



U.S.
MAB

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TO: Barbara Weber/Jack Waide/Paul Dunn USDA-FS
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FROM: Roger Soles *RS*

SUBJECT: Future Focus of the International MAB Program

Because of your interest in organizing the future of U.S. MAB, I am faxing to you the attached recently arrived document from UNESCO MAB entitled "Future Development of the MAB Programme."

It is to form the basis of discussions at the next International Coordinating Council, November 6-10, 2000. On the basis of my experience at such ICCs, this document will be extensively commented upon by the delegates. Then it will be re-issued by the UNESCO MAB staff in even a more "watered-down"/less specific yet more extensive fashion to reflect everyone's interest and special programs. Then again, perhaps with Dr. Bridgewater's direction, it might not and MAB UNESCO may get on with fleshing out the major foci mentioned below. One must always be optimistic about such scenarios.

The crux of the document is in the "Looking Forward" section on page 7 - 9. One can reasonably argue with a number of the premises, however, it is proposed that there be four (4) new foci for international MAB Program:

- The Ecosystem or Bioregional Approach
- Ecological Monitoring and Evaluation
- Building Up Capacity
- Exploring Novel Ecological Theory and Practice

Apparently the operational-ization of these foci will be through the world network of biosphere reserves --and obviously much needs to be elaborated.

Again, I hope that you may find this useful as you contemplate reviving the U.S. MAB program.

Attachment:
Future Development of the MAB Program

SC-00/CONF.208/6-draft
Paris, 20 July 2000
Original: English

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

Man and the Biosphere (MAB) Programme

16th Session of the International Co-ordinating Council of the MAB Programme
UNESCO Headquarters, Paris, Room XII (Fantenoy Building)
06-10 November 2000

Future Development of the MAB Programme

MAB: SOME NEW OR REDEFINED DIRECTION

Background

At its 15th session in Paris, December 1998, the MAB ICC made a number of recommendations, including, *inter alia*:

11.5 Future development of the MAB Programme

- The Council also recommended that an ad hoc working group be entrusted with preparing a document on the perspectives for the MAB Programme in the medium term, to be presented to the next meeting of the MAB Bureau. This document, as amended by the MAB Bureau, should be sent to MAB National Committees for further comment and revised for consideration of the MAB Council.

11.6 Collaborative programmes

- The Council recommended that MAB be closely associated with the development of the DIVERSITAS Programme, and in particular that biosphere reserves should constitute privileged observation sites for the International Biodiversity Observation Year (BOY). The Council also suggested that the MAB Secretary, as UNESCO focal point for biodiversity and member of the DIVERSITAS Scientific Steering Committee, encourage the representation of the different UNESCO programmes concerned (in particular MAB, IOC, IHP and IOST) in this Committee in order to strengthen their participation in this scientific endeavour.

11.7 The UNCED Conventions

- The Council recommended that the Secretariat continue its co-operation with the Conventions on Biological Diversity and on Combating Desertification. As concerns the Convention on Biological Diversity (CBD), the Council recommended that this co-operation should focus in particular on the "ecosystem approach" advocated by the Conference on Parties, the general issues of Article 8 of the Convention, and on the launching by UNESCO and the CBD Secretariat of a global initiative on education, training and public awareness on biodiversity. As concerns the Convention on Combating Desertification, the Council recommended that biosphere reserves in arid and semi-arid zones be mobilized as case studies to help define a methodology of approach.

11.8 Staff situation

- The Council expressed its concern on the abolition of the posts of the Programme Specialists of the Arab region and the Latin American and Caribbean region, and requested UNESCO's governing bodies to find a satisfactory solution to meet this concern.

11.9 Programme and budget for 2000-2001

- The Council recommended that the Secretariat take full account of its recommendations in the preparation of the draft Programme and Budget for 2000-2001 (draft 30 C/5).

This document deals primarily with item 11.5, the future development of the MAB programme, although other recommendations are touched on as relevant to this general point.

Context

Since Council passed these recommendations, the World Science conference has been held in Budapest, July 1999. The Conference produced a Declaration and a framework for Action.

The second sentence to the preamble of the Declaration reads, "*we are in a situation of increasing interdependence, and that our future is intrinsically linked to the preservation of the global life-support systems and to the survival of all forms of life.*" and is an excellent introduction to the MAB programme of work, including the role as focal point for biodiversity within UNESCO.

A number of paragraphs are relevant to MAB, but one area we will look to develop and strengthen the programme is the link between ecosystem health and human health. Global climate changes are already creating new health risks, and the fragmentation of landscapes are allowing diseases, formerly confined to wildlands, to become part of disease framework with which humans and other life-forms must now contend. This includes developed as well as developing countries.

Other linkages identified by the Declaration include developing better mechanisms for incorporating traditional/indigenous knowledge into our modern science paradigm – an area we have been active in, and propose to expand our operations.

In the Framework for Action, under the heading c "New Context" the following is stated:

Scientific research is increasing our knowledge and ability to understand complex systems and processes in an ever-wider range of scales in space and time. The emergence of new disciplines and of interactions among (natural sciences), increasingly powerful computational tools, the rapid accumulation of scientific knowledge, and the need to bring together the natural and the social sciences in joint agendas, are having strong implications on scientific research and education

These emphases are areas in which MAB has a clear interest, and will be able to use the Framework of action in re-defining its agenda. The marriage of biology and informatics, from molecular to landscape level, is one of the success stories of the last decade, and one which we will need to foster as we redefine the MAB programme. Better use of Internet, interactive CDs, involvement in projects such as the Global Biodiversity Informatics Facility (GBIF), and a re-defined relationship with the World Conservation Monitoring Centre (soon to be part of UNEP) are all ways we can redefine MAB in this new context.

Our key relationship with DIVERSITAS, and, through it, the other ICSU programmes for Global Change (IGBP, IHDP, VCRP and the START networks) means we must be able to exploit and build on our existing commitments with the ICSU family, without duplication. This linkage with ICSU and its elements will form a key part of our programme agenda that deals with increasing the scientific underpinning to biodiversity management.

Introduction

MAB has its origins in the late 1960s, arising as a result of the Conference on the "scientific basis for the rational use and conservation of the resources of the biosphere" held by UNESCO in 1968. This was the first time that governments came together to discuss this topic. MAB was set up in 1970 as an interdisciplinary scientific research and training programme, aiming at improving the relationships of people with their environment. It is the main environmental programme of UNESCO that addresses natural resources in the context of promoting sustainable development. While the MAB focus has been largely terrestrial, there has been increasing involvement in coastal and marine systems, and there is promise for this to increase significantly, particularly in the context of the developing Jakarta mandate of the CBD, and in co-operation with programmes of the IOC.

MAB has always aimed at bringing together the natural and the social sciences and at making a bridge between government agencies and the academic community. As such, it is a forum for ideas. MAB began with 13, later 14, Project Areas that had mainly a geographical focus, such as mountains or tropical humid forests. These were concentrated down to 6 projects themes in the 1980s.

Following the 1992 UN Conference on Environment and Development, the MAB programme has been oriented to address the issues of biodiversity, sustainable management of natural resources, capacity building, and information and communication on environmental matters. It has developed, or is actively developing, relationships with the Convention on Biological Diversity (CBD) and the Convention to Combat Desertification (CCD), the Convention on Wetlands (Ramsar), or the Convention on Migratory Species (CMS). It has not, as yet, promoted co-operative work with the Framework Convention on Climate Change (FCCC), where a relationship could develop in terms of mitigation of and adaptation to climate change effects.

