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MAN AND THE BIOSPHERE (MAB) PROGRAMME STRATEGY FOR THE PERIOD 2015-2025

OUTLINE

Source: 36 C/Resolution 33 (para 8).

Background: In accordance with the above resolution, the Director-General presents herewith the MAB Strategy for 2015-2025 as adopted by the International Coordinating Council of the Man and the Biosphere (MAB) Programme at its twenty-seventh session, UNESCO Headquarters, Paris, 8-12 June 2015.

Purpose: The MAB Strategy for 2015-2025 is presented to the General Conference for its endorsement.

Decision required: Paragraph 8.

INTRODUCTION

1. At its 36th session, the General Conference adopted 36 C/Resolution 33 (para. 8) “Further invites the Director-General, in consultation with the International Coordinating Council, to prepare a strategy document for the MAB Programme for the period beyond 2013, covered by the forthcoming Medium-Term Strategy of UNESCO, based on the Madrid Action Plan and evaluations of its implementation”.
2. In accordance with 36 C/Resolution 33, the International Coordinating Council (ICC) of the Man and the Biosphere (MAB) Programme (MAB-ICC), supported by the MAB Secretariat, has subsequently developed the MAB Strategy for 2015-2025. This was adopted by the MAB-ICC at its twenty-seventh session (UNESCO Headquarters, Paris, 8-12 June 2015) with the recommendation that it be presented to the General Conference at its 38th session for endorsement (SC-15/CONF.227/19).
3. At its twenty-sixth session, MAB-ICC entrusted MAB Strategy Group (MSG), composed by the MAB Bureau and six experts nominated by Member States and selected by the Bureau to develop the draft of the MAB Strategy with the support of the MAB Secretariat. The inclusive, participatory, transparent and web-based cost effective process adopted by the MAB ICC for the development of the MAB Strategy over more than one year involved Member States, MAB National Committees, UNESCO National Commissions, Biosphere Reserve Managers and Focal Points, a “Roster of experts” and regional MAB Networks. The Strategy development process is further outlined in the reports of the twenty-fifth, twenty-sixth and twenty-seventh sessions of the MAB-ICC, as well as in an information document (196 EX/4.INF.4) presented to the UNESCO Executive Board at its 196th session.¹
4. The Strategy development process also benefitted from the active engagement of the UNESCO Internal Oversight Service (IOS) based on its experience of conducting the final evaluation of the Madrid Action Plan (MAP) for the World Network of Biosphere Reserves (WNBR).

THE MAB STRATEGY 2015-2025

5. The introductory section of the Strategy document contains an Executive Summary, a Preamble and information about UNESCO, the MAB Programme and related other UNESCO programmes and conventions, the Global Context for the MAB Strategy such as the post-2015 development agenda and related sustainable development goals (SDGs), climate change and biodiversity loss, the MAB Strategy within UNESCO’s Medium-Term Strategy, the Seville Strategy, the Statutory Framework for the World Network of Biosphere Reserves and the Madrid Action Plan (MAP).
6. Framed by the UNESCO’s Medium-Term Strategy 2014-2021 (37 C/4) and the final evaluation of the MAP, the MAB Strategy 2015-2025 begins with clear vision and mission statements for the MAB Programme. The Strategy is structured around four Strategic Objectives, with associated Expected Results, and five Strategic Action Areas, together with their respective

¹ Final Report of the 25th session of the MAB ICC, UNESCO Headquarters, Paris (France), 27-30 May 2013 (SC-13/CONF.225/11).
http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/SC/pdf/SC-13-CONF-225-11_Final_Report_en.pdf
 Final Report of the 26th session of the MAB ICC, Jönköping (Sweden) 10-13 June 2014 (SC-14/CONF.226/15).
http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/SC/pdf/SC14-CONF-226-15-MAB-ICC_Final_Report_en_8-7-2014-v2.pdf
 Final Report of the 27th session of the MAB ICC, UNESCO Headquarters, Paris (France), 8-12 June 2015 (SC-15/CONF.227/19).
http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/SC/pdf/27_MAB-ICC_Report_en_final_draft_080715.pdf
 “Execution of the programme adopted by the General Conference: development of the new Man and the Biosphere (MAB) Programme Strategy for the period 2015-2025’ (196 EX/4.INF.4). Information document presented to the Executive Board at its 196th session.
<http://unesdoc.unesco.org/images/0023/002326/232608e.pdf>

Strategic Lines of Action, aiming to reach the Vision and Mission of the MAB Programme. A key feature of the MAB Strategy is that it provides a comprehensive while succinct framework to contribute to the global sustainable development goals.

7. The Strategy document also refers to an Evaluation Framework, as well as to the MAB Action Plan to be developed to support the implementation of the Strategy. This Action Plan will be presented to the Fourth World Congress on Biosphere Reserves and the twenty-eighth MAB ICC in Lima, Peru, in March 2016. The Strategy is contained in the Annex to this document.

PROPOSED RESOLUTION

8. After examining the present document, the General Conference may wish to adopt the following resolution:

The General Conference,

Recalling 36 C/Resolution 33,

Having examined document 38 C/55,

Emphasizing the importance of the MAB Programme and its World Network of Biosphere Reserves in addressing global sustainability concerns and in meeting the sustainable development goals,

Recognizing the efforts of the International Coordinating Council of the MAB Programme in developing the MAB Strategy 2015-2025,

1. *Endorses* the MAB Strategy 2015-2025 as presented in the Annex to document 38 C/55;
2. *Encourages* the International Coordinating Council of the MAB Programme in cooperation with the MAB Secretariat to finalize the development of the MAB Action Plan in support of the MAB Strategy 2015-2025;
3. *Invites* Member States to implement the MAB Strategy 2015-2025;
4. *Requests* the Director-General to present to the Executive Board, at its 200th session, a progress report on the implementation of the MAB Strategy 2015-2025 and the development of the associated MAB Action Plan (2016-2025).

