emphasis was placed on the need for good scientific information on which to base policies for environmental protection, including legal measures, the fact that coastal wetland sites were far more threatened by fishing and navigation rather than by ecotourism *per se*, the need for a balance among cultural, biological and economic interests. The idea of a developing a project with EU funding to link up EuroMAB coastal marine biosphere reserves was discussed, noting that while this was desirable, no-one really had the time to draft and pursue an EU type of project.

### 7.7.3 Conclusions and recommendations

The workshop participants came to the following **conclusions**:

- a) Coastal marine areas are the arenas of the most intense conflicts in interest for natural resource use
- b) Islands are microcosms of environment and development issues. They have a strong cultural identity, and an imperative to involve all actors in pursuing integrated coastal zone management.
- c) Coastal marine areas and islands are highly sensitive to global environmental problems because they are directly dependant on the conditions of the sea areas. Individual sites cannot by themselves solve these problems but must best cope with the consequences.

The workshop participants **recommended**:

1. EuroMAB countries should be encouraged to review “old” biosphere reserves on coastal and consider expansion to cover whole land-sea interface, taking account of integrated costal zone management and the fulfilment of the development function. For this, they should build on the experience of the existing functional coastal marine biosphere reserves;
2. EuroMAB countries should pay more attention to increasing the biogeogeographic coverage of biosphere reserves in the Mediterranean, the North Sea and the Black Sea;
3. The MAB Secretariat should encourage the formulation of a project for promoting exchanges of experience in coastal marine biosphere reserves for municipal leaders and regional authorities etc, having a strong training component . This project should aim at increasing support and commitment to existing – but generally isolated biosphere reserves and in particular in exploring how to balance traditional values and increasing tourism development, and hydrological works.

For this, latter recommendation, the Finnish participants proposed that they would host a meeting in the Archipelago Sea Area Biosphere Reserve in 2003 with a view to explore with other biosphere reserve partners how best to move forward. Preliminary dates would be 22-25 October 2003. Contact person: Martin Öhman, Southwest Finland Regional Environment Centre . Telephone (358.400) 830 170; Fax; (358.2) 46 525 3509; E-mail: martin.ohman@ymparisto.fi

## 7.8 WORKSHOP ON QUALITY ECONOMIES IN BIOSPHERE RESERVES

### 7.8.1 Background

At the Seville+5 meeting of experts on the implementation of the Seville Strategy in 2000, it was recognised that biosphere reserve authorities needed policy advice on how to become regional models for sustainable development. The MAB-ICC, at its 16th session in November 2000, recommended that “*the MAB Secretariat should facilitate the establishment of a task force, including biosphere reserve managers and local specialists, on developing quality economies at site level.*” It was understood that “quality economies” referred to activities,

goods, and services that are produced and consumed in ways that are compatible with the Seville Strategy and Statutory Framework.

The Secretariat then set up a Task Force composed of persons nominated by MAB National Committees and MAB Focal Points. Terms of reference were established, entrusting the Task Force to examine the following issues:

- defining ‘quality’;
- the development of criteria (social, environmental and economic): in order to assess and promote quality economies;
- branding and a critical analysis of branding, labelling, marketing, and associated mechanisms/structures;
- fund raising, trust funds; micro-credit schemes;
- ‘eco-jobs’.

More information on the Task Force, including the report of the first meeting in March 2002 is available on [www.unesco.org/mab/qualityEconomies/qualityhome.htm](http://www.unesco.org/mab/qualityEconomies/qualityhome.htm).

One of the recommendations of this first meeting of the Task Force was that “*all relevant regional MAB Networks should be invited to consider contributing to the activities of the Task Force, including through introducing quality economy items on their respective meeting and workshop agendas*”. The organizing committee for EuroMAB 2002 responded favourably to this and hence this workshop was organized within the EuroMAB 2002 meeting.

The Task Force also decided to undertake a survey on economic development issues in biosphere reserves. As a first step, the Task Force issued a questionnaire for all biosphere reserve coordinators/managers, for which the replies would be examined at a meeting of the Task Force ‘Focus Group’ on 24-26 October 2002.

