

**UNITED NATIONS EDUCATIONAL,
SCIENTIFIC AND CULTURAL ORGANIZATION**

**INTERNATIONAL COORDINATING COUNCIL OF
THE MAN AND THE BIOSPHERE (MAB) PROGRAMME**

Nineteenth Session

UNESCO Headquarters, Paris,
Room IV (Fontenoy Building)
23-27 October 2006

FINAL REPORT

1 . INTRODUCTION

1.1 Convening of the session

1. The nineteenth session of the International Coordinating Council (ICC) of the Programme on the Man and the Biosphere (MAB) was held at UNESCO Headquarters in Paris from 23 to 27 October 2006.

2. Participants included representatives of the following Members of the ICC elected by the UNESCO General Conference: Austria, Belarus, Chile, Congo, Cuba, Czech Republic, Democratic People's Republic of Korea, Denmark, Ethiopia, Gabon, Germany, Ghana, Israel, Italy, Mexico, Mozambique, Myanmar, Peru, Philippines, Republic of Korea, Romania, Russian Federation, Sri Lanka, Sudan, Sweden, United Kingdom of Great Britain and Northern Island, United Republic of Tanzania and Viet Nam.

3. In addition, observers from the following Member States were present: Argentina, Brazil, Canada, Côte d'Ivoire, China, Costa Rica, Colombia, Egypt, Finland, France, Haiti, Japan, Madagascar, Monaco, Portugal, Slovakia, Spain, Slovenia, Turkey, United States of America. The Holy See was also represented.

4. The following United Nations organizations were represented: the United Nations University (UNU). The following international non-governmental organization was present: the Scientific Committee on Problems of the Environment (SCOPE). The full list of participants is presented as Annex 1 to this report.

1.2 Opening of the session

5. Mr Gonzalo Halffter of Mexico, the outgoing Chairperson of the MAB-ICC opened the Council session by inviting Mr Natarajan Ishwaran, Director of the Division of Ecological and Earth Sciences to deliver his opening address. Mr Ishwaran warmly welcomed the delegates on behalf of the Director-General, Mr Koïchiro Matsuura. He informed the Council that the Director-General would deliver a welcome address on Tuesday 24 October, during a special ceremony from 11:30 to 12:30, honoured by the presence of Ms Cristina Narbona Ruiz, Minister

of Environment of Spain and Mr Musa Bin Jaafar Bin Hassan, President of the General Conference.

2. Report of the outgoing Chairperson

6. Mr Gonzalo Halffter welcomed the new and the former Council Members as well as the observers and representatives from international organizations. He reported to the Council on the decisions of the last two Bureau meetings, particularly on the nomination of new biosphere reserves and the periodic reviews of existing biosphere reserves. He informed that 60 proposals had been received since the last ICC meeting in October 2004. During this period, four (4) countries had established biosphere reserves for the first time, namely: Federated States of Micronesia, Lebanon, Palau and Turkey. He also mentioned the designation of a new transboundary biosphere reserve (TBR) in Africa, Delta du Senegal between Mauritania and Senegal. He expressed his high satisfaction on the tribute given to Michel Batisse, with the creation of the Michel Batisse Award for biosphere reserve management, following the decision of the last Council meeting. The first Michel Batisse Award would be given on Wednesday, 25 October 2006.

7. Mr Halffter stressed the importance of the World Network of Biosphere Reserves (WNBR) as a reference and a unique tool in the international arena. He highlighted the fact that the WNBR was hosted in UNESCO and thus was not only a protected area network but also a unique network linking science and education, where research and environmental education were key elements. In his view, no other UN agency was better suited to coordinate the work of this unique tool than UNESCO.

8. Mr Halffter also reported on the Xalapa meeting, which was held in Mexico, on 25-27 October 2005. The meeting was divided into two parts: a) the 9th meeting of the IberoMAB network and b) an international conference on Biosphere Reserves, World Heritage sites and Ramsar sites. He informed the Council that 170 participants had attended the meeting, presenting 96 communications on key issues, including monitoring aspects, urban and peri-urban biosphere reserves, relationships between social and economic aspects, and local communities living inside and outside the sites as well as on the concept of archipelago reserves. A book was being prepared with selected articles.

9. Mr Halffter mentioned a recent publication of IberoMAB on “Biological diversity: The significance of the alpha, beta and gamma diversities”, prepared in cooperation with the University of Merida (Venezuela), which had been published in 2006.

10. He indicated that following a recommendation from the 18th session of the Council, he sent a congratulation letter to Ms Wangari Maathai, Nobel Peace Prize winner in 2004, on behalf of the Council. On 14 April 2005, the Director-General of UNESCO, Mr Koïchiro Matsuura, nominated Ms W. Maathai as “UNESCO Goodwill Ambassador for the conservation of nature and biodiversity in Africa” in recognition of her support to projects achieving sustainable development targets. He indicated that this recognition should be seen as a good opportunity and it would be good to think about future activities in which Mrs Maathai could be further associated.

11. During the UN Decade of Education for Sustainable Development (UNDESD), many countries were using biosphere reserves as demonstration sites, bringing new ideas and insights that should be better shared and discussed.

12. Finally, Mr Halffter thanked all the vice-chairpersons for their support and cooperation during his mandate as well as the Secretariat for enabling his work.

3. Election of the Bureau of the MAB Council

13. The Council elected the following officers to the Bureau of the MAB Council:

Chairperson:

Mr Thomas Elmqvist (Sweden)

Vice-Chairpersons:

Mr Valery Neronov (Russian Federation)

Mr Pedro Araya (Chile)

Mr Nguyen Hoang Tri (Viet Nam)

Mr Zerihun Woldu (Ethiopia), Rapporteur

Ms Salwa Mansour Abdelhameed (Sudan)

14. Upon his election as Chair of the 19^e session of the MAB ICC, Mr Elmqvist shared his vision about the future of the MAB Programme, emphasizing better sharing of the lessons learned in WNBR and making the Network more visible on global agreements at the international level. He also mentioned the importance of linking science and education, especially as regards the DESD. In particular he thanked the Delegate of Austria for important contributions to EuroMAB and expressed the hope that continuing collaboration of MAB-Austria during his tenure as Chair.

4. Organization of the Council Session

15. The Council adopted its agenda as provided in Annex 2.

5. Report of the Secretary on programmes and activities since MAB-ICC-18

16. The Secretary of the MAB Council presented his report, which was submitted to the Council as working document SC-06/CONF.202/3 with two annexes containing the decisions and recommendations of the eighteen session of ICC (annex 1), as well as the decisions and recommendations of the Bureau, which met in June 2005 (annex 2). The Secretary briefly referred to different agenda items (7, 8, 9, 10, 11, 12 and 13) that would be further discussed during the ICC meeting and that addressed the progress made in more detail in the last two years.

17. Mr Ishwaran highlighted the importance of networking at the national, sub-regional and regional levels as well as networking around specific themes, raising the question of how the activities of these networks could be used as the main drivers of the MAB Programme actions and activities. He emphasized the importance of enhancing the cooperation and communication processes between the MAB networks as well as with other existing networks through a better use of information and communication technologies and through building strategic partnerships.

18. The Secretary referred to several major internal processes that would impact the future of the MAB Programme and the work of biosphere reserves. These included: the overall UN reform to meeting global targets; the UNESCO planning and programming processes such as the next Medium Term Strategy (C/5, 2008-2013) and the Biennial Programme and Budget (2008-2009) both to be adopted at the 34th General Conference in October-November 2007 as well as the ongoing Expert Panel Review of UNESCO's Natural Sciences, and Social and Human Sciences Programmes.

19. The Secretary recalled that the main priority for the natural science sector was water and ecosystems. Concerning the work on ecosystems, the Secretary reported on some key past events, including the International Conference on "The Future of Drylands", which was held in June 2006 in Tunisia; the Ecological Society of America event in January 2006 (Merida, Mexico); the International Conference on "Biodiversity: Science and Governance", which was held in Paris under the high patronage of Mr Jacques Chirac, President of the Republic of France in January 2005. He also mentioned the First Intergovernmental Meeting of GRASP, which was held in Kinshasa, Democratic Republic of the Congo, in September 2005.

20. Several planned and ongoing activities included the International Conference on Humid Tropical Ecosystems, which would be held in Kandy, Sri Lanka in December 2006. The Secretary informed the Council that UNESCO would be hosting the twelfth session of CBD's Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) in July 2007, in preparation of the next Conference of the Parties (COP 9) of the CBD (Convention on Biological Diversity). Co-operation with SCOPE was also mentioned with the publication of two policy briefs, as well as on-going co-operation with UNU and ICSU (International Council for Science), particularly with regard to the follow-up of the Millennium Ecosystem Assessment (MA) findings and recommendations.

21. As regards biosphere reserves, the Secretary mentioned new Member States participating in WNBR, such as the Federated States of Micronesia, Lebanon, Palau and Turkey. He mentioned the circular letter sent to all MAB National Committees in order to highlight experiences and activities related to using biosphere reserves as learning laboratories during the DESD, with targeted partnerships and with strong support by the countries. He highlighted the need for biosphere reserves to become sites for generating knowledge through evidence-based research under different contexts, linking science, conservation and development.

22. Concerning capacity building, the Secretary highlighted the work implemented in Africa, with special relationships with NEPAD (New Partnership for Africa's Development), COMIFAC (*Commission des forêts d'Afrique centrale* – Commission in charge of Central Africa Forests) and RAPAC (*Réseau des aires protégées d'Afrique centrale* – Network of Central African Protected Areas). In particular, he highlighted the work of the Regional Postgraduate School on Integrated Management of Tropical Forests and Territories (ERAIFT) in Kinshasa (Democratic Republic of the Congo) as well as the possibility of adapting and transferring the ERAIFT experience to other sub-regions of Africa and regions of the world. He mentioned the UNEP-GEF regional project for six West African biosphere reserves and the establishment of the UNESCO Chair on South-South Co-operation for Sustainable Development at the University of Belém, Brazil.

23. The Secretary highlighted some emerging initiatives on climate change, bio-fuels and land-use change implications which had been discussed during a Forum held in Paris in March 2006 and the Seminar on related themes held in Trieste, Italy in October 2006. New partnerships included activities on landscape level planning in cooperation with ICMM, the World Business Council for Sustainable Development (WBCSD) and IUCN. He informed the Council about a

MAB/IOC initiative on spatial planning in coastal and marine ecosystems, with a meeting to be held in November 2007 and reported on the “Humanity and the Biosphere” Seminar, which had been held in September 2006 in Paris and on opportunities to follow up on the seminar outcomes during the International Year of Planet Earth (2008). Ethics had been raised as a crucial issue during the seminar outcomes for future discussions on conservation-development relationships.

24. Finally, the Secretary concluded by pointing out that for the last two years there had been many internal changes in UNESCO and that the importance of MAB was acknowledged. Still, more challenges were ahead within the context of the panel review of the sciences sectors, the preparation of the C/4 and C/5 and other associated processes. He indicated that 2008-2013 would be a crucial period for better rationalizing the programme structure, regional and thematic networks as well as the working methods and modalities, and cooperating with organizations and institutions for mutual benefits and generating direct and tangible benefits to Member States.