ANNEX

MAB STRATEGY 2015-2025

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Executive summary

Over four decades, people across the globe have explored local solutions to global challenges in biosphere reserves designated under UNESCO's Man and the Biosphere (MAB) Programme, generating a wealth of experience and innovative potential for a sustainable future which emphasizes the conservation of biodiversity. In the coming 10 years, MAB will amplify its support to Member States in conserving biodiversity, restoring and enhancing ecosystem services, and fostering the sustainable use of natural resources; building sustainable, healthy, and equitable economies, societies and thriving human settlements; and empowering people to mitigate and adapt to climate change and other aspects of global environmental change. MAB will harness lessons learned through sustainability science and education and use modern, open and transparent ways to communicate and share information. MAB will ensure that its World Network of Biosphere Reserves (WNBR) consists of effectively functioning models for sustainable development, by implementing an effective periodic review process so that all members of the network adhere to its standards; by improving governance, collaboration and networking within the MAB and WNBR; and by developing effective external partnerships to ensure long-term viability. The MAB and its WNBR will work towards the sustainable development goals and contribute to implementing the post-2015 agenda, both within biosphere reserves and through the global dissemination of the models of sustainable developed in biosphere reserves. This will be done through the implementation of the present Strategy, which includes a vision and mission and a series of Strategic Objectives and Strategic Action Areas, and an associated Action Plan, to be finalized in 2016.

Preamble

As the MAB Programme has evolved, biosphere reserves have become its principal means of implementation. The biosphere reserve concept has proved its value beyond the protected areas that each biosphere reserve contains, and is increasingly embraced by scientists, planners, policy-makers, businesses and local communities to bring diverse knowledge, scientific investigations and experiences to link biodiversity conservation and socio-economic development for human well-being. To understand and address the key challenges facing our world – poverty, climate change, water and food security, loss of biological and cultural diversity, rapid urbanization and desertification – the MAB Programme, through its World Network of Biosphere Reserves (WNBR) and its regional and thematic networks will strategically address the Sustainable Development Goals (SDGs) through sustainable development actions in biosphere reserves, carried out in partnership with all sectors of society, to ensure the well-being of people and their environment. The experience of the WNBR, MAB Networks and interdisciplinary approaches will be used to develop and test policies and practices that address issues affecting different ecosystems, and ensure the delivery of the goods and services they provide. The MAB Programme is an important means to mainstream sustainable development at all levels, integrating economic, social and environmental aspects and recognizing their vital interlinkages, in order to achieve sustainable development in all its dimensions.

UNESCO

Founded in 1945, at the end of the Second World War, UNESCO celebrated its 70th anniversary in 2015. For seven decades, UNESCO has embodied high aspirations, hopes and an ongoing struggle for a better life, built on ideas of human dignity, mutual understanding and solidarity of humanity. These ideals and values are spelled out in the Organization's Constitution, which is the key to understanding UNESCO's history. Its pioneering work has helped change the way people everywhere understand each other and the planet we live on. UNESCO led the movement to protect the environment and sounded the alert over the planet's shrinking biodiversity, explicitly linking this to human development through the MAB Programme. As a specialized agency of the United Nations, UNESCO will, in the foreseeable future, continue to contribute across continents to the building of peace, the eradication of poverty, the improvement of health, and sustainable

development and intercultural dialogue through education, scientific activities, culture, communication and information.

The MAB Programme

Launched in 1971, UNESCO's Man and the Biosphere (MAB) Programme is an intergovernmental scientific programme that, from its beginning, has aimed to establish a scientific basis for the improvement of relationships between people and their environments. MAB combines the practical application of natural and social sciences, economics and education to improve human livelihoods and the equitable sharing of benefits and to safeguard natural and managed ecosystems, promoting innovative approaches to economic development that are socially and culturally appropriate and environmentally sustainable.

In practice, the MAB Programme is implemented in biosphere reserves. They may contain terrestrial, coastal and/or marine ecosystems, which should be representative of their biogeographic region and of significance for biodiversity conservation. Each biosphere reserve promotes solutions reconciling the conservation of biodiversity with its sustainable use, towards sustainable development at the regional scale. While biosphere reserves are nominated by national governments and remain under the sovereign jurisdiction of the states where they are located, their global status as biosphere reserves is internationally recognized. Biosphere reserves are models to test and apply interdisciplinary approaches to understanding and managing changes in social and ecological systems, and their interaction, including conflict prevention and the conservation of biodiversity.

The MAB Programme's World Network of Biosphere Reserves (WNBR) was launched in 1976. As of 2015, it comprises 651 biosphere reserves in 120 countries, including 14 transboundary biosphere reserves on the territory of two or more countries. As specified in the 1995 Statutory Framework for the WNBR, biosphere reserves should strive to be sites of excellence to explore and demonstrate approaches to conservation and sustainable development on a regional scale. To do this, each biosphere reserve should combine three interconnected functions – conservation, development and logistic support – through appropriate zoning, comprising (1) one or more legally-constituted core areas, devoted to long-term protection; (2) adjacent buffer zones; (3) an outer transition area where sustainable development is promoted and developed by public authorities, local communities and enterprises. Thus, biosphere reserves integrate biological and cultural diversity, particularly recognizing the role of traditional and local knowledge in ecosystem management. They focus on a multi-stakeholder approach, with a particular emphasis on the involvement of local communities in management, and often have highly innovative and participative governance systems.

