United Nations Educational, Scientific and Cultural Organization

International Coordinating Council of the Man and the Biosphere (MAB) Programme
Twenty-first session

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Item 6 of the Provisional Agenda: Implementation of the Madrid Action Plan (MAP)
a. Assessment of the Seville Strategy

1. This document aims at completing and refining the information presented at the MAB ICC Bureau in February 2009 (ANNEX), which also dealt with the assessment of the Seville Strategy in the context of the implementation of the Madrid Action Plan (MAP).

2. As of 31 March 2009, the Secretariat had received 118 completed responses representing the inputs of 124 biosphere reserves from 37 countries. Responses from the Europe and North America region represent 46.77% of the total, Asia and the Pacific region represent 20.9%, Latin America and the Caribbean region 16.1%, the Arab States region 8.8% and Africa 7.25%. Thirty-eight (38) biosphere reserves from the Russian Federation have informed the questionnaires, and a synthesis was transmitted to the Secretariat by the Russian MAB National Committee.

3. An analysis of the questionnaires has revealed a high disparity of staff, technical and scientific means to be found in individual biosphere reserves. As regards the use of indicators and the types of indicators used to measure the performance of the three functions and for assessing sustainable development, high disparities were also observed. Some countries such as Tunisia face difficulties in implementing scientific research and monitoring programmes whereas countries such as Lebanon and South Africa utilize indicators for the three functions on a regular basis and rely on trained staff and equipment in order to monitor changes. Table 1 shows the most used indicators for the three functions, and it is worth noting that many biosphere reserves are using implementation indicators provided in the Seville Strategy.

4. It appears that biosphere reserves established after the Seville Strategy are generally handling the implementation indicators more effectively and are also using sustainable development indicators as a framework for guiding and monitoring implementation of the biosphere reserve functions. It also appears that there is a need to support, in particular, biosphere reserves established before 1996 in the integration of the three functions. With some notable albeit rare exceptions, in general, both generations of biosphere reserves suffer from a severe lack of understanding of the ecosystem services framework, the benefits derived from proper ecosystem structure and functioning as well as the costs associated with degradation and loss of these services. The climate change framework is on the other hand
increasingly taken into account, although measurements of the effects of climate change are rarely pursued.

5. As regards implementation of the periodic review, the majority of the responding biosphere reserves are willing to exchange both methods and data and have provided the MAB Secretariat with suggested questions that they would like to be asked during the periodic review process. These include the following questions: How is local knowledge integrated into the management of the biosphere reserve? How is the balance between the three functions achieved? What are the main challenges faced by the site? How is the site being managed? How are citizens and inhabitants involved? How are the benefits to local communities assessed? How were positive socio-economic changes assessed since the previous review? How to use accurate data and statistics to demonstrate the role of biosphere reserves for sustainable development?

6. The majority of the responding countries requested the MAB Secretariat to assist with the development of operational guidelines for better implementation of the criteria, for better communication and visibility within and outside of the World Network of Biosphere Reserves (WNBR) including better support from decision makers and local communities, enhanced networking, and sharing of information and knowledge within the WNBR, including through the establishment of a clearing house for the MAB Programme.

7. Recommendations

a) Capitalize upon the efforts undertaken by some biosphere reserves for sharing methods, practices and indicators though the Internet and recognize their role as clearing house ‘hubs’ for their respective regional networks (examples of which are the Cape Wineland Biosphere Reserve in South Africa, the Badiar and Haut Niger in Guinea, the Dinder Biosphere Reserve in Sudan, the Jabal Moussa Biosphere Reserve in Lebanon, the Fontainebleau Biosphere Reserve in France, the Sundarban Biosphere Reserve in India and the Lauca Biosphere Reserve in Chile. In addition, Spain is preparing a core-set of indicators for the three functions to be used by the Spain national network of biosphere reserves that would be available in 2009);

b) Explore possibilities to conduct regional training workshops on ecosystems services in order to reach a number of operational biosphere reserves that would provide relevant inputs to and benefit from the Millennium Ecosystem Assessment follow-up process;

c) Consider options to fulfil short on-line questionnaires for monitoring and reporting on key functions of the biosphere reserve and on sustainable development practices, on a regular basis, based on a core-set of indicators that would be used for the periodic review as well, taking into account the indicators already used in the sites, national initiatives such as Spain.