25. During the short debate that took place, the following issues were raised:

- The need for increasing the visibility and the efficiency of WNBR, as well as increasing commitments and support from the governments;
- The need to strengthen the role of biosphere reserves in linking conservation and development under different contexts and using them as interdisciplinary and intersectoral opportunities for sustainable development and not regard development initiatives as threats, and the possibility to elaborate guidelines at national, sub-regional and regional levels.
- The importance of building dialogue and coordination among the different institutions in a country dealing with conservation, development and research issues, taking into account institutional changes since the creation of the MAB Programme, such as the creation of ministries for environment and creating opportunities for building bridges with decision-makers;
- The importance of using ERAIFT as a model for other regions of the MAB Programme;
- The importance of integrated studies to address the issues related to marine and coastal ecosystems and the management of marine areas;
- The need for building capacity for information systems and for periodic review processes and the importance of regional partnerships;
- The need to explore organization of forums dedicated to the future of humanity-biosphere relations.

6. PRESENTATION OF NATIONAL REPORTS AND REGIONAL NETWORKS

6.1 National reports

26. A number of Council Members presented written or oral reports on major activities carried out since the eighteenth session of the MAB Council: Austria, Belarus, Chile, Cuba, Democratic People’s Republic of Korea, Denmark, Israel, Mexico, Philippines, Republic of Korea, Russian Federation, Sri Lanka, Sudan, Sweden, United Kingdom of Great Britain and Northern Ireland, United Republic of Tanzania and Viet Nam. The following observers also presented national

reports: Argentina, Brazil, China, Costa Rica, Egypt, Finland, France, Portugal, Slovakia, Spain and Turkey. All written national reports would be available on the MABNet at: <http://www.unesco.org/mab/icc/icc19th.shtml>.

27. A number of delegates raised the following issues:

- The increasing importance of transboundary cooperation, including TBRs in WNBR. Several countries reported on ongoing and planned transboundary cooperation, through thematic networks and ecological corridors and networks, as well as regional workshops. Many countries reported on ongoing initiatives for creating TBRs (Belarus, Chile, Costa Rica, Finland, Portugal, Russian Federation and Sudan);
- The need to increase the role of biosphere reserves as tools for coping and adapting to changes, including climate and socio-economic changes, as well as learning laboratories for implementing the ecosystem approach;
- The increasing importance of urban and peri-urban issues, as well as landscape planning for biosphere reserves, including in agricultural areas;
- The importance of finding ways to increase the commitments of governments in supporting biosphere reserves. Several countries mentioned the need to secure initial funding as well as to increase the visibility and the sharing of their added value as education and demonstration sites for sustainable development;
- The relevance of biosphere reserves concerning education for sustainable development, including UNESCO and Ecotechnie Chairs and the need to explore linkages with the Millennium Development Goals (MDGs), such as MDG 2 that focuses on the universal education target;
- The complementarity of the World Heritage Sites, Biosphere Reserves and Ramsar sites and the need to better foster cooperation between these tools at the international level;
- The opportunity of using the celebration of the 2008 Polar Year to raise environmental awareness on climate changes and to use concerned biosphere reserves as learning sites;
- The importance of networking and sharing experience through regional networks, countries, site-visit exchanges, South-South cooperation and translation of key information and educational documents such as the desertification education kit.

28. The Secretary highlighted the rich variety of the activities reported and raised the following issues to be further discussed in the framework of the panels on biosphere reserves, scheduled to take place on Wednesday 25 October 2006:

- a) How to better share the information provided by ICC Members and observers with other UNESCO key institutional stakeholders such as National Commissions and delegates at the Executive Board sessions?
- b) How to enhance and improve cooperation with ministries, institutions, MAB National Committees, local authorities and stakeholders in charge of conservation and development issues and meet the integration challenge?

Special session with the Minister of Environment of the Kingdom of Spain, the Director-General of UNESCO and the President of the General Conference

29. A special session was held in the presence of Ms Cristina Narbona Ruiz, Minister of Environment of the Kingdom of Spain, Mr Koïchiro Matsuura, Director-General of UNESCO and Mr Musa Bin Jaafar Bin Hassan, President of the General Conference of UNESCO. After welcoming words from the Chair of the MAB International Coordinating Council, the President of the General Conference delivered an introductory address to the council.

30. Mr Musa Bin Jaafar Bin Hassan thanked the MAB Secretariat for having invited him to open this session and to participate in the 19th session of the MAB Council and addressed his warmest welcome to the Council delegates. He highlighted the challenges of sustainable development and the need to implement better practices, with minimal costs for preserving the environment. He recalled the Millennium Ecosystem Assessment (MA), which highlighted biodiversity erosion, and the irreversible effects and impacts of climate change on ecosystems and resources such as freshwater, fisheries and forests, and on fauna and flora species.

31. The President of the General Conference stressed that there was still time to act, resources to preserve and to sustainably use, that sufficient knowledge was available and what was needed was political will and commitment. He also acknowledged the work and long-time relationships of UNESCO with the environment agenda, especially as regards prevention of pollution and ecosystem management. He recalled the commitment of his country, the Sultanate of Oman, to environmental preservation, with the creation of the Sultan Qaboos Prize for Environmental Preservation thanks to the generous donation of his Majesty Sultan Qaboos Bin Said Al-Said. The first prize was awarded in 1991 during the General Conference. The President of the General Conference informed the Council of the recent decision of his Majesty to increase the prize value from US\$20,000 to US\$30,000.

32. He concluded by expressing his confidence in the fact that the MAB Programme and its WNBR would contribute to analyzing the conditions for implementing sustainable development and that the Council discussions would ensure sharing of knowledge for building a dialogue and facilitating decision-making processes for biodiversity management and conservation.

33. Mr Koïchiro Matsuura, Director-General of UNESCO, began his address to the Council by paying tribute to Spain's active and longstanding support of the MAB Programme, in particular through the work of the IberoMAB Network of biosphere reserves. He indicated that many things were to be learned from Spain's experience.

34. The Director-General expressed his thanks to all the participants and observers in the meeting. He indicated that such widespread participation gave testimony to the continued importance of the MAB Programme 35 years after its creation. He recalled that there were now 482 biosphere reserves worldwide in 102 countries and that 29 nominations had been received this year for the Bureau's examination, and that these figures were eloquent of the MAB Programme's success. He highlighted its innovative approach since its launch in 1971, promoting interdisciplinary and integrated management of natural ecosystems, and indicated that such an approach had anticipated much of the current thinking on sustainable development.

35. He acknowledged the role of UNESCO's biosphere reserves in establishing linkages between conservation and development, between science and policy, and between cultural and biological diversity, and that this integration was essential to achieving human and environmental sustainability. The 1995 Seville World Congress on Biosphere Reserves and the

Seville Strategy for Biosphere Reserves, adopted by UNESCO's General Conference had recognized the biosphere reserves as ideal laboratories for sustainable development.

36. The Director-General stressed that the challenge for the MAB Programme was now to look to the future, based on experience accumulated, with a need to focus in order to maximize the programme's contribution toward achieving international development goals, in particular the MDGs.

37. He indicated that the nineteenth session of the Council came at a crucial moment to reach such global targets and also within UNESCO's own strategic calendar. He informed the Delegates that the Organization was presently engaged in a major review of its programmes in the Natural and Social and Human sciences and that it was also at the beginning of drafting its medium-term strategy for 2008-2013, as well as its biennial programme and budget for 2008-2009.

38. He then highlighted three further themes to be of particular importance to the future of the MAB programme.

39. The first regarded the knowledge built up through the work of the MAB Programme on a wide variety of ecosystems: islands and coastal areas, mountains, wetlands, urban systems, tropical forests and drylands. This knowledge should serve to provide effective responses to global challenges, including the mitigation of and adaptation to climate change, and the achievement of environmental sustainability.

40. The Director-General then indicated the role of biosphere reserves as key learning- and training sites for the UNDESD, in making a special contribution to raising awareness of the youth to issues of sustainable development and in building scientific capacity in higher education. He mentioned UNESCO's cooperative arrangement being developed with the Stockholm University from Sweden on ecosystem management for human well being, using biosphere reserves as pilot and demonstration sites for the next twelve years. He mentioned the importance of ERAIFT in Kinshasa as a centre for building scientific capacity in the sustainable management of tropical forests.

41. Finally, he stressed the role of the MAB regional and sub-regional networks as powerful tools for South-South and triangular North-South-South cooperation as well as the involvement of UNESCO in the NEPAD Environment Initiative.

42. The Director-General concluded by emphasizing the important role of the Council in providing strategic orientation in order to maintain the MAB Programme on the front line of sustainable development.

43. The Chair of the Council then gave the floor to the Minister of Environment, Ms Cristina Narbona Ruiz of the Kingdom of Spain.

44. Ms Narbona started her address by congratulating Sweden on its election as Chair of the MAB Council, as well as Chile, Ethiopia, the Russian Federation, Sudan and Viet Nam for their elections as Vice-Chairs.

45. Ms Narbona informed the Council of the Spanish Government's commitment in contributing to the UN peace and progress challenges, and to sustainable development. She indicated that sustainable development needed to involve more citizens, provide growth as well as fairness and equity. She stressed that it had to be based on knowledge and the recognition of

interactions between human beings and the biosphere. She indicated that WNBR, recognized at the UN level, was a unique laboratory at the international level to demonstrate that sustainable development was not utopia but feasible, and urgently needed. Combating poverty and social inequalities, and halting ecosystem degradation should be both main targets, to be attained in using existing scientific knowledge and available technologies.

46. Ms Narbona stressed the importance of biosphere reserves as living examples of the integration of conservation and diversity, and for increasing environmental awareness of citizens. In this regard, she mentioned the commitment of Spain to the Aarhus Convention, as well as several initiatives for holding institutions damaging the environment responsible for their acts.

47. Ms Narbona indicated that the Spanish network of biosphere reserve was representing 8% of WNBR and that several proposals were being examined, as well as a TBR proposal with Morocco. She reported on the recent congress of Spanish biosphere reserves in the Canary Islands, which had put tools in place for assessing the efficiency of the sites in achieving their objectives and assessing good governance.

48. Finally she recalled the international commitment of Spain, notably through the IberoMAB network and informed the Council that Spain was offering to host the Third World Congress of Biosphere Reserves, to be held in Madrid in 2008 as well as the 20th session of the MAB Council. This congress would evaluate the work undertaken since 1995 and suggest new perspectives and tools.

49. Several members of the Council welcomed the Minister's offer to host the Third World Congress on Biosphere Reserves and the 20th session of the MAB-ICC in Madrid in 2008, and expressed their gratitude for Spain's proposal and strongly supported this initiative.

50. The Secretary of the MAB Programme thanked Ms Cristina Narbona for her strong support to the MAB Programme and WNBR, and for her generous offer to host the Third World Congress on Biosphere Reserves. He also thanked the Director-General and President of the General Conference for their commitment and support to the MAB Programme. He indicated that 2008 would be the first year of UNESCO's Medium Term Strategy for 2008-2013 as well as the International Year of Planet Earth. Hence an International Conference on Biosphere Reserves in early 2008 would be an apt way to launch both these important UNESCO commitments. He stressed that the recommendations of the panels on biosphere reserves would contribute to structuring the World Congress agenda. He ended by reiterating the strong willingness of the Secretariat to strengthen the role of biosphere reserves as learning laboratories for sustainable development.