It should be stressed that MAB was seen as a programme for international co-operation and solidarity. It functions in the same manner as other UNESCO intergovernmental scientific programmes. Countries participating in the Programme ideally create a MAB National Committee (of which there are approximately 125) composed of both government representatives and individual specialists. The UNESCO General Conference elects on a rotational basis an International Co-ordinating Council consisting of 34 countries. This MAB Council and its Bureau is responsible for guiding the development of the Programme and its thematic content.

The main operational tool of the MAB programme is the World Network of Biosphere Reserves. Biosphere reserves are sites nominated by countries where the interdisciplinary MAB approach can be applied in actual situations. They also serve as sites for exploring and demonstrating approaches to sustainable development. The global network that they constitute covers a representative sample of the major ecosystems of the earth. They are linked by scientific exchanges and sharing of experience. After the very successful global Biosphere Reserve meeting in Seville in 1985, the World Network is guided by what is known as the *Seville Strategy*. A Statutory Framework, a «soft» legal mechanism adopted by the UNESCO General Conference, governs the Network. As at 1 August 1999, there are 357 biosphere reserves located in 90 countries.

The MAB programme was always conceived as being a decentralized programme, with work being undertaken by scientists at the country level, co-ordinated by MAB national committees. UNESCO provides the seed money to initiate actions at the national, and particularly at the international levels. UNESCO/MAB provides through extra-budgetary funding substantial support to a few pilot projects on conservation and sustainable development of biosphere reserves, such as the Mananara-Nord BR in Madagascar. In recent years, countries have also found it useful to co-operate at the regional level, i.e. in regional networks geographically and culturally linked groups. Examples are the EuroMAB network, the Arab MAB, and the IberoMAB network -- IberoMAB covers Spain and Portugal and the linguistically linked countries of Latin America, and the newly established REDBIO Network between existing or future biosphere reserves in Cape-Verde, Morocco, Senegal and the Spanish Canary Islands.

Issues

Previous reviews of the MAB programme have always concluded positively, but many of the recommendations made have not been taken up! As we enter a new decade, century and millennium, and as we confront the reality of restricted staffing and tighter budgets, we must be critical in our review, and set achievable goals and strategies to reach agreed and measurable outcomes -- This will be important as UNESCO moves to performance based budgets.

A very extensive review of the programme by ISSU/SCOPE in 1992, pre the UNCED meeting, plaintively argued that the programme had too many elements, there were not enough staff, there were too few resources, and the decisions of the MAB Council and Bureau "tended not to be put into application, or to be followed up". The report also identified a failure to concentrate activities and to include programme evaluation as an on-going iterative process, dispersing activities over too many subjects, some problems with scientific quality in some projects, continued mismatch between the resources allocated and the goals. It also highlighted a failure to compile and synthesize site- or topic-specific material that would act as a reference, and provided indications of how far projects were developing. A major result of the latter has been that national research efforts and results are too widely

dispersed, and often remain unnoticed – We are "re-inventing the wheel" many times in many places.

Notwithstanding those negative evaluations, the report felt there was much to gain from MAB, especially through its use of the World Network of Biosphere Reserves. Of course, since that time there was the very successful meeting in Seville, which produced both the Seville Strategy and the Statutory framework. But in 1999 much of the report of 1992 is still relevant – some even more urgently so. The report laments the number of staffing at 15 professional and 10 general staff. As in July 2000 we have 9 professional staff in Paris, and one out-posted to the University of Columbia, a total of 10; and 7 general staff a decrease of 8 on 1991. Staff reductions have meant especially, a significant reduction in our ability to deal with the MAB regional networks although we do have staff in regional offices, such as Jakarta, Beijing, Montevideo, Dakar, and Nairobi.

Current position

The MAB programme has a number of co-operative relationships, among the key ones being:

- the *DIVERSITAS* Programme, delivering an international research agenda for biodiversity science, with ICSU, SCOPE, IUBS, IUMS and IGBP;
- the *Tropical Soil Biology and Fertility Programme* (TSBF) with IUBS;
- the *People and Plants Programme* on ethnobotany with WWF and Kew Botanic Gardens;
- The *International Institute of Biosphere and Society* (IIBS) with University of Columbia.

Similar co-operative initiatives have been launched for training specialists in resource management, such as:

- the South-South Co-operation Programme with TWAS, UNU with funds-in-trust from donor countries;
- the Regional School on Integrated Tropical Forest Management in Africa (ERAIFT) with support from UNDP;
- the Ecotechnie Chairs for Interdisciplinary training of tomorrow's decision-makers, with the Cousteau Society;
- The MAB *MAB Young Scientists Awards*: which are important to involving a new generation of scientists in the Programme. Ways and means to increase the annual number of Awards should be sought, including, through, *inter alia*, the private sector.

Biosphere reserves have provided the logistic network for other key collaborative actions. Examples include:

- regional co-operative sub-networks working on specific topics with support from richer partner or donor countries, such as the East Asian Biosphere Reserve Network exploring sustainable development;

- the Biosphere Reserve Integrated Monitoring Programme (BRIM), which, with valuable support from the US Government, aims to improve scientific exchanges amongst sites;
- the Northern Sciences Network which was established within the MAB Programme at the 7th session of the MAB ICC (1991), as an initiative of the Canadian delegation, which proposed the "establishment of a network for co-operation among peoples engaged in ecological problems unique to the Circumpolar North."

In the field of information and communications MAB has made some significant contributions to disseminating scientific results to different audiences around the world. Examples include the "Ecology in Action" multiple poster series in three languages, the Man and Biosphere Book Series, the MAB Digests, CD-ROMs and educational wallcharts on biodiversity, and the South-South Co-operation Working Document Series.

Many other UN and non-UN organizations and programmes address the topic of people and the biosphere or people and the planet. The MAB comparative advantage is not as obvious nor, frankly, as well known as it should be. Many of the principles of biosphere reserves have been taken up under different guises such as integrated conservation and development projects (ICDPs) or natural regional parks. The *bioregional approach* to nature conservation and management, now widely advocated, echoes this convergence of thinking.

The MAB programme is ideally positioned for global leadership on these issues, through application of the biosphere reserve concept. Our limited incursion into coastal and marine areas has considerable potential to change as the Jakarta mandate of the CBD develops. The topics of coastal areas, cities and environmental awareness, which were among the 14 original MAB themes, are now in part addressed by other UNESCO programmes: i.e. Intergovernmental Oceanographic Commission, Management of Social Transformations (MOST) and Interdisciplinary Agency Co-operative Project on Education (EPD). As the report of the Chairpersons of the Intergovernmental Programmes on the Environment have noted, these programmes will especially focus on co-operative development in the next biennium.

The content of the 'joint statement' made by the Chairpersons of these programmes should be used to exemplify the linkages and complementarity that exists among the UNESCO programmes dedicated to providing a more scientific understanding of the environment. MAB is particularly well placed to take the lead on, and add value to, a number of joint issues related to environmental management. The Bureau also noted the importance of maintaining the effective links established by the MAB Secretariat with the World Heritage Convention. Emphasis should, however, be given to clarifying the differences and complementarities of World Heritage sites (including Cultural Landscapes) and biosphere reserves, to assist Member States in their implementation of the Convention and the Programme.