8. The Council is invited to provide comments on the above-mentioned recommendations and to add any suggestions on how to better capitalize upon the efforts made by individual countries, including using the Internet and other clearing house facilities and on how to best support them in the implementation of the Seville Strategy and Statutory Framework and Madrid Action Plan.
<table>
<thead>
<tr>
<th>Objective</th>
<th>Red List Index (IUCN)</th>
<th>Biodiversity indicators (CBD, SEBI)</th>
<th>Living Planet Index (WWF)</th>
<th>State of ecosystem services</th>
<th>Implementation indicators of Seville Strategy</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective 1</td>
<td>40 (28.9%)</td>
<td>28 (20.2%)</td>
<td>12 (8.7%)</td>
<td>14 (10.1%)</td>
<td>26 (18.8%)</td>
<td>18 (13%)</td>
</tr>
<tr>
<td>Human Development Index (UNDP)</td>
<td>Geographic indications, labels</td>
<td>State of ecosystem services</td>
<td>Implementation indicators of Seville Strategy</td>
<td>Others</td>
<td></td>
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<tr>
<td>Objective 2</td>
<td>23 (31.9%)</td>
<td>8 (11.1%)</td>
<td>8 (11.1%)</td>
<td>24 (33.3%)</td>
<td>9 (12.5%)</td>
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<tr>
<td>Reports, PhD, Publications</td>
<td>Implementation indicators of Seville Strategy</td>
<td>Others</td>
<td></td>
<td></td>
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<tr>
<td>Objective 3</td>
<td>56 (53.76%)</td>
<td>23 (22.08%)</td>
<td>17 (16.3%)</td>
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Annexe
UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION

Man and the Biosphere (MAB) Programme

Meeting of the Bureau of the International Co-ordinating Council

UNESCO Headquarters, Paris, Room XIV (Bonvin Building)
12-13 February 2009


Item 4.3 of the Provisional Agenda: Implementation of the Madrid Action Plan (MAP)
Assessment of the Seville Strategy

Report on the Survey on the Assessment of the Seville Strategy

General considerations and first observations

1. From 442 MAB National Committees and 501 biosphere reserve (BR) managers contacted, the MAB Secretariat had received as of 15 January 2009, 56 completed questionnaires representing the input of 74 biosphere reserves from 29 countries (see details in Chart 1). The data constitute the first sample of a survey that is meant to be ongoing until March 2009. In this sample, Latin American Region is representing 24%, Europe 20%; and Arab and Africa regions 14% and 7% respectively.

2. During the first stage of the survey process we received specific questions regarding the international biodiversity indicators, and countries like Argentina organized workshops to clarify these concerns. Other countries, like Chile, organized meetings of the state agency in charge (CONAF) to coordinate the process.

3. Regarding the responses, six MAB National Committees opted to respond exclusively by a single questionnaire containing the input of a group or the totality of their biosphere reserves. From the 56 questionnaires, 55 report information about 74 internationally recognized biosphere reserves. From the group of questionnaires, 15 represent biosphere reserves created after the Seville Strategy and the Statutory Framework (created since 1996), and 32 report on BRs that were part of the World Network of Biosphere Reserves (WNBR) prior to the Seville Strategy. Seven questionnaires contain data of BRs created prior and after the Seville Strategy. Countries like Croatia, Chile, Latvia, and Peru responded with feedback for all of their biosphere reserves; the Czech Republic and Iran were also not far from a perfect response rate; nonetheless the low overall response rate is somewhat disappointing. The surveys were completed by different actors: in 43% of the cases they were answered by biosphere reserve managers, 16% were completed by the MAB National

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1 This survey has received substantive input from Ms Deborah Delgado as part of her training period with the MAB Programme during the period September 2008-January 2009.
2 Secretariat of the Man and the Biosphere (MAB) Programme
3 Argentina sent their inquiries about the biodiversity indicators related to First Goal of the Seville Strategy, other countries like Honduras sent us more general observations.
4 Senegal, Cuba, Tunisia, Japan, Kyrgyzstan and Viet Nam
5 Iran answered for 7 of their 9 biospheres reserves and Colombia for 3 of their 4 biosphere reserves.
Committees and MAB focal points, 17% by members of State Agencies, and experts answered for the remaining 9% of the cases.

