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Mont Ventoux mountain in the Provence region of Southern France. Provence-Alpes-Côte d'Azur, France

Abstract & Acknowledgements

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The UNESCO Man and the Biosphere (MAB) Programme is an intergovernmental scientific programme launched in 1971 that aims to establish a scientific basis for the improvement of relationships between people and their environments. The core of this work is the World Network of Biosphere Reserves that brings together 701 Biosphere Reserves from 124 countries. The MAB is currently operating under its 2015-2025 Programme Strategy and Lima Action Plan (2016-2025).

UNESCO Internal Oversight Service (IOS) Evaluation Office undertook a mid-term evaluation of the MAB Programme Strategy and its Lima Action Plan in order to examine its relevance, efficiency, effectiveness, impact and sustainability. The evaluation team found that the MAB Programme is highly relevant in the current global context including factors such as climate change, loss of biodiversity and the international drive towards sustainable development. The Programme is aligned with / contributes to the Sustainable Development Goals.

Although full monitoring information was not available, the Programme is on track to achieve the majority of its targets. The results are substantial compared to the limited available resources, thanks to the mobilisation of numerous partners and synergies with other UNESCO, UN and non-UN programmes. The MAB Programme effects mainly benefit sustainable livelihood of populations and are mainly visible within the Biosphere Reserves, with little outreach. Their sustainability highly depends on the involvement and ownership of key local persons. The bottom-up nature of the MAB Programme is a key strength. Further efforts should be made to make the MAB Programme's impacts visible and to support Biosphere Reserves and National Committees facing difficulties..

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Ongoing quality assurance was provided by the Evaluation Reference Group, in which the Programme Sector, several Bureau and Council Members, and the UNESCO Beijing Office were represented, along with the Division of Gender Equality and the Cabinet. The IOS Evaluation Office would, in particular, like to express its gratitude to Mr. Peter Dogse, focal point for the evaluation at the Man and the Biosphere Programme – Division of Ecological and Earth Sciences.

Geert Engelsman, independent evaluation consultant, provided external quality assurance of the evaluation report.

Bert Keuppens

Director ad interim, IOS

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Acronyms

Acronym	Meaning
AfDB	African Development Bank
AfriMAB	African Network of Biosphere Reserves
ArabMAB	Arab Network of Biosphere Reserves
BR	Biosphere Reserve
C2C	Category II Centre
CBD	Convention on Biological Diversity
CC	Climate Change
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
COP21	21st Conference of Parties of UNFCCC
CYTED	Iberp-American Programme of Science and Technology for Development
DAC	Development Assistance Committee
EABRN	East Asian Biosphere Reserve Network
ERAIFT	Regional Post-Graduate School of Integrated Forest Develop- (ment and Management (Kinshasa
ERG	Evaluation Reference Group
ESD	Education for Sustainable Development
EU	European Union
EUR	Euro
FAO	Food and Agriculture Organisation

FO Field Office GAP Global Action Plan GEF Global Environment Facility GIZ German International Development Agency HQ Headquarters IberoMAB Ibero-American and Carribean Biosphere Reserves Network ICC International Coordinating Council ICF Institute for the Conservation and Development of Forests, Protected Areas and Wildlife IFAD International Fund for Agricultural Development IGGP International Geoscience and Geoparks Programme IHP Intergovernmental Hydrological Programme IOC International Oceans Commission IOS Internal Oversight Service IPBES Intergovernmental Science-Policy Platform on Biodiversity at Ecosystem Services IPCC Intergovernmental Panel on Climate Change ISG International Support Group IUCN International Union for Conservation of Nature	Acronym	Meaning
GAP Global Action Plan GEF Global Environment Facility GIZ German International Development Agency HQ Headquarters IberoMAB Ibero-American and Carribean Biosphere Reserves Network ICC International Coordinating Council ICF Institute for the Conservation and Development of Forests, Protected Areas and Wildlife IFAD International Fund for Agricultural Development IGGP International Geoscience and Geoparks Programme IHP Intergovernmental Hydrological Programme IOC International Oceans Commission IOS Internal Oversight Service IPBES Intergovernmental Science-Policy Platform on Biodiversity at Ecosystem Services IPCC Intergovernmental Panel on Climate Change ISG International Support Group IUCN International Union for Conservation of Nature	EuroMAB	Network of Biosphere Reserves in Europe and North America
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IPBES Intergovernmental Science-Policy Platform on Biodiversity at Ecosystem Services IPCC Intergovernmental Panel on Climate Change ISG International Support Group IUCN International Union for Conservation of Nature	IOC	International Oceans Commission
Ecosystem Services IPCC Intergovernmental Panel on Climate Change ISG International Support Group IUCN International Union for Conservation of Nature	IOS	Internal Oversight Service
ISG International Support Group IUCN International Union for Conservation of Nature	IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IUCN International Union for Conservation of Nature	IPCC	Intergovernmental Panel on Climate Change
	ISG	International Support Group
I AP Lima Action Plan	IUCN	International Union for Conservation of Nature
Entra / Cuott Flatt	LAP	Lima Action Plan

Acronym	Meaning
LIFE	The Financial Instrument for the Environment
LVMH	Louis Vuitton Moët Hennessy
M&E	Monitoring and Evaluation
MAB	Man and the Biosphere
MAP	Madrid Action Plan
MDGs	Millennium Development Goals
MEA	Multilateral Environmental Agreement
MNP	Madagascar National Parks
MOST	Management of Social Transformations
MS	Member States
NC	National Committee
NGOs	Non-Governmental Organisation
OECD	Organisation for Economic Co-operation and Development
PacMAB	Pacific Biosphere Rserve Network
PCB	UNESCO Division for Policy and Capacity-Building (Science Sector
PES	Payment for Ecosystem Services
PhD	Doctor of Philosophy
PP	Participation Programme
REDBIOS	East Atlantic Biosphere Reserves Network
REDD	Reducing Emissions from Deforestation and Degradation
RP	Regular Programme
SAA	Strategic Action Area
SACAM	South and Central Asia MAB Network

Acronym	Meaning
SD	Sustainable Development
SDG	Sustainable Development Goal
SeaBRnet	Southeast Asian Biosphere Reserve Network
SHS	Social and Human Sciences Sector
SISTER	System of Information on Strategies, Tasks and Evaluation of Results
TBR	Transboundary Biosphere Reserves
UN	United Nations
UNDP	United Nations Development Programme
UNEG	United Nations Evaluation Group
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
UNU	United Nations University
USAID	United States Agency for International Development
USD	United States Dollars
WHC	World Heritage Centre
WMO	World Meteorological Organisation
WNBR	World Network of Biosphere Reserves
WWF	World Wide Fund for Nature
ХВ	Extra-budgetary

1. Executive Summary

1.1 Introduction

- i. UNESCO's Man and the Biosphere (MAB) programme is an intergovernmental scientific programme launched in 1971, the aim of which is to establish a scientific basis for the improvement of relationships between people and their environments at global level. Combining the natural and social sciences, economics and education, it seeks to improve human livelihoods and the equitable sharing of benefits, while safeguarding natural and managed ecosystems.
- ii. The 38th General Conference of UNESCO, held from 3 to 18 November 2015, endorsed the new MAB Programme Strategy for the period from 2015 to 2025 as adopted by the 27th MAB International Coordinating Council (ICC). This MAB Strategy is made operational through the Lima Action Plan (LAP), endorsed at the 4th World Congress of Biosphere Reserves, and adopted at the 28th MAB ICC session that both took place in Lima, Peru, in 2016.

1.2 Evaluation Purpose and Scope

- iii. The main objective of this mid-term evaluation is to provide the MAB Secretariat, the International Coordinating Council and other stakeholders with an understanding of the progress achieved so far in the implementation of the MAB Strategy (2015-2025) and its Lima Action Plan (2016-2025). It aims to strengthen this implementation process and seize new opportunities where relevant.
- iv. The evaluation team has assessed and analysed the relevance, efficiency, effectiveness, impact and sustainability of the MAB Programme Strategy in order to draw conclusions, identify lessons learned and formulate action-oriented recommendations.

v. The scope of this evaluation encompasses the first half and mid-term, of the MAB Programme Strategy (i.e. 2015-2019) and the first four years of the Lima Action Plan (i.e. 2016-2019).

1.3 Evaluation Methodology

vi. The evaluation was conducted in three phases:

Inception phase

Data collection and analysis

Reporting phase

- vii. During the inception phase, the evaluation team used the findings from a preliminary document review and key informant interviews to develop methods for this evaluation, i.e. evaluation matrix, interview grids and online survey.
- viii. The data collection was conducted through 15 semi-structured interviews with main MAB Programme stakeholders and an online survey that was completed by 376 respondents worldwide. Data collection was carried out iteratively, with a set of documents being analysed one after the other to collate missing data and triangulate information. It was followed by a thorough analysis to answer the evaluation guestions.
- ix. In the reporting phase, the evaluators used the data collected, and the subsequent analysis, to develop key findings and preliminary recommendations. The findings and recommendations, included in the draft version of the report were collated in a slideshow and shared with the Evaluation Reference Group during an online workshop on 14 March 2020.

1.4 Key Findings

1.4.1 Relevance

- x. This mid-term evaluation points to a high degree of relevance of the MAB 2015-2025 Strategy and its Lima Action Plan. The recommendations provided in the evaluation of the previous Madrid Action Plan (2008-2013) were fully taken into account in the design of the Lima Action Plan. The MAB 2015-2025 Strategy and the LAP are clearly aligned with the Sustainable Development Goals (SDGs), especially SDGs 13, 15 and 17¹ and the Programme is considered to bring added value to achieving SDGs 13 and 15.
- xi. Member States, especially in Africa and Arab States, largely consider the MAB Programme relevant to the needs of their countries. The majority of MAB stakeholders deem the MAB Programme to respond to the current global need. The greater involvement in the Programme goes with greater recognition of its relevance. The most widely acknowledged added value is the MAB's holistic approach, followed by the presence of 701 Biosphere Reserves that allow the Programme to draw lessons from a diversity of fields.
- xii. **The MAB 2015-2025 Strategy does not apply a gender lens.**Nevertheless gender, as promoted by the UNESCO Priority Gender Equality Action Plan, is taken into account as much as possible, bearing in mind that this is not a focus of the MAB.

1.4.2 Efficiency

xiii. The MAB Programme is efficient given its very limited resources and achieved significant results. Staff numbers are very limited compared to the ambition of the Programme, but the staff that does work on the Programme is highly qualified and strongly committed.

- xiv. Limited resources are a bottleneck at all levels in achieving greater results in a timelier manner. Synergies with UNESCO and non-UNESCO Programmes, when they exist, allow for the mobilisation of a greater level of inputs as well as for increased cost-effectiveness. However, some opportunities have been missed in the evaluated period.
- There exists a real leverage effect of MAB resources to attract more external resources. However, the ability to mobilise large amounts of external funding and attract the attention of a more general audience to the Programme and its results, is hindered by Programme's limited resources, time, staff available and the visibility.

1.4.3 Effectiveness and Impact

- xvi. **The Lima Action Plan is an effective implementation document for the MAB Strategy 2015-2025.** It is a critical factor for the effectiveness of the programme as a whole.
- xvii. The level of achievement of the MAB Programme Strategy over the period of this mid-term evaluation is reasonable. However, there is insufficient reliable monitoring information available to fully determine Programme's level of achievement. Further efforts are required to ensure that the objectives of the Lima Action Plan are met in 2025. In addition, while the MAB Programme is mainly considered to be having an effect on raising the awareness of policymakers on the themes it covers, its effects are not so visible in terms of amending or improving national legislation in this direction.
- xviii. While the vast majority of national stakeholders claims that the MAB Programme has had real effects on the communities inside Biosphere Reserves, few consider that there are effects outside the BRs. The MAB Programme stakeholders consider it to be having positive effects for indigenous populations in particular, as well as for women and girls. However, this is possible only where the national and local authorities are open to accepting support targeting these groups.
- xix. The MAB Programme contributes to the global and Member States' implementation of SDGs 13 and 15. It adds, in particular, to the specific SDG targets linked to the protection of key ecosystems.

1.4.4 Sustainability

- xx. The MAB Programme leads to long-term effects for individuals and communities through its environmental awareness-raising and training activities, as well as through its support for local empowerment and job creation. The MAB Programme achieves long-term effects by encouraging organisations and institutions to become involved in sustainable development and increasing their empowerment in this area. Operating under MAB framework can have long-term positive economic effects for small businesses.
- xxi. Positive effects are highly dependent on the involvement, means and level of commitment of local and national actors, which are often still limited. The sustainability of the MAB Programme outcomes is highly dependent on context, especially level of involvement and ownership. It widely varies and depends on the means available, on policymakers' awareness of sustainable development and on the involvement of some key stakeholders. Financial and human resources constraints and communication on the global utility of MAB findings and its impacts to be improved are considered the key bottlenecks for its sustainability.

1.5 The way forward (lessons learned and recommendations)

xxii. The MAB Programme and its 2015-2025 Strategy are widely deemed relevant, particularly in achieving SDGs 13 and 15, but it is essential to enhance its visibility by giving greater prominence to its added value and innovative approach to Sustainable Development. While communication is mainly based on sharing good practices, it lacks quantified data providing concrete feedback on the implementation of the Programme and its impacts in society. The MAB Programme remains somewhat restricted what clearly hinders its capacity to raise greater resources. All MAB stakeholders should therefore participate in expanding outreach and efforts to increase the visibility of the MAB.

- xxiii. The design of the Lima Action Plan is considered much more effective than the Madrid Action Plan (2008-2013), with fewer actions and targeted responsibilities. However, Monitoring and Evaluation (M&E) is not carried out on a regular basis, or at all by some actors or in some countries. The level of action, governance and empowerment of Biosphere Reserves is extremely heterogeneous. M&E information at all levels could help provide support where it is needed the most. The MAB Secretariat should ensure less cumbersome but more effective M&E system. This data should be used by the MAB Secretariat in HQ and Field Offices to strengthen their support to MAB National Committees that need help, especially in developing and emerging countries, as well as to Biosphere Reserves.
- xxiv. Lack of financial resources is the main bottleneck identified, at all levels of the Programme. The human resources constraints are also significant, and this has an impact on the implementation of activities. Synergies within UNESCO and with other international programmes are sometimes mobilised to increase the means available for the MAB Programme implementation, but there are still many missed opportunities for synergies, especially with organisations dedicated to sustainable development. The MAB Secretariat should therefore reinforce the MAB Programme partnerships within and outside of UNESCO, as well as increase its capacity to mobilise funds. Finally, the involvement of youth is critical to the Programme's dynamism and sustainability, especially through youth forums. Their role should be developed and structured within the Programme at all levels.

1.6 Recommendations

N°	Recommendation	Intended for
1	Increase the outreach of the lessons learned as a result of the MAB Programme	All MAB stakeholders
2	Increase the visibility of the MAB Programme and its benefits by increasing the communication efforts already undertaken	MAB Secretariat, MAB ICC, National Committees, Field Offices, Biosphere Reserves
3	Strengthen support to the MAB National Committees in developing (and emerging) countries	MAB Secretariat in Field Offices and HQ
4	Strengthen support to the Biosphere Reserves	MAB Secretariat, National Committees, Field Offices
5	Reinforce the MAB Programme partnerships within and outside of UNESCO	MAB Secretariat
6	Develop and structure the role of young people within the Programme, at all levels	MAB Secretariat, MAB ICC, National Committees, regional networks
7	Ensure that a less cumbersome but more effective M&E system is in place	MAB Secretariat

2. Management Response

Overall Management Response:

The overall management response to the evaluation is positive and its recommendations will be followed-up by the UNESCO MAB Secretariat and UNESCO Field Office within the purview of their responsibilities, in close cooperation with relevant MAB stakeholders, as identified in the Lima Action Plan (LAP). The evaluation has highlighted the effective alignment between the MAB Strategy and the LAP and the 2030 Agenda and the SDGs.

By addressing a wide range of issues contained in the 2030 Agenda, MAB and the World Network of Biosphere Reserves are ideally placed to provide insights and solutions that maximize synergies while minimizing trade-offs among the SDGs. However, this is a complex, aspirational, ambitious and time-consuming task that may not be fully realized during the time-frame of the LAP by 2025. The management response will therefore recognize the need for short-term results, while laying the foundation for a strong MAB Programme until the conclusion of the 2030 Agenda.

The fact that most if not all of the below recommendations can be addressed in the short-term, gives us reasons to believe that they can be successfully implemented. This is particularly important in view of the Covid-19 pandemic and the urgent need to 'build-back-better'.

Finally, we would like to take this opportunity to recognize the high quality of the work undertaken by UNESCO IOS and Hydroconseil under the Mid-term Evaluation of the MAB Strategy and the LAP.