51. A video on Spanish biosphere reserves was shown to the audience, and the Chair closed the session.

6.2. Regional networks

52. Several delegates reported on regional networks namely AfriMAB, ArabMAB, EABRN and IberoMAB. The importance of regional meetings which had proven very helpful for sharing experience, practices, and ideas on ecosystem and thematic issues, including periodic review processes, legal and institutional aspects, conflict management, community involvement, ecotourism and quality economies was highlighted. These meetings had brought together researchers, MAB National Committees as well as biosphere reserve managers and stakeholders

of the civil society. The delegates also mentioned a large number of publications, including atlases, maps, and audiovisual materials, that had been produced.

53. The regional network reports are found in the MABNet at the following address: <http://www.unesco.org/mab/icc/icc19th.shtml>

8. MAB ECOSYSTEM THEMES

54. The MAB Secretariat introduced document SC-06/CONF.202/5, which provided information on progress achieved with regard to MAB ecosystem themes since the eighteenth session of the MAB-ICC.

8.1 Mountains

55. The Council took note of the accomplishments of the project “Global Change in Mountain Regions” (GLOCHAMORE), which lasted from November 2003 to October 2005 thanks to funding provided by the European Commission, UNESCO's MAB and IHP Programmes and the Mountain Research Initiative (MRI). Five (5) international workshops had been held in Austria, Italy, Spain and Switzerland as well as a large international scientific conference in Perth (United Kingdom) in October 2005. Using about 25 mountain biosphere reserves in all world regions as testing sites, biosphere reserve managers and scientists worked out the *GLOCHAMORE Research Strategy* (available in hard copy as well as in PDF format at <http://www.unesco.org/mab/ecosyst/mountains/gcmbr.shtml>) to study and monitor the impact of global change on mountain environments and on the socio-economic conditions of mountain dwellers. The scientific conference had adopted the *Perth Declaration* which stated the expressed wish of mountain biosphere reserve managers and the scientific community to continue collaboration on global change issues focusing on monitoring, process studies and modeling, thus providing scientific advice to biosphere reserve managers on issues such as species composition and diversity, glaciers, regional climate, land use and land cover, freshwater, hazards, grazing, tourism, conflict mitigation and governance in the light of global change.

56. The MAB Council strongly endorsed the continuation of GLOCHAMORE into a second phase that would foster in particular a regional approach to test the GLOCHAMORE Research Strategy at the site-level of biosphere reserves and which would focus on adaptation strategies to cope with global change in the more distant future. Delegates from Egypt and Canada suggested including also study sites that were not yet biosphere reserves (e.g. Saint Catherine in Egypt, and arctic/tundra sites in the Yukon and Alaskan areas) in order to further expand the geographical scope of GLOCHAMORE.

57. The MAB Council took note of the results of the international symposium on "Cultural and Biological Diversity - The Role of Sacred Natural Sites and Cultural Landscapes" that was organized by UNESCO in Tokyo (Japan) from 30 May to 2 June 2005 in collaboration with UNU, FAO, CBD, UNPFII (United Nations Permanent Forum on Indigenous Issues) and IUCN. The symposium's “Tokyo Declaration” invited international organizations to continue collaboration for safeguarding biological and cultural diversity contained in sacred natural sites and cultural landscapes, and invited governments and protected area managers to consider the UNESCO/IUCN working guidelines for the conservation and management of sacred natural sites. The Council also took note that studies on this theme would continue and that a future international workshop might take place, possibly at the time of the World Heritage Committee meeting scheduled for 2007 in New Zealand.

8.2 Drylands

58. The Council welcomed progress achieved within the UNESCO/MAB-UNEP/GEF Regional Project entitled “Building Scientific and Technical Capacity for Effective Management and Sustainable Use of Biodiversity in Dryland Biosphere Reserves in West Africa”, which had started in July 2004 for a four year-period. The six countries involved were carrying out applied research, capacity building and conflict prevention training activities in the six participating biosphere reserves (Pendjari (Bénin), Mare aux Hippopotames (Burkina Faso), Comoé (Côte d’Ivoire), Boucle du Baoulé (Mali), “W” (Niger) and Niokolo Koba (Senegal). Twelve Ph.D. and sixteen Master students had been recruited to study interactions between human uses and biodiversity in the six biosphere reserves, based on demonstration sites on sustainable use activities in each country.

59. The Council was pleased to note that the MAB Secretariat had continued its efforts concerning environmental education on drylands. The UNESCO/UNCCD "Education Kit on Desertification" now existed in nine language versions. In addition, the MAB Secretariat was working on a new "Teaching Resource Kit for Dryland Countries" thanks to funding provided by the Flemish Government of Belgium. A delegate of Egypt volunteered to translate the new kit into Arabic and to collaborate with the UNESCO-MAB Secretariat in testing and implementing the kit in Egyptian communities.

60. The Council also welcomed progress achieved in the implementation of the inter-regional project “Sustainable Management of Marginal Drylands (SUMAMAD)” that promoted scientific collaboration among nine countries on dryland management (Belgium, China, Egypt, Islamic Republic of Iran, Jordan, Pakistan, Syria, Tunisia and Uzbekistan). Sponsored by the Flemish Government of Belgium, UNESCO, UNU, ICARDA and the Chinese Academy of Sciences, the research project comprised several dryland biosphere reserves and study sites of research institutions.

61. The MAB Council appreciated the efforts of the UNESCO-MAB Secretariat for having led and organized the international scientific conference on “The Future of Drylands” in collaboration with the Tunisian Government, which was held in Tunis from 19 to 21 June 2006 within the framework of the 2006 International Year of Deserts and Desertification. Sponsored by 20 different organizations, the conference had assembled over 400 participants from all world regions. Conference participants had adopted a “Declaration on Research Priorities to Promote Sustainable Development in Drylands” (the *Tunis Declaration*) which *inter alia* called upon governments and multilateral environmental agreements (MEA) to use sound scientific knowledge to formulate and implement policies, laws, regulations and action programmes vis-à-vis environmental issues stressing integrated management of natural resources and conservation practices, and which requested the scientific community to ensure that its findings were made available and understandable to decision-makers and local dryland communities so that research could help to shape sound policies and good governance as well as education on an interactive basis for sustainable dryland management and improved livelihoods.

62. The conference identified the following themes as priority issues in drylands research:

- Interdependence and conservation of cultural and biological diversity;
- Integrated management of water resources in the context of a looming water crisis;
- Assessing and forecasting dryland ecosystem dynamics in order to formulate adaptation strategies in the context of global change and to alleviate poverty so as to achieve the MDGs;

- Agriculture and pastoralism as opportunities for sustainable land use;
- Coping with and management of natural and man-made disasters;
- Formulating and implementing scenarios and policy options for good governance in the context of global change;
- Identifying viable dryland livelihoods and policy options for the benefit of dryland dwellers (such as ecotourism);
- Educating for sustainable development and knowledge sharing;
- Reversing environmental degradation and promoting rehabilitation;
- Costs related to *inaction* in the field of land degradation;
- Renewable energies suitable for dryland development;
- Evaluation of dryland ecosystem services and their trade-offs.

63. The MAB Council members decided that MAB continue its dryland and desertification studies, by including also steppe areas such as occurring in the Eurasian steppe region. Moreover, the Council felt that MAB should also address policy-relevant questions such as the interrelated complex issue of poverty-desertification-migration in collaboration with the United Nations Convention to Combat Desertification (UNCCD).

8.3 Wetlands

64. The Secretary provided up-to-date information on the Japanese Funds-in-Trust for Capacity Building of Human Resources Project for Establishing the West Polesie Transboundary Biosphere Reserve and a Regional Ecological Network in Polesie between Belarus, Poland and Ukraine. This project had started in May 2006 and should end in April 2008. The TBR would be established by consolidating the three following biosphere reserves: Pribushskove Polesie Biosphere Reserve (Belarus), West Polesie Biosphere Reserve (Poland) and Shatskyi Biosphere Reserve (Ukraine). The establishment of the ecological corridor in the Polesie sub-region would be achieved with other ongoing UNDP/GEF projects in the region.

65. The Delegate from Belarus indicated that the project was the result of five years' cooperation between the three countries. She thanked the Secretariat for its support in the initial phase of the process and welcomed its continuous assistance until the project would become operational.

66. The Delegate from the Russian Federation commended the project, at the same time emphasizing the importance of conserving East Polesie, which included the Russian Federation. He also expressed his support for the proposal by the Czech Republic to hold an international course on ecohydrological approaches for the wise use, restoration, management and conservation of wetlands. The representatives of France, Egypt and China also commented on activities being conducted in their respective countries or regions on wetlands.

8.4 Marine and Coastal

67. The Secretariat introduced the agenda sub-item and the related documents on marine and coastal biosphere reserves (SC-06/CONF.202/INF.8)

68. The Republic of Korea mentioned Jeju Province-UNESCO Fund-in-Trust project - "the Jeju Initiative" - for promoting the nomination of marine and coastal biosphere reserves in the South-East/Pacific Asian region, which encompassed issues related to quality economies, reinforcement of the institutional and individual capacities of local governments and non-governmental organizations, follow-up to relevant initiatives undertaken under ASPACO, as

well as the provision of useful case studies to be made available to the rest of WNBR. The Delegate of the Republic of Korea also made reference to the Marine Peace Park initiative that was initiated by the Maritime Institute of his country. This initiative can contribute to building international cooperation between in marine ecosystems of the Korean peninsula for the conservation and sustainable development of biological resources. This transboundary initiative of great potential and importance for the sustainable livelihoods of local communities inhabiting the area (which is an important fishing ground) would be pursued on the basis of a plan developed by an International Advisory Committee, in which UNESCO was taking part.

69. The Council noted that coordination among marine and coastal biosphere reserves was crucial to the success of the MAB Programme and that current cooperation among such biosphere reserves was not efficient enough. The Council noted the importance for coordination among marine and coastal biosphere reserves to be associated with relevant networks of marine research stations, building upon, but also going beyond, the successful experience of cooperation between the EuroMAB network and MARS, and also to establish linkages with networks such as the network of North America Marine Laboratories (NAML), in the Pacific and in other regions, in cooperation with appropriate partners such as IOC.

70. The Council asked the MAB Bureau and the Secretariat to work out a mechanism to ensure better coordination among marine biosphere reserves and networks of marine research stations.

71. The Secretariat presented the work being accomplished in relation with the 2nd edition of the *World Atlas of Mangroves*, which was being prepared as a joint initiative of FAO, ISME (International Society for Mangrove Ecosystems, ITTO (International Tropical Timber Organization), UNESCO-MAB, UNEP-WCMC (United Nations Environment Programme-World Conservation Monitoring Centre) and UNU-INWEH (International Network on Water, Environment and Health) and was expected to be published in late 2007.

72. A brief presentation was given by the secretariat on the ROPME Sea Area-Transboundary Diagnostic Analysis (TDA) Regional Planning and Co-ordination Workshop Tehran and Ramsar, Islamic Republic of Iran, 2-6 May 2005, which had been jointly organized by the Regional Organization for the Protection of the Marine Environment (ROPME) in Kuwait, the Iranian National Centre for Oceanography (INCO) in Tehran, the Senckenberg Research Institute (SRI), Frankfurt am Main, Germany, and UNESCO.

73. The Secretariat gave also a brief presentation on the “New Biosphere Reserves in the Pacific”, such as in the Federated States of Micronesia (FSM) and Palau, as well as on ongoing projects again in FSM, Papua New Guinea, Samoa and Tonga. All these nominations were the direct outcome of the ASPACO project, financed by the Government of Japan, and implemented by MAB between 2001 and 2004. Delegates welcomed particularly the results of ASPACO and encouraged the Secretariat to seek additional funding for ASPACO.