4. **About the online mechanism:** This is the first time that the MAB Secretariat has used an online survey application for the WNBR. In the three weeks the survey was online during December 2008, it was visited 131 times; 32 users tried to complete the survey, but only 7 biosphere reserves responded entirely by this means. Although biosphere reserves from the Europe Region were the survey’s most frequent visitors, the majority of the actual users consisted of Asian and African biosphere reserves. Some difficulties were exposed during the survey process: the survey was too large and complex to be effectively presented electronically and there was no option to save data on a survey in progress in order to respond to the questionnaire over several visits. Taking into account the observations of BRs managers and MAB National Committees, the online survey mechanism can be adapted to the needs of the WNBR and has enormous potential to facilitate the reporting process.

**Part I:** Survey to identify indicators for assessing the achievements of the Seville Strategy and the Statutory Framework

Relevance of the implementation indicators listed in the Seville Strategy and assessment by biosphere reserves of emerging and unresolved issues identified in the Madrid Action Plan (MAP)

5. Part I of the survey dealt with implementation of the Seville Strategy and to which extent emerging issues not reflected in the Seville Strategy are addressed in BRs, namely climate change, the effects of increased urbanization and ecosystem services and their contribution to human wellbeing.

6. Except for rare isolated cases, in general, the Seville Strategy framework seems to have been used.

7. Overall, the dramatic absence of practices to assess the status and trends of ecosystem services reflects most likely an important lack of understanding of the very notion of ecosystem services. With the exception of a few BRs where the notion seemed to have been understood (although comprehensive assessments of ecosystem services have not taken place), in general the services listed in the annex to the questionnaire are not reflected in the daily management of BRs.

8. In general, while there may be an increased awareness of climate change as an important stressor to people and their livelihoods, there also tends to be a lack of response by BRs in addressing this issue through measurements of the impacts of climate change on resources, biodiversity and human communities. In some BRs, research on the ecological effects of climate change is carried out. In general, there seems to be a growing understanding of climate change, vulnerability and the need for adaptation measures.

9. Monitoring of urbanization plans and the application of indicators for assessing human pressure (essentially demographic indicators) are in general well established in BRs. However, urbanization entails more than demographic factors and encompasses various
types of land-use and land-use change, but this more comprehensive approach to assessing urbanization in the BRs that have participated in the survey is largely missing. In some cases, no human effects are reported in the BR due to the lack of human settlements in those areas.

10. The specific incorporation of BRs in National Biodiversity Strategies and Action Plans (NBSAPs) as per related provisions of the Convention on Biological Diversity (CBD) is in general much diffused. The successful integration of most of the respondent BRs into NBSAPs seems to indicate that the MAB Programme has been mainstreamed into the implementation of the CBD. It is hoped that the same could be done in the future with regard to relevant provisions under the United Nations Framework Convention on Climate Change (UNFCCC). In some cases, BRs are also associated with the Ramsar Convention on Wetlands and the UNESCO World Heritage Convention.

11. Most of the Seville Strategy indicators appear to be still adequate for assessing the implementation of the very fundamental BR notion. In turn, the new dimensions brought by the MAP would need to be measured on a regular basis so as to ensure the successful implementation of the BR notion in the XXI century. However, there seems to be a need for further significant efforts to be made in order to mainstream current emerging management priorities into BR management practices, especially the assessment of the status and trends of ecosystem services.

12. In the latter regard, the probable severe lack of understanding of ecosystem services, which would explain the practically non-existent response to this question (with the exception of a few rare cases in which the concept of ecosystem services at the level of the BR concerned was well articulated), may be addressed through the newly-established ICSU-UNESCO-UNU Programme on Humans, Ecosystems and Wellbeing (HEW). This programme aims at filling knowledge gaps in the Millennium Ecosystem Assessment and fosters to facilitate the design and implementation of assessments of ecosystem services in BRs. In order to fill the apparent gap identified, the MAB Secretariat is planning a campaign to publicize this new programme, with the hope that many BRs will participate in its implementation.

13. However, these conclusions are preliminary due to their preliminary nature and should therefore be taken with care. The survey has suffered from a limited number of BRs that have participated in it. It is self-evident that a more systematic analysis of the results from a statistical as well as substantive standpoint at the level of the WNBR will depend on the further participation of BRs in the survey.