Recommendation

Recommendation 1:

Increase the outreach of the lessons learned as a result of the MAB Programme

Recommendation 2:

Increase the visibility of the MAB Programme and its benefits by increasing the communication efforts already undertaken

Management response

This will be done through strengthened efforts to promote and identify lessons learnt and to share them through UNESCO and MAB's full-range of communication and outreach channels. This includes a reinforced data and information management system coordinated by the MAB Secretariat. MAB Young Scientists Award winners will be solicited for sharing of their research results. The work of UNESCO Chairs related to MAB and BR issues will also be shared more broadly. Discussions with major a major international scientific publishing house on a book / publication series will also be re-launched. With emphasis on biodiversity and climate change, the MAB Secretariat will also liaise actively MAB National Committees, regional and thematic MAB and BR networks, academic and other partner institutions and MAB stakeholders with a view to identify and highlight lessons learnt and good practises to decision makers and the public at large.

Steps will be taken to accelerate the implementation of MAB's communication strategy and related efforts with increased focus on the added-value recognised by the vast majority of stakeholders, as outlined by the Evaluation. Particular efforts will be done on the social media and internet site of the Programme. The 50th Anniversary of MAB in 2021 provides a particularly important opportunity in this context.

Recommendation

Recommendation 3:

Strengthen support to the MAB National Committees in developing (and emerging) countries

Recommendation 4:

Strengthen support to the Biosphere Reserves

Recommendation 5:

Reinforce the MAB Programme partnerships within and outside of UNESCO

Recommendation 6:

Develop and structure the role of young people within the Programme, at all levels

Recommendation 7:

Ensure that a less cumbersome but more effective M&E system is in place

Management response

The MAB Secretariat with Field Offices, largely through its regional networks, will promote the strengthening of MAB National Committees through dialogues identifying needs and challenges and opportunities for how they best can be addressed. Existing guidelines for establishing MAB Nat Committees (https://unesdoc.unesco.org/ark:/48223/pf0000111527) will be updated in collaboration with the MAB Bureau / ICC and shared with all Member States.

The MAB Secretariat with Field Offices will collaborate with MAB Nat Committees, regional and thematic networks, academia, UNESCO Chairs, institutes and international and intergovernmental programmes, public and private stakeholders and Member States at large to strengthen biosphere reserves and the overall WNBR. Additional efforts will be made by the MAB Secretariat and Field Offices to act as honest brokers assisting Member States in particular need of support, to gain access to financial support through public and private partnerships. The operationalization of the AfriMAB fund in support of BRs in Africa is also foreseen. Similar funds for other regions may also be envisaged. The MAB Secretariat and Field Offices will engage more actively with MAB National Committees, regional and thematic networks to draft joint project proposals for external funding. Opportunities for strengthening BRs in general will be seized more vigorously in relation to those priority issues identified through the 'Excellence Strategy'.

The MAB Secretariat will further strengthen its engagement within UNESCO and with external partners in favour or bringing a critical mass of activities and resources to biosphere reserves while seeking to ensure that MAB and its WNBR also contribute actively to the overall agenda set by UNESCO and its wide-range of programmes. With a focus on the SDGs, senior management in different UNESCO Sectors will be encouraged to promote individual and joint activities in BRs around the world. A wider set of UNESCO Chairs, Category I and Category II Centres will be solicited for engaging with MAB and BRs. Efforts will also be made to construct donor partnerships for the mobilization of unearmarked resources providing MAB with additional capacity to address emerging and urgent needs.

MAB will invest more time and resources in connecting and empowering youth within MAB and its WNBR as a matter of priority. The rapidly growing MAB Youth Network is a promising development for this purpose. Efforts will also be made to seek the active engagement of MAB Youth in other UNESCO youth related and youth driven initiatives and processes.

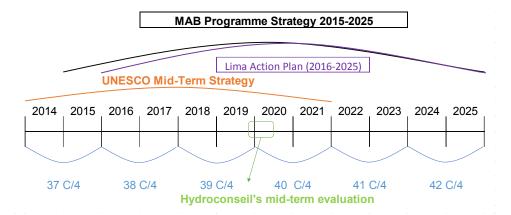
The MAB Secretariat in cooperation with the MAB Bureau will explore options for a more effective M&E system for the attention of the MAB ICC. This will include efforts to identify and adopt a more limited set of M&E indicators (10 maximum for BRs and 15 maximum for MAB National Committees) for the MAB ICC in 2021.

3. Evaluation Background

3.1 The MAB Programme, its 2015-2025 Strategy and the Lima Action Plan

- 1. UNESCO's Man and the Biosphere (MAB) programme is an intergovernmental scientific programme launched in 1971, the aim of which is to establish a scientific basis for the improvement of relationships between people and their environments at global level. Combining the natural and social sciences, economics and education, it seeks to improve human livelihoods and the equitable sharing of benefits, while safeguarding natural and managed ecosystems.
- 2. The MAB Programme promotes innovative approaches to economic development that are socially and culturally appropriate and environmentally sustainable. Its main tool is the World Network of Biosphere Reserves (WNBR), with 701 Biosphere Reserves (BRs), which serves as a 'laboratory' for the implementation of its activities, consisting mainly of research and capacity-building (workshops, training, partnerships with professional and educational institutions, allocation of study and research grants, etc.).
- 3. The 38th General Conference of UNESCO, in November 2015, endorsed the new MAB Programme Strategy for the period 2015-2025 as adopted by the 27th MAB International Coordinating Council (ICC), its Assembly of Member States and the main governing body of the MAB Programme. This Strategy is made operational through the Lima Action Plan (LAP), endorsed at the 4th World Congress of Biosphere Reserves and adopted at the 28th MAB ICC Session that took place in Lima, Peru, in 2016.
- 4. The MAB Programme Strategy 2015-2025 is part of UNESCO's Medium-Term Strategy 2014-2021 (37 C/4), the overarching objectives of which are peace and equitable and sustainable development. The graph below summarises the time horizon of the MAB Programme Strategy.

Figure 1. Time horizon of the MAB Programme Strategy



- 5. The MAB Programme Strategy 2015-2025 and the resulting LAP are based on four main strategic objectives:
 - i. Conserve biodiversity, restore and enhance ecosystem services, and foster the sustainable use of natural resources.
 - ii. Contribute to building sustainable, healthy and equitable societies, economies and thriving human settlements in harmony with the biosphere.
 - iii. Facilitate biodiversity and sustainable science, education for sustainable development and capacity-building.
 - iv. Support mitigation and adaptation to climate change and other aspects of global environmental changes.
- The LAP constitutes the implementation plan to achieve the MAB Programme Strategy 2015-2025. It is conceptualised as a matrix, with outputs, actions and expected outcomes that will contribute to the effective implementation of the strategic objectives contained in the Strategy. It also details the entities with primary responsibility for implementation, a time range and a list of performance indicators (62 in total).

- 7. The entities with primary responsibility for the LAP implementation are the MAB Secretariat, the MAB Bureau, the MAB ICC members, the Biosphere Reserves, Member States, National and Sub-National Authorities, the MAB National Committees, the National Commissions for UNESCO, the UNESCO Field Offices, the regional and thematic MAB networks, partners universities and research institutions, educational and training institutions (including those involved in the Global Action Programme on Education for Sustainable Development (ESD)), universities and entities from the private sector.
- 8. The LAP is structured around the following Strategic Action Areas:
 - i. The World Network of Biosphere Reserves comprised of effectively functioning models for sustainable development.
 - ii. Inclusive, dynamic and results-oriented collaboration and networking within the MAB Programme and the WNBR.
 - iii. Effective external partnerships and sufficient and sustainable funding for the MAB Programme and the WNBR.
 - iv. Comprehensive, modern, open and transparent communication, information and data sharing.
 - v. Effective governance of and within the MAB Programme and the WNBR.
- 9. Both the MAB Programme Strategy 2015-2025 and the LAP 2016-2025 are a continuation of the Seville Strategy and the Statutory Framework of the World Network of Biosphere Reserves.²
- 10. To implement the objectives of the MAB Programme and the associated LAP, the 38th session of the General Conference allocated USD 7.4 Million in regular programme funds to the Natural Sciences Sector. Over the evaluation period (2016-2019), these were significantly supplemented by external funding, reaching a 10:1 ratio in source of funds for MAB activities. Whilst regular programme funding has remained stable across the two biennia, the programme has been fragilized by a

- stark drop in extrabudgetary funding with the 39 C/5 budget representing only a fifth of that of the 38 C/5.
- 11. During the 29th session of the MAB Council in June 2017, the MAB Programme's 'Exit Strategy' (adopted in 2013) was discarded and became the 'Process of Excellence and Strengthening of the WNBR', to ensure that the sites respect specific criteria, serving as models for the implementation of Agenda 2030 and the Sustainable Development Goals (SDGs).

3.2 Evaluation Purpose and Scope

3.2.1 Evaluation Rationale and Management

12. The MAB Programme Strategy and Activity 3.2 of the LAP provided for an evaluation framework to be developed and implemented in close cooperation between the MAB Secretariat and the UNESCO IOS Evaluation Office. The MAB Secretariat invited the IOS Evaluation Office to oversee an independent mid-term evaluation of the MAB Strategy 2015-2025 and the LAP.

3.2.2 Evaluation Purpose and Specific Objectives

- 13. In a global context of climate change, destruction of the biosphere by human activity, and the political will to address these issues, UNESCO, through its MAB Programme, is committed to responding to the urgent need to protect the Biosphere Reserves on the international scale.
- 14. The main objective of this mid-term evaluation is to provide the MAB Secretariat, the ICC and other stakeholders an understanding of the progress achieved so far in the implementation of its Programme Strategy 2015-2025 and the LAP, with a view to strengthening the implementation process and seize new opportunities where relevant. The evaluation findings may also prove of value to UNESCO's Member States in their deliberations towards the overall UNESCO Medium-Term Strategy for 2022-2029 (41 C/4), including sections dedicated to MAB and its WNBRs.
- 15. The evaluation team has assessed and analysed the Programme Strategy and LAP on the basis of the following OECD/DAC criteria: relevance, effectiveness (in particular, progress against LAP performance indicators), impact, efficiency and

² In 1995, the second International Conference on Biosphere Reserves took place in Seville, Spain. The outcomes of the conference have been incorporated into the Seville Strategy and the Statutory Framework of the World Network of Biosphere Reserves, both approved by the General Conference of UNESCO.

- sustainability so as to draw conclusions, identify lessons learned and formulate action-oriented recommendations.
- 16. In doing so, the evaluation has adopted both a retrospective and a forward-looking perspective with action-oriented recommendations formulated on the basis of substantive findings.
- 17. The main target audiences of the evaluation are the MAB Secretariat within the UNESCO Natural Sciences Sector, the several entities that comprise the MAB Programme and, in particular, the representatives of Member States of the ICC, other Member States, regional and thematic networks and the WNBR and Biosphere Reserves. The evaluation's secondary target audiences include civil society organisations, notably non-governmental organisations, wider academic and policy communities, the communities located near the Biosphere Reserves (women, men and young people) and donors. The evaluation report was developed with all of these audiences in mind.

3.2.3 Evaluation Scope

- 18. The scope of this evaluation encompasses the first half, or mid-term, of the MAB Strategy (i.e. the period from 2015 to 2019) and the first four years of the Lima Action Plan (2016-2019). Therefore, the evaluation covers a period from 2015 to 2019.
- 19. The geographical scope of the evaluation covers the scope of the MAB Programme Strategy and LAP. It includes all MAB Member States and its 701 Biosphere Reserves. The conclusions and recommendations are therefore also global, and not country-specific.
- 20. In terms of stakeholder actions covered, this evaluation targeted the MAB Programme as a whole, with its full governance architecture (including the ICC and networks) and tools (notably, the WNBR) rather than only the work of the MAB Secretariat.

3.3 Evaluation Methodology

3.3.1 Evaluation Approach

21. The evaluation was conducted in three phases: inception; data collection and analysis; and report writing phase.

Inception Data collection Reporting phase and analysis phase

Inception Phase

- 22. The inception phase started with a kick-off meeting at UNESCO's headquarters in Paris on December 3, 2019, which was attended by members of the Evaluation Reference Group (ERG), half of them remotely via video-conference. This meeting enabled the evaluators to gain an understanding of the global context of the Programme, to discuss the Theory of Change of the Programme and to gather the expectations for this mid-term evaluation and the major issues to be addressed by the evaluation.
- 23. During the inception phase, the evaluation team conducted a preliminary document review and key informant interviews, using the findings to develop tools for this evaluation: the evaluation matrix, the interview grids and the online survey.
- 24. The evaluation team also built a Theory of Change on the basis of the LAP activities and the strategic objectives of the MAB Strategy 2015-2025, in a joint effort with the MAB Secretariat. This involved developing the assumptions and conditions under which the MAB Programme would reach its results.
- 25. On January 10, 2020, the draft inception report was presented to the Evaluation Reference Group. The composition of the group, formed specifically for this evaluation, was geographically diverse and gender-balanced (see list of ERG members on Page 2). The feedback collected from members fed into the design of evaluation, especially the evaluation matrix and the Theory of Change.

Data Collection and Analysis Phase

The data collection and analysis phase used **five main methods**:

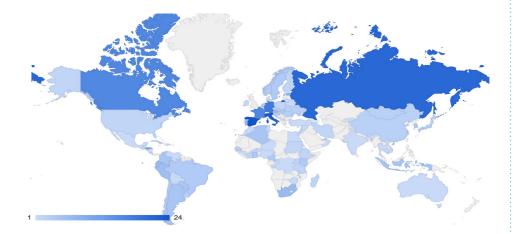
Document review

Semistructured interviews

Online survey Macro-data sets analysis Direct observations in the field

- 26. The UNESCO IOS Evaluation Office and the ERG supported the evaluation team to prepare for data collection phase, especially by providing relevant documentation, contact details and a list of all relevant stakeholders and their distribution
- 27. This phase was conducted through 15 semi-structured interviews with main MAB Programme stakeholders (see Annex 2) and an online survey that was completed by 376 respondents from 97 countries as shown in the map below:

Figure 2. Online survey respondent countries



- 28. As the scope of the evaluation was the overall Strategy (2015-2025) of the MAB Programme, covering 124 countries, a precise sampling of online survey' respondents was not carried out. However, the list of desired respondent categories was identified, and the team ensured that each of these categories of Programme stakeholders was appropriately represented.³
- 29. The wide and diverse pool of 376 respondents, from all identified respondent categories, suggests good representation for the online survey sample.
- 30. Data collection was carried out iteratively, with documents being analysed one after the other to collate missing data and triangulate information.
- 31. Unfortunately, the global Covid-19 health crisis made it impossible (at the time of the data collection) to carry out field case studies in the BRs of Madagascar. As a result, this visit was replaced with two other case studies: in the Gorges du Gardon BR and in the Mont Ventoux BR both in France and the third one in the BR of Jabal Moussa in Lebanon. These field visits were not intended to be representative of LAP implementation (which covers 124 countries). Rather, they illustrate what the MAB Programme has achieved in the field. They were selected during the inception phase, based on a number of variables including geographic distribution.
- 32. Following data collection, the evaluation team triangulated and analysed the data gathered from all sources to answer the evaluation (sub-) questions.

Reporting Phase

33. The evaluators used the information obtained through their analysis of the data to answer the evaluation (sub-) questions and review the findings. The evaluation team also developed preliminary recommendations.

³ The categories of stakeholders were: MAB International Co-ordinating Council, MAB Bureau, MAB Secretariat, MAB National Committees, Other representatives of MAB Member States (e.g. National Commissions, subnational local authorities, Representatives of the MAB Youth Forum, MAB donors, Biospehere Reserve manager.

3.3.2 Evaluation Tools and Methods

Evaluation Matrix

34. The matrix contains four criteria. Each criterion has two to four evaluation questions. Each question is further specified by two to four sub-questions. For each evaluation sub-question, the source(s) of information and/or collection tool(s) is / are specified.

The full evaluation matrix is available in Annex 8.

Evaluation criteria and evaluative questions

35. The evaluation applied the following OECD/DAC evaluation criteria: Relevance, Efficiency, Effectiveness, Impact and Sustainability.

3.3.2.1 Relevance

- 36. Definition: Relevance examines the extent to which the MAB Strategy and LAP are aligned with international and UNESCO objectives, bring added value to the sustainable development sector and are consistent with beneficiaries' requirements, country needs, global priorities and donor's sector policies.
- 37. Three evaluation questions capture the dimensions of relevance:
 - ➤ Alignment: The extent to which a programme has coordinated and aligned its strategies and activities with International and main organization (here UNESCO) strategies.
 - Answer to needs: The extent to which a programme answers the needs of the beneficiaries, the key stakeholders and the broad sector.
 - Added value and comparative advantages: The extent to which a programme has done something (in terms of activities or approach or thinking) that the other players did not do and/or had a significant effect on the sector progress. Comparative advantages are the benefits brought by an organization due to its characteristics (i.e. intergovernmental organization, being part of UNESCO, locally based global network etc.).

Evaluation questions:

- To what extent are the MAB strategy and LAP aligned with International and UNESCO objectives in the sector?
- To what extent are interventions and outcomes undertaken in the framework of the MAB Strategy and the LAP and WNBR perceived as beneficial to Member States' needs and priorities?
- What are the main elements of UNESCO MAB Programme's added value and comparative advantage?