8.5 Tropical Forests

74. The Secretariat reported to the Council about two international meetings that had been announced at the 18th session of the Council and had taken place in 2004 and 2005 respectively as MAB activities in the field of tropical forests. They were the “International Symposium on Tropical Forests in a Changing Global Context”, organized by UNESCO-MAB and the *Académie Royale des Sciences d’Outre-Mer* (ARSOM), held in Brussels (Belgium) from 8-9 November 2004, and the “First Intergovernmental Meeting on Great Apes and the Great Apes

Survival Project (GRASP)”, held in Kinshasa (Democratic Republic of the Congo) from 5 to 9 September 2005. The participants in the Kinshasa meeting had adopted several key documents, including the Kinshasa Declaration on Great Apes and GRASP. The publications of the two international meetings were available in hard copy and on CD-ROM as well as on the Internet. The Secretariat then informed the Council about the “International Conference on Humid Tropical Ecosystems: Changes, Challenges and Opportunities”, organized by UNESCO in conjunction with the National Science Foundation and the National MAB Committee of Sri Lanka, to be held in Kandy (Sri Lanka) from 4 to 9 December 2006.

75. The Council took note of the activities carried out by the Secretariat since its last session in the field of tropical forests. Several delegates, in particular those from Costa Rica, Egypt, Madagascar, Philippines, United Kingdom and Sri Lanka, welcomed the holding in Sri Lanka of the International Conference on Humid Tropical Ecosystems and gave some directives on how to raise the profile of MAB, in particular in the framework of emerging initiatives (climate change and carbon sequestration) which should be capitalized as a new UNESCO-MAB programme on tropical forests using biosphere reserves, including TBRs, as pilot and demonstration sites. The Council gave its backing to the holding of the conference with the aim of strengthening the Secretariat’s work on humid tropics during UNESCO’s Medium-Term Strategy (2008-2013). The issue of defining tropical forests was raised by the Delegate from Egypt who stressed the importance of the management of dry tropical forests, particularly for combating desertification.

8.6 Urban

76. In addressing urban ecosystem issues, the Council referred to paragraphs 43-50 of document SC-06/CONF.202/5. The Secretariat reported on progress on a several issues, such as the application of the biosphere reserve concept to urban areas, urban biodiversity conservation and the integration of aquatic habitats in urban water management and associated partnerships with other UNESCO Programmes, NGOs and city administrations. The Chair of the MAB Urban Group, Ms Mirilia Bonnes (Italy), outlined the main recommendations of the MAB Urban Group concerning criteria for urban biosphere reserves contained in document SC-06/CONF.202/INF.6. She stressed that the group felt that it would be difficult to adopt biosphere reserve criteria outside the Seville Strategy, and that it could be beneficial to pursue work to update the Strategy and the Statutory Framework of WNBR to include criteria and implementation indicators for urban areas as biosphere reserves. In introducing document SC-06/CONF.202/INF.7, the Secretariat representative of the UNESCO Office in New York, emphasized the emerging opportunities for collaboration on urban policy and research between MAB and the Stockholm MISTRA Institute. She identified several avenues for cooperation, including with cities, around the world, interested in urban biosphere applications and sustainability.

77. In the rich discussion that followed, Egypt expressed satisfaction with Ms Mirilia Bonnes’s continued support to the programme and MAB’s strongly revived interest in urban issues, the origins of which dated back to the early days of the programme. Germany and Costa Rica inquired about opportunities for cities to join in networking efforts. Belarus was interested in the availability of guidelines targeting cities of different sizes. France stressed the need for effectively engaging with mayors, city administrations and local city stakeholders, as called for in the biosphere reserve concept. In response to the comments and the questions raised, the MAB Urban Group Chair and the UNESCO Secretariat stressed that cooperation was open to all interested cities and MAB Committees. On the issue of urban biosphere reserve guidelines, it was suggested that it would be difficult to produce tailor-made texts targeting urban areas

according to their sizes. The representative of Sweden and the Kristianstad Vattenrike Biosphere Reserve then recalled that they had had interesting experiences in applying the biosphere reserve concept in partnership with the city of Kristianstad with a population of some 30,000 inhabitants -- experiences that they would be pleased to share with all interested partners.

78. The Chair summed up the discussion, emphasizing the need, in line with the general MAB philosophy, to involve urban inhabitants and decision makers also when MAB engages in urban issues. He concluded the item by suggesting that the 2008 Congress in Madrid would constitute a good opportunity to move MAB's urban agenda forward.

7. WORLD NETWORK OF BIOSPHERE RESERVES: PAST, PRESENT AND FUTURE

79. The Secretary introduced the document SC-06/CONF.202/4 on the World Network of Biosphere Reserves: past, present and future. He indicated that two items would be reported upon, namely the work on quality economies and the Michel Batisse Award, respectively. He gave an introduction to the three panels, which would be held later the same day (25 October 2006) with reference to information document SC-06/CONF.202/INF.4 and its addendum, presenting key issues for the future of biosphere reserves, names of chairs, speakers and panellists. He presented the objectives of the panels and suggested that each panel aim to provide three to five key issues that could guide the agenda of the Third World Congress of Biosphere Reserves to be held in Madrid in February 2008.

7.1 Quality Economies

80. On the issue of quality economies and biosphere reserve labelling, the Secretariat and the Chair of the MAB Task Force on the Development of Quality Economies in Biosphere Reserves (the Task Force), Mr Engelbert Ruoss, referred to work conducted since the last council session. Several national and regional workshops and seminars (e.g. in Brazil, Egypt, Morocco and Laos) had been held on quality economy topics, including bio-carbon sequestration, ecotourism and agriculture. National pilot studies on labelling and certification were also mentioned, as well as an ongoing Task Force study on these issues, called for by the MAB Bureau. In the discussion that followed, Council participants underlined the importance of the economic dimensions of biosphere reserves.

81. France referred to ongoing work on studies on voluntary charters for biosphere reserves open for signature by interested companies active in and around biosphere reserves that adhered to the philosophy of the Seville Strategy. In order to increase the value of biosphere reserve goods and services, the point was also made that it would be good if a clarification could be given as to the appropriate use of the affiliation of UNESCO to the sales of such goods and services. Chile was interested in learning more about quality economies and biosphere reserve labelling experiences and national pilot projects in other countries. The Philippines referred to the need for capacity building and the fact that socio-economic development in biosphere reserve could be a conflicting issue if local communities did not fully benefit from economic development and that it seemed most useful, citing the example of Spain, that the highest national authorities be supportive of biosphere reserves. Costa Rica commented that at times non-biosphere reserve areas seem to be more advanced than biosphere reserves in terms of labelling and certification. Egypt stressed that economic development was an important component of the biosphere reserve concept and that the Task Force was well placed to identify elements of a future work-programme on quality economies. The Council decided to extend the mandate of the Task Force for another four (4) years.

82. The Chair concluded the discussion saying that the topic of quality economies, including studies on national biosphere reserve charters, labelling and certification schemes, could be an interesting topic for the Madrid Congress in 2008.

7.2 Michel Batisse Award

83. The Secretariat informed the MAB Council that following the decision of the MAB-ICC Bureau (25-29 June 2005) on the setting up of a scheme in memory of Mr Michel Batisse, the Secretariat had sent a MAB Circular Letter (N° 7, October 2005) and received eleven case studies by 30 March 2006. In July 2006, during its meeting, the Advisory Committee for Biosphere Reserves had been invited to: a) provide criteria for selecting the winner, including criteria for demonstrating the integration of the three functions of a biosphere reserve, as well as b) recommend the first award winner for 2006 for consideration and approval by the MAB Bureau.

84. Based on the criteria proposed by the Advisory Committee, Ms Birgit Reutz-Hornsteiner from Austria had been recommended for the 2006 Award. This recommendation had been approved by the MAB Bureau members.

85. Ms Birgit Reutz-Hornsteiner presented her case study on “Taking the future in our own hands”... The Biosphere Reserve Grosses Walsertal in Austria – a living model of sustainable regional development with the participation of the local people – the first five years as a member in the worldwide MAB Network. Her presentation is available on the MABNET at the following address: <http://www.unesco.org/mab/bursaries/mb.shtml>. Then the Chair awarded Ms Birgit Reutz-Hornsteiner a certificate.

86. Mr Gonzalo Halffter paid a tribute to Professor Francesco Di Castri, who had passed away in January 2005. He recalled his professional background and experience, his move from Venice (Italy) to Chile as a professor of ecology, his contribution to major international conferences such as Stockholm as well as his key role in the initial planning and stages of implementation of the MAB Programme. He paid a tribute to both his professional and human qualities.

7.3 Panels

87. It was announced that the introduction papers and presentations for the panels were available at the following MABNET address: <http://www.unesco.org/mab/icc/icc19th.shtml>

88. *Panel 1: Biodiversity Conservation and Sustainable use*

The panel was composed of the following members:

Chair: Mr Clayton Ferreira Lino, MAB National Committee, Brazil

Speaker: Mr Sergio Guevara Sada, Instituto de Ecologia, Mexico

Panellists: Mr Nimal Gunatilake, MAB National Committee, Sri Lanka

Mme Yao-Yao Akissi, Permanent Delegation of Côte d’Ivoire to UNESCO

Mr Tom Gilbert, United States Biosphere Reserve Association, USA

Mr Sven-Erik Magnusson, Kristianstads Vattenrike Biosphere Reserve, Sweden.

89. The speaker focused his presentation on the connection existing between conservation of biodiversity and its sustainable use, and the role of biosphere reserves in this regard.

90. The main results of the MA were presented and the increased fragmentation of ecosystems was reported. The panellists indicated that the main challenges for biosphere reserves in the future consisted in dealing with fragmentation and connectivity issues. The need for activities related to rehabilitation and restoration of biodiversity was also mentioned. The importance of scientific assessments as the bases for proper delimitation of the core areas, and surrounding buffer zones and transition areas was highlighted. The challenge of how biosphere reserves can fully play their roles as demonstration sites for biodiversity conservation and at the same time meet the socio-economic progress and poverty-alleviation needs of their inhabitants was raised. The need to harmonize legislation and practices, in particular for TBRs, was also mentioned. Zonation and the importance of the appropriate links with relevant national authorities that are responsible for policy and decision making on land use, particularly in buffer zones and transition areas, were seen as critical for the effectiveness of biosphere reserves. Finally, the potential for biosphere reserves for enhancing our understanding of the linkages between ecosystem goods and services was presented as a prerequisite for addressing the gap between conservation thinking and practice. Activities related to the sustainable use of genetic resources were referred to as a possibility to contribute towards narrowing this gap.

91. In the discussion that followed, the members of the Council raised other key issues with regard to the theme of the session:

- 1) The efficiency of the current biosphere reserve monitoring programmes;
- 2) The potential of the MAB Programme in promoting the integration of new scientific tools and knowledge in biodiversity monitoring and management;
- 3) The possibility of new types of protected areas – archipelago reserves and ecological corridors taking into account not only alpha but also beta biodiversity;
- 4) The implementation of the ecosystem approach, particularly with regard to wetlands and migrating species habitats;
- 5) The degree to which the MAB Programme and its WNBR reflect the importance of the countryside and/or agricultural biodiversity;
- 6) Addressing issues in low biodiversity areas and their conservation, knowing that in these areas the loss of one or two key species can threaten the entire ecosystem.