At the global level, the MAB Programme is governed by its International Coordinating Council (ICC), under the overall authority of the UNESCO General Conference and its Executive Board. The next level of governance is represented by regional and thematic networks. Governance at the national level is ideally through MAB National Committees.

MAB and other UNESCO programmes and conventions

UNESCO has developed several international programmes to assess and manage the Earth's resources better. UNESCO's primary objective – besides working together with its Member States to develop and promote education, science, culture, communication and information in all countries of the world – is to achieve mutual understanding among nations and peoples. Towards this goal, the Member States of UNESCO have established two programmes that recognize the global importance of natural and cultural heritage. The first, in 1971, was the MAB Programme. The second, in 1972, was the Convention for the Conservation of the World Cultural and Natural Heritage, which established a World Heritage List of Cultural and Natural Sites, inscribed for their outstanding universal value. For these sites, the main concerns are the conservation and

management of exceptional natural and cultural sites, as well as raising awareness for heritage preservation.

In addition to these globally-important sites designated under UNESCO, others are designated under the Convention on Wetlands (Ramsar Convention), signed in 1971. This intergovernmental treaty provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources. Many biosphere reserves are also designated as World Heritage Sites, under the Ramsar Convention, and/or as Global Geoparks. Such multiple designations emphasize even further the global importance of these sites and offer opportunities for synergies between these global programmes all of which, like the MAB Programme, have ongoing review processes to ensure that activities in the constituent sites continue to move towards defined goals.

Given the diverse objectives of biosphere reserves and the stakeholders involved in them, there are clear opportunities for synergies with other UNESCO programmes, particularly the International Hydrological Programme (IHP), the International Geoscience Programme (IGCP), the International Oceanographic Commission (IOC), and the Management of Social Transformation Programme (MOST). There are also good opportunities for collaboration with the Global Action Programme (GAP) on Education for Sustainable Development (ESD), and the UNESCO institutes, centres, Chairs and networks, such as the UNESCO Associated Schools Project Network (ASPnet). A further context for collaboration is with regard to the Convention for the Safeguarding of the Intangible Cultural Heritage. In all of these contexts, collaboration with UNESCO's Communication and Information Sector is essential.

Global context for the MAB Strategy

Sustainability issues are at the centre of the international debate, as human activities continue to fundamentally alter the Earth's systems, with profound impacts on freshwater resources; on the ocean, atmosphere and climate; and on ecosystems, habitats and their biodiversity. These trends are underscored in the Rio+20 Outcome document, "The Future We Want", which also recognizes that they will have significant impacts on all societies; that they have economic, cultural and social drivers; and that they are likely to be accentuated in the coming decades. The global community is advancing on establishing and implementing a comprehensive set of related sustainable development goals (SDGs) and targets to simultaneously address human needs and environmental change. These explicitly take into account other global imperatives, such as the targets set under the United Nations Framework Convention on Climate Change (UNFCCC) and its protocols and the Convention on Biological Diversity's (CBD) Strategic Plan for Biodiversity 2011-2020, including the Aichi Biodiversity Targets.

The MAB Strategy within UNESCO's Medium-Term Strategy

Peace and equitable and sustainable development are the overarching objectives in the UNESCO Medium-Term Strategy 2014-2021 (37 C/4). Africa and gender equality are Global Priorities. UNESCO emphasizes the critical importance of greater knowledge sharing in order to induce the transformative changes needed to address the complex and inter-related challenges of sustainable development. UNESCO is therefore promoting international scientific cooperation and integrated scientific approaches to support Member States in effectively managing natural resources, reducing knowledge divides within and among countries, and building bridges for dialogue and peace. Building on its experience in leading intergovernmental and international science programmes and on their global observation capacities, UNESCO seeks to contribute to shaping the research agenda of global and regional scientific cooperation, based on the Rio+20 outcome document "The Future We Want" and the post-2015 development agenda. The important role of MAB and its WNBR is emphasized in UNESCO's Medium Term Strategy 2014-2021, notably in relation to UNESCO's Strategic Objective 5: "Promoting international scientific cooperation on critical challenges to sustainable development", as well as Strategic Objective 4: "Strengthening science, technology and innovation systems and policies – nationally, regionally and globally".

The Seville Strategy, Statutory Framework and Madrid Action Plan

The evolution of the MAB Programme and its WNBR has been steered by a series of meetings, beginning with those of a MAB Task Force in 1974 and continuing with the First International Biosphere Reserve Congress in Minsk, Belarus in 1984, which led to an Action Plan for Biosphere Reserves. A second international conference on biosphere reserves took place in Seville, Spain in 1995, and started a new era for the WNBR. The actions decided at that meeting were incorporated into the *Seville Strategy* and the *Statutory Framework of the World Network of Biosphere Reserves*, both approved by the General Conference of UNESCO in 1995. The Seville+5 meeting, held in Pamplona, Spain in 2000, followed through on the strategic recommendations from Seville and led to decisions on various actions, particularly with regard to transboundary biosphere reserves.

The Third World Congress of Biosphere Reserves took place in Madrid in 2008. This agreed the *Madrid Action Plan for Biosphere Reserves* (MAP), building on the *Seville Strategy* and aiming to capitalize on the strategic advantages of the Seville instruments and raise biosphere reserves to be the principal internationally-designated areas dedicated to sustainable development in the twenty-first century. The MAP articulated actions, targets and success indicators, partnerships and other implementation strategies, and an evaluation framework, for the WNBR for 2008-2013. It took fully into consideration the recommendations of the Review Committee that evaluated UNESCO's Natural Sciences and Social and Human Sciences Programmes.