14. On the basis of the information collected thus far, it appears that the results of the survey would substantially assist in assessing what has been and not been achieved in the implementation of the Seville Strategy at the BR and the WNBR levels and why, and assist in the implementation of the MAP. For example, many BRs are potentially in a position to offer important insights to issues related to benefit-sharing on the ground.
Seville Strategy and Statutory Framework perspective

What are the main achievements of the Seville Strategy?

The analysis of the answers to this question highlighted the following achievements:

- Increase of respect and involvement of local communities in planning because the biosphere reserve is better seen as a source of economic development for local communities;
- More awareness-raising about the concept among decision makers;
- Increased cooperation among different stakeholders including private sector and local communities;
- Sustainable development as one of the key elements became a worthy alternative to strict nature conservation: this fact helped to win the public and local communities support;
- Sustainable development as a vision;
- Design and implementation of management plans.

What were the main obstacles to the implementation of the Seville Strategy?

- Lack of government support;
- Lack of knowledge of Seville strategy and lack of understanding of the biosphere reserve tool;
- Legal limitation;
- Lack of coordination between different sectors and implementing agencies;
- Limitation in staff, equipment and budget;
- No mechanism of integration of management of biosphere reserves into national policies of sustainable development.

What were the main gaps in implementation?

- Limited infrastructure, human resources and capacity building;
- Lack of legal status to enforce decisions and/or management decisions;
- Lack of indicators/measurements to see how the biosphere reserve has increased the way of life of inhabitants;
- Main focus on the core area and on conservation objective;
- Missing information and data and lack of communication between stakeholders;
- Economic valuation of ecosystem services not fully elaborated;
- Conflict resolution mechanisms not fully set in place;
- Lack of integration of biosphere reserves into regional management plans;
- Insufficient communication from MAB Secretariat; lack of direct communication between Paris and the single BR; No supervision from the MAB Headquarters on how the Seville Strategy is being implemented at national levels or how national MAB BRs committees promote it. On-site check could be also appropriate.
- Time: The implementation of the Seville Strategy has proven to be more complex and at times misunderstood. Development of the correct mechanism to manage the biosphere reserve and development of procedures and resources;
- Lack of knowledge about the biosphere reserve;
- Lack of communication and non-systematic approach to the biosphere reserve between the parks in the BR and at the national level;
- Lack of best practices examples.
What are the main priorities for the coming years?

- Better implementation of the Madrid Action Plan;
- Development of new biosphere reserves;
- Networking and active communication with other BRs;
- Compile best practices for inspiration;
- Technical support from the MAB Secretariat to face new challenges such as climate change;
- Improvement of management systems for existing BRs;
- Better presentation of newly proposed BRs;
- Better dialogue with decision makers and developers (investors);
- To develop an Ecosystem Assessment Framework;
- To implement functional data management systems;
- Promote the biosphere reserve;
- Secure ongoing funding to enable the implementation of the Madrid Action Plan;
- Improve communication and understanding of the Government.
- Take a greater leadership role in the planning and sustainable development of the region and in research and education;
- Education of the wider community and government on the need for sustainable development as the way to secure the future and the function of biosphere reserves to that end;
- Establishment of the monitoring system for ecosystem assessment as well as for management actions;
- To develop the site into a BR where both Seville Strategy and Madrid Action Plan are tools used when communicating the BR objectives to the local people and actors as well as within the WNBR.

What do you expect from the MAB Secretariat in terms of achieving these priority goals?

- Support for funding opportunities including for training of the staff, research in the biosphere reserves, workshops and discussions forums at national and regional levels;
- Organize meetings for BR managers on a more regular basis;
- Technical advice, and championing moral support;
- Higher communication, better information flow;
- Coordination, facilitate exchange of experience and networking with other sites;
- More involvement in support for regional projects;
- More user-friendly reading and diffusion material;
- Ongoing communication of MAB Secretariat with policy makers at national and regional levels and also with managers of biosphere reserves and obviating law limitation and reforming the structure and regulation to provide participatory management;
- Available information and defensive environmental costs in the biosphere in worldwide;
- Moral support of individual BRs in negotiations with the national government and potential fund donors;
- Better supervision of the Seville Strategy implementation by MAB National Committees;
- Finding a model BR in each country performed by independent out-of-country experts (e.g. BR coordinators);
- Provide links to best practices (success stories in relevant sectors), support twinning
  and cooperation between different BRs in research and educational programmes

**Part II: Survey to improve the periodic review form and data analysis**

15. The objective of this part of the survey was to gather information and contributions for
the improvement of the periodic review process and form and to gain a better picture
of the state of data analysis undertaken by BRs as well as their use of indicators to
measure progress towards achieving the different functions. The sample used in the
analysis of this section comprises 55 valid cases, each case being a filed questionnaire.
In the case of each indicator used for measuring the goals of the Seville Strategy, the
total of cases is the total of times that each of the indicators has been used by the
group of BRs of this sample (for example in the following chart the total will be 96).