92. Finally, the Chair summarized key points of the discussion as follows:

- Monitoring is very important to ensure sustainable use of biodiversity;
- Coordination with the Ramsar Convention, Convention on Migratory Species and other MEAs is imperative;
- The Ecosystem Approach as a basic strategy is crucial;
- Emphasis on conservation of biodiversity in low-biodiversity areas needs to be addressed;
- Re-thinking and re-interpretation of the biosphere reserve zonation must be supported;
- The significance of contributions of biosphere reserves to appropriate management of resources and ecosystem services needs promotion and demonstration.

93. *Panel 2: Socio-economic, human and institutional development*

The panel was composed of the following members:

Chair: Mr Julius Oszlanyi, MAB National Committee, Slovakia
 Speaker: Mr Nguyen Hoang, MAB National Committee, Viet Nam
 Panellists: Ms Boshra Salem, MAB National Committee, Egypt
 Mr Andrew Bell, MAB National Committee, United Kingdom
 Mr Jorg Bruker, MAB National Committee, Germany
 Mr Alfredo Reca, MAB National Committee, Argentina.

94. In his presentation, the speaker presented four complex issues, which the panellists clarified through discussion of practical examples based on the experience within their own national biosphere reserve networks.

95. **Can biosphere reserves be used as instruments for sustainable development?** All the participants stressed that biosphere reserves had considerable potential as instruments and models for sustainable development. The three functions should be integrated. Nevertheless, because of their influence at the local level, biosphere reserves could only assume their functions fully if backed by a sustainable development policy at the national level. The development function required a partnership between all public and private stakeholders in cooperation with local communities and for their benefit. Even in the absence of a resident population, the interaction between biodiversity and its uses should be included in the development function. A panellist mentioned that there was a trend towards placing greater emphasis on socio-economic criteria when designating biosphere reserves. Lastly, a number of specific examples showed that the application of the biosphere reserve concept made it possible to combat poverty and thus contribute to achieving the MDGs, including access to drinking water and giving due regard to gender issues in governance and management.

96. **Are there good ways to facilitate interactions between stakeholders at different levels?** A good approach would involve coordination and partnership among all the development and conservation sectors, through the use of dialogue. But it was often a difficult task to accomplish owing to the sectoralization of today's societies and government administrations and the specialization of experts, which prevented approaches from being interdisciplinary. For that, it was necessary to train biosphere reserve managers who would be more than simple guardians. It was also important for the populations concerned to understand that the application of the biosphere reserve concept was in their interest. It was suggested that it would be advantageous to implement a system whereby the various stakeholders would pay for ecosystem services.

97. **Is environmental pollution an unavoidable aspect of development? How can a solution be found to environmental pollution?** The answer to this question is on the positive side: when pollution cannot be avoided and the challenge is to minimize the impact, for example, by using the most appropriate advanced technologies in mining or other extractive industries, and to promote sustainable consumption and production. It is necessary to take a long-term view because negative consequences may emerge later on. It was proposed that methods be devised to measure the sustainability of development activities in transition and buffer zones.

98. **How can exchanges among biosphere reserves be used for human and institutional development within the framework of adaptive management?** Several suggestions were made on this point. Emphasis was laid, first of all, on the importance of networks and on the need for them to be strengthened and interlinked. To ensure that such exchanges are productive, however, they must be based on quantitative and qualitative data. In that regard, periodic examinations of biosphere reserves could be very useful, but it was necessary to develop indicators and gather information on reference states so that changes could be better gauged. The Secretary of MAB recalled that the Bureau had asked the Secretariat to implement a pilot project for that purpose.

99. *Panel 3: Science and knowledge networks for sustainable development*

The panel was composed of the following members:

Chair: Mr Günter Köck, Austrian Academy of Sciences, Austria

Speaker: Mr Thomas Elmqvist, MAB National Committee, Stockholm University, Sweden

Panellists: Mr Chung Il Choi, Dept. Earth and Marine Sciences, Republic of Korea

Mr Javier Diaz, Permanent Delegation of Costa-Rica to UNESCO

Mr Ruzika N. Muheto, National Environment Management Council, United Republic of Tanzania

Mr Jacques Weber, *Institut français de la biodiversité*, France

Ms Birgit Reutz-Horsteiner, the winner of M. Batisse Award (also invited to be a panellist).

100. The presentations and discussions covered the following key points:

- The results of MA and the relevance of MA to biosphere reserves. The knowledge and information obtained from MA, which is essentially about the loss of ecosystem services, should be used as a building block for linking science to management of biosphere reserves.
- It is essential that biosphere reserves be the platforms for mining, creating and transferring knowledge. Such knowledge should not only include scientific knowledge, but local and traditional knowledge that are not necessarily in scientific forms.
- To further science and knowledge for sustainable development, it was proposed that UNESCO take the lead to develop a global infrastructure based on biosphere reserves for an evidence-based approach for ecosystem management. To this end, UNESCO should work with institutions and programmes such as IGBP (International Geosphere-Biosphere Programme), IHDP (International Human Dimensions Programme), ICSU and *Diversitas*, as well as the Member States, and build on the achievement of MA. The infrastructure should also have strong linkages with local, national and regional bodies in the policy arena.
- It was also proposed that a framework for long-term ecological and social monitoring and research be established within MAB and WNBR so as to link biosphere reserves with other relevant scientific programmes and institutions such as LTER (Long Term Ecological Research) and the Stockholm Mistra Institute.
- The gaps and differences in visions between policy makers and scientists in many countries remain to be addressed, and communications between scientific communities and policy makers regarding sustainable development need to be enhanced.
- Networking, such as regional and sub-regional networks of MAB (EABRN, IberoMAB, AfriMAB, etc.) are good instruments for knowledge and information sharing, but more needs to be done to strengthen or to vitalize the networks.
- Genetics is a basic building block of biodiversity, but at present there is a lack of global shared information on genetic information and knowledge. Biosphere reserves have not demonstrated clear roles in generating knowledge regarding genetic resources. More cooperation should be explored within the framework of the commitment of States Parties to the CBD.
- A major challenge concerns communication of science at local, national and international levels. The message for conservation and its value/benefits to people and to societies must be made clear and visible, which is not always the case. Scientific

knowledge must be translated into narratives that can be digested by the public at large in order to involve the civil society for conservation.

- MAB must actively participate in the UNDESD and efforts are needed not only for schools but also for the general public and a range of target audiences. More teaching kits are needed and UNESCO should use biosphere reserves for biodiversity education.
- There is clear need for better documentation of scientific data in biosphere reserves especially in developing countries. Capacity building is therefore critical – use of ICT is important but need to take into account limiting conditions in many developing countries.
- The notion of biosphere reserves as learning laboratories for sustainable development should receive full support. In this undertaking, more attention is needed to the use of local and traditional knowledge, which is at times as critical as scientific knowledge and information. Codes of conduct for scientists should be established for the use of biosphere reserves as sustainable development laboratories. The already formulated consultation process of MAB with local communities and partners should be relevant and applied.
- With regard to private sector partnerships for biosphere reserve management ways and means for implicating commercial and industrial partners to long-term commitments benefiting future generations need to be worked out.
- Financial resources remain a major challenge for MAB and biosphere reserves. To address it, cooperation at international level should be put on both South-South and triangular (North-South-South) cooperation, and on building centres of excellence.
- Issues of capacity building in developing countries, public awareness on biosphere reserves, the value of evidence-based approach for ecosystem management, scientific data management and funding were addressed.

Panel reports and discussions

101. The major issues presented and discussed in each panel as well as main recommendations were reported by the Secretariat in plenary. The reports for each panel are available on the MABNET at the following address: <http://www.unesco.org/mab/icc/icc19th.shtml>

102. In discussing the three reports presented by the Secretariat, the following issues were raised: Several delegates emphasized the importance of biodiversity conservation, which is one of the main functions of the biosphere reserves, and felt that this priority had been overlooked during the panel discussions. The delegate from Mexico recommended that existing methodology for biodiversity monitoring and inventorying be shared at the international level with the biosphere reserve managers. He also indicated that there was a crucial need for assessing how biosphere reserves were effectively contributing to biological diversity conservation. The importance of the role of ecosystem rehabilitation for biosphere reserves was also mentioned as crucial. The Delegate from the Russian Federation stressed the importance to assess the contribution of biosphere reserves to biodiversity conservation, at the three levels: ecosystem, species and genetic resources, including potentials for bioprospecting, and the need to use the results of the Millennium Ecosystem Assessment. Several delegates also mentioned the contribution of biosphere reserves to global change as significant. Several members of the

Council indicated that biosphere reserves needed a global assessment. The numerous periodic review reports should be analyzed and synthesized, and the results shared.

103. Regarding Panel 2, the Delegate from Chile expressed his concern about the mention of the development function and suggested to refer to the Vision from Seville for the 21st Century in *The Seville Strategy & the Statutory Framework of the World Network* in order to avoid confusion.

104. The Delegate of Austria shared his country's experience about the development of national criteria for biosphere reserves and expressed its willingness to share these experiences. He also referred to one of the main outcomes of the EuroMAB meeting held in 2005 concerning biosphere reserves from the 'old generation' that mainly fulfilled the research function, and suggested to create a special category for them. The Delegate of the Czech Republic expressed reservation about this course of action while several delegates including UK, Federation of Russia and Israel supported the statement made by the Delegate of Austria for defining a new category for these sites, and stressed their significant scientific and monitoring values, and that it was important to maintain them in WNBR.

105. The delegate of UK suggested that a new name be found for these research-oriented sites in order not to lose the essence and added value of biosphere reserves as integrators of conservation, development and research.

106. The Delegate from Viet Nam expressed his satisfaction regarding the organization of the panels. He stressed that the main issue was how to transfer the key questions raised in the three panels into the design of an action plan for WNBR. He emphasized the need to establish efficient links between policy, science and practices and that in this regard the experience of the biosphere reserves should be better shared and transferred within the countries as a permanent learning process, which would contribute to increasing the efficiency of WNBR. The Delegate from Argentina indicated that the panels had provided ideas, but the majority of these were already known and contained in the *Seville Strategy and the Statutory Framework of the World Network of Biosphere Reserves*. He stressed the importance of having new ideas for WNBR, as well as some clear criteria for what is forbidden in the different zones/areas of a biosphere reserve, such as the building of a road in the core area. He also highlighted the need to better analyze the contribution and the role of local communities to the conservation of biodiversity.

107. Regarding Panel 3, the Delegate of Costa Rica asked for a more explicit reference to the essential need for South-South cooperation, which was mentioned during the discussions.

108. The Delegate from the United States of America expressed the need for better reporting the discussions and recommendations from the Council to the Permanent delegates of UNESCO and not only to scientists and other key actors who had been mentioned during the discussions. She also drew the attention to the fact that the Council's discussions and recommendations would be examined closely by the Permanent Delegates of UNESCO in the light of the results of the Science Sector review.

109. The Russian Federation delegate referred to the draft proposal for the World Map of Biosphere Reserves and suggested that the gaps be corrected by the countries, MAB National Committees and the Secretariat. He also expressed his hope that the Madrid Congress would be an opportunity for increasing the participation and cooperative work with the United States of America that had the highest number of sites participating in WNBR.