3.3.2.2 Efficiency

- 38. Definition: Efficiency compares the results obtained in relation to the inputs, in order to assess if the first have been maximised keeping the latter limited.
- 39. Under this criterion, the way the MAB optimizes the use of the available resources, namely financial, human and time resources, to reach its objectives and foster synergies has been evaluated.

Evaluation questions:

- Are the resources invested in the MAB Strategy and the LAP used responsibly and do they generate appropriate value for money?
- Have synergies and cost efficiencies been fostered?

3.3.2.3 Effectiveness & Impact

- 40. Definitions:
 - ➤ Effectiveness measures the extent to which the development intervention's objectives were achieved, or are expected to be achieved, taking into account their relative importance.
 - Impact measures the positive and negative, primary and secondary longterm effects produced by a programme, directly or indirectly, intended or unintended.

41. Under this criterion, the level of achievement of the programme objectives, and the short-term and possible long-term effects of the MAB programme for beneficiaries, including vulnerable ones, have been analysed. Unexpected impacts have been detected and analysed.

Evaluation questions:

- Does the LAP adequately cover the strategic objectives and strategic areas of the MAB Strategy?
- To what extent has the LAP been achieved, based on performance indicators of the same?
- What difference has UNESCO's work in biosphere reserves at the country level made to ultimate beneficiaries, including girls and women, and to the inclusion of disadvantaged groups, such as indigenous peoples?
- To what extent has progress been achieved on the targets of SDG 13 (Climate Action) and SDG 15 (Life on Land) taking into account their indicators, in particular in Member States with biosphere reserves?

3.3.2.4 Sustainability

- 42. Definition: Sustainability examines the continuation of effects and benefits generated by a programme after major development assistance has been completed. When the programme is still ongoing, it can also estimate the probability of continued long-term benefits depending on their resilience to risks and the presence of sustainability building blocks.
- 43. As a mid-term evaluation, it mostly looks at potential long-term effects and presence of factors conducive to sustainability. An ad hoc definition of sustainability was developed, from the document review and from the first stakeholders' interviews, to suit the specific and unique features of the MAB Programme.

E valuation questions:

- Has UNESCO's work in support of the MAB Strategy and the LAP contributed to long-term effects for individuals (women, men and youth), organizations and institutions?
- To what extent is it likely that benefits ensuing from the MAB Strategy and the LAP will be maintained if MAB support was withdrawn?

3.3.3 Strengths and limitations

3.3.3.1 Strengths

- 14. The evaluation team applied a complex evaluation design drawing upon different strands of data collection to ascertain the positions of the various stakeholders involved in the MAB Programme.
- 45. The survey response rate was adequate, and respondents were representative of the diverse stakeholders both in terms of type of stakeholders (i.e. their affiliation to government entities, CSOs or others) and geographical representation allowing for an accurate reflection of stakeholder's opinion of the MAB Programme as of late 2019

3.3.3.2 Limitations

- 46. Despite its efforts to strengthen the data available through the various methods explained above, the evaluation still faced a number of hurdles. The evaluation team carried out its analysis in the awareness of the limitations of their data collection.
- 47. In particular, there is very little monitoring and evaluation data on LAP performance indicators. Further, the interviewees were key stakeholders in the Programme, whose vision may be biased.
- 48. Covid-19 pandemic erupted during the data collection phase of the evaluation and affected the team's capacity to pursue the evaluation as initially planned. Due to travel restrictions, the team could no longer undertake a case study in Madagascar. Given the global scale of the pandemic, selecting an alternative biosphere reserve proved difficult. Hence the Madagascar case study was replaced by a Biosphere Reserve in France, where the team is based.
- 49. The evaluation team conducted its analysis as objectively as possible, always keeping in mind the global scope of the evaluation.

4. Key Findings

4.1 Relevance

- 4.1.1 Evaluation Question: To what extent are the Man and the Biosphere Strategy and Lima Action Plan aligned with international and UNESCO objectives in the sector?
- 50. The 2030 Agenda⁴ and the 17 Sustainable Development Goals (SDGs), were adopted by UN Member States in late 2015, shortly before the Lima Action Plan (LAP) was developed. It helped to ensure that the LAP is fully aligned with the SDGs to a greater extent than the previous Madrid Action Plan (MAP) was aligned with the Millennium Development Goals⁵ (MDGs).
- 51. According to the MAB Secretariat and Bureau members interviewed, the MAB Programme particularly targets SDGs 13, 14 and 15, but ultimately contributes, more or less directly, to all SDGs. MAB activities are also particularly linked to SDG 17, strongly encouraging partnerships between Programme stakeholders at different scales.
- 52. The MAB Programme has produced a communication aid entitled "Our biosphere, our future: local actions for the Sustainable Development Goals", which includes examples of concrete actions carried out in the Biosphere Reserves (BRs) linked to each of the 17 SDGs. This is a good illustration of the Programme's integration into the 2030 Agenda.
- 53. Each LAP activity has been linked to the SDGs to which it is associated.

4 Transforming our world: the 2030 Agenda for Sustainable Development.

Figure 3. Lima Action Plan activities and Sustainable Development Goals - by Strategic Action Area

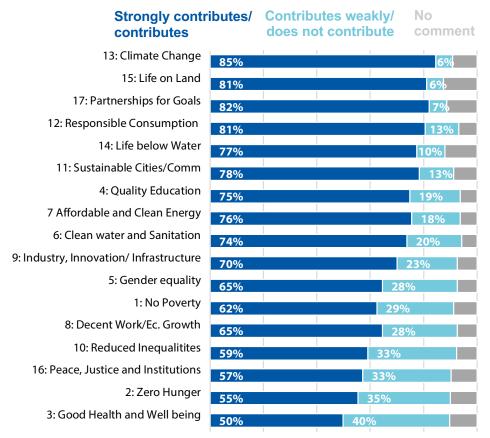
	SDG 1: No poverty	SDG 2: Zero Hunger	SDG 3: Good health & well-being	SDG 4: Quality Education	SDG 5: Gender equality	SDG 6: Water & Sanitation	SDG 7: Clean Energy	SDG 8: Decent work & eco-growth	SDG 9: Industry, innovation, infrastructure	SDG 10: Reduced inequalities	SDG 11: Sustainable Cities & Communities	SDG 12: Sustainable consumption/production	SDG 13: Fighting Climate Change	SDG 14: Aquatic Life	SDG 15: Earthly life	SDG 16: Peace, Justice & Effective Institutions	SDG 17: Partnership for SDG implementation
A: The WNBR comprised of effectively functioning models for	1	1	2	2	1	1	1	7	2	4	6	3	5	5	11	7	7
sustainable development	l '		_	_				,		7	Ü	5	3	5		'	,
B: Inclusive, dynamic and results- oriented collaboration and networking within the MAB Programme and the WNBR	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	1	8
C: Effective partnerships and sufficient and sustainable funding for the MAB Programme and the WNBR	0	0	0	3	0	0	0	3	0	0	0	2	0	0	0	0	6
D: Comprehensive, modern, open and transparent communication, information and data sharing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
E: Effective governance of and within the MAB Programme and the WNBR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1
TOTAL	1	1	2	7	1	1	1	10	3	4	6	5	5	5	11	10	23

Source: Evaluators analysis.

⁵ The United Nations Millennium Development Goals were eight goals that have been agreed to be achieved by the year of 2015.

- 54. Sustainable Development Goals 15 and 17 are the most represented. It is notable that each of the SDGs is mentioned directly in at least one of the LAP Strategic Action Areas, thus clearly illustrating the alignment of the LAP with the 2030 Agenda objectives.
- 55. The online survey asked respondents if the MAB Programme contributes to achieving the various Sustainable Development Goals. Respondents believe the MAB Programme contributes significantly to certain SDGs such as 13, 17, 15 and 12, and less to others such as SDG 3 and 2.

Figure 4. Contribution of the MAB Programme to Sustainable Development Goals

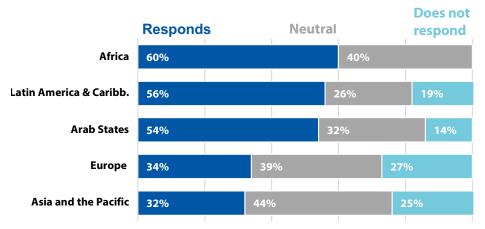


- 56. The UNESCO Priority Gender Equality Action Plan 2014-2021 directly integrates the MAB Programme into its performance indicators.⁶
- 57. The term 'gender' is not explicitly mentioned anywhere in the Lima Action Plan. However, gender equality priorities are embedded in the work of the main MAB Programme stakeholders (MAB Secretariat and Bureau especially). For instance, gender balance is ensured in all meetings and training sessions (both for trainers and participants). At the level of BRs, efforts are being made to integrate more women into decision-making processes and training activities.
- 58. The target of gender equality within the MAB Programme is reinforced through its actions with young people. At the MAB Youth Forum, the gender balance was clearly respected among participants. The MAB research scholarships and the Michel Batisse Awards, as well as the training and thesis courses offered by UNESCO Category II Centres (e.g. the Kinshasa Centre in particular) promote the integration of young girls.⁷
- 59. In the online survey, SDG 5: Gender Equality was ranked 11th in the list of SDGs to which the MAB Programme contributes (see Figure 4). Twenty-eight per cent of the respondents indicated that the MAB Programme contributes little or not at all to the achievement of this objective.
- 60. Opinions of respondents on the contribution of the MAB to SDG 5: Gender Equality differ by continent. Whereas in Africa around 60% of survey respondents answered that the MAB responds to SDG 5, in Asia and the Pacific it was only 32% (see Figure 5 below).

⁵ Expected result n°5: Performance indicator: Number of Member States supported that have improved gender parity in the awarding of MAB-related fellowships and prizes. Evaluation criteria: - ratio of women to men among the beneficiaries of the MAB Young Scientists Awards, the Sultan Qaboos Prize and the Michel Batisse Award.

⁷ In 2016-2017, 8 women and 5 men received a MAB research scholarship and, in 2018-2019, scholarships were awarded to 8 women and 6 men. The Michel Batisse Awards were awarded to 2 laureates, one woman and one man in 2014-2015, to one woman and one man in 2016-2017 and to one man in 2019.

Figure 5. Contribution of the MAB Programme to Sustainable Development Goal 5

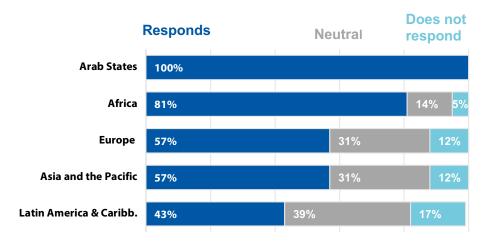


- 61. Gender equality is not a central focus of the MAB Programme nor is it strictly formalized in the strategy. Gender equality is taken into account through equal participation of men and women. However, the focus on gender equality is not always easy to implement. Differences in local cultures and in the areas of work covered (some of which, such as forest reserves, are historically male-dominated), and different levels of sensitivity to this issue affect the ability to fully integrate gender considerations to the Programme.
- 62. The recommendations provided in the evaluation of the Madrid Action Plan (2008-2013)⁸ were fully taken into account in the design of the Lima Action Plan. The five main recommendations included:
 - i. Strengthen the value of the World Network of Biosphere Reserves (WNBR) for BRs and the active involvement of the latter in the network's activities;
 - ii. Strengthen the clearing house function of the WNBR;
 - iii. Develop the WNBR's global role as a laboratory of ideas;
 - iv. Raise the profile of the WNBR;
 - v. Strengthen the financial and human resource base of the WNBR.

- 63. The uptake of these recommendations is visible in the LAP planned activities and outcomes. For example, all of Strategic Action Area D: Comprehensive, modern, open and transparent communication, information and data sharing is aimed at raising the profile of the MAB Programme and its WNBR. The strengthening of financial resources, i.e. the fifth recommendation of the mentioned evaluation, is also targeted by the outcomes of the LAP, and especially via Strategic Action Area C: Effective external partnerships and sufficient and sustainable funding for the MAB Programme and the WNBR.
- 64. According to interviewed MAB Secretariat and Bureau members, the LAP is better structured and clearer than the MAP, the number of outcomes and activities has been reduced and LAP indicators are more measurable. A more participatory process was used to develop the LAP.
- 65. In terms of content, the LAP further encourages collaboration between the Biosphere Reserves, and the development of partnerships at different scales. As presented above, it is also more focused on achievement of the SDGs (notably SDGs 13 and 15), and its alignment with the 2030 Agenda is greater than the MAP's alignment to the MDGs, at the time.
- 66. In addition, the implementation of the "Exit Strategy" (2013), which is now the "Process of Excellence", has made it possible to strengthen the BRs monitoring and support, and to introduce more rigour to compliance with the criteria defined in the statutory framework. This should ensure commitment and that work of high quality is carried out within the BRs to achieve the objectives set by the Programme's 2015-2025 Strategy.
- ⇒ The MAB 2015-2025 Strategy and the LAP are clearly aligned with the SDGs especially SDGs 13, 15 and 17.
- Gender, as promoted by the UNESCO's Priority Gender Equality Action Plan, is taken into consideration as much as possible in the actions, although this is not the main focus of the MAB. The MAB 2015-2025 Strategy does not explicitly apply a gender lens.
- ⇒ The Lima Action Plan content is in line with the Madrid Action Plar evaluation recommendations.

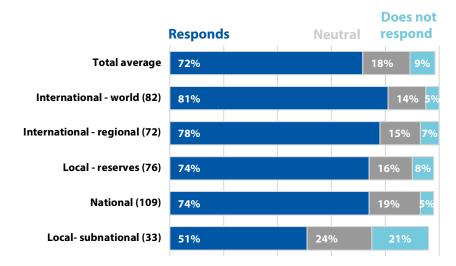
- 4.1.2 Evaluation Question: To what extent are interventions and outcomes from the Man and the Biosphere Strategy, the Lima Action Plan and World Network of Biosphere Reserves perceived as beneficial to Member States and beneficiaries?
- 67. Sixty per cent of all Member States representatives (average) considered the MAB Strategy and LAP to respond or highly respond to the needs of their countries. This perspective was most prevalent in Africa and the Arab States and lower elsewhere, especially Latin American and the Caribbean, where only 43% considered it to be responding effectively.

Figure 6. Responsiveness of the MAB Programme to the needs of Member States⁹



68. In the online survey, an average of 72% of respondents stated that, in their view, the MAB responds to current global needs.

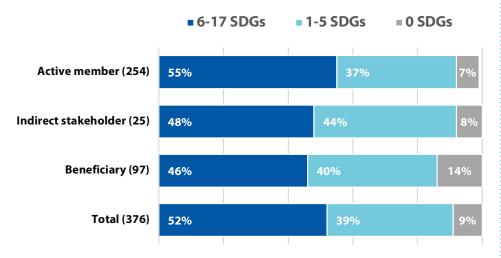
Figure 7. Responsiveness of the MAB Programme to the current global needs



- 69. The more people are actively involved in the MAB Programme, the more they are convinced of its relevance. This is borne out by the fact that 80% of the 254 active members provided positive answers, compared to around 70% of the 97 beneficiaries and around 60% of the 25 indirectly involved stakeholders.
- 70. The perspective of active stakeholders differs in relation to the MAB Programme's contribution to the SDGs implementation. Beneficiary respondents considered that the Programme contributes to lower number of SDGs than stakeholders who are indirectly involved. This is shown in the Figure 8 below:

⁹ Survey question to Member States: "Within its scope, to what extent would you find that the Strategy 2015-2025 and the Lima Action Plan meet the needs of your country?"

Figure 8. Contribution of the MAB Programme to the SDGs implementation according to its active stakeholders



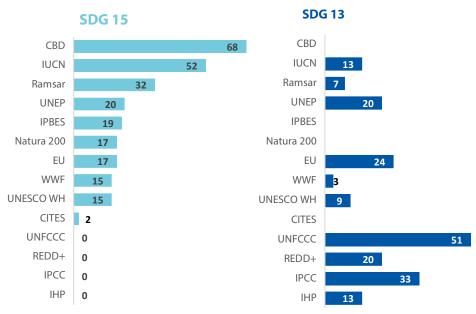
- 71. Based on the results of the survey, a small percentage of respondents (10%) considered that the MAB is not relevant and / or that it fails to take the global or countries' needs into account. In contrast, a large majority (70% to 80%) of respondents considered the MAB to be highly relevant.
- 72. The MAB focuses on a key topic: how to ensure that human communities develop economically and socially without negatively affecting their surrounding environment. It covers the three pillars of sustainable development: social, environmental and economic. Most of the interviewees agreed the MAB and its 701 Biospehere Reserves integrates these considerations. Some interviewed stakeholders, however, expressed disappointment that this aim had not been sufficiently met, especially in terms of social and economic development; that the lessons learned are not being widely shared and, that audiences remain too local, inside the BR.

- In majority, the representatives of Member States considered the MAB Programme to be relevant to the needs of their countries, especially in Africa and in the Arab States, and even more relevant overall (not in their particular country).
- ⇒ A majority of MAB stakeholders deemed the MAB Programme to respond to a current global need, and the more involved they are in the Programme, the more relevant they considered it to be.