The World Network of Biosphere Reserves is a unique asset, owned by the member states but made real through intergovernmental co-operation. The

World Network should be seen therefore as a resource for all the intergovernmental programmes, not simply MAB. In this connection, one could envisage it being used for the declaration of Geoparks, to highlight geodiversity and its conservation, as key sites for hydrological work, and as a source of unique foci to draw together the work of IOC and MAB.

The MAB Programme's indisputably important role for a number of external partners should be further stressed: for example, the Convention on Biological Diversity and *Diversitas*. This being said, the Bureau also noted that these partnerships first and foremost should benefit MAB. It was recommended in this context that the Secretariat should explore the possibility of establishing a memorandum of understanding between MAB and the Ramsar Convention in view of the fact that a number of biosphere reserves are situated in wetland areas designated under that Convention.

UNESCO MAB has been a partner of *Diversitas* since 1991 originally with IUBS, SCOPE and more recently together with ICBU and IUMS. In addition, UNESCO hosts the *Diversitas* Secretariat. While UNESCO has invested in *Diversitas* from the beginning, *Diversitas* is now at a critical crossroads for its own future. The science agenda of *Diversitas* has been welcomed by the SBSTTA of the Convention on Biological Diversity – there is thus an imperative for MAB to continue to work with the partners to ensure the development of *Diversitas*. Recent welcome support from the IGFA partners for core funding will enable MAB to help in a synergistic way with the key issue of developing an integrated science of biodiversity. It will be important, however, for MAB to focus on this core issue, and not divert scarce resources to initiatives not strongly focussed on this aim (e.g. the IBOY, designed to focus on awareness raising for the year 2001).

Looking forward

The 1992 review had three major issues for the programme, namely:

- ◆ The maintenance of biodiversity,
- ◆ Environmentally sound sustainable development, and,
- ◆ Rate and extent of global change.

The scientific community has been, in fact, focusing on global change issues for much of the last decade, resulting in the development of programmes such as the IGBP, WCRP, IHDP, etc. – so the issue of MAB as essentially a global change *programme* is no longer sensible. It can, and must, of course, develop close synergies with the suite of active global change programmes, and continue to see the relevance of its activities in helping *understand*, *mitigate* and *manage* the effects of global change – especially through more effective use of the World Network of Biosphere Reserves.

As identified by the Council, MAB should take an ecosystem approach to biodiversity conservation and management, as adopted by the Convention on Biological Diversity. The report of the Liaison Group on this issue, hosted by

UNESCO last September, is attached for information. As such, it is clear that MAB is even more relevant in the nascent 21st century than ever before.

Because MAB lies within UNESCO, which is also the Culture, the Education and the Social Sciences focus of the United Nations system, it is in a unique position among UN environmental programmes and related Conventions. We need to build upon the synergies we can construct with initiatives in-house. More than ever, MAB needs to be that "ideas forum", breaking new ground in seeking means to reconcile conservation and development, to empower separate institutions to work together towards common goals, and, above all, to bring scientific research results to bear on policy decisions.

Partnerships with ICSU and its many environmental programmes, including those dealing with global change, the World Conservation Union (IUCN) and key NGOs such as Conservation International and WWF, are key to our continuing success. UNESCO membership of the Ecosystem Conservation Group, and the key role played by the Division of Biological Sciences in that arena is important to our future.

A renewed MAB should focus on, say, four key focus areas, each one drawing on the support and resources of the World Network of Biosphere Reserves, and developing joint programmes with the other UNESCO intergovernmental environmental programmes wherever feasible and sensible:

- ✦ *The ecosystem or bioregional approach;* - reconciling biodiversity conservation and rural/peri-urban and urban development at a range of scales while also supporting and enhancing cultural values. Included in this focus should be provision for developing, nurturing and using biodiversity and ecological knowledge in partnership with traditional and indigenous people, especially where they are the stewards of the biodiversity. (key partners - CBD, ECG, Culture Sector, WHC)
- ✦ *Ecological Monitoring and evaluation;* - providing scientifically viable primary data sets for the various global biodiversity assessments and monitoring/observation initiatives (co-ordinated monitoring of environmental parameters in the long term through the expanded work under BRIM). The BRIM (Biosphere Reserve Integrated Monitoring Programme) is a particular asset of MAB. BRIM should be expanded beyond MAB Flora/Fauna to become a more truly integrated monitoring programme. It is also recommended that the feasibility of increasing the participation of MAB Committees outside the EuroMAB network in its activities and its further development be explored. Links between BRIM and GTOS should also be made. (key partners - national and regional MAB networks, WCMC-UNEP, WHC)
- ✦ *Building up capacity;* - to respond to complex environment and development issues through a global programme of education, technical training of specialists, and public outreach and information, including a focus on the relationship between environment and human health. (key

partners – Convention on Biological Diversity Education sector, donor agencies, national governments)

- ✦ *Exploring novel ecological theory and practice* : - for example emerging ecosystems and their management, ecological genetics, relationship between culture and ecology, ecological economics, ecosystem health, urban ecology. (Key partners – DIVERSITAS, CSU, SCOPE, Ecological Science Institutions). This is an opportunity for MAB to establish some key issues in ecological science, where global leadership will be helpful. In this category there is also the need to re-establish MAB leadership in the field of biogeographical classifications, in their own right, but especially as aids to developing effective and representative conservation biology frameworks.

Operational aspects of these four strands should be developed early on, with a clear programme of work, and measurable outcomes. The WNBR might be used in different ways – in other words we might want to start differentiating within the network between sites which cover a range of aspects, those which are chiefly for monitoring and research, those chiefly for conservation and so on. This is a change from the process envisaged after Seville, and needs careful evaluation. However, some diversity across our network already exists, it may be useful to institutionalize this. We also seek to use the WNBR in strategic ways – for example the cores are a useful representative set that can have relevance for CBD activity, buffer and transition zones useful for programmes which measure human impacts.

It would also be useful to stratify the network by priority ecological systems – freshwaters, inland salt systems, grassland, mountains, etc. Such stratification can reflect the needs and values of conventions, from the CBD, through CCD, Ramsar, and CMS, etc. It would also be useful to focus on ecotones and transitional areas, and to have a structured pro-active approach to transborder Biosphere reserves. In all this process we need to re-visit the Seville Strategy and the Periodic Review process foreseen in the Statutory Framework – to what extent must this become a tool for managing the Network?

We should also seek to implement the development of science-based networks, analogous to the northern science network, where this will be composition of the MAB networks, but they may also follow different boundaries, as appropriate to the scientific imperatives. Focusing science and management on "emerging ecosystems", ecosystem integrity, ecosystem rehabilitation and creative conservation will help achieve all four foci.

Programme

The MAB programme has been run from the Division of Ecological Sciences. This arrangement is sensible and should continue. The Division should take the opportunity to develop linkages between MAB and other UNESCO Programmes and Sectors.

An issue that has been raised is the title of the programme – which is not, for some Member States sufficiently gender neutral. While this is not an especially serious issue, should it prevent the programme from being universally accepted, a minor change may be helpful. Any change must reflect also the valuable identity of the logo and existing name.

A suggestion could be to proceed via the IUCN model, when the original letters remain – but the new name *World Conservation Union* is given as a short title.

For MAB one might envisage, for example:

MAB - Managing the Biosphere

It would be important to research the short title to ensure linguistic appropriateness across the UN and other major languages. It may well be each language needs its own short title, rather than attempt translation.