110. Several delegates, including UK and the Russian Federation, recommended paying special attention to effective cooperative links with the other UNESCO intergovernmental programmes.

111. The Secretary stressed the importance of practices and sharing these experiences as expressed by the delegate of Viet Nam, to complement science and policy for biodiversity conservation.

112. Following the debate, the Chair and the Secretary presented the following five-point action plan for discussion:

- a) Working methods and practices of the ICC in relation to the same of the Executive Board and the General Conference of UNESCO as a tool for improving science-policy practice within UNESCO's planning and programming agendas;
- b) Implications for each of the biosphere reserve zones contributing to conservation and development taking into consideration constraints and opportunities inherent in each zone;
- c) How can biosphere reserves be a learning platform for interactions between science, policy and practice in order to generate usable knowledge for sustainable development?
- d) How can the MAB and biosphere reserve regional, sub-regional and thematic networks be strengthened to become the main drivers of MAB and biosphere reserve agendas?
- e) What are the policy and political initiatives needed to articulate and confirm the niche of biosphere reserves as learning laboratories for sustainable development?

113. The five points were adopted for preparing the 3rd World Congress on Biosphere Reserves and the 20th session of the MAB-ICC, and the Council asked the MAB Bureau and the Secretariat to develop the programme described above, maintaining ongoing discussions with the Council.

7.4 Results of the MAB-ICC Bureau meeting

7.4.1. New biosphere reserves, extensions and changes in zonation of biosphere reserves

114 The Council took note that its Bureau had met on several occasions during its 19th session and had examined 35 proposals in total, of which 29 new proposals (21 from Mexico, and one from a country that submitted its first biosphere reserve nomination, i.e. the Sultanate of Oman), one nomination of a transboundary biosphere reserve (TBR), and five (5) revisions/extensions of existing biosphere reserves). The Council took note of the decisions and recommendations of the Bureau as follows.

Extension of Atoll de Taiaro Biosphere Reserve, France and change in name

115. The Bureau commended the French authorities on the high quality of the dossier, and approved the extension of the site with the new name of Commune de Fakarava Biosphere Reserve.

116. The Bureau noted with satisfaction that the periodic review process had led to substantive extension and revision of this biosphere reserve to encompass a group of seven atolls, many of which were inhabited. The new name proposed for the expanded biosphere reserve had been chosen by the local people. The Bureau noted with appreciation the strong participatory

approach during the review and revision, with local communities being heavily involved in designing the zonation of the biosphere reserve, which reflected the perceptions of its inhabitants and took into account local rules of access and use of resources. The Bureau also noted with satisfaction the existence of management plans, which resulted from these participatory processes, as well as the establishment of a locally based association to coordinate activities.

Extension of the Camargue Biosphere Reserve, France and change in name

117. The Bureau commended the French Authorities on the high quality of the dossier, and approved the extension of this site with the new name of the Réserve de biosphère de Camargue (delta du Rhône).

118. The Bureau noted with satisfaction that the periodic review process had led to the extension of the existing Camargue Biosphere Reserve into a larger site. It noted the complexity of the site with a great diversity of stakeholders, compound land ownership, multifarious uses, and the proximity to major urban areas. It recognized the role of the MAB National Committee in leading an effective consultation process, with the support of research scientists, which had helped to overcome some longstanding conflicts. The Bureau noted the broad range of stakeholders within the structures specifically developed for the implementation of the biosphere reserve, and encouraged these structures to consider sustainable development in a broad regional context, potentially beyond the boundaries of the transition zone as shown in the periodic review document.

Lake Chilwa Wetland, Malawi

119. The Bureau approved this site as a biosphere reserve. It noted that the site included important wetland ecosystems of Malawi. The Bureau encouraged further development of transboundary cooperation with the Mozambique authorities with a view to establishing a Lake Chilwa Wetland TBR covering this entire ecosystem.

Archipelago de Revillagigedo, Mexico

120. The Bureau recognized that this was a well-prepared nomination. However, the Bureau did not approve the proposed site as it could not meet the basic criterion of a biosphere reserve regarding sustainable development, due to the absence of permanent settlements. The Bureau recommended submitting this proposal for international recognition under other conservation instruments due to its significant biodiversity value.

Arrecife Alacranes, Mexico

121. The Bureau approved this site as a biosphere reserve. It commended the Mexican authorities on this well-prepared nomination, particularly as it underlined the relationship between island, sea and terrestrial activities.

Barranca de Metztilan, Mexico

122. The Bureau approved this site as a biosphere reserve and commended the Mexican authorities on this well-prepared nomination. It recommended that the Mexican authorities consider the feasibility of establishing an ecological corridor between the core areas.

Calakmul Biosphere Reserve, Mexico

123. The Bureau approved the extension of this biosphere reserve under its new name: Región de Calakmul Biosphere Reserve, particularly as it included more protected areas of the Yucatan Peninsula.

Chamela-Cuixmala, Mexico

124. The Bureau approved this site as a biosphere reserve. It welcomed this nomination, particularly as it underlined the relationship between island, sea and terrestrial activities. The Bureau recommended that the Mexican authorities consider surrounding the newly established island core areas at least partially by a transition area.

Cuatrociénagas, Mexico

125. The Bureau approved this site as a biosphere reserve. It welcomed this nomination, particularly as it included the protection of wetlands in dry areas.

Cumbres de Monterrey, Mexico

126. The Bureau approved this site as a biosphere reserve. It welcomed this nomination particularly for the protection of plant species of economic value and for its environmental services on ensuring the water supply for nearby urban areas. The Bureau encouraged the development of activities for the benefit of the local community.

Huatulco, Mexico

127. The Bureau approved this site as a biosphere reserve. The Bureau welcomed this nomination particularly for the protection of its terrestrial and marine resources and recommended that the Mexican authorities consider surrounding the whole core area with a buffer area to improve its protection.

Isla Guadalupe, Mexico

128. The Bureau welcomed this nomination but did not approve this site as a biosphere reserve as it recognized that the site could not meet the basic criterion of a biosphere reserve regarding sustainable development, due to the near absence of permanent settlements. The Bureau recommended submitting this proposal for international recognition under other conservation instruments due to its significant biodiversity value.

La Encrucijada, Mexico

129. The Bureau approved this site as a biosphere reserve. It noted in particular the protection of its lagoons, terrestrial and marine resources. It recommended that the Mexican authorities consider extending the transition area into the marine zone.

La Primavera, Mexico

130. The Bureau approved this site as a biosphere reserve. The Bureau welcomed this nomination, particularly for the protection of its dry forest ecosystems and for the participatory management of its buffer and transition areas. It also recommended that the Mexican authorities provide more precise information on the exact protected status of the core area.

La Sepultura, Mexico

131. The Bureau approved this site as a biosphere reserve. It welcomed this nomination, particularly for the importance of its biological resources and its high variety of forests and land-use systems.

Laguna Madre y Delta de Rio Bravo, Mexico

132. The Bureau approved this site as a biosphere reserve. It commended the Mexican authorities on the high quality of this proposal, and recommended that the authorities be encouraged to:

- develop a management plan and policy for the whole river basin;

- include the marine area in the biosphere reserve by extending the core and/or buffer areas to the sea;
- limit potentially harmful run-off from the inland river basin to the core areas.

Los Tuxtlas, Mexico

133. The Bureau approved this site as a biosphere reserve. The Bureau welcomed this nomination, particularly for the protection of its natural resources. It also encouraged the authorities to include the marine area into this site.

Maderas del Carmen, Coahuila, Mexico

134. The Bureau approved this site as a biosphere reserve. It welcomed this nomination, particularly for the protection of its high biodiversity. It recommended surrounding the buffer zone with a transition area. The Bureau recognized that this site was contiguous to the Big Bend National Park and Biosphere Reserve on the US side of the border and thus encouraged the ongoing transboundary co-operation.

Mariposa Monarca, Mexico

135. The Bureau approved this site as a biosphere reserve. It welcomed this nomination, particularly for the protection of its natural resources and the migratory Monarch butterfly. The Bureau recommended the Mexican authorities to increase co-operation with the Canadian and US authorities responsible for key sites in the Americas along the migratory routes.

Pantanos de Centla, Mexico

136. The Bureau approved this site as a biosphere reserve. It welcomed this nomination, particularly for the protection of its water resources resulting from millennial cultural practices. It recommended including the villages in the transition area of this site, and encouraged the collaboration with all the communities involved.

Selva El Ocote, Mexico

137. The Bureau approved this site as a biosphere reserve. The Bureau welcomed this nomination, particularly for the protection of its valuable natural resources and noted the high quality of the proposed nomination.

Sierra de Huautla, Mexico

138. The Bureau approved this site as a biosphere reserve. It welcomed this nomination, particularly for the aspects of local participation in its preparation and management, especially regarding the protection of its natural resources including a large number of endemic species.

Sistema Arrecifal Veracruzano, Mexico

139. The Bureau approved this site as a biosphere reserve. It welcomed this nomination, particularly for the protection of its coastal and island resources in the vicinity of the town of Veracruz. The Bureau encouraged the authorities to extend the transition area between the urban part and the traditional use area to the south.

Volcan Tacana, Mexico

140. The Bureau approved this site as a biosphere reserve. It welcomed this nomination, particularly for the aspects of local participation in the preparation and management aspects and for the protection of its natural resources. It underlined the importance of this biosphere reserve for the development of poor rural populations. Finally, it recognized the existence of a national park on the Guatemalan side, and suggested transboundary co-operation.

Ant Atoll, Federated States of Micronesia

141. The Bureau noted that the proposed Ant Atoll was the most biologically diverse and undisturbed area of the island of Pohnpei. However, the Bureau deferred this nomination, as the overall size of the proposed area was too small to fulfil the three functions of a biosphere reserve in terms of conservation, sustainable development and logistic support. The Bureau recommended that the Micronesian authorities consider an extension of the proposed biosphere reserve in collaboration with landowners and environmental NGOs, which could include additional coastal areas on Pohnpei Island and other atolls. UNESCO with its field offices and MAB experts from other island biosphere reserves could provide advice if the Micronesian authorities so wished.

Jebal Samhan, Oman

142. The Bureau welcomed the proposed nomination of Jebal Samhan as a biosphere reserve noting that it was the first nomination to be received from the Sultanate of Oman, and that it had considerable terrestrial and coastal biodiversity value. However, the Bureau deferred this nomination. It invited the Sultanate of Oman to resubmit the nomination with a revised and more thoroughly explained zonation map indicating the different biosphere reserve zones and reflecting regional ecosystem and resource management realities. In order to cover additional ecosystems of high conservation value, as well as additional human settlements, the revision could include extending the biosphere reserve outside the existing nature reserve, in particular to the South of Jebal Samhan. The Bureau also recommended that the Oman authorities foster additional engagement and involvement of local people and communities in the establishment and future management of the biosphere reserve. The Bureau recommended that UNESCO, through its Doha Office, assist Oman in the above-mentioned tasks, as appropriate.

Middle Volga Integrated Biosphere Reserve, Russian Federation

143. The Bureau approved this site as a biosphere reserve. It recognized that this site represented an “island of nature” formed by a loop of the Volga River within a major industrial zone. This was a new type of biosphere reserve nomination in the Russian Federation as, for the first time, it corresponded to a combined territory of a *zapovednik*, national park and some municipal areas. The Bureau welcomed this new urban biosphere reserve to the World Network.