In 2013-14, UNESCO's Internal Oversight Service evaluated the MAP. Particular challenges limiting this process included the broad scope of the MAP, lack of clarity in the formulation of particular elements, and the lack of an implementation logic. The validity of conclusions was further constrained by low response rates, with significant regional variations. Despite these limitations, five main recommendations of areas for improvement were made: (1) strengthen the value of the WNBR for biosphere reserves and actively involve them in the activities of the WNBR; (2) strengthen the clearing-house function of the WNBR; (3) develop the WNBR's global role as a platform for new ideas; (4) raise the profile of the WNBR; (5) strengthen the financial and human resource base of the WNBR.

The MAB Strategy 2015-2025

The MAB Programme with its WNBR constitutes an important and valuable partner and instrument for research and experimentation on the ground, to build knowledge on practice-based sustainable development and share it globally. Thanks to this practical approach, the MAB Programme supports the efforts of UNESCO Member States to address critical issues related to biodiversity, ecosystem services, climate change, and other aspects of global environmental change. Adopted by the MAB ICC at its twenty-seventh session, this MAB Strategy provides a comprehensive while succinct framework to achieve these goals and contribute to the global sustainable development goals. This MAB Strategy is developed in line with the UNESCO Medium-Term Strategy 2014-2021, the *Seville Strategy* and *Statutory Framework of the WNBR*, and with due consideration to the recommendations emerging from the final evaluation of the MAP. The Strategic Objectives and Strategic Action Areas of this MAB Strategy will be implemented through the associated MAB Action Plan (to be presented to the Fourth World Congress on Biosphere Reserves in 2016); their implementation will be assessed using a specific Evaluation Framework.

Vision and Mission of the MAB Programme

Our vision is a world where people are conscious of their common future and interaction with our planet, and act collectively and responsibly to build thriving societies in harmony within the biosphere.

The MAB Programme and its World Network of Biosphere Reserves (WNBR) serve this vision

within and outside biosphere reserves.

Our mission for the period 2015-2025 is to:

- develop and strengthen models of sustainable development in the WNBR;
- communicate the experiences and lessons learned, facilitating the global diffusion and application of these models;
- support evaluation and high-quality management, strategies and policies for sustainable development and planning, as well as accountable and resilient institutions;
- help Member States and stakeholders to urgently meet the sustainable development goals through experiences from the WNBR, particularly through exploring and testing policies, technologies and innovations for the sustainable management of biodiversity and natural resources and mitigation and adaptation to climate change.

Strategic Objectives

MAB's Strategic Objectives for 2015-2025 derive directly from the three functions of biosphere reserves identified in the Statutory Framework for the WNBR and the key global challenge of climate change, identified in the Madrid Action Plan for Biosphere Reserves. These Strategic Objectives are to:

- 1. Conserve Biodiversity, Restore and Enhance Ecosystem Services, and Foster the Sustainable Use of Natural Resources**
- 2. Contribute to Building Sustainable, Healthy and Equitable Societies, Economies and Thriving Human Settlements in Harmony within the Biosphere**
- 3. Facilitate Biodiversity and Sustainability Science, Education for Sustainable Development and Capacity Building**
- 4. Support Mitigation and Adaptation to Climate Change and other aspects of Global Environmental Change**

Strategic Objective 1. Conserve Biodiversity, Restore and Enhance Ecosystem Services, and Foster the Sustainable Use of Natural Resources

The conservation and sustainable use of biodiversity is a critically important challenge. Biodiversity provides insurance and supports human well-being through a range of **ecosystem services**. Loss of biodiversity results in reductions in ecosystem services, creating direct threats to human well-being, and is an important indicator of an unbalanced system where vital components are affected. Habitat loss and fragmentation due to human development and unsustainable consumption and production patterns are among the major causes of diminishing biodiversity globally. The current scales of unprecedented exploitation of our natural resources call for their improved governance and stewardship.

Expected results

1.1 Member States actively support their biosphere reserves as models in contributing to the implementation of global conventions and other **Multilateral Environmental Agreements** and the achievement of relevant SDGs.

1.2 Alliances at local, national and regional level are established to support biosphere reserves to carry out their biodiversity conservation function and provide benefits to local people, thus contributing to the achievement of the 2011-2020 Strategic Plan for Biological Diversity and its **Aichi Biodiversity Targets**.

1.3 Effective, equitable and participatory planning for sustainable development in biosphere reserves specifically takes into account the rights, needs and capacities of young people as well as women and indigenous and local communities, and their ownership and access to, and sustainable use of, natural resources in and around biosphere reserves.

1.4 States, local government, international organizations, and the private sector support biosphere reserves through the effective use of the **ecosystem approach**, to ensure the continued delivery of **ecosystem services** both within biosphere reserves and to the wider communities which rely on their provision for their health and well-being.

1.5 The role of the MAB Programme is strengthened in research and experimentation towards models and solutions of sustainable development, and promoting their global diffusion.