![Graph showing indicators used](image)

**Goal I**

*Which indicators, criteria do you use to measure the use of Biosphere Reserves to
conserve natural and cultural diversity?*

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Red List Index (IUCN)</td>
<td>21%</td>
</tr>
<tr>
<td>Others</td>
<td>18%</td>
</tr>
<tr>
<td>No answer</td>
<td>14%</td>
</tr>
<tr>
<td>State of ecosystem services</td>
<td>11%</td>
</tr>
<tr>
<td>Implementation indicators of the Seville Strategy</td>
<td>11%</td>
</tr>
<tr>
<td>Biodiversity Indicators (CBD, SEBI)</td>
<td>5%</td>
</tr>
<tr>
<td>Living Planet Index (WWF)</td>
<td>20%</td>
</tr>
<tr>
<td>Others</td>
<td>14%</td>
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</table>

16. The most applied indicator for measuring the conservation of natural and cultural
diversity is the Red List Index which represents 21% of all the indicators monitored in
this sample of biosphere reserves. This indicator concerns the particular species
represented in each biosphere reserve and in some cases this list has become part of
the national strategy and conservation lists.6 Another 20% of the respondents follow
mostly national and regional standards, as is the case of European programmes.7 Black
Sea in Ukraine and the biosphere reserves of the Czech Republic are examples of
multiple indicators monitoring8. The state of ecosystem services is used in a minor
degree and the respondents did not go into detail about the way this indicator was
applied. Finally, 30% of the biosphere reserves in this sample do not report the use of
any indicator.

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6 This is the case of the Omayed and Wadi Allaqui Biosphere Reserves in Egypt and Juan Fernandez in Chile
among others.
7 Since regional lists and standards were not specified in the indicated options they are represented in the category
“others”. Biosphere reserves in Chile and Brazil and in Ukraine and Latvia are good examples of sites using these
lists.
8 Such as the implementation of the Seville Strategy, the CBD, the state of ecosystem services and the IUCN Red
List index.
17. The information is centralized by the management team and national agencies in most of the cases. Universities play a role in gathering the information. Universities and scientists, as can be seen in the chart below, represent 34% of the total users who have access to the data. Decision-makers also represent a significant percentage of those who have access to biodiversity indicator data.
18. Regarding Goal II, the Human Development Index is the indicator most used for measuring biosphere reserves as models of approaches to sustainable development. Some of the biosphere reserves did not have proper zoning in order to implement models of land management that can incorporate this goal effectively, but they have recently extended and adopted sustainable development plans specially for their buffer zones (as is the case of La Campana in Chile). Environmental impact assessment and sustainability analysis for regional land-use plans are also cited regularly by the respondents. On the other hand, the use of labels and geographic indications are weakly represented in the sample.
19. The significant proportion of those who did not observe changes or did not answer\(^9\) this question may lead us to think that the assessment of the Seville Strategy regarding sustainable development is in a way premature, and that there is place for developing and adapting indicators for biosphere reserve needs as well as establishing policies and programmes in order to attain this goal. The comments made about the changes observed are wide-ranging: the most recurrent is the participation of local people; changes on the perception that local stakeholders have of the biosphere reserve were highlighted several times (from the feeling of exclusion and expropriation to an improved knowledge of local environment and as a source of development). Management improvements are mentioned as well.

20. Four objectives of Goal III “Using biosphere reserves for research, monitoring, education and training” were analyzed by this survey. The first, improving knowledge of the interaction between humans and the biosphere (III.1) was well measured. Management teams have tracked and participated in research activities undertaken in their biosphere reserves as details for the reports, PhD papers, titles and publications were provided to the Secretariat.\(^10\) As biosphere reserves are increasingly being incorporated into sustainable development plans, research on these aspects is ongoing. The implementation of the Seville Strategy is ongoing, especially as regards applied research. Concerning the improvement of monitoring activities, the use of implementation indicators is mentioned. Monitoring involves local communities (La Comoé, Côte d’Ivoire), and sharing of experience among local population on these practices is also in place (Badiar, Guinea).