Os Ancares, Spain

144. The Bureau approved this site as a biosphere reserve. It commended the Spanish authorities for this well-prepared and detailed nomination. It recognized the biogeographical importance of this site, particularly as it constituted an important complementary part of the existing biosphere reserve complex - Gran Reserva de la Biosfera de la Cordillera Cantábrica. The Bureau decided that this site be inscribed as the Os Ancares Biosphere Reserve unit of the Gran Cantábrica.

Los Ancares Leoneses, Spain

145. The Bureau approved this site as a biosphere reserve. It welcomed this nomination, particularly as the proposed site constituted an important complementary unit of the existing biosphere reserve complex - Gran Reserva de la Biosfera de la Cordillera Cantábrica. It decided that this site be inscribed at the Los Ancares Leoneses Biosphere Reserve unit of the Gran Cantábrica.

Las Sierras de Béjar y Francia, Spain

146. The Bureau approved this site as a biosphere reserve. It commended the Spanish authorities for this well-prepared and detailed nomination. The Bureau emphasized the richness

of the resources of the area and their important ecological and cultural values. It also underlined particular importance of this biosphere reserve for the revitalization of the rural economy.

Change of zonation of Danube Delta (Dunaisky) Biosphere Reserve, Ukraine

147. The Bureau recalled that this dossier had been examined by the MAB-ICC at its last session and by the Advisory Committee for Biosphere Reserves in 2005 and 2006. In summary, the Ukrainian government authorities had decided to re-zone the Dunaisky Biosphere Reserve to accommodate the construction of a controversial navigation canal in the Bystroe arm of the Delta. The Bureau recalled that the Advisory Committee was of the opinion that any significant change in the zonation of a biosphere reserve would have to follow the same procedure of a new nomination, i.e. to be considered by the Advisory Committee for recommendation and decision by the MAB International Coordinating Council, or its Bureau.

148. At its meeting in July 2006, the Advisory Committee had recognized that to date there had been no official reply from the Ukrainian authorities in response to the recommendations of the MAB-ICC and its Bureau. Therefore it had not been in a position to make any recommendation in relation to the international biosphere reserve criteria. However, the Bureau noted that the Permanent Delegation of Ukraine had verbally informed the Secretariat that, following a meeting of the Presidents of Romania and Ukraine in February 2006, a bilateral expert committee on environment and sustainable development was being established which could officially respond to the recommendations of the MAB Bureau and the ICC on this site.

149. The Bureau encouraged the Ukrainian authorities to pursue these efforts and to provide a response as early as possible to the recommendations as reiterated and updated by the Advisory Committee as follows:

- provide the official version of the zonation of this site;
- submit the results of the Environmental Impact Assessment of Phase 2 of the navigation canal project;
- provide a written statement of clarification on the status of the project;
- encourage cooperation in the framework of the Transboundary Biosphere Reserve with Romania, in particular to follow up on the recommendations of the International Conference on the Conservation and Sustainable Development of the Danube Delta, Odessa, Ukraine, 27 February-1 March 2006

Extension to the Shatskyi Biosphere Reserve, Ukraine

150. The Bureau welcomed and approved this extension, submitted in response to the recommendation made at the time of the approval of the Shatskyi Biosphere Reserve by the MAB Bureau in March 2002. The extensions to the transition area to the southwest to the international border with Poland and to the north to the international border with Belarus were proposed in order to form a more complete unit for future transboundary cooperation with existing biosphere reserves in neighbouring Belarus and Poland.

151. The Bureau also encouraged the Ukrainian authorities:

- to establish and implement the overall management plan in cooperation with the local actors;
- to continue cooperation with Poland and Belarus in the framework of the UNESCO extra-budgetary project on the establishment of the potential West Polesie TBR; and
- to inform the MAB Secretariat of any additional substantive changes in zonation in the future.

Kien Giang, Viet Nam

152. The Bureau approved this site as a biosphere reserve. It welcomed the resubmission of this site, which had already been considered by the Advisory Committee at its session in 2005. However, at the time the Advisory Committee had recommended deferral of the site, more information was needed on the specific conservation value of the overall area, the potential human impacts on the conservation and buffer zones, and the logistic function of the proposed biosphere reserve.

153. By letter of 2 April 2006, the Vietnamese MAB Committee had provided detailed responses to the queries raised by the Advisory Committee. The Bureau noted with satisfaction that the additional information enabled it to make a full appraisal of the proposed cluster biosphere reserve covering coastal and marine ecosystems, as well as islands, swamps, mangroves, coral reefs and primary tropical forest patches. The area is noted for its dugong habitats; its growing tourism has great potential for sustainable development in the light of ecotourism. The Bureau recommended that on-site scientific research be implemented to study the impacts of growing tourism on the conservation aspects of the site. Moreover, the Bureau encouraged the MAB National Committee of Viet Nam to embark on collaborative actions with neighbouring Cambodia, in particular as this site has great potential for transboundary collaboration.

Western Nghe An, Viet Nam

154. The Bureau noted that this proposed site was located in a mountainous terrain with a remarkably high biodiversity encompassing different vegetation zones. However, the Bureau deferred this nomination. It recommended that the MAB National Committee of Viet Nam consider revising and resubmitting the proposal in 2007 addressing the following points:

- aligning the size of the core areas with the legally protected areas as the core areas appear to cover also non-protected lands;
- ensuring that the northern core zone be surrounded by a buffer zone and a transition area;
- providing a larger scale map, which will also help to discern the rationale for the zonation pattern of the biosphere reserve;
- providing information on the location of the hydro-electric dam and informing if an environmental impact assessment has been carried out or being planned;
- submitting information on the forestry resources of the site, in particular the economic relationship and use of timber vs. non-timber products;
- outlining the main characteristics of the management plan of the site.

155. Moreover, the Bureau encouraged the MAB National Committee of Viet Nam to embark on consultations with the authorities of the Lao People's Democratic Republic with regard to forging transboundary collaboration.

Intercontinental Biosphere Reserve of the Mediterranean, Morocco/Spain

156. The Bureau approved this site as the first intercontinental biosphere reserve within WNBR. It commended the Moroccan and the Spanish authorities on taking up the new and ambitious challenge of establishing an intercontinental transboundary biosphere reserve, connected by a marine transition area. It recognized the logic of the proposal, with similarities in terms of geology, ecology and cultural heritage. The Bureau particularly welcomed the possibility of a transfer of Spain's wide biosphere reserve experience to Morocco with a view to improving livelihoods and diversifying the economic base of the Moroccan part. However, the Bureau requested the Moroccan and Spanish authorities to submit to the international MAB Secretariat in due course an official agreement signed by the highest appropriate central government authorities of the two countries regarding the TBR, covering interests in the terrestrial and the marine areas. The Bureau also took note that the existing biosphere reserves

in Spain, viz. Sierra de las Nieves y su Entorno, and Grazalema, would be subsumed into the Spanish part of the TBR, whereby the Sierra de las Nieves part would be administered under an autonomous regime within the large biosphere reserve complex.

7.4.2. World coverage of biosphere reserves

157. The Council noted that with these 25 additions including the first intercontinental biosphere reserve, the World Network of Biosphere Reserves (WNBR) now consisted of 507 sites in 102 countries.

7.4.3 Periodic Review

158. The Bureau examined the recommendations of the Advisory Committee for Biosphere Reserves at its meeting on 5-7 July 2006 concerning fourteen (14) biosphere reserves designated for a period of over ten years. The Bureau endorsed the recommendations as presented in Annex 3 of this report and requested that they be transmitted to the Member States concerned for follow-up.

7.4.4. MAB Young Scientists Awards

159. The Council took note of the MAB Young Scientist Award Laureates selected by the MAB Bureau for 2007 (as listed in Annex 4).

7.4.5. Research Grants to Young Scientists on Great Apes in Africa

160. The Council also took note of the laureates benefiting from the Young Scientist Research Grants on Great Apes in Africa selected by the MAB Bureau for 2007 (as listed in Annex 5).

7.4.6. Michel Batisse Award for Biosphere Reserve Management

161. The Bureau decided that the deadline for the submission of applications for the Michel Batisse Award for Biosphere Reserve Management be set two months before the next meeting of the Advisory Committee for Biosphere Reserves.

9. PARTNERSHIPS

162. The Secretariat introduced the document SC-06/CONF.202/6 and indicated that emphasis had been given to describe the types of partnerships rather than listing the institutions and other partners with which the Secretariat cooperated on a regular basis.

163. Some ICC Members stressed that partnerships should be reinforced at other levels than that of the MAB Secretariat, so as to expand the number of partners involved in the implementation of the MAB Programme and the approaches followed in executing such partnerships. For example, at the level of the MAB National Committees, special efforts should be made to link up with local partners such as foundations, National Commissions for UNESCO, regional offices, main sectors, governments.

164. SCOPE referred to the excellent ongoing cooperation with UNESCO-MAB.

165. In response to an observation made by the Delegate from the Russian Federation on the absence of several key partners, the Secretary provided some examples of activities being successfully implemented in cooperation with UNESCO programmes and MEAs such as CBD, Ramsar, as well as with IUCN and with other UNESCO Sectors (Culture and Education) and several specific units of these sectors. He also referred to the very fruitful partnerships developed with business sector non-governmental organizations such as WCBSD and ICMM in

the context of the on-going Landscape-Level Planning Initiative. He finally referred to ongoing cooperation with ICSU and *Diversitas*.

166. Presentations were then made by representatives of UNESCO's International Hydrological Programme (IHP), International Geoscience Programme (IGCP) and the IOC, who reported on the excellent cooperation with UNESCO-MAB in their respective areas of competence. Cooperation with the MOST Programme, Ramsar's MetWet as well as the Nile Basin Initiative was also reported upon.

10. CAPACITY BUILDING

10.1 NEPAD and ERAIFT

167. The Council reviewed document SC-06/CONF.202/7 on capacity building presented by the Secretariat.

168. The Secretariat presented the ERAIFT project and the linking opportunities with NEPAD especially in the framework of the implementation of the Bali plan of action on capacity building, adopted by NEPAD/Environment and CMAE (African Ministerial Conference on the Environment).

169. The Council expressed its overall support to the ERAIFT project that is considered as a model to be replicated in other sub-regions of Africa. Several delegates expressed their satisfaction about the progress made in the implementation of ERAIFT and approved the initiative of the Secretariat aiming at launching a network of university and research centres in the framework of the North-South-North cooperation. The following delegates have in turn taken the floor on this subject: Costa Rica, Egypt, Philippines, United Kingdom, Sudan and Tanzania. The delegate of UK mentioned the possibility of creating centres of excellence to strengthen capacities, as recommended in seven areas by the Science Committee of the U.K. National Commission for UNESCO. The Council noted the significant progress in the implementation of the ERAIFT project as MAB's "regional flagship project", and recommended that the project activities in capacity building in the framework of cooperation with NEPAD, and the Medium-Term Strategy of UNESCO (2008-2013) be continued.

10.2 South-South Cooperation

170. The Secretariat introduced the new "UNESCO Chair on South-South Co-operation for Sustainable Development" at the Federal University of Para (UFPA), Belém, Brazil, established on 15 September 2006 in Belém. Prof. Dr Luis Aragon had been appointed Chair holder. Finally, it was mentioned that the UNESCO Chair would organize, in collaboration with MAB, an interregional seminar on tropical forest in the Democratic Republic of the Congo in May 2007.