Strategic Objective 2. Contribute to Sustainable, Healthy, and Equitable Societies, Economies and Thriving Human Settlements in Harmony within the Biosphere

A burgeoning world population, increasingly concentrated in rapidly expanding urban areas of all sizes, notably in coastal regions, has resulted in the overexploitation and unsustainable use of limited natural resources, accelerating pollution and environmental degradation, with significant impacts on human well-being. Healthy, equitable societies and economies, and thriving human settlements, are essential elements of the quest for long-term sustainability and social development. To achieve this requires in-depth knowledge of natural and cultural heritage, socio-economic realities and innovative approaches to increase resilience. Through its WNBR, MAB is uniquely well placed to support the transition to thriving economies and sustainable societies, not only in individual Member States, but also through transboundary biosphere reserves. These provide opportunities for cooperation and understanding: enabling environments which foster the harmonious coexistence of people, and of people and nature, and promote a culture of peace with regard to the use of, and benefits from, shared natural resources.

Expected results

2.1 Biosphere reserves act as, and are recognized and supported by, all levels of government as models for promoting sustainable development and advancing the implementation of the SDGs relating to equitable and healthy societies and settlements.

2.2 Biosphere reserves act as models for exploring, establishing and demonstrating sustainable economic systems that positively affect the conservation of biodiversity and its sustainable use.

2.3 Biosphere reserves act as models to explore, establish and demonstrate innovative approaches that foster the resilience of communities and opportunities for youth, through livelihood diversification, green businesses, and social enterprise, including responsible tourism and quality economies.

2.4 Functional mechanisms are established to ensure that those who facilitate the provision of ecosystem services from biosphere reserves are equitably compensated and supported by those who utilize and benefit from these ecosystem services, often in distant urban areas.

2.5 Biosphere reserves contribute directly to the health and well-being of those who live in them and those who are related to them.

2.6 Transboundary biosphere reserves are reinforced through multi-scale dialogue and capacity building specific to transboundary issues.

Strategic Objective 3. Facilitate Biodiversity and Sustainability Science, Education for Sustainable Development (ESD) and Capacity Building

Sustainability science is an integrated, problem-solving approach that draws on the full range of scientific, traditional and indigenous knowledge in a trans-disciplinary way to identify, understand and address present and future economic, environmental, ethical and societal challenges related to sustainable development. At a biosphere reserve level, this requires collaboration between all the different stakeholders, including scientists, policy-makers, members of local communities, and the private sector. **ESD** promotes the inclusion of key sustainable development issues into teaching and learning, to motivate and empower learners to change their behaviour through acquiring new skills, competencies and values and take action for sustainable development. Biosphere reserves, particularly through their coordinators, managers, and scientists have key roles to play in operationalizing and mainstreaming sustainability science and ESD at local and regional levels, in order to build scientific knowledge, identify best practices and strengthen the interface between science, policy and education and training for sustainable development.

Expected results

- 3.1 MAB and its WNBR are fully engaged with international, regional, national and sub-national research initiatives and programmes that contribute to the post-2015 development agenda and the SDGs.
- 3.2 The establishment of an international network of scientists working in biosphere reserves and with their managers/coordinators and other stakeholders.
- 3.3 Each biosphere reserve has an active research programme, based on the principles of sustainability science, which provides the basis of participatory decision-making and management in the biosphere reserve.
- 3.4 Traditional knowledge is used as a “knowledge input” for managing biosphere reserves while recognizing the importance of both empowering indigenous and local communities as guardians of unique knowledge and of maintaining cultural identity.
- 3.5 Training and capacity-building activities in biosphere reserves and at national, regional and global levels addressing the interlinked issues of conservation and sustainable use of biodiversity, mitigation and adaptation to climate change, and the socio-economic and cultural well-being of human communities.
- 3.6 ESD activities take place in all biosphere reserves, including all partners of civil society. Biosphere reserves also serve as ESD hubs from which the models are disseminated.
- 3.7 Increased partnerships between biosphere reserves and UNESCO Education Sector programmes, such as the **Global Action Programme (GAP) on ESD**, the **UNESCO Associated Schools Project Network (ASPnet)**, and the **UNITWIN/UNESCO Chairs Programme** and other relevant education and capacity-building bodies of the United Nations.

Strategic Objective 4. Support Mitigation and Adaptation to Climate Change and other aspects of Global Environmental Change

Climate change continues to be of paramount concern for the future of humankind. It is now extremely likely that human activities have been the dominant cause of the observed warming since the mid-twentieth century. According to the fifth Assessment Report of the **Intergovernmental Panel on Climate Change (IPCC)**, warming of the climate system is unequivocal; many of the observed changes since the 1950s have been unprecedented over decades to millennia. The specific values of, and opportunities for, biosphere reserves in relation to climate change were recognized in the Madrid Action Plan for Biosphere Reserves (2008-2013) and the Dresden Declaration on Biosphere Reserves and Climate Change (2011), aiming at

placing greater focus on the capacities of the MAB Programme and its biosphere reserves for mitigating and adapting to the impacts of climate change and for integrating their contributions effectively into national and international climate strategies and policies. This requires simultaneously addressing the complex interactions between climate change and other aspects of global environmental change, such as loss of biodiversity, urbanization, desertification, degradation of land and water resources, and stratospheric ozone depletion.

Expected results

4.1 The WNBR functions as a global network of regions to promote learning and pilot innovative actions to monitor, adapt to, and mitigate the effects of climate change and other types of global environmental change.

4.2 Member States actively support their biosphere reserves as models in implementing the United Nations Framework Convention on Climate Change (UNFCCC), the United Nations Convention to Combat Desertification (UNCCD), the Convention on Biological Diversity (CBD) and the ***Global Framework for Climate Services (GFCS)***.

4.3 Member States and other decision-makers recognize and promote biosphere reserves as priority sites in developing and implementing strategies on climate change mitigation and adaptation, in particular through (1) energy efficiency and the development and adoption of renewable and clean energy, including energy saving through responsible consumption and (2) approaches related to carbon sequestration and ***REDD+*** (Reducing Emissions from Deforestation and Forest Degradation).