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\(^9\) Mainly because of their recent designation, they have not yet implemented the Statutory Framework.

\(^10\) Badiar Haut Niger (Guinea), Dinder (Sudan), Cabo de Hornos (Chile), Cienaga Grande de Santa Marta (Colombia), Krkonose/Karkonosze (Czech Republic) among many others are good examples.
Which indicators, criteria do you use to measure the improvement of the knowledge of the interactions between humans and the biosphere

Goal III: Objective III.2
Improve Monitoring Activities

Implementation indicators of the Seville Strategy
Others
No answer
21. In addition to the sites which reported on information and documentation centres and libraries, 10 sites reported on visitors’ centres, research/interpretive centres, or environmental education classrooms as part of their public awareness efforts. Seven sites mentioned specific community organizations collaborating with biosphere reserves.
22. Respondents highlighted work with students, training courses, and the organization of conferences and workshops in their efforts towards reaching this objective. Examples of stakeholders approach to management, involving NGOs, local people and national agencies have been presented.

23. Management teams are involved in the monitoring in nearly 70% of the cases. Universities are involved nearly 20% of the time.
24. On the sample, the concentration of access to the data is with managers, scientists, schools, and the MAB National Committee.

25. Two biosphere reserves that reported changes in the zonation of the area consider that those had a positive influence in the coherence of the management plan of the biosphere reserve, facilitating the establishment of targets and actions plans for each area and avoiding their isolation. Changes in zonation implied a better protection of the core areas and the extension of the biosphere reserve. 40% of the BRs that reported these changes indicated that they had occurred during the periodic review process.

26. Some changes in the governance structure - coordination and management - are reported. They include decentralization of public management (creation of sub sectors for each zone) creation of consultative councils of stakeholders and stakeholder-based management structures with direct participation of the local communities.

27. Changes in governance reported lead to a larger participation of biosphere reserves’ stakeholders and opportunities for the sustainable development of local communities. The biosphere reserves that reported these changes, 26% of the sample, consider that the management of conflicts among local actors was improved, that a larger awareness of the biosphere reserve resources was achieved and that new opportunities for development were seized.

28. Nevertheless, there is a rather low rate of creation of indicators and standards to assess and understand the relation between the three functions of a biosphere reserve. 50% of the answers do not use any indicators or standards, 35% did not answer this question and from the 16 % that declare to have them, just a very few go into real detail.

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11 Vosges du Nord-Pfälzerwald (France/Germany); Haut Niger (Guinea).
12 Examples of this are The Black Sea Biosphere Reserve in Ukraine and the two Egyptian biosphere reserves.
13 See Wadi Allaqui (Egypt) response.
14 References are the cases of all the biosphere reserves in Chile and Mbaracayu (Paraguay).
15 This is the case of Lower Morava (Czech Morava) Biosphere Reserve Managing Board, Advisory Board and the Scientific Council, all created on the representative terms.
29. Sustainable development indicators are still to be developed in biosphere reserves. From the 17% of the sample that considered having this indicator, only a few lists those. The presence of sustainable development projects or sustainable economic activities, the general satisfaction of local population are considered in these lists. The elaboration of a charter is the one indicator that encompasses a bigger range of dimensions.

30. The criteria used to define a ‘well-functioning’ biosphere reserve are: enables good conservation (30 cases), promotes integration of the three goals (27), creates spaces for dialogue and participation (22), promotes sustainable interactions between humans and nature (21), and promotes development (12 cases). Two biosphere reserves reported using ‘other’ criteria, and most biosphere reserves used a combination of at least three criteria to define a ‘well-functioning’ biosphere reserve.

31. Of the few BRs that reported using indicators to measure sustainable development in the biosphere reserve, only a few lists those. The presence of sustainable development projects or sustainable economic activities, the general satisfaction of local population are considered in these lists. The elaboration of a charter is the one indicator that encompasses a bigger range of dimensions.