10.3 Remote sensing applications for sustainable development

171. The Secretariat introduced the UNESCO initiative of working in partnership with space agencies, space research institutions and universities providing access to less developed countries to space technologies for the benefit of UNESCO-inscribed sites. This initiative also aimed to provide Member States with the minimum capacity, both human and infrastructural, in order to take advantage of all the results derived from satellite images.

172. Several activities were presented including the following new ones:

- In close partnership with the University of Ghent (Belgium), UNESCO had elaborated the map for the biosphere reserves. Countries had been asked to provide comments about this new map. The electronic file could then be sent to the countries wishing to receive it so that they could print as many copies as they needed locally.
- “Taking the pulse of UNESCO tropical World Heritage sites” which was an activity that aimed to assess the state of conservation of tropical forest sites since its date of inscription up to today.
- “Monitoring the Mesoamerican corridor” which aimed to assess conservation and sustainable development for the whole Mesoamerican corridor with the participation of the European Space Agency, UNESCO, all associated Member States, the Commission for Sustainable Development (CSD) and CBD.

173. The ICC welcomed this initiative and the following comments were formulated: The delegate of Tanzania underlined the importance of remote sensing and appreciated the activities presented. Tanzania encouraged UNESCO to apply these techniques to all developing countries. The Secretariat indicated that Ngorongoro and Serengeti were now being covered by satellite images in the framework of this UNESCO programme.

174. The delegate of Russian Federation indicated that the Russian Space Agency was not in the list of partners and that he would like it to become a partner. The delegate of Egypt announced that the University of Alexandria would join the list of remote sensing partners of UNESCO.

11. UN DECADE OF EDUCATION FOR SUSTAINABLE DEVELOPMENT (DESD)

175. The Secretariat introduced the agenda item and related documentation, drawing the attention of delegates to the limited response by MAB National Committees to the 2004 ICC call that biosphere reserves be promoted and used as sites for implementing the UNDESD. France stressed that, despite the lack of response to the circular letter to MAB National Committees, many biosphere reserves were very active in educational activities that were consistent with DESD and that such activities encompassed scientific, cultural and recreational activities. Participative science activities were also organized in biosphere reserves, which involved school pupils visiting biosphere reserves and learning the basics of sciences on the ground. Other similar activities were twinning programmes between schools associated with different biosphere reserve sites. In this regard, the Secretariat was asked to assist in linking up with those schools that were associated with biosphere reserves, so as to promote communication and twinning programmes and activities. Canada also supported the participation of schools that take part in UNESCO’s Associated Schools Project (ASP) in the Decade; this might need some arrangements, in the fact that the programme activities implemented in the context of ASP did not always automatically coincide with the formal national curricula, although such barriers could be overcome; the involvement of Associate Schools had proven extremely successful. China also added its positive experience in using biosphere reserves for educational purposes, activities that had brought very good results. The Delegate from Egypt proposed cooperation, such as twinning between biosphere reserve schools situated in Europe and those situated in Egypt, taking into account the language barriers, as well as promoting exchanges between urban and rural biosphere reserves. The Delegate from Madagascar mentioned the worldwide programme GLOBE (Global Programme for the Benefit of the Environment) in cooperation with high schools all over the world.

12. COMMUNICATION AND PUBLIC AWARENESS

176. The Secretariat presented the document SC-06/CONF.202/9 on progress made since the eighteenth session in terms of enhancing the use of Web as a communication tool and primary content-bearer of information related to MAB and biosphere reserve achievements.

177. The Secretariat referred to some projects that had been implemented in this regard: the publication of the new MABNet and the Web Map of WNBR; the launching of the electronic newsletter, development of the biosphere reserve map, and the establishment of community multimedia centres in the framework of the UNESCO-MAB/UNEP-GEF regional programme.

178. The Secretariat pointed out that Web-based templates would be used as standards to print and disseminate materials locally with the assistance of UNESCO Offices, National Commissions for UNESCO, MAB National Committees and other partners.

179. In the discussion that followed, the Council encouraged the Secretariat for the presented efforts. It supported the use of the electronic newsletter as a communication tool. The National Committees were invited to assist with the translation and distribution of this newsletter in countries with limited access to Internet. Also, the use of CD-ROMs was suggested for the dissemination of communication materials.

180. The members of the Council took note of the 2005 Web Video Contest winner (“Lamto”) and endorsed the new guidelines as well as the theme for the future Video Web contest as proposed in the document SC-06/CONF.202/9 and its Annex 1. Furthermore, in accordance with the proposals of the Delegate of Egypt, the Council decided that awards of future contests be dedicated to the memory of Mr Di Castri, the first International Secretary of the MAB Programme.

181. Mr Cipriano Marin from the Kingdom of Spain and one of the authors of the book *Doñana, Water and Biosphere*, introduced briefly the origin of this important publication, which had been handed over by the Minister of Environment of Spain to the Director-General of UNESCO on the occasion of the special ceremony on 24 October 2006. He also explained the new “StarLight Initiative”, which aimed to protect the quality of the night sky within biosphere reserves.

13. UNESCO Medium-Term strategy (C/4 – 2008-20013) and Programme & Budget (C/5 – 2008-2009). Ecological and Earth Sciences, MAB and WNBR

182. The Secretary recalled the key processes that would impact the future of the MAB Programme with reference to working document SC-06/CONF.202/10:

- The Director-General’s consultations with Member States (via National Commissions, Permanent Delegations, etc.); Decisions and recommendations of the 175th Session of the Executive Board (175EX/PLEN/DR.1) with regard to the Medium Term Strategy (2008-2013) and the Biennial Programme & Budget (2008-2009), both to be adopted at the 34th General Conference.
- Ongoing Expert Panel Review of Natural and Social and Human Sciences Programmes of UNESCO (second phase of the review from October 2006 will focus more on the future).
- UNDESD up to 2014.

183. He also informed the members of the Council that in the current draft for the Medium Term Strategy one of the proposed overarching objectives was: mobilizing science for sustainable development; and that sustainable development was included in the Organization's mission statement together with peace.

184. The Secretary invited the Council to provide insights and ideas with respect to the future of MAB especially in relation to the following questions:

- 1) What future for MAB, given UNESCO's planning and programming emphasis on greater focus of the mission, rationalization and concentration of actions and activities and targeting results to directly benefit local and national stakeholders?
- 2) How to best use the period leading to the 3rd International Biosphere Reserve Congress and 20th session of the ICC in early 2008 to reinvent and re-align MAB with the emerging UNESCO and UN global agendas?
- 3) How to better align the work of ICC to have better interactive/iterative relations with UNESCO Executive Board and General Conference sessions?

185. Taking into account the proposed Strategic Programme Objectives, namely: Sustainable use and management of biological and mineral resources; Combating desertification; Alternative and renewable energy sources; Capacity building for science and technology policy; and Natural disasters, the Council members identified the following issues on which MAB could concentrate in the future:

- combating desertification: Biosphere reserves should be on ground laboratories and models showing how to avoid and react to desertification through developing, demonstrating and implementing preventive measures and rehabilitation actions;
- biodiversity related issues: Biosphere reserves as laboratories and learning and demonstration sites (importance of inventory of biodiversity, and cooperation with the Global Taxonomy Initiative);
- disaster prevention and mitigation;
- exploring linkages between biodiversity and cultural diversity, making connection to the local knowledge and to the benefits for the local communities;
- considering revisiting the 14 original research MAB programmes mainly those dealing with natural resources, drylands, water resources, tropical forests;
- agriculture related issues – in cooperation and collaboration with FAO and its regional commissions;
- energy issues in terms of renewable and alternative energies in the context of the main MAB agenda – integrated land use management;
- addressing not only terrestrial and mineral resources, but also water resources
- Focusing on a smaller number of themes - good science and best practices for biodiversity conservation;
- Climate change and more generally global change issues as the main environmental issues today.

186. The Council members raised the additional issues with regard to the functioning of the MAB Programme:

- Need for increased support from decision makers;
- Importance of assessing the relationships between scientific programmes, MAB National Committees, practitioners and administrators;
- Synergy between MAB and other programmes must be evaluated and strengthened so as to work more effectively, provide more information, exchange practices and lessons;
- Consider programming and budgeting in a more transparent way;

- India expressed its proposal of hosting workshop on drylands;
- Need for a better interaction between the MAB Programme and the existing International Conventions.

187. The Council also noted that a number of countries were not present during the discussions of this ICC session.

14. REPORT OF THE INCOMING BUREAU

188. The Bureau informed the Council that it had met on several occasions during the week. As regards WNBR, it had examined 35 proposals in total, of which 29 new proposals (21 from Mexico, and one from a country that submitted its first biosphere reserve nomination, i.e. the Sultanate of Oman), one nomination of a transboundary biosphere reserve, and five (5) revisions/extensions of existing biosphere reserves). Moreover, the Bureau had examined the periodic review reports of 14 biosphere reserves designated for a period of over ten years.

189. It was indicated that the text of the Bureau's decisions and recommendations on these points was included in the ICC report under section **7. WORLD NETWORK OF BIOSPHERE RESERVES: PAST, PRESENT AND FUTURE.**

190. The Bureau also made its selection of the 2007 MAB Young Scientists Awards: the results are reported in Annex 4. Moreover, the Bureau for the first time decided on the selection of Research Grants to Young Scientists on Great Apes of Africa: the results are provided in Annex 5. Finally, the Bureau decided that the deadline for the submission of proposals under the Michel Batisse Award for Biosphere Reserve Management be set two months before the next meeting of the Advisory Committee for Biosphere Reserves.

191. The Bureau decided that its next meeting be held in the course of 2007. The MAB Secretary will propose a suitable date to Bureau members in the light of the preparations of the next MAB Council session to be held in Spain in 2008.

15. DATE AND VENUE OF MAB-ICC-20

192. The Council supported the proposal made by Ms Cristina Narbona Ruiz, Ministry of Environment of the Kingdom of Spain, on behalf of her country, to host the Third World Congress on Biosphere reserves, in Madrid (Spain) on 4-8 February 2008, and expressed its warm thanks to the Kingdom of Spain for its kind offer. The Council also approved the holding of the 20th Session of the MAB-ICC in conjunction with the Third World Congress on the same provisional dates. A draft time-table for the effective sequencing of the Congress and the MAB Council would be prepared by the Secretariat.

16. OTHER MATTERS

193. There were no other matters discussed.

17. ADOPTION OF THE REPORT

194. The Rapporteur, Mr Zerihun Woldu (Ethiopia), invited the delegates to review the draft report of MAB-ICC 19, which was adopted following amendments proposed by the Council.

18. CLOSURE OF THE SESSION

195. The Chairperson thanked the Secretariat for the quality of the meeting documents prepared both for the Council and its Bureau. He also thanked the outgoing Chair and Bureau, the Members of the Council and all those involved in the preparations and smooth running of this session and in particular the interpreters.

196. The Secretary thanked the Chair, the Bureau and the Council participants for their support and discussions. He also expressed his appreciation to his colleagues of the MAB Secretariat as well as to those staff members working hard behind the scenes such as translators, interpreters, secretaries and technicians. He finally indicated that it was time for marketing WNBR as learning laboratories for sustainable development, taking advantage *inter alia* of the 15th Session of the UN Commission on Sustainable Development, planned to take place in New York in May 2007.