4.4 Member States actively promote the transfer of approaches developed in biosphere reserves to other countries and regions.

Strategic Action Areas

MAB's Strategic Action Areas for 2015-2025 are:

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| <ul style="list-style-type: none">A. The World Network of Biosphere Reserves comprised of effectively functioning models for sustainable developmentB. Inclusive, dynamic and results-oriented collaboration and networking within the MAB Programme and the World Network of Biosphere ReservesC. Effective external partnerships and sufficient and sustainable funding for the MAB Programme and the World Network of Biosphere ReservesD. Comprehensive, modern, open and transparent communication, information and data sharingE. Effective governance of and within the MAB Programme and the World Network of Biosphere Reserves |
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The first three of these Strategic Action Areas have specific foci: A – on individual biosphere reserves in the context of the countries in which they are located; B – on networking within the MAB Programme; C – primarily on partnerships outside the MAB Programme. The Strategic Action Areas, together with their respective strategic lines of action, are outlined below.

Strategic Action Area A. The World Network of Biosphere Reserves comprised of effectively functioning models for sustainable development

By 2025, the WNBR aims to be an integrated global network of learning and demonstration sites for innovation in sustainable development. Once biosphere reserves reach their optimum

functionality, they will represent a key interface between science, policy and society at local, national, regional and global levels, to the benefit of their populations, the Member States in which biosphere reserves are located and much wider constituencies. As models, biosphere reserves should contribute to sustainable development, including conserving biodiversity and reducing poverty. The WNBR is a unique forum for the co-production of knowledge for sustainable development between the inhabitants of biosphere reserves, practitioners and researchers. The WNBR must consist of fully functioning, well managed sites that comply with the Seville Strategy and the Statutory Framework. Ensuring this has been the aim of the exit strategy adopted by the ICC in 2013.

Strategic lines of action

- A.1 Procedures and processes for selecting, designating, planning and implementing biosphere reserves are open and participatory, taking into account local practices and traditions and cultures, and involving all relevant stakeholders.
- A.2 States and other entities with territorial and governance competences explicitly integrate biosphere reserves into national and regional development, territorial planning, environment and other sectoral legislation, policies and programmes, and support effective governance and management structures in each biosphere reserve.
- A.3 Biosphere reserves and national MAB Committees have partnerships with universities and research institutes, to undertake applied research and provide practical learning and training opportunities that support the management and sustainable development of biosphere reserves.
- A.4 Financial sustainability of biosphere reserves is much improved, with a diverse funding base.
- A.5 The periodic review process supports an effectively functioning WNBR, generating a dynamic process of adaptive management of biosphere reserves.

Strategic Action Area B. Inclusive, dynamic and results-oriented collaboration and networking within the MAB Programme and the World Network of Biosphere Reserves

Inclusive, dynamic and results-oriented collaboration and networking are essential for MAB and its WNBR to provide effective contributions towards the SDGs and related targets. At the international level, collaboration will especially focus on South-South and North-South-South triangular cooperation, as a catalyst for dialogue and co-production of scientific knowledge, in synergy with local and indigenous knowledge brokers, and for **science diplomacy**. Collaboration and networking shall target all four strategic objectives. The importance of MAB's regional and thematic networks should be emphasized in this context. The regional networks have variable working methods and statutes, which address regional needs and should be flexible in order to be relevant and efficient in the context of their regions, and the thematic networks typically should be self-organized.

Strategic lines of action

- B.1 Global and regional capacity-building and training programmes directed to managers/coordinators of biosphere reserves and other stakeholders facilitate the delivery of the Strategic Objectives.
- B.2 Networks are strengthened through enhanced participation of Member States – including UNESCO National Commissions, MAB National Committees, and relevant ministries – and other public stakeholders, as well as universities, civil society organizations, the private sector, and stronger cooperation with relevant stakeholders.
- B.3 Networks have the infrastructure and adequate resources to fulfill their potential to implement their objectives.

- B.4 Networks foster collaboration in research, implementation and monitoring, including through exchanges between biosphere reserves.
- B.5 Networks communicate and disseminate their aims and activities effectively, both internally and externally.
- B.6 An increased number of twinning arrangements between biosphere reserves foster transboundary and transnational cooperation.

Strategic Action Area C. Effective partnerships and sufficient and sustainable funding for the MAB Programme and the World Network of Biosphere Reserves

Effective partnerships aimed at strengthening biosphere reserves, networks and the MAB Secretariat, and to promote the implementation of plans and strategies, particularly through sustainable financing mechanisms, are a priority for the MAB Programme. While the basic operational resources of the Programme and members of the WNBR must be provided from regular budgets for all levels of implementation, there is a clear need to bring in new partners – such as research groups, private sector enterprises or groups, museums, seed banks, and civil society organizations – either to strengthen existing partnerships or create new ones. In doing so, each country's administrative organization must be respected and local communities must not lose their independence and influence, especially if the partners are from other regions. To increase organizational, including financial, resilience in MAB and individual biosphere reserves, different means of funding should be explored. In addition to financing, new partnerships should increase public awareness of the values and benefits of biosphere reserves as well as the involvement of local communities. UNESCO has one of the most famous and best-recognized global "brands": a key challenge is how to use it to raise funds for the WNBR and its biosphere reserves.