4.1.3 Evaluation Question: What are the main elements of UNESCO Man and the Biosphere Programme's added value?

- 73. As the "Fight against climate change" and "Life on land" are the two main SDGs targeted by the MAB Programme, the evaluation further examined with stakeholders, the added value of the MAB Programme compared to other international programmes with the same objectives.
- 74. There are many international programmes whose objectives include the achievement of SDGs 13 and / or 15. Some of the conventions and institutions most frequently cited by respondents included: the Convention on Biological Diversity (CBD), the International Union for Conservation of Nature (IUCN), the United Nations Framework Convention on Climate Change (UNFCCC), European Union's programmes, the United Nations Environment Programme (UNEP), the Ramsar Convention and the Intergovernmental Panel on Climate Change (IPCC). Some other programmes mentioned were: Reducing Emissions from Deforestation and Degradation (REDD+), Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), World Wide Fund for Nature (WWF), Intergovernmental Hydrological Programme (IHP) and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

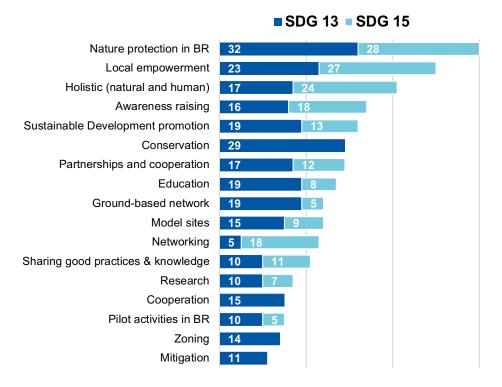
Figure 9. Other international programmes contributing to Sustainable Development Goals 13 and 15



- 75. The vast majority of respondents agreed that the MAB Programme, particularly its 2015-2025 Strategy, has real added value compared to these programmes. 78% of the respondents who stated that the MAB Programme had significant or average added value with regards to the achievement of SDG 13 and 83% as regards SDG 15.
- 76. The Programme's holistic approach and its focus on the link between man and nature are seen as particularly innovative and interesting. The Programme focuses not only on protecting the biosphere, but also on the place and activities of humans within it.

- 77. The WNBR is also a great added value: the MAB Programme contains 701 biospheres worldwide that act as laboratories in the field to identify good practices and serve as a model outside of the BR. Moreover, these biospheres are well-defined areas, and this idea of 'zoning' was regularly cited by respondents as an added value of the MAB Programme. The WNBR also includes 21 transboundary BRs, which enable it to participate in international conflict reduction by encouraging state cooperation for valuable shared resources (SDG 16).
- 78. The MAB Programme responds to global issues at the national / local level, and provides multi-dimensional responses such as tools, policies and good practices. It connects the global with the local, and aligns stakeholders sharing the same objectives. The fact that it is multi-disciplinary is also an asset as it covers research, ecology, agriculture, education, social sciences etc.
- 79. One further added value of the Programme lies in the strength of its partnerships with donor countries, governments, field-based teams, research centres, public and private financial partners, etc.
- 80. Finally, the involvement of young people within the programme was highlighted as a strength of the MAB Programme, through both the online survey and interviews.
- 81. Nature protection and conservation in BR, the holistic approach of the Programme and local empowerment were cited most often by interviewed stakeholders when asked to describe the value added of the MAB Programme in its contribution to SDGs 13 and 15 when compared to other similar international programmes.

Figure 10. Added-value of the MAB Programme in the implementation of Sustainable Development Goals 13 and 15

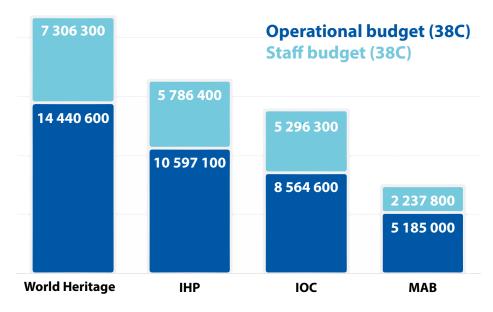


- ⇒ The MAB is considered to bring added value to achieving SDGs 13 and 15.
- ⇒ The most widely acknowledged added value is its holistic approach; the second one is the presence of 701 Biosphere Reserves that allow it to draw lessons learned from a diversity of fields.

4.2 Efficiency

- 4.2.1 Evaluation Question: Are the resources invested in the Man and the Biosphere Strategy and the Lima Action Plan used responsibly and do they generate appropriate value for money?
- 82. MAB financial resources are limited, especially in terms of regular resources, i.e. UNESCO funding. As of the 38 C/5 (2016-2017), the General Conference's allocation for the MAB Programme came to a total of USD 7.4 million. This is a relatively small amount when compared to other UNESCO programmes (World Heritage, IHP, Intergovernmental Oceanographic Commission IOC).

Figure 11. Budget of several UNESCO Programmes according to the UNESCO General Conference budget document (USD)



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- 83. Given the MAB Programme is the least-funded programmes in the Natural Sciences Sector but operates with number of Biosphere Reserves and activities conducted by regional and thematic networks, it would suggest its efficiency.
- 84. The extra-budgetary resources made up 94% and 70% of total expenditure in 2016-2017 and 2018-2019 respectively. This shows that the resources invested by UNESCO in the MAB Programme have a leverage effect: much more can be achieved thanks to the funds received from partners. It is, however, important to note that this same extra-budgetary expenditure has drastically reduced between the 38 C/5 and the 39 C/5 (-80%).

Table 1. Regular Programme and Extra-budgetary expenditure of MAB Programme between 2016-2019 (USD)

	RP expenditure	XB expenditure	Total expenditure
2016-2017 (38C/5)	1,373,894	26,458,163	28,132,057
2018-2019 (39C/5)	1,846,259	5,235,395	7,482,654
2016-2019 Total	3,220,153	31,693,558	35,614,711

85. Another indicator for efficiency is the expenditure rate, which corresponds to the ability of the Programme to spend the funds available. On average, this rate is 90%, which is good. However, in 2016-2017, Headquarters (HQ) was able to spend only 71% of Extra-budgetary funds (XB), which is somewhat low. This was due to the fact that 3 projects¹¹ had very low expenditure rates, whether due to their context or because they had limited availability of human resources to ensure the implementation of the projects.

Table 2. Expenditure rates of MAB Programme depending on the type of resources, the level of implementation and the period

	Regular Pi	rogramme	Extra-budgetary				
	Headquarters	Field Offices	Headquarters	Field Offices			
2016-2017	93%	96.5%	71.4%	84.4%			
2018-2019 96%		89.6%	97.4%	92.9%			

- 86. Eighty per cent (93 of the 115) respondents to the 2019 internal online survey cited "lack of financial resources" as a challenge for implementing the LAP. Several interviewees also believed they could achieve more with more resources. Therefore, more resources could perhaps help achieve far greater outcomes and impacts.
- 87. The MAB Programme employs very few UNESCO staff. As of 2020, there are 10 people working full-time for the MAB Secretariat at UNESCO HQ. There is a total of 16 people working part-time on MAB in Field Offices, who are Natural Sciences officers that are also involved in the work of other programmes in the Natural Sciences Sector (e.g. IHP, MAB or the International Geoscience and Geoparks Programme IGGP). This is a very low number given the worldwide scope of the MAB Programme and its ambitions, and means that it has to optimise the use of its human resources.
- 38. The MAB Programme uses of external human resources. The LAP provides for MAB actions to be implemented by Member States, national and subnational authorities, MAB National Committees, National Commissions for UNESCO, partner universities and research institutions, Regional and Thematic Networks, Biosphere Reserves, and the private sector, including social entrepreneurs and enterprises. This mobilisation ensures the implementation of many more activities than could be achieved by 14 full-time equivalents and, thus, the MAB is very efficient in this regard.
- 39. Nonetheless, the few human resources allocated to the MAB are highly qualified, multi-disciplinary and passionate officers. The people involved are high-level scientists, who are specialised in the issues covered by the MAB. However, some have no particular background in communication and / or project management, which can be a weakness for the MAB Programme management and visibility. Further,

¹⁰ Extracted from SISTER the UNESCO operational project and budget management tool of UNESCO.

¹¹ The three projects with very low expenditure rates were: 1. Appliquer le modèle des réserves de biosphère transfrontières et des sites du Patrimoine Mondial pour promouvoir la Paix dans le bassin du Lac Tchad par la gestion durable de ses ressources naturelles (Eng.: Application of the model of a transboundary Biosphere Reserves and World Heritage Sites to promote peace and in the Chad Basin by sustainable use of its natural resources); 2. Biosphere Reserves as tools to reach the Sustainable Development Goals in island and coastal areas; 3. Support for the Restoration of forest ecosystems to promote sustainable socio-economic development in La Selle biosphere reserve (Haiti).

- although youth is involved in certain fora, this involvement does not seem to be integrated in the human resources strategy, with no permanent junior experts in the MAB Secretariat.
- 90. The allocated Secretariat's human resources are limited what creates a bottleneck for LAP implementation, thereby hindering its efficiency. For instance, developing and disseminating lessons learned would be very important for the MAB, but it requires the coordination-time that the MAB Secretariat cannot provide. The same considers reporting and fundraising. Seventy eight of the 116 respondents to a survey launched by the Secretariat in 2019, to assess the level of implementation of the LAP according to its stakeholders (the 2019 internal online survey on LAP implementation), cited "lack of human resources" as a challenge.
- 91. All the major MAB international events scheduled for the period have taken place as planned. This will not be the case for the 2020 ICC, due to the Covid-19 crisis.
- 92. Nineteen of the 62 LAP actions were scheduled for completion by the end of 2018 or before. In the June 2019-survey on LAP implementation, the respondents considered that these actions had not yet been fully achieved (Column A in Table 3, below). According to the MAB Secretariat, at least 2 actions had been completed as of May 2020 (Column B):

Table 3. Level of achievement of actions planned to be achieved by December 2018

Activities	Timeframe	A (2019)	B (2020)					
SAA A. WNBR consisting of effectively functioning models for sustainable development								
A1.3.	By the end of 2018	48.20%	/					
A2.1	End 2017	37.80%	67.50%					
A5.1.	By the end of 2018	35.90%	/					
SAA B. Inclusive, dynamic and result-oriented collaboration and networking within the MAB Programme and WNBR								
B3.1.	By the end of 2018	22.20%	/					
B6.1.	By the end of 2018	27.50%	/					
B7.1.	By the end of 2017	23.60%	/					

Activities	Timeframe	A (2019)	B (2020)				
SAA C. Effective external partnerships and sufficient and sustainable funding for the MAB Programme and WNBR							
C1.1.	Before MAB ICC in 2018	22.40%	25%				
C2.2.	By the end of 2017	28.60%	100% 37.50% 25%				
C4.1.	Before MAB ICC in 2018	26.70%					
C7.1.	By the end of 2018	23.60%					
SAA D. Comprehensive, modern, open, and transparent communication, information and data sharing							
D1.1.	By the end of 2016	50.80%	75%				
D2.1.	By the end of 2018 27.20%		100%				
SAA E. Effective governance of and within the MAB Programme and WNBR							
E1.1.	By the end of 2016	53.80%	/				
E1.2.	By the end of 2018	36.80%	/				

- The MAB Programme is efficient in the sense that the resources it uses are very limited yet it still achieves results.
- ⇒ Staff numbers are also very limited compared to the ambition of the Programme, but this staff is highly qualified and very committed.
- However, these limited resources are a bottleneck to achieving greater results in a timelier manner.

4.2.2 Evaluation Question: Have synergies and cost efficiencies been fostered?

- 93. There are synergies in place between MAB and other UNESCO programmes: IOC, IHP and World Heritage. The interviewed MAB Secretariat members explained that extensive information was shared with the UNESCO World Heritage Centre on their joint or adjacent sites and, thus, many nature protection and sustainable development actions were undertaken jointly or in consultation.
- 94. The MAB Programme also works closely with UNESCO Chairs and Category 2 Centres (C2C). For example, the C2C in Kinshasa (ERAIFT Regional Post-Graduate School of Integrated Forest Development and Management) has a strong technical partnership with the International Centre on Space Technologies for Natural and Cultural Heritage Centre in China, which includes funding for training and equipment. It is also in partnership with the Belem Institute in Brazil and the Indonesian Institute of Sciences.
- 95. These synergies are very positive as they disseminate the vision of the work, avoid dispersed actions and responses, help ensure the Programme benefits from the expertise of actors working on other programmes and, moreover, are real assets on the financial level.
- 96. These synergies greatly improve the cost-effectiveness of the MAB Programme. According to interviews, the MAB Programme has few resources, so synergies with other programmes improve its visibility and allow it to benefit from the resources of other programmes. For example, the MAB Programme in Paraguay benefited from the budget of the UNESCO Water Division. Some of the Interviewees raised concerns that it is more difficult to secure funds for biodiversity conservation than for issues such as access to water. In another concrete example, the Category 2 Centres on the Mediterranean Network of Biosphere Reserves in Castellet i la Gornal (Spain) entirely manages this network and makes around EUR 300,000 available per year.
- 97. UNESCO's programmes are highly complementary, and the development of synergies is a real strength. However, the majority of the interviewed actors explained that there are many missed opportunities, and that these synergies could be much more developed, especially as BRs can be very interesting labs for such synergies between programmes fostering different aspects of sustainable development.

- 38. At the local level, and at the Field Office level, synergies tend to be created naturally as people work together and regularly exchange information. In the Nairobi Office, but also in the other regional offices, staff works on the IHP, but also on MAB and the Geoparks programme.
- 9. However, this is much more difficult at the level of UNESCO Headquarters. Some of those interviewed spoke of 'silos' between the different programmes, which reduce the opportunity for synergies. There is also a lack of time for creating more joint projects between programmes. For example, other UNESCO programmes could make greater use of the BRs as research sites, but this is far from being systematically realised.

Example of synergies between the actors of the MAB programme: the creation of a 'MedMAB' network

Lebanon is part of the ArabMAB regional network. However, a Mediterranean sub-region has developed in 2017 and this 'MedMAB' network seems very promising in terms of creating a Mediterranean dynamic. Projects have already been set up between Jabal Moussa, Moroccan and European BR and universities (Euromed funding). There are also fairly dynamic exchanges with MAB France and Italy (field visits, meetings between ecoactors, transfer of good practices). The association of Jabal Moussa BR is requesting this type of work approach and networking, and thus, recommends the formalisation and then the effective integration of MedMAB into the MAB networks.

Pierre Doumet, Association for the Protection of Jabal Moussa Biosphere Reserve - Lebanon

- 100. According to the interviewed MAB actors, funds attract funds, and the MAB Secretariat is receiving more and more funds from private foundations (LVMH, Guerlain, etc.). The designation of sites as BR attracts financial resources. Examples of this are as follows:
 - i. The BR of Belo-sur-Mer in Madagascar is an example of a reserve that has received support from other programmes (USAID, WWF) since it obtained the BR label.
 - ii. In Tanzania, the activities carried out under the MAB Programme have attracted a group of donors who have further funded the activities initiated by the MAB.

- 101. However, this requires BR managers to have sufficient human and financial resources to seek funding and attract funders. In Madagascar, for instance, the BRs find it difficult to prepare grant applications that are sometimes complex. This situation is the same for the MAB Secretariat: limited financial and human resources hamper their possibilities of raising additional funds.
- 102. In addition, the lack of visibility of the MAB Programme's effects and impacts limits its financial leverage. Many stakeholders do not have a clear understanding of what the MAB Programme actually does, which results in missed fundraising opportunities.
- 103. For French BRs, one respondent explained that financial leverage is possible at the MAB Programme level, but more complicated to obtain at the BR level.

An example of missed opportunities to create synergies in Namibia and Botswana.

Namibia and Botswana have a remarkable history of nature conservation. The tourism and wildlife sector play a major role in the countries'economies. Efforts to find sustainable approaches have been undertaken for many decades. It would seem that both countries would add tremendous value to the MAB network, and also benefit from what more than 700 other landscape initiatives have brought. UNESCO has invested considerably in both countries. Namibia had a Cluster Office from 2000 to 2016. Botswana was covered by the Harare Cluster Office.

Funds from the Regular Programme, Participation Programme (PP) and Extra-budgetary funds (Germany) have been invested in workshops in both countries to present the idea, to raise awareness, etc. Botswana developed a MAB committee and obtained extrabudgetary funding to develop a feasibility study, ranking proposed sites according to global and agreed national criteria. And yet neither country has formally joined MAB or submitted a BR proposal.

The relative strength appears to require a different approach. These are not Member States without much environmental investment. They have small environment departments but with excellent capacity, and have benefited from funding in Community-Based Natural Resource Management (a BR-like approach mainly funded by USAID in the 1990s and 2000s) and Global Environment Facility (GEF) funding, mainly through the United Nations Development Programme (UNDP - some through UNEP); with both Governments being members of the IUCN and adopting the IUCN classification of protected areas.