A similar problem exists with respect to Biosphere Reserves – where the "Reserve" part is taken sometimes as denoting "a step to progress". For this a suggestion might be:

Biosphere Reserves: living Landscapes, special places for people and nature

Publications

MAB produces a book series and the journal *Nature and Resources*, in conjunction with other key programmes (IHP, IOC, etc). The book series is seen as valuable, but does not have a very large sale. *Nature and Resources* apparently has lack of support from the publishers and, while exceptionally well produced, simply does not represent a good return on scarce resources. For these reasons, the Sector decided in late 1989 to suspend publication of this periodical. The overall issues related to publications will be examined separately in the light of contractual requirements and obligations, but an ideal future model may be to focus publications on those designed to influence decision makers about the range of issues MAB is concerned with. In that sense publications for meetings of the various conferences of the parties should be seen as high priorities.

Governance

At national level there are a variety of different organizational structures – some functioning well, some hardly existing. Well-functioning MAB National Committees could be used as models, when appropriate, for those Committees, which are in need of advice and support. In this way their capacity to implement the MAB Programme can be enhanced, as well as

providing working models for those countries which have not yet established a MAB Committee.

At international level, presently there is the ICC, the Bureau and an Advisory Committee on Biosphere Reserves. The ICC, meeting as it does every two years, has not been able to exercise the executive direction it perhaps should, and the Bureau has not been able to provide the appropriate direction either. Part of the problem is the duplication provided by the Advisory Committee on Biosphere Reserves. One model may be for the Bureau to assume the majority of the functions of the Advisory Committee for the selection and review of Biosphere reserves – perhaps meeting 3 times between council meetings as against once at present.

There is a clear and vital role, however, for an Advisory Body to provide comments to the Director-General, mainly on some of the scientific and technical aspects of the programme. Such a body could include nominations from ICSU, perhaps the Chair of its Advisory Committee on the Environment, as well as other key scientists and natural resource managers. This body could meet as appropriate and do much of its work by correspondence. The Bureau would help set the agenda for, and receive regular reports of activity this Body would undertake.

Strengthening the regional networks by *inter alia* provision of full support through the respective UNESCO Regional Office is another way the World Network can be more effectively managed. These networks are key instruments for the worldwide implementation of the programme as a whole, and should be seen as an asset for, as well as beneficiary of, UNESCO's overall decentralization policy. Strenuous efforts to achieve global coverage, including reviewing the coverage of existing networks should be a priority for the next biennium. Time-limited, special purpose networks (e.g. REDBIOS) will no doubt play an increasing role in developing the network.

An important aspect of governance is review of the effectiveness of programme elements. There is thus an imperative to set time-limitations (sunset clauses) for the various MAB activities and projects when they are being designed/launched. This would help focus the programme and make it more efficient, as well as enhancing reporting within a "sleeker" UNESCO generally.

Epilogue

For all of these points, the MAB operational tool will continue to be the World Network of Biosphere Reserves. In this connection, it is perhaps fitting to conclude with a statement from the "Vision for Seville for the 21st century" which was formulated in the 1995 International Conference on Biosphere Reserves:

"...Biosphere reserves are thus poised to take on a new role. Not only will they be a means for the people who live and work within and around them to

attain a balanced relationship with the natural world; they will also contribute to the needs of society as a whole by showing the way to a more sustainable future. This is the heart of the vision for biosphere reserves for the 21st century".

We are now at the stage of translating this vision to action.

“Future Development of the MAB Programme”

A Statement by
the U.S. National Committee for MAB

The U.S. National Committee for MAB (USMAB) is pleased with the forward looking tone of the document prepared for the 16th Session of the ICC, “Future Development of the MAB Programme. We believe the document provides appropriate background and context for the proposed future directions of the MAB Program, discussing relevant background information to the present proposal, including recent ICC recommendations. The following comments are meant as an evaluation of the document as it applies to the worldwide MAB program, that, of course, are based in the U.S. MAB experience.

While the U.S. MAB Program is in the process of establishing new priorities to guide our program activities, we anticipate that we will build upon our long established mission statement to establish innovative institutional arrangements that foster local partnerships to enhance conservation and the sustainable use of natural resources. We believe that this will contribute significantly to the achievement of the roles for Biosphere Reserves stated in the “Vision from Seville.”

We also applaud the document’s reaffirmation of MAB as a place-based, interdisciplinary science program. Achievement of sustainable use – our common objective – requires that we bring together the natural and social sciences. We endorse the emphasis on biosphere reserves as laboratories for applied interdisciplinary research because the biosphere reserves are a unique feature offered by the MAB program. This is an important role for the Worldwide Network of Biosphere Reserves (WNBR) consistent with the scientific foundation of MAB.

In short, we believe our future U.S. MAB guidelines will continue to emphasize that it is our mission to explore, demonstrate, promote and encourage harmonious relationships between people and their environments. We anticipate carrying out our mission by developing more functional relationships between U.S biosphere reserves and regional partners, and by providing more interdisciplinary research to contribute to our long term goal of helping to achieve a sustainable society early in the 21st century.

The document discusses enhanced future cooperation between MAB and other UNCED conventions. However, it is not at all clear from the brief discussion provided how this will advance the future agenda and capabilities of MAB, and how it will help MAB articulate a unique niche and role for itself among the many UN and related science-based international conservation programs.

The partnerships described in the document are important for global information with a minimum of redundancy. However, we have a concern that many of these partnerships seem to be building layers of global relationships with little definition. The MAB

program must not lose its focus on developing functional Biosphere Reserves and its unique human and social interdisciplinary science orientation when joining with other organizations under multi-program "umbrellas." Efforts to interconnect with intergovernmental environmental programs must avoid overburdening MAB's unique contributions with bureaucratic guidelines and requirements. Clearly, more thought needs to be given to this idea relative to the advantages it provides to Biosphere Reserves. The ICC must address the unique role and place of MAB in the UN family, and the attributes that set it apart from all other programs. Given the many linkages and cooperative efforts mentioned with other UNESCO programs, MAB runs the real risk of being lost among UN conservation efforts. At the current level of resources, MAB must focus on the limited number of opportunities that relate directly to its basic mission

We believe that the international MAB program must be cautious in accepting invitations for collaborative research partnerships from "prestigious" international science programs. MAB should agree to participate only if the proposed research activities are of an applied managerial nature, or directly related to applied sustainable environmental policies — of governmental or international institutions which have requested such input. We anticipate that much of such advice would specifically involve major inputs from the social sciences to develop practical knowledge on promoting harmonious relationships between humans and the biosphere.

With respect to building capacity, we believe strongly that place-based interdisciplinary science should be designed to, among other purposes, support education and training as well as resource management. Therefore, we encourage the forward looking strategy to incorporate education and training into all of its biosphere reserve related action. We further encourage that this education and training respond to needs at all scales, from local to global, but targeted initially at the regional level.

The U.S. National Committee supports the idea contained in this document of distinguishing within the WNRB which of the MAB focal themes are being successfully pursued at which specific Biosphere Reserves. It is no longer useful to presume that each Biosphere Reserve site will initially or always contribute to all MAB focal themes. Each has its own strengths, its own political and social contexts, and unique attributes that make different biosphere reserves useful for different approaches.

The international MAB programme can help to support and to publicize the legitimate diversity of Biosphere Reserves pursuing different focal themes within differing cultural, political and social environments.