### **7.8.2 Plenary Introduction**

This topic was introduced by Mr Engelbert Ruoss, of the Entlebuch Biosphere Reserve in Switzerland, who had been designated also the Chair of the Task Force on Quality Economies. He illustrated the topic by describing the process of the establishment of the Entlebuch Biosphere Reserve in his country, based on a cooperative endeavour of the local community with the objective of attaining sustained economic growth based on high quality local produce, resource efficiency and innovation. Key aspects in the success of this endeavour were the identification of a market for local produce; making best use of networks of contacts inside and outside the Entlebuch itself, a coordination structure which took the lead in developing Entlebuch as an economic enterprise using the method “TarDec Leadership System”; and a high level of professionalism in developing the products and marketing them in a cost-efficient fashion ([www.biosphaere.ch](http://www.biosphaere.ch)).

This presentation stimulated many comments, notably on the difficulty of extrapolating and reproducing the Entlebuch “model” for developing quality economies to other biosphere reserves, given the huge variability in their socio-economic contexts. Emphasis should therefore be given to the methods used, rather than the specific tools, for promoting quality economies, including tourism.

### **7.8.3 Workshop**

Mr Engelbert Ruoss served as Moderator for the workshop, and also presented his summary to the plenary. Three presentations were made at the workshop, from Italy, the Russian Federation and Estonia.

- Mr B. Cignini, from Rome Municipality, made a presentation on “Agricultural areas in the Municipality of Rome and Biodiversity: management problems and economic responses”. The Rome area had a surprisingly high number of green spaces with natural vegetation and agricultural areas devoted to the market of the Roman Centre for Agrofood Products, which is the biggest in Italy. Two large farms managed by the Rome municipality were now converting to organic farming, developing “niche” markets for high quality produce for the urban population. He described some of the partnerships that had developed to ensure efficient production and distribution.
- Ms Natalia Moraleva of the Russian Federation made a presentation on “Quality economies in biosphere reserves: implementing the Seville Strategy in Russia”. She stated that the real implementation of the Seville Strategy had begun only since the June 2001 training seminar on biosphere reserves in Russia. Two case studies of recent work were given for the Laplandsky Biosphere Reserve and the Vodloresky Biosphere Reserve. The director of the former site had developed a partnership with the local mining industry to reduce pollution, rehabilitate damaged areas, and to promote local tourism. Half the funding for the site now came from the private sector. Vodloresky was developing ecotourism based on the revival of the local traditions and culture of the Vodlozer ethnic group. Key elements were the securing of Russian donors, investments in training of local people as guides, hotel keepers etc; trusting and giving moral support to those who believed in the Seville Strategy, and the development of a web site attractive to potential tourists ([www.ecotours.ru](http://www.ecotours.ru)).
- Mr Toomas Kokovkin spoke on “Green labels and the promotion of quality economies based on sustainable use of valuable habitats: experience from the West Estonian Archipelago Biosphere Reserve”. Through a WWF project called “from landscape to consumer”, the economy of the Biosphere Reserve had been oriented towards beef cattle raising (with the advantage of maintaining the biodiversity of open areas); traditional handicrafts and nature tourism. Some 14 new jobs had been created (significant in such a sparsely populated area) and 2 enterprises for marketing handicrafts had been set up. Keys to the success and sustainability of this work were the high degree of networking among farmers, shops, consumers etc; the professionalism of the business plans for the tourist enterprises: and the existence of a good web site ([www.archpelaag.et](http://www.archpelaag.et)).

Workshop discussions highlighted the differences between “quality economies” and “quantity” economies. The former referred to an integrated concept combining not only the production of commodities for consumers, but also the indirect benefits it could bring. Many biosphere reserves were located in remote areas where the economy was declining: “quality economies” could provide peripheral benefits such as stopping the “brain drain” and the “labour drain”, revitalising old cultures, and restoring the dignity of poor communities by making them aware of the values of their surroundings and lifestyle. In short, this could be equated with “quality thinking”. The material products of “quality economies” were most likely to be speciality products with a high added-value on the market (for example Roquefort cheese, Parma ham, St André sweet onions). This also applied to tourism packages based on traditional homes and housing. Indeed, this ‘new generation’ of the tourism industry, -- including ‘ecotourism’ -- was a key driving force of quality economy development since it had the greatest by far impact economically,

culturally and socially (e.g. through new job opportunities) on rural areas and their protection.