One possible reason for the lack of success is the political support. Neither Member State has received the visit of a senior UNESCO Official to promote MAB. One junior Science Sector specialist with limited resources may establish links at a middle-management level, and academic interest, but does not have leverage at senior level. One can compare this with World Heritage, where until 2001 neither country had a World Heritage site. This has changed because of interest from senior level, largely through the National Commissions and Permanent Delegates, and possibly the role of other key players, including UNDP. In both countries, UNDP is the main environmental UN partner, due to its control over GEF funds. GEF projects often come up with ideas based on MAB, e.g. a GEF project created 5 landscapes very similar to a BR, but since the UN operates in silos, the idea to merge the programme with MAB or seek synergies is not promoted by the other programmes.

Guy Broucke, Natural Sciences Specialist, UNESCO New Delhi

- Synergies, when they exist, allow for the mobilisation of more inputs and increase the cost-effectiveness of the Programme. However, there have been a lot of missed opportunities so far.
- The leverage effect of MAB resources to attract more resources is real but, as the MAB resources are limited, the time, resources and visibility available are insufficient to secure large amounts of funding and attract the attention of a more general audience to the Programme results.

4.3 Effectiveness and Impact

4.3.1 Evaluation Question: Does the Lima Action Plan adequately cover the strategic objectives and strategic areas of the Man and the Biosphere Strategy?

- 104. According to the MAB Secretariat members, LAP outcomes and strategic objectives and areas of the MAB Strategy are fully consistent.
- 105. The MAB Strategy 2015-2025 and the LAP were developed one after the other and were notably based on feedback received on the MAP. The LAP is the implementation plan of the Strategy, so its results chain is fully adequate for achieving the Strategy's objectives. The members of the Secretariat find that their daily activities are fully connected to this action plan.
- 106. The LAP activities and the strategic objectives of the MAB Strategy 2015-2025 contribute to the same Theory of Change that was reconstructed (as a joint and collaborative effort between the Secretariat and the evaluators) during the inception phase (see Annex 3).
- 107. However, while this is clear to members of the Secretariat and Bureau, who have been involved in the implementation of the Action Plan, it may be less recognizable to the national and regional actors involved in the MAB Programme. According to various respondents to the online survey, the LAP is global, while the issues of the countries and Biosphere Reserves are very specific. They explained that, in order to generate impact, the broad strategic lines described in the LAP must be accompanied by specific actions in each territory. A representative of the MAB France, explained that the strategy objectives were somewhat "stratospheric", i.e. by breaking down global objectives into activities, MAB is not always as close to the reality on the ground as it could be. However, he affirmed that by having very broad objectives, each BR can find itself within the Lima Action Plan and the MAB national and field-level stakeholders are encouraged to develop their own strategies and plans, adapted to their realities.
- ⇒ The LAP is consistent with the implementation document of the 2015-2025 MAB Strategy.

4.3.2 Evaluation Question: To what extent has the Lima Action Plan been achieved, based on performance indicators of the same?

- 108. The evaluation team relied on the Monitoring and Evaluation (M&E) system put in place by the evaluated institution. However, there is no monitoring system providing regular information on the level of achievement of the LAP performance indicators. This can be partly explained by the fact that the MAB ICC favoured reporting that focused on providing good practices and lessons learned as Member States were not always keen to provide detailed monitoring information. This implied that, for the MAB Secretariat, monitoring progress against performance indicators among stakeholders was a challenging task. Consequently, this posed a challenge to for the evaluation in determining the effectiveness of the Programme. The mentioned indicators tended to have no baseline or target values, which made it difficult to assess their current level of achievement.
- 109. To bridge the information gap, the MAB Secretariat had been asked to provide information on the level of achievement on LAP indicators. They provided the evaluation team with the May 2020 values for the 21 actions in which the MAB secretariat plays a role, out of the total of 61. These are presented in column 2 of Table 4. The details of these figures, along with supporting information, including the other entities responsible for achieving the result(s), are presented in Annex 10.
- 110. The MAB Secretariat's self-assessment of these 21 LAP performance indicators concluded that the Programme is relatively effective as:
 - i. 5 activities have an implementation level of less than 50%;
 - ii. 14 activities have an implementation level of 75% or more;
 - iii. 5 activities have reached a level of 100%
- 111. However, only 5 of the 21 indicators can be assessed solely by the Secretariat. The remaining 16 require information from other responsible entities. The results presented in column B are therefore incomplete and somewhat subjective.
- 112. To enhance the reliability of the results, the database of the survey launched by the MAB Secretariat in June 2019 was further reviewed. In this survey, 116 MAB Programme stakeholders answered the question: "How would you rate the progress

- in the implementation of the specific LAP actions that you/your stakeholder group is primarily responsible for?" for each of the 62 LAP activities.
- 113. Based on this information, the following scale to quantify the answers was used:
 - i. A. No progress = 0%;
 - ii. B. Limited progress = 30%;
 - iii. C. Good progress = 70%;
 - iv. D. Excellent progress = 100%.
- 114. An average rate of progress of LAP activities was then calculated, based on the opinion of the stakeholders responsible for these activities. The results are presented in Column 1 of Table 4 so they can be compared with the MAB Secretariat's assessment of the same performance indicators' progress one year later.
- 115. From these figures, by June 2019, progress on indicators had been relatively limited. The greatest progress had been made in Strategic Action Area A WNBR comprised of effectively functioning models for sustainable development (45.5% on average). Conversely, the lowest rate of progress was considered to be in Strategic Action Area C Effective external partnerships and sufficient and sustainable funding for the MAB Programme and the WNBR, with an average of 28.6%.

- 116. By comparing the M&E data provided by the MAB Secretariat in May 2020 with the information from the June 2019 survey, it is notable that the assessment of the level of performance indicators varies widely, with the MAB Secretariat viewing this assessment more positively. This is notable for the four activities of Outcome D2. Increased awareness of all aspects of the MAB Programme. This may be explained by four main factors:
 - i. The MAB Secretariat has assessed its own progress against the indicators and has not taken into account the progress that has to be achieved by the other responsible entities; meanwhile, in the June 2019 survey, these other entities also provided information about their own progress.
 - ii. Further progress has been made between June 2019 and May 2020.
 - iii. The June 2019 survey respondents may not be aware of MAB Secretariat progress in some of its activities.
 - iv. The MAB Secretariat may be more optimistic than other stakeholders (especially those in the Field) about the achievement of LAP performance indicators.

 Table 4. Level of achievement of LAP performance indicators

Outcomes	Activities	Surv.19	Secr. 20
	STRATEGIC ACTION AREA A. THE WORLD NETWORK OF BIOSPHERE RESERVES CONSISTING OF EFFECTIVELY FUNCTIONING MODELS FOR SUSTAINABLE DEVELOPMENT		
A1. Biosphere Reserves recogn	, and the second	50.5%	/
as models contributing to a implementation of SDGs an MEAs	Promote RRS as sites that actively contribute to implementing weak including the Alchi Riodiversity	47.2%	87.5%
WIL/ \S	A1.3. Establish alliances at local, regional, international levels for biodiversity conservation and benefits to local people, taking into consideration the rights of indigenous people	48.2%	/
	A1.4. Use BRs as priority sites/observatories for climate change research, monitoring, mitigation and adaptation, including in support of the UNFCCC COP21 Paris Agreement	52.4%	/
	A1.5. Promote green/sustainable/social economy initiatives inside BRs	48.2%	/
	A1.6. Undertake research and ensure the long-term conservation of the socio-ecological systems of BRs including restoration and appropriate management of degraded ecosystems	58.1%	/
A2. Open and participatory selection, planning and	A2.1 Provide guidelines to enable Member States (MS) to apply the BR concept and implement the LAP effectively	37.8%	67.5%
implementation of BRs	A2.2 Ensure processes for selecting, designing, planning, and nominating BRs are open and participatory, involving all concerned stakeholders, taking into account local and indigenous practices, traditions and cultures, and based on sound science	60.5%	/
	A2.3. Ensure processes for implementing, managing, monitoring and periodic review of BRs are open and participatory and take into account local and indigenous practices, traditions and cultures	53.0%	/
	A2.4. Ensure that BRs have clear communication plans and mechanisms to implement these	36.4%	/
A3. Integration of BRs into rele	A3.1 Recognise BRs in legislation, policies and/or programmes at national and/or subnational levels	43.7%	/
legislation, policies and/or programmes complement by support for the functior of BRs		44.7%	/

Outcomes		Activities		Surv.19	Secr. 20
A4.	Research, practical learning and training opportunities that support the management of BRs and sustainable development in BRs	A4.1.	Establish partnerships with universities/research institutions to undertake research, especially UNESCO Chairs and Centres	56.4%	/
		A4.2.	Establish partnerships with educational and training institutions, especially UNESCO Chairs, Centres and associated schools, to undertake education, training and capacity-building activities aimed at BR stakeholders, including managers and rights holders, taking into account the SDGs	46.5%	/
		A4.3.	Provide adequate research infrastructure in each BR	49.8%	/
		A4.4.	Identify, and disseminate good practices for sustainable development, and identify and eliminate unsustainable practices in BRs	42.8%	/
		A4.5.	Encourage managers, local communities and other BR stakeholders to collaborate in designing and implementing projects that inform the management and sustainable development of their BR	42.9%	/
A5.	Financial sustainability of BRs	A5.1.	Develop a business plan for each BR including, generation of revenues and effective partnerships with potential funders	35.9%	/
		A5.2.	Implement the BR business plan to produce revenues	30.2%	/
		A5.3.	Strengthen national and subnational financial contributions to BRs	38.9%	/
A6.	The effective functioning of the WNBR, with all BRs complying with its Statutory Framework	A6.1.	Implement an effective periodic review process as defined in the Statutory Framework	53.0%	/
		A6.2.	Apply adaptive management processes in BRs	38.8%	/
A7.	BRs recognised as sources and stewards of ecosystem services	A7.1.	Identify ecosystem services and facilitate their long-term provision, including those contributing to health and wellbeing	47.6%	/
		A7.2.	Implement mechanisms for the equitable payment for ecosystem services (PES)	20.0%	/
		A7.3.	Implement programmes to preserve, maintain and promote species and varieties of economic and/or cultural value and that underpin the provision of ecosystem services	53.1%	/

Outcomes		omes Activities		Secr. 20
	STRATEGIC ACTION AREA B. INCLUSIVE, DYNAMIC AND RESULT-ORIENTED COLLABORATION AND NETWORKING WITHIN THE MAB PROGRAMME AND THE WORLD NETWORK OF BIOSPHERE RESERVES			
B1.	Effective BR managers/ coordinators and engaged stakeholders of BRs	B1.1. Organise global education, capacity-building and training programmes	44.3%	75%
		B1.2. Organise regional education, capacity-building and training programmes	47.3%	75%
B2.	Inclusive regional and thematic networks	B2.1. Ensure the participation of all relevant stakeholders in regional and thematic networks	45.9%	/
В3.	Regional and thematic networks with adequate resources	B3.1. Develop a business plan for each network	22.2%	/
B4.	Effective regional and thematic level collaboration	B4.1. Create opportunities for collaborative research, implementation and monitoring	40.0%	/
B5.	Visibility of regional and thematic networks and their activities	B5.1. Disseminate results of network activities internally, and externally, including cases of good practice in BRs	42.2%	/
B.6.	Transnational and transboundary cooperation between BRs	B6.1. Create and implement twinning arrangements between BRs in different countries	27.5%	/
		B6.2. Designate and implement transboundary BRs (TBRs)	48.2%	/
B.7	An active and open interdisciplinary network of scientists/ knowledge holders sharing MAB vision and mission	B7.1. Establish an international network of scientists/knowledge holders working in and with BRs, that engages with national and other international networks of scientists/knowledge holders	23.6%	/
		B7.2. Develop a joint research and knowledge exchange agenda for the international network	19.7%	/

Out	comes	Activi	ties	Surv.19	Secr. 20
	STRATEGIC	ACTION	I AREA C. EFFECTIVE EXTERNAL PARTNERSHIPS AND SUFFICIENT AND SUSTAINABLE FUNDING FOR THE MAB PROGRAMME AND THE WORLD NETWORK OF BIOSPHERE RESERVES		
C1.	Adequate resources for the MAB Programme and the WNBR	C1.1.	Prepare a business and a marketing plan to be endorsed by the ICC	22.4%	25%
		C1.2.	Implement the business and marketing plan	13.2%	25%
C2.	Recognition of the MAB Programme as a key partner within UNESCO and with other international organisations and relevant conventions	C2.1.	Create and realise opportunities for collaboration and partnerships within UNESCO	40.6%	100%
		C2.2.	Create opportunities for collaboration and partnerships with international programmes and relevant conventions	28.6%	100%
С3.	BRs and regional networks generating their own revenues	C3.1.	Support capacity-building in approaches to generate revenue	28.9%	75%
		C3.2.	Promote partnerships to raise funds from external entities with objectives that are compatible with those of the MAB Programme	32.9%	/
C4.	Recognition of the MAB Programme as a key partner by private sector	C4.1.	Develop guidelines on private sector partnerships for national committees and BRs	26.7%	37.5%
		C4.2.	Create opportunities for collaboration and partnerships with private sector which are open, accountable and sustainable	36.1%	/
C5.	Recognition that the MAB Programme contributes to the delivery of the objectives of national, regional funding programmes	C5.1.	Create opportunities for projects and activities funded by national and regional funding agencies	32.9%	/
C6.	enterprises contribute to BR	C6.1.	Provide guidance and training to entrepreneurs and social enterprises on involvement in BRs	28.4%	67.5%
		C6.2.	Create opportunities for entrepreneurs and social enterprises in BRs, including training, incentives and public procurement	33.3%	/
С7.	Recognition of BRs nationally and internationally	C7.1.	Undertake an analysis of a strengthened global BR brand, and establish this, with associated national guidelines	23.6%	25%
		C7.2.	Use the brand in products and services in line with national guidelines	28.1%	37.5%
C8.	Enhanced synergies between BRs	C8.1.	Encourage joint promotion and marketing of BR products and services among BRs and beyond	23.9%	/

Out	comes	Activit	ies	Surv.19	Secr. 20
	STRA	ATEGIC /	ACTION AREA D. COMPREHENSIVE, MODERN, OPEN, AND TRANSPARENT COMMUNICATION, INFORMATION AND DATA SHARING		
D1.	Full availability of MAB documents, data, information and other material	D1.1.	Implement the open access policy adopted by the ICC in 2014	50.8%	75%
D2.	Increased awareness of all	D2.1.	Create a communication strategy and an LAP	27.2%	100%
	aspects of the MAB Programme	D2.2.	Implement the communication LAP	27.4%	87.5%
		D2.3.	Implement a coordinated publications programme to facilitate data and knowledge sharing	25.8%	75%
		D2.4.	Effectively implement the MAB web site (MABNet).	33.7%	100%
D3.	Broader engagement and outreach	D3.1.	Use social media and other novel information and communication technologies	58.5%	100%
	ST	RATEGI	C ACTION AREA E. EFFECTIVE GOVERNANCE OF AND WITHIN THE MAB PROGRAMME AND THE WORLD NETWORK OF BIOSPHERE RESERVES		
E1.	Strong support for the implementation of the MAB from the governments of MS	E1.1.	Ensure the active participation of at least one representative of each ICC Member State at each MAB ICC session	53.8%	/
		E1.2.	Provide institutional support and resources to ensure that each MAB Committee and National BR network can carry out its mission	36.8%	/
E2.	MAB-National Committees have a transdisciplinary membership	E2.1.	Ensure that each MAB national committee has a transdisciplinary and representative composition	47.5%	/
E3.	Regular progress updates by MS and monitoring of the LAP		Submit a biennial report to the ICC covering progress made in each Member State, using a template provided by the MAB Secretariat	45.4%	75%
		E3.2.	Evaluate mid-term implementation of the LAP	25.5%	75%
E4.	Effective functioning of regional and thematic networks	E4.1.	Develop plan with objectives, performance assessment mechanism and timeframe for each regional and thematic network	22.0%	/
		E4.2.	Submit an annual report to the ICC on performance of the regional and thematic network	30.8%	/

- 117. In Table 6, the level of progress towards achieving the LAP outcomes has been assessed using different sources of information:
 - i. In the "Surv. 2019" column, the average of the scores of the LAP performance indicators related to each outcome has been calculated.
 - ii. In the "Secr. 2020" column, the scores provided by the MAB Secretariat (HQ and Field Offices) during two workshops held in early May has been included.
 - iii. In the "Eval 2020" column, the level of achievement of the outcomes based on the view of the evaluation team and on the information collected from the interviewees, documents, 2020 online survey, 2019 online survey and the Secretariat scoring workshops has been provided. The same scale as that used in the "Secr. 2020" column has been used.

Table 5. Scale for the outcomes rating

0 - 0%	No progress.
1 – 25%	Little progress: process is low or starting; much remains to be done to achieve the outcome in 2025, which may be challenging.
2 – 50%	Intermediate progress: significant progress has been made, but further efforts needed to reach a satisfactory level of achievement.
3 – 75%	Good progress: progress so far has been as fast as expected; if this pace is maintained, there is no doubt the outcome will be achieved in 2025.
4 – 100%	Already achieved.