U.S. MAB is in complete support of the BRIM program and hope that UNESCO MAB may investigate additional sources of funding. We believe it should be expanded to include similar metadata concerning existing socio and biological monitoring programs. However, we do not believe that MAB can, nor should it try to, suggest universal agreements on international standards for measurement and monitoring. The more appropriate role for the international MAB program would be to ensure that there is an increased knowledge about such multiple systems that are currently in use so as to foster and promote the inter-operability and comparability of the information already being

produced by these measurement and monitoring systems. As suggested in the document, regional science based networks such as the Northern Sciences Network may be the appropriate strategy.

We support the adoption by MAB of the ecosystem approach to biodiversity conservation and management, as well as highlighting the role of MAB in researching mechanisms to reconcile conservation with development. These have been and should remain key components of the MAB approach.

"Managing the Biosphere" would not be an appropriate name for MAB in the U.S. Here there are many concerns about land sovereignty which are not alleviated by the assurances in the Seville Strategy. We do believe there should be one universal name for the program of Biosphere Reserves.

We are especially supportive of the definition of the key themes of ecosystem or bioregional approach, ecological monitoring and evaluation, and of building capacity as foci for future MAB activities. These themes are quite appropriate as organizing foci for future MAB programs, and provide a useful and forward looking agenda for MAB, especially as they are developed through direct linkage to the WNBR. MAB must develop clear programs of work for each, with clear specifications of measurable outcomes and ongoing assessments of progress in implementation. It should be the essence of MAB's efforts to develop the scientific underpinnings of biodiversity conservation, the reconciliation of conservation with development, and the harmonization of sustainable human actions with the environment.

End of statement by the U.S. National Committee for MAB on the "Future Development of the MAB Programme."

“Future Development of the MAB Programme”

A Statement by
the U.S. National Committee for MAB

The U.S. National Committee for MAB (USMAB) is pleased with the forward looking tone of the document prepared for the 16th Session of the ICC, “Future Development of the MAB Programme.” The document is well written and organized and provides appropriate background and context for the proposed future directions of the MAB Program. In our view, this document does a good job of discussing relevant background information to the present proposal, including recent ICC recommendations; outlines the broad context in which MAB operates; presents issues that influence future program directions; and briefly but accurately assesses the current state of the program. The following comments are meant as an evaluation of the document as it applies to the worldwide MAB program, but, of course, is based in the U.S. MAB experience.

The reaffirmation of MAB as a place-based, interdisciplinary science program aimed at bringing together the natural and social sciences is applauded. We endorse the emphasis on biosphere reserves as laboratories for applied interdisciplinary research because the biosphere reserves are a unique feature offered by the MAB program. This would be an appropriate role for the Worldwide Network of Biosphere Reserves (WNBR) consistent with the science base of MAB.

The document discusses enhanced future cooperation between MAB and other UNCED conventions. However, it is not at all clear from the brief discussion provided how specifically this will advance the future agenda and capabilities of MAB, and help it articulate a unique niche and role for itself among the many UN and related science-based international conservation programs.

The partnerships described in the document are important for global information with a minimum of redundancy. However, we have a concern that many of these partnerships seem to be building layers of a global umbrella with little definition. The MAB program must not lose its unique human and social interdisciplinary science orientation when joining with other organizations under multi-program “umbrellas.” Efforts to interconnect with intergovernmental environmental programs must avoid overburdening MAB’s unique contributions with bureaucratic guidelines. Clearly, more thought needs to be given to this idea relative to the advantages it provides to MAB and its definition of a clear future role for its efforts. The ICC must address the unique role and place of MAB in the UN family, and the attributes that set it apart from all other programs. Given the many linkages and cooperative efforts mentioned with other UNESCO programs, MAB runs the real risk of being lost among the blur of UN conservation efforts.

With respect to building capacity, we believe strongly that place-based interdisciplinary science

should be designed to, among other purposes, support education and training as well as resource management. Therefore, we encourage the looking-forward strategy to incorporate education and training into all of its biosphere reserve related action. We further encourage that this education and training respond to needs at all scales, from local to global.

The U.S. National Committee supports the idea contained in this document of differentiating within the WNBR as to which of the MAB focal themes will be pursued at which specific Biosphere Reserves. It is no longer useful to presume that each Biosphere Reserve site will contribute to all MAB focal themes. Each has its own strengths and unique attributes that make different biosphere reserves useful for different approaches.

U.S. MAB is in complete support of the BRIM program and hope that UNESCO MAB may investigate additional sources of funding. We believe it should be expanded to include similar metadata concerning existing socio and biological monitoring programs. However, we do not believe that MAB can, nor should it try to, impose universal agreements on international standards for measurement and monitoring. As suggested in the document, regional science based networks such as the Northern Sciences Network may be the appropriate strategy.

We support the adoption by MAB of the ecosystem approach to biodiversity conservation and management, as well as highlighting the role of MAB in reconciling conservation with development. These have been and should remain key components of the MAB approach.

Managing the Biosphere would not be an appropriate name for MAB in the U.S. Here there are many concerns about land sovereignty which are not alleviated by the assurances in the Seville Strategy. As suggested, UNESCO may encourage each country to develop its own title for the program while at the same time using the MAB acronym and the ankh symbol.

We are especially supportive of the definition of four key themes (ecosystem or bioregional approach, ecological monitoring and evaluation, building capacity, and exploring novel ecological theory and practice) as foci for future MAB activities. These themes are quite appropriate as organizing foci for future MAB programs, and provide a useful and forward looking agenda for MAB, especially as they are developed through direct linkage to the WNBR. MAB must develop clear programs of work for each, with clear specifications of measurable outcomes and ongoing assessments of progress in implementation. The last theme of novel ecological theory and practice seems especially intriguing, especially as it is implemented through the WNBR. It should be the essence of MAB's efforts to develop the scientific underpinnings of biodiversity conservation, the reconciliation of conservation with development, and the harmonization of sustainable human actions with the environment.

Comments on 'Future Development of the MAB Program' – Jack Waide, USDA-FS R&D

The U.S. National Committee feels that the document is well written and organized and provides appropriate background and context for the proposed future directions of the MAB Program. In our view, this document does a good job of discussing relevant background information to the present proposal, including recent ICC recommendations; outlines the broad context in which MAB operates; presents issues that influence future program directions; and briefly but accurately assesses the current state of the program.

The document discusses enhanced future cooperation between MAB and other UNCED conventions. This is an interesting concept and one worth pursuing. However, it is not at all clear from the brief discussion provided how specifically this will advance the future agenda and capabilities of MAB, and help it articulate a unique niche and role for itself among the many UN and related science-based international conservation programs. Clearly, more thought needs to be given to this idea relative to the advantages it provides to MAB and its definition of a clear future role for its efforts.

The U.S. National Committee supports the concept of MAB as the focal point within UNESCO for biodiversity concerns. We agree that this role for MAB is strengthened by linkages to DIVERSITAS and other ICSU programs. In our view, this indeed enhances the ability of MAB to contribute meaningfully to the scientific underpinnings for management of biological diversity.

One key question that is not adequately addressed in this document is – what is the particular or unique role of MAB within the UN/UNESCO family of conservation programs (or, the comparative advantage of MAB as noted in this document)? The Worldwide Network of Biosphere Reserves (WNBR) provides an excellent and very unique asset for execution of many of MAB's programs, as does BRIM in our view, but it does not by itself define the unique attributes or role of MAB internationally. Similarly, taking the lead on and adding value to joint issues related to environmental management is not the same as clearly and directly defining the unique role of MAB that sets it apart from all other related programs. Given the many linkages and cooperative efforts mentioned with other UNESCO programs, MAB runs the real risk of being lost among the blur of UN conservation efforts. The ICC must address the unique role and place of MAB in the UN family, and the attributes that set it apart from all other programs, more clearly and directly than it has in this document.