Strategic lines of action

- C.1 A comprehensive business and marketing plan for the WNBR, regional and thematic networks, national MAB Committees and individual biosphere reserves is prepared, taking into account the priorities of bilateral and multilateral donors and the private and philanthropic sectors. (Key elements are identified below; others may be included in the action plan)
- C.2 The MAB Secretariat and National Committees strengthen collaboration and partnerships both within UNESCO and with key international organizations.
- C.3 The MAB Secretariat assists biosphere reserves and regional networks to build expertise in developing their own revenue, and to share this expertise.
- C.4 Private-sector partnerships generated around the MAB Programme at local, national and international levels.
- C.5 An increased number of projects and activities support biosphere reserves and networks funded through national and regional funding mechanisms, especially those that emphasize the need for multinational partnerships.
- C.6 Deeper involvement of, and guidance provided to entrepreneurs active in biosphere reserves, especially those supporting social enterprises and green economies.
- C.7 A strengthened global Biosphere Reserve brand is established, supplementing local biosphere reserve brands.
- C.8 Joint promotion of biosphere reserve products/services between biosphere reserves is enhanced.
- C.9 Every biosphere reserve generates some of its own revenue.

Strategic Action Area D. Comprehensive, modern, open and transparent communication, information and data sharing

The success of the MAB Programme depends on effective and open communication, data and knowledge exchange, based on a clear and shared vision of the biosphere reserve concept, both among the different actors on the Programme – biosphere reserves, national committees, networks and the Secretariat – and externally. Contemporary communication and information, social media, and data-sharing tools have huge potential for the Programme. While the MAB Secretariat, National Committees, regional and thematic networks and individual biosphere reserves are starting to make good use of these tools, there is an urgent need to widen their application not only within the MAB Programme but also to engage diverse external audiences. Yet many countries still have poor access to modern communication facilities, which implies a continued focus on traditional means of communication and information exchange. The task to communicate more effectively depends not only on how well MAB mobilizes communication tools and instruments, but also on MAB's success in producing outcomes and services that are appreciated and available in as many languages as possible, starting with UNESCO's official languages. Good outcomes will attract press and media attention, so they communicate on our behalf.

Strategic lines of action

- D.1 Full implementation of the open access policy to MAB and WNBR-related documents, data, information and multimedia materials.
- D.2 A comprehensive communication strategy complemented by an action plan (Key elements are identified below; others may be included in the action plan).
- D.3 The MAB Secretariat has a coordinated publication programme and effectively implements the MAB website (MABNet) as the key communication, data and information hub for MAB.
- D.4 Biosphere reserve coordinators/managers, National Committees, and regional networks ensure wide access to information concerning biosphere reserves.
- D.5 Increased use of video conferencing, social media and new information and communication technologies for knowledge sharing, communication, technical cooperation, and capacity-building.

Strategic Action Area E. Effective governance of and within the MAB Programme and the World Network of Biosphere Reserves

The MAB Programme is governed by its International Coordinating Council, under the overall authority of the UNESCO General Conference and its Executive Board. The Statutory Framework of the WNBR remains the basis for its governance. Well-structured and effectively implemented and managed governing mechanisms are at the foundation of a successful MAB Programme. MAB National Committees have critical roles to play in implementing the vision and mission of the MAB Programme. Important lessons have been learned from many years of experiences working with the Seville Strategy and from the implementation and evaluation of the Madrid Action Plan. Continuous monitoring and evaluation of actions and governance mechanisms are essential in order to ensure timely and effective adaptation to change.

Strategic lines of action

- E.1 The governments of Member States and National Commissions for UNESCO support the implementation of the MAB Programme, including through well-defined institutional support.
- E.2 Each MAB National Committee has a transdisciplinary membership, including representatives from the public, private, research and education sectors, and a wide range of other stakeholders, including representation from biosphere reserves.

- E.3 Member States regularly update the MAB Secretariat and regional networks regarding implementation of the MAB Strategy and Action Plan within their country.
- E.4 Each regional network has a defined governance mechanism, including annual assessment of performance.
- E.5 New thematic networks, if any, have well-defined objectives and plans, an inbuilt review mechanism and a sunset clause.
- E.6 The International Support Group (ISG) of Permanent Delegations to the MAB Programme continues to contribute to communications and advocacy to the benefit of the Programme.

Evaluation Framework

The MAB Strategy will be implemented through the associated MAB Action Plan (see below) and assessed using a specific Evaluation Framework founded in strategic intervention logic. This will connect the strategic objectives and the strategic action areas contained in the present strategy with the key activities and outputs of the Action Plan. Under the Framework, performance indicators will be developed, together with corresponding sources of verification and monitoring, and included in an evaluation plan that sets out roles and responsibilities of the key actors involved in the performance and achievement of the Strategy and the Action Plan. The Evaluation Framework and subsequent monitoring and evaluation will be developed and conducted in close cooperation with UNESCO's Internal Oversight Service (IOS).

MAB Action Plan

The MAB Action Plan (2016-2025) will provide a comprehensive set of actions for the effective implementation of the MAB Strategy. The Action Plan will be presented to the Fourth World Congress on Biosphere Reserves and the twenty-eighth MAB ICC in Lima, Peru, in March 2016.

Glossary²

Aichi Biodiversity Targets

The Aichi Biodiversity Targets are a set of 20, time-bound, measureable targets agreed in Nagoya, Japan (October 2010) by the Parties to the Convention on Biological Diversity in order to reach several strategic goals by 2020, namely to: address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society; reduce the direct pressures on biodiversity and promote sustainable use; improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity; enhance the benefits to all from biodiversity and ecosystem services; enhance implementation through participatory planning, knowledge management and capacity building.