Table 6. Assessment of the level of achievement of LAP outcomes

No.	- Outcome	Surv. 2019	Secr. 2020	Eval. 2020	Supporting Information
A1 -	BRs recognised as models contributing to the implementation of SDGs and MEAs	51%	50%	50%	Good progress has been achieved, but very dependent on regions, contexts, and stakeholders. According to interviews, progress still required to make sure BR are recognised as models. 35 of 215 (16%) respondents to the question on MAB added values have indicated that BR play a model role.
A2 -	Open and participatory selection, planning and implementation of BRs	47%	75%	63%	It depends on the country and the conception of participation: closely linked to the political situation. The reviews received show good participation processes as, if not, they would be part of the exit strategy.
А3 -	Integration of BRs into relevant legislation, policies and/or programmes complemented by support for the functioning of BRs	44%	25%	38%	54%, 37 of the 69 Member States that answered the question indicated they had developed a national strategy and/or action plan in order to implement the MAB Programme strategy; 41%, 28 of the 69 Member States that answered the question consider that the MAB has had an effect on national legislation, especially regarding the integration of BR into the law. There has been slow progress but it is moving in the right direction. The new 20 BR/year are mostly created by regional development planning.
A4 -	Research, practical learning and training opportunities that support the management of BRs and SD of BRs	48%	50%	50%	Some countries are highly active, and some academic communities are very active in BR, but this is difficult to demonstrate: lack of visible information and little evidence. There is no doubt that greater research is taking place, but connecting research with places needs to be improved.
A5 -	Financial sustainability of BRs	35%	25%	25%	24% of Biosphere Reserves respondents indicated that the lack of financial resources is a bottleneck for the MAB. (This was an open question there are so probably more BR facing financial problems, especially those unable to answer the online survey as it requires internet access and at least a smartphone)
A6 -	The effective functioning of the WNBR, with all BRs complying with its Statutory Framework	46%	50%	50%	WNBR works well, especially seeing all the regional and thematic networks sharing information, exchanging, supporting each other. However, the WNBR has not reached its maximum potential as it is somewhat weaker at implementing things together.
A7 -	BRs recognised as sources and stewards of ecosystems services	40%	50%	38%	Progress is only just starting to be made, due especially to the fact that "ecosystems services" are pretty new. Efforts need to be redoubled to produce evidence that BR offer ecosystems services, and to market them.

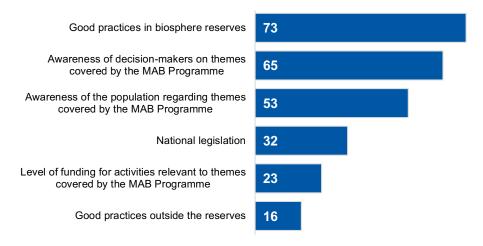
No Outcome	Surv. 2019	Secr. 2020	Eval. 2020	Supporting Information	
B1 - Effective BR managers/ coordinators and engaged stakeholders of BRs	46%	25%	25%	This outcome is linked to training of BR managers, of which there have been few due mostly to financial constraints. There are only 3 extra-budgetary projects working on this, with a limited number of trainees per year.	
B2 - Inclusive regional and thematic networks	46%	100%	88%	10 regional networks (AfriMAB, ArabMAB, EABRN, PacMAB, SACAM, SeaBRnet, EuroMAB, IberoMAB, REDBIOS, CYTED) + 8 thematic networks (Drylands; Mangroves; Marine, Coastal and Island Areas; Mountains; Savannahs; Tropical Forest; Wetlands; Agro-ecosystems). There is no need for new regional networks, as all regions are covered. The frequency could be higher. They could do more to engage more young people.	
B3 - Regional and thematic networks with adequate resources	22%	100%	75%	Each regional network has found specific solutions for securing enough funds to organise their meetings (e.g. Spain for IberoMAB, each hosting State for AfriMAB, self-funding for EuroMAB, etc.). Funding of the regional networks has been consolidated, despite not following a common business plan. There are enough resources for meetings, but maybe not to implement common actions.	
B4 - Effective regional and thematic level collaboration	40%	75%	63%	The regional and thematic networks collaborate during their meetings (7/10 regional networks have met in the past 2 years (2019 or 2018)). More progress could be made on achieving collaborative activities to have an impact outside the network events.	
B5 - Visibility of regional and thematic networks and their activities	42%	75%	50%	Due to irregular network activities (1 every 2 years), which are not very visual (meetings and training), the networks are not particularly visible. It would be useful for the member countries to share information on the network websites and social network pages more regularly. At least half of the regional networks have websites, and 4 can be found on Twitter.	
B6 - Transnational and transboundary cooperation between BRs	38%	88%	63%		
B7 - An active and open interdisciplinary network of scientists sharing MAB vision	22%	25%	25%	The MAB made very little progress on scientist networking, and it has fallen behind any planned schedule. Some brainstorming has been held, but no entity has yet been identified to lead this outcome.	
C1 - Adequate resources for the MAB Programme and the WNBR	18%	75%	38%	According to interviews and online survey participants, resources remain too limited. According to the Secretariat, the regular resources made available by the General Conference is enough to ensure the MAB and WNBR are able to function. However, to do more, the MAB Secretariat and WNBR need to secure other resources, and this is difficult and time-consuming.	

No.	- Outcome	Surv. 2019	Secr. 2020	Eval. 2020	Supporting Information
C2 -	Recognition of the MAB Programme as a key partner within UNESCO and with other international organisations and relevant conventions	34%	100%	83%	Progress has been made in the last few years to strengthen the partnerships, but it seems that more work could be done to improve synergies and effective collaboration. Collaboration and partnerships with UNESCO WHC, IOC, IHP, Education sector, Social and Human Sciences Sector, Communication and Information Sector, IOS, Centre for Agriculture and the Biosciences, IGGP, UNESCO Task Team on Climate Change, and the Biodiversity working group. Outside UNESCO: international programmes, organisations and conventions, such as: UNEP, FAO, WMO, IPCC, UNU, IFAD, African Union, AfDB, EU, IUCN, UNFCCC, CBD, Ramsar Convention, etc.
C3 -	BRs and regional networks generating their own revenues	31%	50%	50%	There is evidence that a lot of BR have funded their activities through partnerships, generating their own revenues, but their situations are very diverse. The information is not easy to obtain. Most countries are reaping benefits thanks to the BR brand, which is considered as an added value in terms of visibility and tourism opportunities, but the revenue may not come back to the BR. Marketing, product branding and sponsoring are being developed in some BR, helping to generate more revenue.
C4 -	Recognition of the MAB Programme as a key partner by private sector	31%	100%	50%	The private sector's interest in BR and in supporting a global programme with a global brand is growing as companies focus on corporate social responsibility, enabling more and more funding to be obtained through this channel. New partnerships have been developed: LVMH, Albertis foundation, Volkswagen (negotiating); For Youth Forums, funding from Shimao, and Italy Bank Foundation. More partnerships could be established if the visibility of the MAB was increased. Of the 6 private sector respondents to the online survey (not representative), only 3 consider that the MAB responds or really responds to current global needs.
C5 -	Recognition that the MAB Programme contributes to the delivery of objectives of national, regional funding programmes	33%	63%	50%	The MAB projects receive financial support through bilateral funding (e.g. Germany, Korea, Spain, Portugal) and also from regional development banks (e.g. AfDB) but more progress is needed to ensure there are sufficient resources to generate impacts inside and outside BR.
C6 -	Entrepreneurs and social enterprises contribute to BR activities	31%	75%	50%	Many BRs are constituted by social enterprises, and many are working within BR. There are good examples of entrepreneurs, but little data available for ensuring they really contribute to BR activities.
C7 -	Recognition of BRs nationally and internationally	26%	50%	38%	Some progress has been made on branding at the global scale and in some countries, as well as on mentions of BR in international conferences, but a lot of work still needs to be done to make sure the brand is recognised internationally.

No.	- Outcome	Surv. 2019	Secr. 2020	Eval. 2020	Supporting Information	
C8 -	Enhanced synergies between BRs	24%	50%	25%	Some progress is visible in some countries, but there is still a lot to do to enhance the joint promotion and joint marketing of BR products.	
D1 -	Full availability of MAB documents, data, information and other material	51%	75%	75%	All MAB documents are open access (open access policy of UNESCO), except confidential information. Weaknesses: language remains an issue, and up-to-date information about BR and national and local contacts are not really available.	
D2 -	Increased awareness of the MAB Programme	29%	75%	50%	In terms of visibility, considerable efforts have been made in the last 2-3 years with the hiring of a communication specialist. There is almost daily communication via social networks (Instagram, Facebook, and Twitter). The new website is better than the old one, but both are still available, which is not good for visibility. Communication remains a bottleneck according to the online survey.	
D3 -	Broader engagement and outreach	59%	50%	38%	Efforts have been made on social media, with content for a broader audience and people outside the BRs. However, outreach is still somewhat weak (13,000 followers on Facebook, 3,600 on Twitter).	
E1 -	Strong support for implementation of the MAB Programme from the governments of Member States	45%	50%	50%	On average, there are 100 countries participating in the ICC. The involvement of national institutions is highly dependent on the political context. There are improvements in some cases, due to the recent broader focus on sustainable development; however, in others, a lot remains to be done.	
E2 -	MAB National Committees have a transdisciplinary membership	48%	63%	50%	This depends on the countries' willingness and understanding of the MAB. In some countries, the scientific ecological aspect is dominant, especially where the National Committee has been composed of the same people for decades.	
E3 -	Regular progress updates by Member States and monitoring of the Action Plan	36%	63%	25%	Member States are not always keen to provide detailed information for the indicators. When discussing this, the MAB ICC favoured reporting that focused on providing good practices and lessons learned. This implies that the MAB Secretariat finds it challenging to monitor more detailed LAP implementation among all the key stakeholders. The indicators are also not always relevant or easy to monitor on a large scale.	
E4 -	Effective functioning of regional and thematic networks	26%	75%	50%	The networks holding meetings always report to the Secretariat. Not all thematic networks seem to be very active. There has been progress, but monitoring could be better.	

- 118. Survey respondents were asked what they considered unexpected outcomes of the MAB Programme. Many respondents said that there were no unexpected outcomes or quoted outcomes anticipated in the LAP. Several respondents cited the improvement of local governance and increasing involvement of young people, especially through Youth Forums. Unfortunately, some respondents also pointed out that they considered levels of outcomes achieved to be relatively low.
- ⇒ The level of achievement seems to be reasonable for this mid-term period however, there is not enough reliable monitoring information to be sure.
- ⇒ Further efforts are required to make sure the objectives of the LAP will be met in 2025.
- 4.3.3 Evaluation Question: What difference has UNESCO's work in biosphere reserves at the country level made to ultimate beneficiaries, including girls and women, and to the inclusion of disadvantaged groups, such as indigenous peoples?
- 119. According to the survey, the most widely acknowledged effect of the MAB Programme at country level is linked to good practices in the BRs. Out of 100 respondents, two-thirds (65) considered that the MAB increased policymakers' awareness of the themes it covers but only one-third (32) that it had an effect on national legislation, which is mostly linked to the inclusion of Biosphere Reserves in law, or on the protection of specific areas.

Figure 12. Effects of MAB in countries according to Member States' representatives



Source: Survey. Based on 100 responses of countries' representatives.

120. According to the MAB vision, BRs are supposed to act as models, but few respondents believed that the MAB had an effect on good practices outside the BR. According to interviewees, the MAB has had a particular effect in the BR not only on local governance, which tended to be participatory and representative of the local population, but also on improving livelihoods (see the section on long-term effects for individuals).

Giant Steps' towards governance in Biosphere Reserves management in Honduras

'Giant Steps' towards governance in Biosphere Reserves management in Honduras

Honduras has four Biosphere Reserves recognised by the MAB Programme. In 2016, there were no governance structures for the coordination and management of biosphere reserves, so the National Institute for the Conservation and Development of Forests, Protected Areas and Wildlife (ICF), in the framework of coordination with the Honduran Commission for Cooperation with UNESCO, submitted a request to the Participation Programme (Biennium 2016-2017), which was approved for the implementation of the project "Strengthening the MAB National Committee and the Local Management Committees of the Man and the Biosphere Reserves in Honduras".

Within the framework of the project implementation, institutional efforts and financial counterparts of German Cooperation projects (PROCAMBIO/GIZ and MC-PROTEP), the 4 Biosphere Reserves have local integrated management committees that are transparent, inclusive and representative of stakeholders and sectors of the territory. In 2019, in response to the request of the local committees to establish the MAB National Committee as a multi-sectoral platform for coordination and support in the management of the reserves, during the First Central American Meeting of Biosphere Reserves, this structure was integrated and MY ENVIRONMENT+ and ICF were recognised as having a role as political and operational focal points, respectively.

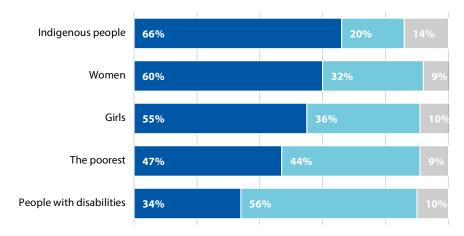
With the integration and strengthening of governance structures, Honduras still faces many challenges, but has undoubtedly taken important steps that constitute significant progress in the implementation of the MAB Programme strategy and the management of the Reserves.

Martha Leticia Mioñez Hernandez, National Institute for Forest Conservation and Development, Protected Areas and Wildlife ICF

121. According to survey respondents, the MAB Programme can have significant positive effects for indigenous populations in particular. For women and girls, the response was more mixed, yet still positive, while the poorest and the disabled are not considered specific beneficiaries of the MAB Programme.

Figure 13. Perceived benefits from the MAB Programme for vulnerable groups





- 122. This fits well with MAB's focus on indigenous peoples and consideration of gender. Of the 142 projects listed in UNESCO's financial monitoring system between 2016 and 2019, 95 are indicated as 'gender sensitive' and 25 as 'gender responsive'. For indigenous peoples, this information has been collected since 2018, and 23 out of 79 projects are now tagged as engaging with indigenous peoples. Furthermore, indigenous populations are targeted by activities A.1.3 and A.2.3 of the LAP.
- 123. There are some good examples of how BR can empower indigenous peoples, such as the Samis (see box below) in Scandinavia or the Inuit in Canada. However, this is possible only where the government is open to accepting such support.
- 124. It is also to be noted that promoting the creation of economic activities where there are limited opportunities can help poor people, including young adults, enabling them to find a job in their local communities instead of migrating to cities. However, according to the International Co-ordinating Council report in 2018, only a quarter of the BRs undertake specific actions in this regard.

125. Due to their locations, many BRs include people vulnerable to climate change, as they live in coastal, mangrove, desert, mountainous or oasis areas, and the MAB Programme can support them in adapting to these changes in a sustainable way.

Vindelälven-Juhtatdahka Biosphere Reserve in Sweden since 2019: An example of consideration of indigenous peoples' rights and culture in a Biosphere Reserve

Straddling the Arctic Circle, the Vindelälven-Juhtatdahka Biosphere Reserve includes large parts of the Vindelfjällen nature reserve, one of the largest in Europe. The area is home to two distinct cultural communities, Swedish and Sami and their rich cultural traditions. Activities in the Biosphere Reserve include mining, forestry, and reindeer husbandry, which enjoys official protection as a traditional activity of public interest. The Sami Parliament is officially responsible for ensuring that Sami interests are defended in spatial planning, while Samernas Riksförbund, the National Federation of Swedish Sami people, works more directly to support 'samebys' on planning issues. The Sami Parliament has, moreover, drawn up an action plan for Sami livelihoods and culture to deal with climate change.

- ⇒ The MAB Programme is mainly considered to have an effect on raising the awareness of policymakers on the themes it covers. However, effects are not very visible in terms of amending or improving national legislation.
- ⇒ While the vast majority of national stakeholders claims that the MAB Programme has had real effects on the communities inside the BRs, very few consider that the effects are visible outside the BRs.
- The MAB Programme stakeholders consider it to be having positive effects for indigenous populations in particular, and for women and girls. However, this is possible only where the national and local authorities are open to accepting such support.

4.3.4 Evaluation Question: To what extent has progress been achieved on the SDG 13 and SDG 15 targets taking into account their indicators, in particular in Member States with Biosphere Reserves?