The WNBR is presented in this document as a resource for all (UNESCO) intergovernmental programs, not just MAB. This is an interesting idea that may help solidify MAB's importance among the many related UNESCO programs. We agree that this idea should be considered. But, the implications of this approach for the management and future of Biosphere Reserves, and for the definition and wide acceptance of the specific and unique role of MAB within UNESCO, are again not given adequate attention here.

We agree that it is not useful to view MAB as a global change program. This does not imply, however, that the WNBR cannot serve the very useful role of natural laboratories (global

observatories) for detecting global change impacts on biological diversity and ecosystems. This would be an appropriate role for the WNBR consistent with the science base of MAB.

We support the adoption by MAB of the ecosystem approach to biodiversity conservation and management, as well as highlighting the role of MAB in reconciling conservation with development. These have been and should remain key components of the MAB approach.

We are especially supportive of the definition of four key themes (ecosystem or bioregional approach, ecological monitoring and evaluation, building capacity, and exploring novel ecological theory and practice) as foci for future MAB activities. These themes are quite appropriate as organizing foci for future MAB programs, and provide a useful and forward looking agenda for MAB, especially as they are developed through direct linkage to the WNBR. However, although the broad outlines of each theme are adequately described here, specific details of actions and expected outcomes under each are totally lacking. We recognize that the MAB Bureau must build consensus within the ICC around these themes before proceeding to develop them in detail. But, MAB must develop clear programs of work for each, with clear specifications of measurable outcomes and ongoing assessments of progress in implementation. The last theme of novel ecological theory and practice seems especially intriguing, especially as it is implemented through the WNBR. It should be the essence of MAB's efforts to develop the scientific underpinnings of biodiversity conservation, the reconciliation of conservation with development, and the harmonization of sustainable human actions with the environment. But, what is to be accomplished under this theme is especially vague in the present discussion.

The U.S. National Committee supports the idea contained in this document of differentiating within the WNBR as to which of the MAB focal themes will be pursued at which specific Biosphere Reserves. It is no longer useful to presume that each Biosphere Reserve site will contribute to all MAB focal themes. Each has its own strengths and unique attributes that make them useful for different approaches. But, again, details as to how this approach might be implemented on the ground are not discussed in any detail here.

DRAFT

Future Development of the MAB Programme Statement by the U.S. National Committee for MAB

The U.S. National Committee for MAB (USMAB) is pleased with the forward looking tone of the document prepared for the 16th Session of the ICC, "Future Development of the MAB Programme." The following comments are meant as an evaluation of the document as it applies to the worldwide MAB program, but, of course, is based in the U.S. MAB political and scientific experience.

The reaffirmation of MAB as a science program aimed at bringing together the natural and social sciences is applauded. The importance of the biosphere reserves as the laboratories for this interdisciplinary research should be emphasized as a unique feature offered by the MAB program.

The partnerships described in the document are important for global information with a minimum of redundancy but we have a concern that many of these partnerships seem to be building layers of a global umbrella with little definition, and with organizations joined under the umbrella losing their unique contributions. We are concerned that interconnecting too many intergovernmental environmental programs may overburden the process with bureaucratic guidelines, and focus on globally oriented programs to the detriment of the smaller locally developed pieces of information needed for complete understanding of the biosphere.

U.S. MAB is in complete support of the BRIM program and the expansion of it to include a worldwide-integrated monitoring program, but is pessimistic about agreement being reached on international standards for measurement, and on issues of scientific authorship. As suggested in the document, regional science based networks such as the Northern Sciences Network may be the appropriate strategy.

Managing the Biosphere would not be an appropriate name for MAB in the U.S. Here there are many concerns about land sovereignty which are not alleviated by the assurances in the Seville Strategy. It is possible that a globally acceptable name will not mirror the acronym, or that as suggested each country will need to develop its own title for the program.



MABRES@aol.com

10/02/00 04:35 PM

To: <bweber@fs.fed.us>

cc: mwalbrid@osf1.gmu.edu

Subject: MAB and Urban issues

TO: Members, U.S. National Committee for MAB
FR.: Roger E. Soles
RE: Attached MAB Circular letter # 7
Subject: Call for Nomination of National Specialists for the
UNESCO-MAB Roster of Experts on the Biosphere Reserve
Concept and Urban Issues

For those of you who have had time to read the offered options in the Future Development of the MAB Program (which was distributed at the last meeting and was also sent to all of you last week), UNESCO MAB is moving forward on the focus of the "Ecosystem or bioregional approach; - reconciling biodiversity conservation and rural/peri-urban and urban devolvment at a range of scales while also supporting and enhancing cultural values" (see p. 8, Future Development...).

Attached is the call for nominations of specialists to serve on a panel of experts from which the UNESCO MAB Secretariat will select members of a Working Group.

While UNESCO/MAB would like to have nominations by October 15, I am sure that they would give most serious consideration to nominees endorsed by our U.S. National Committee on October 16.

Please review the attached "Circular letter" and come to the October 16 meeting prepared to nominate experts for the U.S. National Committee to endorse to MAB UNESCO.

Do note that as per paragraph 3 of the letter, if we do endorse candidates and if some are chosen to be members of the "UNESCO Working Group Urban Systems," that U.S. MAB should be prepared to support their attendance at the forthcoming International Coordinating Council meeting in Paris, November 6-10, 2000.



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United Nations Educational, Scientific and Cultural Organization
Organisation des Nations Unies pour l'Éducation, la science et la culture

REF.: MAB Circular Letter No. 7/2000

27 September 2000

To: MAB National Committees and MAB Focal Points
UNESCO Field Offices

From: Peter Bridgewater, Director, Division of Ecological Sciences and
Secretary, Man and the Biosphere (MAB) Programme

**Subject: Call for Nomination of National Specialists for the UNESCO-MAB Roster
of Experts on the Biosphere Reserve Concept and Urban Issues**

1. Following the recommendation at the last MAB-ICC session in 1998 concerning the establishment of an *Ad Hoc* Working Group to Explore the Application of the Biosphere Reserve Concept to Urban Areas and their Hinterlands (the 'Urban Group'), the MAB Secretariat is hereby inviting nominations from MAB Focal Points concerning national specialists to constitute a UNESCO-MAB Roster of Experts on the Biosphere Reserve Concept and Urban Issues (the 'Urban Roster').
2. Based on the names forwarded for inclusion on the Urban Roster, the MAB Secretariat will select the Members of the Urban Group, the Terms of Reference for which are included as an annex to document SC-00/CONF.208/5 prepared for the 16th session of the MAB Council on this issue (attached).
3. In view of the limited financial resources available to the Secretariat, it would be preferable if the nominations included names of experts that will be part of the delegations planning to attend the 16th session of the MAB-ICC 6-10 November 2000, during which the Urban Group is intended to hold its first meeting.
4. The MAB Secretariat would appreciate it, if nominations of experts for the Urban Roster could be forwarded to the MAB Secretariat not later than 15 October 2000, together with a short curriculum vita of each nominee (preferably by e-mail to: mab@unesco.org) using the attached form.
5. The composition of the Urban Roster and the Urban Group will be announced on the UNESCO MABNet on the Internet (web address: <http://www.unesco.org/mab>) on 20 October 2000, as well as to all selected Urban Group Members and their respective MAB Focal Points.