Sustainability of resource use, whether of natural materials or energy, was inherent in “quality economies”: in Estonia, for example, there was a reluctance to marketing traditional black bread using imported flour. Ethical aspects were also important, for example preferring cultivation of aromatic plants to that of tobacco (as was the case in the Waterberg Biosphere Reserve in South Africa). Most important of all, the monies generated by economic activities had to be reinvested back into the communities concerned, and not diverted to some distant agency or enterprise. However, the workshop participants realised that trade-offs had sometimes to be made: this was illustrated by the example from the Trebon Biosphere Reserve in the Czech Republic, where traditional carp production in artificially-maintained ponds inevitably went hand in hand with some environmental pollution.

What was the added-value of biosphere reserve designation for developing quality economies? This question led to a discussion on the potential value of having a recognized “biosphere reserve label” which gave a certain “image” of excellence and conformity with the ideals of Agenda 21 and the CBD etc. Such a “label” could be used as a marketing instrument. While this idea was attractive, it was not simple to implement, posing problems of common definition, standards and certification. It was however considered to be a priority issue for further attention by the Task Force.

#### **7. 8.4 Conclusions and recommendations**

1. At the level of individual biosphere reserves, all efforts should be taken to develop ‘quality economies’ which take account of:
  - adopting a business-oriented, professional approach, involving the disciplines of the economic and the social sciences;
  - “benchmarking” to accurately assess the benefits before and after developing activities for “quality economies” ;
  - pre-marketing studies to explore the real potential of product development;
  - investing in a good web site and a system for maintaining it to optimise contacts;
  - respect for traditional cultures so that they truly share the benefits.
  - promoting appropriate research and educational activities to underpin the development of quality economies
2. The Task Force should be encouraged to further examine the question of biosphere reserve labelling. EuroMAB tended to prefer the option of one biosphere reserve ‘label’ to promote the biosphere reserve image at the level of individual sites, national networks, and the World Network.
3. The Task Force should consider the option of examining 3-5 case studies of methodologies of developing “quality economies” in biosphere reserves in the EuroMAB region.
4. MAB National Committees, with the support as appropriate of the Secretariat, should help to build up the capacity of their biosphere reserves to professionally develop “quality economies”. Therefore training workshops for biosphere reserve managers should be organized.

## **8. CLOSURE OF MEETING**

Mr M. Iaccarino of Italy chaired a final working session examining and discussing the recommendations of the individual workshops and how these would be implemented over the next few years, thus forming a EuroMAB “workplan”. A checklist with the main EuroMAB meetings and events is given in annex.

Mr Scarascia Mugnozza, Chair of EuroMAB 2002, closed the meeting, indicating that he was ready to continue to help coordinate EuroMAB work over the next two years. In particular, he indicated his willingness to host technical meetings to continue work notably on urban systems (in Rome, possibly in 2003) and on ecotourism (in Capri, some time in 2003-2004), and the possibility of making research links with the Zoological Station in Naples. He indicated that this offer of cooperation was also extended to Southern and Western Mediterranean countries.

Participants thanked Mr Scarascia Mugnozza for his willingness to serve as the EuroMAB Chair for 2003-2004 and to encourage countries to implement the recommendations of this meeting, in coordination with the MAB Secretariat.

Mr Fred Roots of Canada recalled that the MAB Northern Sciences Network also involved most EuroMAB countries and welcomed strengthening of cooperation with its ongoing research programme. Mr Jurgen Nauber of Germany congratulated Mr Scarascia Mugnozza on his new role, and encouraged him to help the EuroMAB countries to make better links in particular with the work of the EU, for example to promote the recognition of biosphere reserves in implementing EU policy on biodiversity, and as research sites for appropriate work under Framework 6.

After thanking all participants for their contributions, Mr Scarascia Mugnozza closed the meeting.

ADDRESS OF PROF. GIAN TOMMASO SCARASCIA MUGNOZZA

TO THE

**President of the Italian Republic**

ON THE OCCASION OF THE MEETING OF THE EUROPEAN UNESCO-MAB NETWORK

**Quirinale Palace, Rome**

*October 8, 2002 – 10:00 a.m.*

Mr. President,

On behalf of the Italian Committee for the UNESCO Programme “Man and the Biosphere”, the representatives of other National Committees and experts from 45 European and North American countries, and on behalf of the participants from the UNESCO Division of Ecological Sciences, all reunited here in Rome for the EuroMab conference 2002, I wish to express to you, Mr. President, our deepest respects. We are very grateful for your high patronage of this intergovernmental meeting and for having received us at this special visit.