- 126. The vast majority of respondents to the online survey, at all levels, expressed the view that the MAB Programme is contributing to the achievement of SDGs 13 and 15. The proportion of both international and local-level (Biosphere Reserve) respondents who consider that the MAB Programme strongly contributes to SDGs 13 and 15 is relatively similar. The only exception is their perception of its contribution to SDG 15, to which the respondents operating at sub-national level responded less positively.
- 127. When looking more specifically at SDG 13 and 15 targets, it can be seen that the MAB Programme has outputs, activities or ambitions that are linked to 3 out of 5 targets for SDG 13 and 8 out of 12 targets for SDG 15. 3 Of these SDG targets that are especially related to the MAB Programme are:
 - 13.b Promote mechanisms for raising capacity for effective climate changerelated planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities.
 - ii. 15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements.
 - iii. 15.4 By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development.
- 128. With regard to 15.1 and 15.4, it is to be noted that the total surface area of Biosphere Reserves, namely 7,039,992 square kilometres, corresponds to 4.7% of the world's total land area, or 0.9% if taking only core areas into account. From SDG tracking information, the total land area protected is 14.5%, so Biosphere Reserves make up 32% of the world's protected areas or 6.3% taking only the surface area of core areas into account

- 129. In 19 countries, the Biosphere Reserves core areas account for more than 20% of the protected areas (in 10 countries, this is more than 33% and it is 84% in Jordan), which means that, as tools to protect ecosystems, Biosphere Reserves contribute significantly to achieving SDG 15.
- 130. For SDG 15.1, specific ecosystems are particularly targeted for conservation, restoration and sustainable use. In the table below, it can be seen that these ecosystems are also targeted by Biosphere Reserves:

Table 7. Ecosystems covered by Biosphere Reserves

Ecosystem Type	Number of BRs ((2018	of BRs %
Mountain Ecosystem	364	54%
Mangrove Ecosystem	82	12%
Savannah Ecosystem	65	10%
Marine, Coastal, and Island Areas	205	30%
Dryland Ecosystems	50	7%
Forest Ecosystem	526	78%
Wetlands	182	27%

⇒ The MAB Programme contributes to the achievement of SDGs 13 and 15, especially the targets linked to the protection of key ecosystems.

4.4 Sustainability

- 4.4.1 Evaluation Question: Has UNESCO's work in support of the MAB Strategy and the Lima Action Plan contributed to long-term effects for individuals (women, men and young people), organisations and institutions?
- 131. Through its support to people in BRs, MAB can have long-term effects, notably by improving people's living conditions. In many BRs, inhabitants received training on new environmentally friendly professions, such as beekeeping, responsible agriculture or solidarity tourism. Some organisations, such as information centres, also employ local staff. These activities enable the beneficiaries to increase their incomes, thereby giving them the means to improve their living conditions. Consequently, these people are motivated to continue with these incomegenerating activities, which can have effects over the long-term.
- 132. This is also the case for awareness-raising, which can change the knowledge, attitudes and practices and way of life of the BR inhabitants, and of some of the implementing partners, in the long-term. For example, the educational camps organised in several of the reserves for children can help to improve their environmental awareness. By learning and conducting research on sustainable development issues, MAB Category 2 Centres' PhD students and MAB Chairs students (see the box below) are likely to be active in or at least sensitive to the theme for the rest of their careers
- 133. Informing the BR populations on climate change mitigation and adaptation measures, such as diversifying the species grown in agroforestry, can improve their resilience and reduce the negative effects of climate change on these communities for decades to come.
- 134. The MAB Programme contributes to the empowerment of local communities by encouraging their involvement in BR governance. Some people are thus able to take institutionally recognised decisions on the management of their territory. They may also be asked to present their activities and / or defend their position at the national

- or even international level. This bottom-up approach can have a considerable impact on the lives of BR community representatives in the long-term.
- 135. This is also the case for the young people who participate in the MAB Youth Forum. Their involvement can result in them taking on a leadership role on similar issues in their countries and thus enhance their career opportunities.

An example of training with long-term effects for students: the MAB Master's degree at the University of Toulouse, UNESCO Chair

Since 2012, the French-speaking MAB Master's course has been teaching concepts and tools to future managers and leaders of territories and protected areas working in the spirit of the UNESCO "Man and the Biosphere" programme. It insists on the knowledge of the interactions between human activities and ecological systems for a sustainable management of natural resources.

The MAB curriculum explains the concepts related to socio-ecosystems and shows how the Biosphere Reserve enables their implementation. It provides skills and tools (notably participatory approaches) to know how to lead a multi-stakeholder process and co-construct a territorial project. The lessons are based on the students' practical situation in a French Biosphere Reserve. A project on land management, prepared with the site manager, serves as a case study to experiment with the principles and methods of project engineering.

Students go on 6-month internships in various structures including Biosphere Reserves in France or abroad. They put their knowledge into practice in Biosphere Reserve management projects. They represent an original and constructive form of cooperation with various countries. Several former students are now working in Biosphere Reserves where they have brought real MAB knowledge and original skills, particularly in organizing participation. The students have also established the Co'MAB association, which, alongside MAB France, works to involve the younger generations in the Programme and, more broadly, in the implementation of sustainable development objectives.

Catherine CIBIEN, Director of MAB France

- 136. The MAB Programme encourages stakeholders to become involved in sustainable development and makes them responsible for implementing the MAB frameworks. The guidelines to be respected provide a soft-power method of prompting stakeholders to modify their practices and / or to encourage good practices in turn. By applying these guidelines, organisations modify their practices for the long-term.
- 137. The MAB Programme support can also have positive long-term effects on the companies that benefit from their support as it can increase revenue through the BR label. This is the case in BRs where tourism has increased thanks to the label. It can also occur through the labelling of certain products from BRs, such as honey from a BR in Tanzania, which is now being sold at a higher price, with more benefits for local beekeepers, as a label was set up with MAB support that has since been taken over by a consortium of partners.
- 138. The presence of a BR encourages local authorities to become involved in governance and, in some cases, take action based on BRs good practices. For example, in Sweden, following successful trials in a BR on forest diversification for better resilience, several regional authorities have since promoted this practice. However, these effects are often limited to areas close to the BR and seem to rarely reach the national or international level. When the resources are available, an area being designated a BR encourages the use of renewable energies such as hydroelectricity or solar energy.
- 139. Some interviewees also pointed out a sustainable and long-lasting (no end-date) effect on territories that become the Biosphere Reserve under the MAB Programme. Some BRs have been in place for more than 30 years. There is thus a regular incentive to put governance processes in place to promote environmentally friendly practices, and the effects on BRs are logically sustainable.
- 140. Nevertheless, the effects of MAB are highly dependent on the involvement, means and level of commitment and ownership of local and national actors, and this is all the more true in the long term. When there are only limited means available, or when actors have little motivation, efforts quickly fade away.

Jabal Moussa Biosphere Reserve in Lebanon: an example of success at the social, economic and environmental level, which would, however, require further support from the Programme

The integration of Jabal Moussa into the MAB Programme in 2009 launched a dynamic that allowed the Lebanese government to protect the area from 2012. The creation of the BR and its label has allowed the development of activities and has clearly impacted the socio-economic conditions of some actors in the region, who have developed an activity in total connection with the reserve and the association. In this case, the MAB Programme has thus provided a virtuous impetus.

Despite this, the actors regret that the MAB Programme's representatives are not more involved or dynamic to go beyond this initial impulse, and develop tools or spaces to support the actors (be they the managers of the reserve or the eco-actors).

The Mont Ventoux Biosphere Reserve: better visibility for better effects

Nationally and internationally known, Mont Ventoux is an exceptional place attracting thousands of tourists every year, but where local actors make sure that the environment is preserved and that this tourism is respectful of the unique environment of the Mont. Indeed, the Mont Ventoux Biosphere Reserve, designated in 1990, is strongly committed to environmental protection through forest management, biodiversity protection, educational and awareness-raising activities, ecotourism (cycling, trail, climbing, etc.) especially.

Despite 30 years of integration in the MAB Programme, the eco-actors involved in the BR¹² have great difficulty gauging the long-term effects that the Programme might have on their organization. Tourism is more important in the summer, but thanks to Mont Ventoux recognition, and not thanks to the BR label, and BR's stakeholders are not contacted because they are eco-actors in the MAB network. There is a real lack of visibility and communication: locally elected officials are not informed and therefore not involved and the label is not well known at the territorial level. The organizations interviewed wondered how the MAB network could have an impact on their projects, and how they could participate more so that the Programme would have a long-term impact for them.

The lack of a clear vision of the Programme's impacts, and especially of visibility/ communication, hinders the positive impacts that a Programme, which is considered relevant and totally anchored in the vision of environmental protection of local actors, could have.

- The MAB Programme leads to long-term effects for individuals through its environmental awareness and training activities, as well as its support for local empowerment and job creation. Its work with young people is also par of a long-term strategy.
- ⇒ The MAB Programme also achieves long-term effects by encouraging organisations and institutions to become involved in sustainable development and increasing their empowerment in this area. Obtaining the MAB label can also have long-term positive economic effects for small businesses.
- However, these positive effects are highly dependent on the involvement, means and level of commitment of local and national actors, which are often limited.
- 4.4.2 Evaluation Question: To what extent is it likely that benefits ensuing from the Man and the Biosphere Strategy and the Lima Action Plan will be maintained if MAB support were withdrawn?
- 141. The people interviewed stated that they felt supported by UNESCO (MAB Secretariat) in their activities. The actors in the field (BRs or National Committees) that have been interviewed have a contact person available in the Secretariat and information sharing takes place. The involvement of members of the Secretariat and the quality of the exchanges were highlighted by some of the respondents.
- 142. The MAB Secretariat provides little financial support, due to its limited resources, but supports countries through capacity-building, technical support as well as networking and partnership development. This has enabled some national actors to strengthen their capacities. In France, there has been an evolution in capacities in the field, particularly over the last five years. The challenges of MAB gradually manifested themselves (in particular the fight against climate change) and, since UNESCO has high-quality expertise, this has been an asset that has made itself

¹² See list of people met in Annex 4.

- felt in the field (for setting up research programmes, for example). As another example, the C2C in Kinshasa also noted good progress since the beginning of their involvement in the Programme, both in terms of infrastructure and training: in the first 10 years, they trained 80-90 people and they now train 42 people per year.
- 143. Progress is therefore visible, but MAB support and capacity-building efforts need to be maintained. Many survey respondents stressed the need for more guidance with their activities, as well as more support and capacity-building, especially in terms of management.
- 144. Ownership of the Programme by the national actors varies. MAB France, for instance, is financially independent and would be able to work alone in the Mont Ventoux BR. However, they explained that this would not be of interest as the MAB Programme provides them with opportunities and enables them to develop partnerships. The benefits of the MAB Programme go beyond financial support. In Madagascar, the MAB framework is used as a guideline by the BRs and Madagascar National Parks (MNP) to select activities to be carried out. Their need for support is greater. In particular, they cited support with seeking funding, more capacity-building and more linkages between the BRs.
- 145. More generally, and according to the results of the online survey, there is strong ownership of good sustainable development practices on the part of the National Committees and BRs. However, results vary widely when it comes to the establishment of good governance at regional or local level.
- 146. Thirty seven out of 69 countries that responded to the survey indicated they had a national action plan or strategy in place whilst 32 did not (5 countries did not respond). Commitment and ownership varies at the national level. Countries in Africa have the fewest national action plans.

Table 8. Countries with a national action plan or strategy – by region

	Number of Countries by region	Yes	No
Arab States	2	2	0
Asia and the Pacific	10	8	2
Europe and North America	29	17	12
Latin America and the Caribbean	11	6	5
Africa	17	4	13
Total	69	37	32

Source: Survey.

147. By reviewing the interview data and the responses provided by 292 respondents to the online survey question: "What would you consider to be the bottlenecks for sustainable results of the MAB Programme?" the bottlenecks raised can be grouped into the following 7 main themes:

4.4.2.1 Financial constraints

- 148. Lack of financial resources is the most consistent response. There is a lack of funding for implementing actions at local level. Poor financial partnerships with international institutions and the private sector were also mentioned.
- 149. Some respondents lamented that UNESCO tends to adopt a strongly governmentsubsidised approach to conservation, with little consideration for opportunities from the private sector. In their opinion, this approach weakens the viability of Biosphere Reserves.

4.4.2.2 Human resource constraints

- 150. The respondents to the online survey also regularly cited human resource constraints, which were often related to financial constraints.
- 151. There is a lack of human resources to support the BRs and the governments and to ensure communication and the documentation of lessons learned. The lack of handover to the next generation was also highlighted, as there is deemed to be a lack of recruitment and integration of young people, especially at the level of UNESCO headquarters.
- 152. The 'MAB Youth' movement could provide a unique opportunity to renew and reinvigorate human resources.

4.4.2.3 Lack of communication

- 153. The lack of visibility of the BR's MAB Programme actions in the territories and at the national level was also raised. Some respondents explained that there is still a lack of awareness of the MAB concept and its benefits and a lack of differentiation between the MAB Programme and other initiatives: what is the added value of a Biosphere Reserve compared to a national park, for example?
- 154. Some stakeholders highlighted weakness in communication on good practices between BRs as well as a lack of dissemination of results. At present, little is known about the economic benefits of the Programme and visibility should be generated to ensure that beneficiaries and partners remain involved.
- 155. Better communication at all these levels would improve the effectiveness of activity implementation, enhance the credibility of the MAB Programme and raise the awareness of national and international decision-makers.

4.4.2.4 Weakness in the ability to mobilise new partners

156. Some respondents explained that there is a need to engage the academic community to promote evidence-based solutions for sustainable development and that science needs to be a more important component of the Programme. BRs could prove to be very interesting laboratories for researchers, but many of them may be unaware this possibility exists; meanwhile, partnerships between MAB and scientists could benefit both parties.

157. Similarly, potential new financial partners may not be attracted to supporting the MAB and the BRs because they are not aware of the benefits they bring.

4.4.2.5 Governance issues and lack of State involvement

- 158. The lack of commitment and ownership at national level was highlighted as a bottleneck to sustainability of activities, particularly by respondents from Latin America and the Caribbean.
- 159. The weakness of UNESCO's advocacy with governments to consider MAB as a tool for the good management of protected areas was cited in this regard.
- 160. In addition, some respondents highlighted lack of support for the managers of the BRs as well as the lack of support from national and regional governments.
- 161. Some people would like to see better coordination and integration with other programmes.

4.4.2.6 Weakness in management and the monitoring process

- 162. The poor institutional organisation of the MAB National Committees (numerous inactive members) was highlighted by some of the respondents.
- 163. In some cases, the fact that there are no mechanisms for managing the BRs in each country as a binding commitment of each State creates a bottleneck.
- 164. Some options were needed to improve the performance of BRs, e.g. standardised approaches for monitoring climate change and its effects, a database on biodiversity and climate change, a best practice toolbox, a MAB journal and / or thematic workshops. The development of indicators and a benchmark to evaluate the success of the MAB was suggested.
- 165. Finally, according to some respondents, the performance indicators are too numerous and not all of them are useful. This generates bottlenecks since these performance indicators are not monitored.

4.4.2.7 Lack of global awareness on climate change

166. More generally, several respondents explained that the main bottleneck to the sustainability of activities was the lack of global awareness and interest in the problem of climate change and the destruction of nature and biodiversity. It is difficult to act in a society where decision-makers are not committed or willing to take strong action against climate change.

The Gorge du Gardon Biosphere Reserve and its eco-actors: examples of bottlenecks in the daily activities in the BR.

Designated in 2015, the Gorges du Gardon Biosphere Reserve (France), attached to the "Syndicat Mixte des Gorges du Gardon", is managed by Céline Boulmier, its Programme Officer. Céline Boulmier has been very involved since the request for the BR's labelling until today, and she is in charge of the existence and animation of a network of 30 ecoactors of the Biosphere Reserve.

Mainly financed by the Gard Department, and responding to calls for projects (EU), this BR is very active because one person is employed full time to keep it alive.

Indeed, she organizes training (3 or 4 per year) for eco-actors, sends them proposals for thematic calls for projects on which they could position themselves (often transmitted by the MAB Bureau France, or by foreign BRs that send partnership proposals), and organizes biannual meetings and other activities to keep the network of eco-actors active.

However, despite the commitment and motivation of the eco-actors of this BR, some bottlenecks may hinder the sustainability of their activities: i) current budgetary restrictions on the part of the main funder of the BRs activities, ii) the eco-actors have a professional activity, and therefore lack time to commit themselves to the network and the BR in parallel with their activities, iv) the lack of communication around the BR, particularly at the level of the region, the department or the city halls of the communes belonging to the Gorge du Gardon BR, iii) the lack of human resources, Céline Boulmier, the Programme Officer, is alone in her post, and the demands on the part of the eco-actors in particular are too great to be solved by one person alone.

Céline Boulmier, Gorges du Gardon Biosphere Reserve Programme Officer, France

- The sustainability of the MAB Programme outcomes is highly dependent on the context, especially the level of involvement and ownership, which vary widely and depend on the means available, on policymakers' awareness of sustainable development, and on the implication of some key stakeholders.
- ⇒ Financial and human resources constraints, and poor communication on the global utility of MAB findings, are considered the key bottlenecks for its sustainability.