Peter Bridgewater

**UNESCO-MAB Roster of Experts on the Biosphere Reserve Concept and Urban
Issues**

Nomination form

Title (Mr/Ms/Dr/Prof):

First name:

Family name:

Function:

Institution:

Address:

Postal code:

Country:

Tel:

Fax:

E-mail:

Http:

Short description of experiences/special interests in relation to the Biosphere Reserve
concept and urban issues:

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

**International Co-ordinating Council of the Man and the Biosphere (MAB)
Programme
Sixteenth Session**

UNESCO Headquarters, Paris 6-10 November 2000
Room XII, Fontenoy Building

THE ROLE OF MAB WITH REGARD TO URBAN AND PERI-URBAN ISSUES

1. The present document outlines a new phase in the MAB Programme's contribution to the international agenda of research and policy making in the area of sustainable urban management and development through the establishment of the ad hoc 'Working Group to Explore the Application of the Biosphere Reserve Concept to Urban Areas and their Hinterlands' (the Terms of Reference for which are included in Annex 1).

2. MAB, through a number of important projects carried-out under the auspices of MAB National Committees, have provided pioneering contributions to the establishment of the notion of 'urban ecosystem' research. This was for years a most fruitful branch of MAB's rich and diverse project portfolio, which, however, developed somewhat in parallel with that of the Biosphere Reserve concept. The fact that urban sprawl continue at an alarming rate worldwide, at the same time as the Biosphere Reserve concept today perhaps is more popular than ever as a model for sustainability, has sparked a renewed interest in seeking to further investigate the urban area/biosphere reserve interface.

3. The Advisory Committee for Biosphere Reserves, who had the issue placed before it at its Fifth meeting 7-10 July 1998 (see Annex 2 to this document), concluded that it would be beneficial if a group of MAB experts could be charged with examining this issue with a view to further explore the application of the Biosphere Reserve concept to urban areas and their hinterlands. Taking into consideration the view of the Advisory Committee, the MAB Council subsequently recommended at its 15th session in December 1998, that the MAB Secretariat set up an *ad hoc* working group to further explore the application of the biosphere reserve concept to urban areas and their hinterlands. Due to budgetary constraints, it has not proved feasible to ask MAB National Committees and MAB Focal Points to nominate names from which the MAB Secretariat would establish the working group before the present biennium, or to organise its first meeting before the 16th Session of the MAB Council.

4. Within the framework of the Terms of Reference established for it, the MAB Council is now invited to outline any particular issues it may want the *ad hoc* working group to consider in its deliberations.

United Nations Educational, Scientific and Cultural Organization
Organisation des Nations Unies pour l'Éducation, la science et la culture

Annex 1

***Ad Hoc* Working Group to Explore the Application of the Biosphere Reserve Concept to Urban Areas and their Hinterlands**

Terms of Reference

I. Introduction

At its 15th session in December 1998, the MAB Council recommended that the Secretariat set up an *ad hoc* working group to further explore the application of the biosphere reserve concept to urban areas and their hinterlands (hereinafter referred to as the 'Urban Group').

The present document outlines the Terms of Reference (TOR) for the Urban Group which is expected to hold its first meeting during the 16th Session of the MAB Council, UNESCO, Paris, 6-10 November 2000.

II. Objectives

The objectives of the Urban Group are to:

- a) Identify contributions that the biosphere reserve concept have made or could make in urban planning and management, including in the context of the Convention on Biological Diversity with its focus on the ecosystem approach;
- b) Examine if there is, or should be, a place for urban areas and cities in the World Network of Biosphere Reserves (beyond as transition areas);
- c) Explore alternative ways and means of recognizing selected cities, or parts thereof, as sites that exemplifies the Biosphere Reserve model;

- d) Stimulate a discussion within MAB and with relevant partner institutions and organizations, on the development of an agenda for possible future MAB activities in this area.

III. Composition

The Urban Group shall consist of 6-10 experts selected by the MAB Secretariat on the basis of nominations from MAB National Committees. The Urban Group shall function as an 'open' group as far as its deliberations on the web are concerned: all interested MAB members, as well as other relevant programmes and organization shall be invited to participate and contribute with their information, experiences and opinions, as appropriate.

IV. Modes of Action

The Urban Group shall report to the MAB-ICC. It shall conduct its business primarily using e-mail and the Internet and a dedicated discussion forum to be established for this purpose linked to the MABNet. During the duration of the Urban Group, an annual meeting shall be organized, if possible in conjunction with sessions of the MAB-ICC. The Urban Group shall select a Chairperson among its members responsible for the coordination of its activities, in cooperation with the MAB Secretariat. The MAB Secretariat shall provide logistic support, including a dedicated section on the MABNet.

V. Expected Results

The Urban Group is expected to produce the following results:

- a) Recommendations concerning the appropriate application of the biosphere reserve concept to urban areas and their hinterlands;
- b) Suggestions for collaboration among established biosphere reserves with an interest in urban/peri-urban issues;
- c) Options for how MAB best could recognize efforts towards more sustainable urban development and management, if such efforts are to be recognized;
- d) Outline elements of a possible future interdisciplinary research agenda on the biosphere reserve concept in relation to urban areas and their hinterlands.

VI. Budget

In the period 2000-2001, the MAB Secretariat will provide a budget of US \$13,500 for the deliberations of the Urban Group, subject to availability of resources. Members from developed countries are expected to cover their participation in the activities of the Urban Group primarily through their respective MAB National Committees, or from other sources.

VII. Duration

The Urban Groups shall operate for a period of 2 years, starting in October 2000 and ending in September 2002. The Urban Group can be extended only following a decision by the MAB ICC.

ANNEX 2

SC-97/CONF. 502/4

5 July 1998

UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANISATION

Man and the Biosphere (MAB) Programme

Advisory Committee for Biosphere Reserves

Fifth meeting

7-10 July 1998, UNESCO HQ (Room XIV)

Application of the Biosphere Reserve Concept to Urban Areas and Their Hinterlands

Item 8 on the provisional agenda

1. In anticipation of possible future biosphere reserve nominations including major urban areas, the Secretariat would welcome a preliminary discussion among the Advisory Committee members regarding the application of the biosphere reserve concept in relation to such areas. The present document is intended to facilitate such a discussion by providing: i) a short introduction to some urban environment and development issues; ii) a brief analysis of urban areas in the context of the Seville Strategy and the Statutory Framework of the World Network of Biosphere Reserves; and iii) a list of questions of possible interest in this context.

2. The Advisory Committee's advice, comments and suggestions regarding the concerns, issues and questions included in this document, or which might arise during the discussion, are highly welcome.

I. Introduction

3. Ongoing urbanization trends indicate that more than 50% of the globe's population will live in urban areas by the year 2000 (World Resources 1996 p.97). The impacts of urbanization on biodiversity and the environment are complex and challenging. Besides having direct negative impacts on the areas being transformed into cities, increasing consumption among city inhabitants tend also to result in increased exploitation of natural resources and in higher levels of waste and pollution outside the city borders. The so called "ecological footprint" of urban areas are therefore often substantial. On the other hand, by concentrating a larger number of people per km², cities can, at least in theory, reduce the pressure on rural areas.