Convention on Biological Diversity (CBD)

Signed by 150 government leaders at the 1992 Rio Earth Summit, the Convention on Biological Diversity (CBD) entered into force on 29 December 1993. It has three main objectives: the conservation of biological diversity; the sustainable use of the components of biological diversity; the fair and equitable sharing of the benefits arising out of the utilization of genetic resources.

Ecosystem approach

The Conference of the Parties of the Convention on Biological Diversity (CBD) adopted in November 1995 the ecosystem approach as the primary framework for action under the CBD as a strategy for the integrated management of land, water and living resources that promotes

² Glossary text inserted by the MAB Secretariat. This text will be checked with the relevant organisations (e.g. Convention Secretariats) and against standard references before the final version of this document is published.

conservation and sustainable use in an equitable way. It recognizes that humans, with their cultural diversity, are an integral component of ecosystems.

Ecosystem services

Ecosystems provide a wide range of services without which human life would not be possible, such as provision of food and water. Ecosystem services also protect and sustain human welfare through flood and disease control and by providing cultural services including recreational, spiritual and cultural benefits.

Education for sustainable development

Education for sustainable development (ESD) allows every human being to acquire the knowledge, skills, attitudes and values necessary to shape a sustainable future. ESD means including key sustainable development issues into teaching and learning; for example, climate change, disaster risk reduction, biodiversity, poverty reduction, and sustainable consumption. It also requires participatory teaching and learning methods that motivate and empower learners to change their behaviour and take action for sustainable development. ESD consequently promotes competencies like critical thinking, imagining future scenarios and making decisions in a collaborative way.

Global Action Programme on ESD

The Global Action Programme (GAP) on ESD seeks to generate and scale-up ESD action. It is intended to make a substantial contribution to the post-2015 agenda. The overall goal of the GAP is to generate and scale up action in all levels and areas of education and learning to accelerate progress towards sustainable development. The GAP has two objectives: to reorient education and learning so that everyone has the opportunity to acquire the knowledge, skills, values and attitudes that empower them to contribute to sustainable development – and make a difference; and to strengthen education and learning in all agendas, programmes and activities that promote sustainable development. The GAP focuses on five priority action areas: advancing policy; integrating sustainability practices into education and training environments (whole-institution approaches); increasing the capacity of educators and trainers; empowering and mobilizing youth; and encouraging local communities and municipal authorities to develop community-based ESD programmes.

Global Framework for Climate Services

The international community decided to establish the Global Framework for Climate Services (GFCS) in 2009 to promote operational climate services at the national and regional levels. This intergovernmental partnership is supported by the United Nations and other international organizations with diverse, cross-cutting mandates. It is overseen by the Intergovernmental Board on Climate Services, which reports to the World Meteorological Congress. The GFCS has four initial priority sectors: agriculture and food security, water, health and disaster risk reduction.

Multilateral environmental agreements

Multilateral environmental agreement (MEA) are agreements between States on specific environmental issues, such as biodiversity and climate change, that typically include obligations involving general principles and more specific actions to be taken in order to achieve an environmental objective. Examples of MEAs include the Convention on Biological Diversity (CBD), the United Nations Framework Convention on Climate Change (UNFCCC) and the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention),

Reducing emissions from deforestation and forest degradation

Reducing emissions from deforestation and forest degradation in developing countries, and the role of conservation, sustainable management of forests, and enhancement of forest carbon stocks

in developing countries (REDD+) is a mechanism that has been included under negotiation by the UNFCCC in order to promote the mitigation of climate change by enhancing forest management in developing countries and thereby also the net emissions of greenhouse gases.

Science diplomacy

Science diplomacy implies scientific collaboration among states to find solutions to common problems and the promotion of international academic, technical, or research partnerships and exchanges. Science diplomacy can thus contribute to peace and security through enhanced international relations and understanding.

Sustainability science

Sustainability science promotes problem driven cross-disciplinary approaches to advance understanding of human-environment interactions and systems, and of how those interactions affect the challenge of sustainability. The field is defined by the problems it addresses rather than the disciplines it employs. It draws from multiple disciplines of the natural, social, medical and engineering sciences, from the professions, and from practical field experience in business, government, and civil society. Sustainability science approaches are characterized by: use of problem-driven methodologies promoting dialogue between science and society; a focus on the interactions between social and natural systems; and integration of multiple forms of knowledge leading to sound policy and sustainable development.

Sustainable development goals

The sustainable development goals (SDGs) are a set of targets negotiated among States to orient future national and international development efforts in favour of sustainable development. The SDGs were discussed at the United Nations Conference on Sustainable Development held in Rio de Janeiro in June 2012 (Rio+20) and thereafter elaborated through the United Nations General Assembly's Open Working Group on Sustainable Development Goals.

UNESCO Associated Schools Project Network (ASPnet)

Founded in 1953, the UNESCO Associated Schools Project Network (ASPnet), commonly referred to as UNESCO Associated Schools, is a global network of 10,000 educational institutions in 181 countries. Member institutions – ranging from pre-schools, primary, secondary and vocational schools to teacher training institutions – work in support of international understanding, peace, intercultural dialogue, sustainable development and quality education in practice.

UNITWIN/UNESCO Chairs Programme

Launched in 1992, the UNITWIN/UNESCO Chairs Programme promotes international inter-university cooperation and networking to enhance institutional capacities through knowledge sharing and collaborative work. The Programme supports the establishment of UNESCO Chairs and UNITWIN Networks in key priority areas related to UNESCO's fields of competence – i.e. in education, the natural and social sciences, culture and communication.