The MAB Programme started in the 1960s in the framework of the “International Biological Program”, with the contribution of Giuseppe Montalenti, biologist and geneticist and, afterwards, president of the National Academy of Lincei. The programme was launched in 1970 by the eminent Italian biologist, Adriano Buzzati-Traverso UNESCO’s Deputy Director General; the first Director of the MAB Programme was the Italian ecologist, Francesco di Castri. Valerio Giacomini, of Rome University, was a great promoter of MAB among the Italian scientists; and, at the end of the 1990s, Maurizio Iaccarino, as Assistant Director-General of UNESCO for Natural Sciences, also administered the MAB Programme.

The MAB biosphere reserves are areas of terrestrial and coastal eco-systems; proposed by each government which receive UNESCO recognition after rigorous evaluation. The biosphere reserves’ objectives are: to protect biodiversity, to guarantee sustainable use of the territory, to develop, for the benefit of local population, economic activities which are eco-compatible (agriculture, fishing, tourism, transformation of local raw materials) increasing employment thanks to new professions and expansion of local businesses. In biosphere reserves (real “living laboratories”), development is also supported by research programmes and *ad hoc* training, as well as information and communication activities, and of course environmental education for the young and for society.

Humanistic and experimental sciences, technological progress, consolidation of local authorities, updating of legislative norms, access to information and education, and international collaboration are essential factors for positive relations between man and the biosphere; in other words, for a better quality of life.

Established in 1987, the MAB European network today is made up of more than 200 biosphere reserves, while more than 400 sites are distributed in about one hundred countries worldwide and are growing quantitatively and qualitatively every year. In the European network, including North-America, Europe and Israel, the disparity of socio-geographical conditions and historical and cultural traditions make it necessary to find and strengthen, within the complex and diverse environmental situations, connections, exchanges, as well as

collaboration and innovative lines and actions. Therefore, sectoral and territorial meetings are frequent.

The objective of this meeting in Rome is not to present the state of the art in specific fields, but rather, to discuss and, on the basis of recent experiences, explore and outline the activities for the following two years. The UNESCO Ecological Sciences Division with the cooperation of the Italian MAB Committee will be responsible for the realization of these activities.

The Director of the Ecological Sciences Division, Dr Bridgewater, will illustrate the programme, problems, and objectives which we hope to reach in this work week. A relevant Italian participation is foreseen and will include introductory statements, oral communications, descriptions and poster illustrations on Italian biosphere reserves, designated by UNESCO, and on protected areas and sub-urban areas acknowledged by the Ministry of Environment or by local or regional Authorities.

I would like to touch upon one topic of this meeting: ecotourism, or to be more specific, cultural and environmental tourism. Tourism is the primary source of employment in the world and in Italy its presence is very strong, even though it has declined in recent years. In a post-industrial society, with the globalisation of communication and information and with its rapid and unforeseeable progress in life sciences interacting with the environment, economic and cultural development could be strengthened by the propelling role of a “responsible” tourism, which will profit by the advantages offered by the world patrimony of natural and cultural resources and prevent destructive conduct. On a planetary scale it could be a factor to promote dialogue and comprehension between diverse cultures.

This conference will conclude on Saturday with two visits: the first, thanks to your permission, Mr President, to the “Protected Natural Reserve” of the Castelporziano Presidential Estate; the second, to one of the five Italian biosphere reserves, Circeo National Park. Mr. President, please allow me to conclude by mentioning the organizations which made possible this EuroMab 2002 conference:

The UNESCO Regional Office for Europe in Venice, the General Secretariat of the Presidency of the Italian Republic, and in particular Councillor G. Gifuni, the Ministry of Environment and in particular Minister Matteoli and his collaborators for the generous financial and technical contribution to the Conference, the Ministry of Foreign Affairs, the Ministry of Agricultural Policy and Forestry, the Mayor of Rome Walter Veltroni and the Municipality of Rome who made possible the visits to scientific museums, the Capitoline Museums and other historic sites, the Lazio Region, the National Research Council for hosting the Conference, the UNESCO National Committee, the State Forestry Corps, the National Agency for Environmental Protection and Roma Natura, the Botanical Gardens at the University of Rome, the European Institutions that participated, such as: the European Commission, the European Council, the European Science Foundation, the International Union for the Conservation of Science, WWF, and lastly, proof of the importance of the U.S.’s return to UNESCO, the US Geological Survey.

Thank you, Mr. President, for receiving us at the Quirinale Palace and for your flattering appreciation of this European Conference on ‘Man and the Biosphere’ an area which I am certain is of great interest to you.

Thank you.