4. There is therefore a clear need to address cities and the urbanization process in environment and sustainable development discussions. Not the least in the South where the urbanization process is particularly rapid. This need was perceived early on within the MAB Programme, in particular through its pioneering work on cities using an ecosystem approach. More recently, UNESCO has established an action-oriented project for the six-year period 1996-2001, entitled "*Cities: management of social and environmental transformations*". The first four years will be spent designing and implementing a small number of pilot activities. During the final biennium (2000-2001), a comparative evaluation of these experiments will be carried out, and proposals will be drawn up to improve policies for cities, mainly in respect of support for local communities in the context of urban management. This project, which is anchored in the MOST (Management of Social Transformations) and MAB Programmes of UNESCO is designed to respond to Agenda 21 of UNCED, and the U.N. conference on Human Settlements (Habitat II) which was held in June 1996, in Istanbul, Turkey.

II. Urban Areas and Biosphere Reserves

5. The World Network of Biosphere Reserve is the major MAB instrument for promoting biodiversity conservation and sustainable development. Having evolved from traditional protected area approaches, in particular national parks (which often are part of biosphere reserves), the biosphere reserve concept and the Word Network are associated with more pristine, scarcely populated environments than what urban areas typically offer. This being said, the biosphere reserve concept is an evolving one, and following the Seville Conference, more emphasis is now put on sustainable development objectives and on more large scale, regional, conservation and development concerns.

6. It is also significant that biosphere reserves are being created closer and closer to urban areas. In a number of cases, biosphere reserves have been established just outside cities. Sometimes in order to slow down, or stop the urbanization process of important green areas surrounding them. Today, it is becoming increasingly clear that biosphere reserves outside cities often create substantive economic values (although it is still difficult to assess these values more exactly) in terms of production of various ecosystem goods and services (eg watershed protection, tourism and recreation opportunities). Examples of such biosphere reserves include the green belts around Rio de Janeiro and Sao Paulo (Mata Atlantica Biosphere Reserve) and the Cerrado Biosphere Reserve around Brasilia (Brazil), Cordillera Volcanica Central Biosphere Reserve outside San JosÈ (Costa Rica), and the Alto Manzanares Biosphere Reserve near Madrid (Spain).

7. If it is true that biosphere reserves are coming closer to the cities, it is also certainly the case that because of urbanization, cities tend to get closer to biosphere reserves that previously might have been relatively isolated and "spared" from human impacts. The interface between urban areas and their hinterlands is therefore starting to emerge as an issue that possibly will require more in-depth attention within the MAB Programme. It might, for example be pertinent for MAB in the future to promote interdisciplinary research that could reveal more accurately the importance of, including in economic terms, biosphere reserve planning and management integrating urban areas and their hinterlands.

8. Most cities and large metropolises are, more or less successfully, actively struggling to become more green, less polluting and resource-use intensive. In some cases, important improvements have indeed been made in the city environment, although it is in most, if not all cases, too early to talk about examples of sustainable cities. This being said, some city officials and MAB National Committees, such as in the EuroMAB region, have expressed an interest in recognizing ongoing urban efforts and to further strengthen them as models for regional development through associating more successful urban areas with the World Network of Biosphere Reserves (see an Annexed letter from Germany). Such a development would certainly accelerate the need to pay increased attention to the city-hinterland interface within the Programme.

9. It is one thing to apply the biosphere reserve concept outside a city as a green belt. It would be much more ambitious to suggest that a city itself (particularly a city of any more important size) could be an integrated part of a biosphere reserve (ie include extensive core areas) or actually constitute the biosphere reserve.

10. Several arguments could however be raised in favour of maintaining a more traditional approach whereby biosphere reserves primarily are associated with national parks and other types of protected areas experiencing low or only modest human impacts. The main arguments perhaps being that:

1. besides a reference to peri-urban areas, cities are not recognized in the Seville Strategy or in the Statutory Framework of the World Network of Biosphere Reserves;
2. urban areas are typically unlikely to meet the criteria set out in the Statutory Framework;
3. confusion could possibly arise as to the objectives and nature of biosphere reserves if the World Network would include some major urban areas.

11. However, before concluding that cities are unsuitable in general for biosphere reserve designation, it might be useful to examine the criteria regarding designation of biosphere reserves listed in the Statutory Framework somewhat more in detail.

12. One possible conclusion of such an examination could be that, although the Statutory Framework does not seem to exclude the possibility of including cities or urban areas in the World Network, it is not evident that such areas would meet the criteria as presently presented in the Statutory Framework. The Advisory Committee is invited to provide its view on this issue.

13. For the discussion, it would likely also be beneficial to try to identify some different scenarios under which urban areas might be subject for biosphere reserve nominations, as well as to try to identify alternative options within the MAB Programme for

recognizing successful city models.

14. First, according to the Statutory Framework, a biosphere reserve should consist of three zones with varying levels of conservation ambitions. This implies that a city, or an urban area could be associated with a biosphere reserve in several different ways. The scenarios/categories outlined below, might be useful in the discussion:

15. Scenario/category I: The city as the biosphere reserve: In theory, one could imagine an urban area that within its borders hosts and manages a range of ecosystems of such significance and representativeness that it could encompass the three different biosphere reserve zones within its borders. Such an area would then likely meet the Statutory Framework criteria for biosphere reserves and the reserve could be named after the city itself, eg the "Metropolis X Biosphere Reserve".

16. Scenario/category II: Green-belt biosphere reserve around a city: Green-belt biosphere reserves can help sustain polluted and unsustainable cities. Only minor, if any core or buffer zones inside the city itself would be expected in such a reserve. Some cities might however meet the transition zone criteria. Basically, the reserve will consist of the areas outside the city, while its major objectives might be to serve and sustain the city.

17. Scenario/category III: Mixture of I and II above: "Greener" cities often host some significant areas for conservation (*in situ* as well as *ex situ*) within their borders. Such areas could constitute important core areas. Together with more traditional core areas in the natural environments in surrounding hinterlands, possibly combined with city core areas through so called "green corridors", the biosphere reserve would constitute a sort of "regional" biosphere reserve blending urban, rural and natural areas. It might constitute a prototype for the type of green city many urban areas around the world now strive to become.

18. Other scenarios are perhaps also possible to conceive. The most challenging, and least realistic scenario is certainly scenario I. Pursuing scenario III type of biosphere reserves might be a particularly constructive strategy for future MAB work in this field.

Alternative ways of recognizing model cities

19. If there were a strong interest within the MAB Programme to recognize selected cities as models, there might be other ways of doing so then by associating them with the World Network of Biosphere Reserves. Part of the strength of the biosphere concept has been its capacity to evolve over time. But in spite of the fact that the flexibility of the concept might make it difficult to state unequivocally that it cannot be applied to cities and major urban areas, it might be the case that the costs of stretching the concept too far from its original applications could be higher than the advantages.

20. Alternative approaches might therefore be more efficient. One option for MAB could, for example, be to consider the development of a new concept and associated network, eg a "MAB City" concept and a "MAB City Network". Such a concept could

draw on the biosphere reserve concept (eg zonation of the city environment, community involvement etc) but would include the development of a set of unique criteria regarding the designation of MAB Cities.

III. Tentative list of questions for the discussion

1. Should MAB put more emphasis on urban area issues, such as on the city/hinterland/biosphere reserve interface? If so, how should MAB proceed (MAB City workshops, expert meetings, synthesis documents)?
2. What contributions can the biosphere reserve concept have in urban planning and management?
3. Is there, or should there be a place for urban areas and cities in the World Network of Biosphere Reserves (beyond as transition areas)?