31. Of the few BRs that reported using indicators to measure a ‘well-functioning’ reserve, satisfaction or living standards were reported in the two cases in the Egyptian biosphere reserves; answers from Iran were based on natural indicators such as grazing pressure and wildlife populations; and answers from the Guinean biosphere reserves used an integrated view including natural and cultural factors.
Periodic review process

32. Respondents described a great variety of processes for conducting periodic reviews. Several (e.g., Parque Costero del Sur in Argentina) mentioned relying on the Seville Strategy for reference. In Chile and the Czech Republic, government agencies play a key role in the periodic review process, while in the Vosges du Nord BR in France, the review process is led by the biosphere reserve staff and managing committee. Mbaracayu in Paraguay reported focusing the review primarily on the core area, while Wadi Allaqi in Egypt has an electronic review process using the internet and an electronic library. At Cairnsmore BR in the UK, a consultant was hired to lead the review process.

33. There was a unanimous interest among respondents in learning how other BRs are measuring progress and actions toward reaching the different goals.

34. A strong majority (32 respondents, 62% of the sample) expressed an interest in sharing their periodic review process and reports with other BRs. Several Chilean reserves expressed a preference not to share for the moment.

35. Questions respondents felt should be asked during the periodic review process that do not figure in the present periodic review form included:

- What direct benefit has accrued to the local community through their participation in biosphere reserve management? (3 respondents)
- How do BRs collaborate with each other? Are you aware of any joint initiatives? (2 respondents)
- What are the needs of BR in terms of training personnel?
- What are the current primary concerns of the BR?
- What is the size of the management team?
- What projects take place in the transition area?
- What is the level of participation of the local community in BR management decisions?
- How is the management team financed?
- Does the BR have an electronic communication and publication programme?
- What is the permanent population of each of the three zones?
- How many people visit the BR each year?
- What role does the government play in promoting and supporting the BR?
- How do you apply statistical tools to BR monitoring and management?
- What has been the activity of the MAB National Committee vis-à-vis your BR?

36. Respondents also raised the following questions:

- How are biosphere reserves managed in different countries?
- What are the financing mechanisms for biosphere reserves in different countries?
- How can we improve communications in order to have access to information about experiences in other BRs?
- Would it be possible to set up an international fund to finance specific projects in BRs?

37. The Lower Morava BR in the Czech Republic suggests “that the review should be done by independent MAB certified out of country experts to achieve comparison of individual BR performance with international standards. Performance criteria
included in the review can be understood differently on different sites. Many indicators are considered achieved by the staff but in the Network context are not.”

38. The Black Sea BR in Ukraine requests support from the MAB National Committee to carry out land management surveys and planning and to coordinate policy on wildlife management between the Seville Strategy and national regulations.

General commentaries:

39. The general comments about this survey are as follows:

- The pertinence and the detail of the information provided by the respondents vary significantly. There is a strong impression that not every respondent is familiar with indicators presented in the survey such as biodiversity indicators (CBD and SEBI standards) and sustainable development and land management indicators in a minor degree. Sharing information and know-how through the World Network of Biosphere Reserves is going to play a major role in this regard taking into account that some countries answered the questions in detail and can be examples for further reporting under this or other formats.

- It is possible to improve the survey tool and keep the process on-going in order to have a larger sample that will lead to statistically valid data pertaining to the whole WNBR. This will constitute a baseline to continue the implementation of the Seville Strategy for the years to come and contribute to a monitoring and reporting tool, in co-building the MAB clearing house.

- This analysis provides a partial snapshot of the current situation and should be used as a basis for recommendations by the MAB Bureau and ultimately the MAB-ICC for those BRs that have not yet contributed to the survey. The MAB Secretariat shall attempt to produce a comprehensive survey for the meeting of next MAB-ICC in May 2009 and present a draft revised periodic review report form, using a core-set of key indicators for assessing and monitoring changes at local, national and global levels as well as key questions for monitoring and reporting for individual sites.

40. The MAB Bureau is invited to comment on these preliminary results and recommendations and advise on next steps to complete the survey and the periodic review report form for preparation of the next meeting of the MAB-ICC. The biosphere reserves that have not yet contributed to the survey should do so before end of March 2009. Moreover, the MAB Bureau is invited to recommend to the ICC that training schemes for biosphere reserve managers in the areas of ecosystem services and on indicators of sustainability be developed and implemented and that adequate funding be identified to this end.

16 Like the Czech Republic or Iran among others.