5. Lessons learned

- i. The Man and the Biosphere (MAB) Programme and its 2015-2025 Strategy are deemed relevant by all stakeholders, particularly in achieving Sustainable Development Goals (SDGs) 13 and 15. The programme's added value is clearly highlighted by the stakeholders, but it has not yet been sufficiently publicised to allow the broad audience to identify what the MAB Programme and Biosphere Reserves (BRs) can bring in greater measure than other programmes or other types of protected areas (e.g. national parks). It is essential to give greater prominence to MAB's added value and its innovative approach in order to enhance its visibility.
- ii. The design of the Lima Action Plan (LAP) is much more effective than that of the previous Madrid Action Plan (MAP), in particular because it was prepared in a participatory manner. Taking the recommendations of the MAP final evaluation into account, the LAP contains fewer performance indicators and is well-aligned with the SDGs.
- iii. There are already synergies within UNESCO and external synergies with other international programmes, but there remain many other (at times unexplored) opportunities available. These synergies can create financial leverage for MAB activities. However, there seem to be several missed opportunities for synergies and these should be further analysed at the design phase of the Programme's next Action Plan.
- iv. Lack of financial resources is the main bottleneck identified, at all levels of the Programme. Financial partnerships with the private sector are gradually being developed at the Secretariat level, but this is much more complicated at the level of the BRs. There is a clear need for fundraising capacity-building.
- v. The members of the MAB Secretariat (Headquarters and Field Offices) are highly involved and fulfil their roles as key contacts for the National Committees. However, the team is very small and therefore lacks the time to ensure the more extensive follow-up as occasionally requested by local stakeholders in the BRs. The human resource constraints are significant and this has an impact on the implementation of activities.

- vi. Monitoring and Evaluation (M&E) is not carried out on a regular basis (or not carried out at all by some actors or in some countries). There is limited feedback of M&E information from the National Committees and/or BRs to Headquarters. However, it is difficult to ask for regular M&E to be carried out if there is neither a return on the investment in carrying out this monitoring, nor a quid pro quo.
- vii. The level of action, governance and empowerment of BRs is heterogeneous at the global level. Differentiated support and monitoring of the BRs should be introduced based on capacities.
- viii. Communication is mainly based on sharing good practices. The sharing of knowledge and lessons learned is one of the results expected from the MAB, and provides global audience communication, which is a very positive point. However, the communication lacks quantified data (M&E of LAP performance indicators, for example) that would make it possible to attract potential partners (research institutes, financial partners, business sector, universities, etc.) by providing them with concrete feedback on the implementation of the Programme.
- ix. Clearly visible efforts to improve communication have been made in recent years, especially since the final evaluation of the MAP. These efforts must be maintained in order to: i) demonstrate and highlight the added value of the MAB; ii) strengthen its visibility both vis-à-vis potential partners and the general audience. Despite all the efforts deployed, the MAB Programme remains somewhat restricted (compared to other UNESCO programmes) and this clearly hinders its capacity to raise more resources.

6. Recommendations

Recommendation 1: Increase the outreach of the lessons learned as a result of the Man and the Biosphere Programme (MAB)

Intended for: All MAB stakeholders

The MAB Programme was not created solely to have an effect in Biosphere Reserves (BRs) but to identify, in specific BR sites, the practices that can improve the relationship between mankind and the environment everywhere. Therefore, work to identify good practices in the BRs, with a special focus on the recommendations that can be used to improve the sustainability of human activities worldwide – outside of the BRs – should be intensified. This could be achieved by launching a series of publications (e.g. 10 per year), in partnership with PhD students or scientists, on lessons learned from at least 20 different BRs for broad application towards achieving Sustainable Development Goals (SDGs), especially in the fight against climate change and the loss of biodiversity. National Committees could assist with this outreach work by enhancing their political influence to improve governments' consideration of sustainable development and biodiversity protection and their inclusion in national legislation.

Recommendation 2: Increase the visibility of the Man and Biosphere Programme and its benefits by increasing the communication efforts already undertaken

Intended for: MAB Secretariat, MAB ICC, National Committees, Field Offices, Biosphere Reserves

Considerable communication efforts have been made in recent years to enhance the visibility of the MAB Programme. However, these efforts must be sustained in order to give this global programme the visibility it deserves, as well as to encourage new

partnerships and synergies, and to increase the programme's capacity to obtain funds and have a greater impact. This is also true within UNESCO, where better visibility would help secure more funding and facilitate the development of synergies between UNESCO programmes.

The benefits of the MAB Programme could be better promoted and conveyed to a larger audience. Basing the communication strategy on the added value recognised by the vast majority of stakeholders could help increase the Programme's visibility and strengthen MAB's brand image.

It is also important to expand communication efforts to reach a broader audience, for instance by focusing on the use of social networks and increasing the visibility of the MAB accounts (only 3,600 followers on Twitter, and an average of 800 views on YouTube as of April 2020). The MAB could consider partnerships with YouTubers known for their interest in/commitment to environmental issues, and/or consider the possibility of nominating global and regional 'ambassadors', with a focus on famous or influential people popular with a young audience (e.g. Greta Thunberg, Leonardo Di Caprio, etc.). The 50-year anniversary of the MAB Programme would provide the ideal opportunity to boost these communication efforts.

Moreover, the MAB Programme's communication should be based on more concrete evidence to attract potential new partners. This would require improving the collection of tangible and quantified information on MAB Programme impacts, notably based on the LAP indicators

Finally, it is important to ensure that there is only one website, and that the old version contains only a link to the new site and any outdated information is removed. Information needs to be updated (such as contacts of MAB National Committees) and adopt more attractive interface to access information on BRs. The MAB Secretariat could also consider adopting a new logo that is more representative of the current MAB mandate (this new visual identity could be unveiled as part of the 50-year anniversary events).

Recommendation 3: Strengthen support to the Man and Biosphere National Committees in developing (and emerging) countries

Intended for: MAB secretariat in the Headquarters and Field Offices

In some countries, the limited resources available hinder the capacity of the MAB national stakeholders to fully carry out their role. It would be useful to identify the MAB National Committees that are not particularly active or experiencing difficulties and provide them with increased training and fundraising support (national or external resources) to ensure they are able to assist their BR network and transfer lessons learned to policymakers. This support, which would mainly focus on developing and emerging countries, will require additional resources for the MAB Secretariat, especially in MAB field offices in developing regions. Guidelines could be developed to ensure that each member country has an effective National Committee in place. These guidelines could require, for example, that the National Committee be multidisciplinary, has an active focal point, provides annual reporting on a limited number of indicators (see monitoring), and holds annual meetings with representatives of the BRs.

Recommendation 4: Strengthen support to the Biosphere Reserves

Intended for: MAB Secretariat, National Committees, Field Offices

The BRs have a wide range of needs, which vary in accordance with national/regional contexts and human and financial resources. It is important to continue to identify BRs in difficulty, analyse their difficulties, and provide them with increased relevant support. This can be achieved by using the results of the reporting linked to the excellence strategy and the feedback from the field offices.

For BRs experiencing financial difficulties, support should be provided to help them identify funds for which they may be eligible and to prepare and submit their funding applications. Efforts to build BRs' management, activity monitoring, financial independence and national-level advocacy capacities should be sustained. There is also a need to enhance the sharing of experience between BRs through more regular contact and information sharing between the BRs and with the MAB Secretariat.

Moreover, the MAB National Committees should also take on a monitoring role to ensure that focal point is in place in each BR, and that all BRs effectively carry out their three functions (conservation of biodiversity, sustainable development and support for logistics) and that, in addition to the environmental aspects, they include social and economic-focused activities in their sustainable development approach, particularly with regard to job creation and economic development.

Finally, in order to secure the necessary resources for this support, the MAB could consider setting up a large initiative that specifically focuses on developing and emerging countries (see 'partnerships' section below) in order to raise funds through only one channel and optimize the resources dedicated to fund-raising.

Recommendation 5: Reinforce the Man and Biosphere programme partnerships within and outside of UNESCO

Intended for: MAB Secretariat

As the MAB Secretariat has limited resources, it has to rely on partnerships to ensure the MAB Programme meets its objectives. The main partnerships to be further consolidated are those with the other Science Sector programmes. With better coordination, these programmes can share resources and lessons learned and maximise their impacts. This may require the creation of common projects and/or sites. For instance, BRs could be considered as research and implementation sites for other UNESCO-led programmes.

Synergies can also be found or reinforced with other UNESCO, UN and non-UN international programmes and initiatives. Collaborations with academic institutions could be introduced to help share the lessons learned by several BRs and make these more science- and evidence-based. Partnerships with donors active in the development assistance sector could help secure more resources for the MAB Programme and the BRs, especially if the World Network of Biosphere Reserves (WNBR) is promoted as being a 'global laboratory' for identifying good practices. Were more funds to be obtained, the MAB Programme would need to conduct effective monitoring of the BRs to ensure compliance with the funding criteria.

Recommendation 6: Develop and structure the role of young people within the programme, at all levels

Intended for: MAB Secretariat, MAB ICC, National Committees, regional networks

The MAB Programme seeks to involve young people in its actions. This is especially visible through the organisation of Youth Forums. However, beyond these Youth Forums, which are useful and worthwhile and should be encouraged at all levels, there is no properly structured role for young people within the MAB Programme. Despite this, key stakeholders are aware that young people provide real initiative and motivation to help move the MAB Programme forward. Youth involvement in the MAB Programme, keeping in mind the gender equality aspect as well, should be strengthened by giving young people more responsibility. For instance, MAB youth representatives could be invited to actively participate in other MAB instances such as the ICC and the regional networks, and thus become more involved in the decision-making process and the governance of BRs.

It would also be worth considering recruiting some permanent junior experts for the MAB Secretariat. This would ease knowledge transmission, provide a new perspective and help modernise certain elements of the Programme.

Recommendation 7: Ensure that a less cumbersome but more effective Monitoring and Evaluation system is in place

Intended for: the MAB Secretariat

Despite the fact that the LAP has reduced the number of performance indicators compared to the MAP, the current process for monitoring activities in the BRs remains cumbersome, and there is no real monitoring information available. One of the reasons for this is the time-consuming nature of the task of gathering and aggregating data for an overly large number of indicators, which come from more than 120 countries and 701 BRs.

The number of indicators should be limited to a total of 35 SMART¹³ indicators, with baseline values and clearly identified targets. These indicators should also be disaggregated by sex where possible and relevant. The number of indicators should be particularly limited at the local and national levels:

- ➤ 10 indicators maximum to be collected by the BRs (selected from the 34 indicators currently in place);
- ➤ 15 indicators maximum to be collected by the National Committees (selected from the current 23).

Once the list is finalized, monitoring guidelines should be provided to the National Committees, and training on the indicators could help developing countries implement them.

This should be implemented as soon as possible and continued under the next Action Plan. The MAB Secretariat could use external expertise to support the participatory development of these indicators.

Furthermore, the entities in charge of reporting on the indicators at local level should be encouraged to collect this information in return either for the support received from the MAB or for the MAB workshops or training provided.

¹³ Specific, Measurable, Achievable, Relevant, Time-bound/targeted.

7. Annexes

- Annex 1. List of documents reviewed
- Annex 2. List of stakeholders interviewed
- Annex 3. The MAB Strategy 2015-2025 Theory of Change
- Annex 4. Case study: Mont Ventoux Biosphere Reserve France
- Annex 5. Case study: Gorges du Gardon Biosphere Reserve France
- Annex 6. Case study: Jabal Moussa Biosphere Reserve Lebanon
- **Annex 7. Terms of Reference**

Annex 1. List of documents reviewed

- 38 C/5: Approved programme and budget, 2016-2017: second biennium of the 2014-2017 quadrennium, UNESCO. General Conference, 38th, 2015
- 39 C/5 Approved programme and budget 2018-2019: first biennium of the 2018-2021 quadrennium, UNESCO. General Conference, 39th, 2017
- A New Roadmap for the Man and the Biosphere (MAB) Programme and its World Network of Biosphere Reserves. MAB Strategy (2015-2025), Lima Action Plan (2016-2025), Lima Declaration
- Composition du Conseil International de Coordination du Programme sur l'Homme et la Biosphère (MAB), November 2017
- en.unesco.org/mab/strategy/goodpractices
- Final Evaluation of the Madrid Action Plan for Biosphere Reserves, Internal Oversight Service Evaluation Section. May 2014
- Final list of proposed Sustainable Development Goal indicators, Report of the Inter-Agency and Expert Group on Sustainable Development Goal Indicators (E/ CN.3/2016/2/Rev.1)
- Fourteenth Session of the International Support Group (ISG) of the MAB Programme. UNESCO, 23 April 2018
- Implementation Plan July 2018
- July 2018 LAP Implementation Monitoring Report, June 2018
- LAP Implementation roadmap spreadsheet EN FR
- Qui est responsable de quoi dans le PAL?
- Lima Action Plan for UNESCO's Man and the Biosphere (MAB) Programme and its World Network of Biosphere Reserves (2016-2025). UNESCO. 4th World Congress of Biosphere Reserves on 17 March 2016, and as adopted by the 28th MAB ICC on 19 March 2016, Lima, Peru

- Lima Action Plan Implementation Template June 2018 (responses)
- Lima Action Plan Implementation Template June 2019 (responses)
- MAB Programme UNESCO website and its resources
- MAB young scientists award scheme, 2000
- MAB leaflet, UNESCO, 2016-2017
- Man and the Biosphere Programme, biennial progress report 2016-2017
- Management and financing of the MAB Young Scientists Award Scheme, 2003
- May 2019 MAB ICC document on the Implementation of the Lima Action Plan, 17-21
 June 2017
- Medium-Term Strategy, 2014-2021. UNESCO, General Conference, 37th, 2013
- Mont Ventoux presentation leaflet "Autour du Ventoux, entre l'Homme et la Nature »
- Our biosphere, our future, local actions for the Sustainable Development Goals. UNESCO, Fundacion Abertis.
- PD presentation 31st MAB ICC on item 13 Implementation of the Lima Action Plan, Doc SC-19/CONF.231/1, Paris, 17-21 June 2019
- Periodic_review_form_FR_2013, January 2013
- Report of the International Coordinating Council of the Man and the Biosphere Programme on its activities (2014-2015)
- Report of the International Coordinating Council of the Man and the Biosphere Programme on its activities (2016-2017)
- Report of the International Coordinating Council of the Man and the Biosphere Programme on its activities (2018-2019)
- Request for Proposal, Mid-term Evaluation of the Man and the Biosphere (MAB)
 Programme Strategy (2015-2025) and its Lima Action Plan (2016-2025). 18
 October 2019

- SDG tracker webpage and data on SDG 13: https://sdg-tracker.org/climate-change
- SDG tracker webpage and data on SDG 15: https://sdg-tracker.org/biodiversity
- SISTER_38C5_Financial_Report_2020_04_07_16-14-07
- SISTER_39C5_Financial_Report_2020_04_10_19-19-58
- SISTER_40C5_Financial_Report_2020_04_07_16-10-57
- Statuts du Conseil International de Coordination du Programme sur l'Homme et la Biosphère (MAB), November 2017
- Table of all Biosphere Reserves
- UNEG Ethical Guidelines for Evaluation. UNEG, March 2008
- UNESCO evaluation policy, IOS/EVS/PI/162, 2015
- UNESCO' Priority Gender Equality Action Plan: 2014-2021. UNESCO, General Conference, 37th, 2013

Annex 2. List of stakeholders interviewed

Name	Organisation
BAUDOUIN Michel	Category II Center
BONETTI Anna	UNESCO Executive Office
	Natural Sciences Sector
	Evaluation Reference Group
BOUAMRANE Meriem	MAB Secretariat
BILAGHER Moritz	UNESCO Internal Oversight Service (IOS) / Evaluation Office
CARDENAS TOMAZIC Maria Rosa	MAB Secretariat
CLÜSENER-GODT Miguel	MAB Secretariat
DOGSÉ Peter	MAB Secretariat
HECKLER Serena	Field Office - Montevideo
MACTAGGART Johanna	MAB Bureau / Evaluation Reference Group
PARANY Liliane	Madagascar National Parks
PRCHALOVA Marie	MAB Secretariat
PYPAERT Philippe	Field Office - Beijing
RAMASAMY Jayakumar	Field Office - Nairobi
RAONDRY RAKOTOARISOA Noéline	MAB Secretariat
REYNA Ken	MAB France /
	Representative of the
	Mont Ventoux Biosphere Reserve
SATTOUT Elsa	Field Office - Cairo
SUDARMONOWATI Enny	MAB Bureau / Evaluation Reference Group

Annex 3. The MAB Strategy 2015-2025 Theory of Change

SDG 15: Participate in other SDGs: Improve the **SDG 13:** Impacts Protect, restore and 11 (sustainable communities) relationship between Take urgent action to promote sustainable 12 (responsible production) people and their combat climate change use of ecosystems and 14 (life below water), 16 (peace) environment and its impacts 17 (partnerships) biodiversity Biosphere WNBR. MAB Activities in Biosphere Member states MAB activities are coordinated. Outcomes Reserves act as networks and MAB Reserves are support Biosphere known and recognized as models of institutions share economically, socially Reserves and having an impact on the conservation of biodiversity and sustainable socioknowledge and and environmentally integrate them into ecosystems lessons-learned viable national legislation the fight against climate change Networks foster Plans developed Research knowledge Communication Business and available collaboration and plan developed and available marketing plan Outputs communicate and implemented implemented Well-managed / functioning BRs Stakeholders Reports educated and / or developed and Activities Resources trained available implemented in sites mobilized Research Education Communication Develop plans Fund-raising on MAB website with objectives fostering BR management and social media Capacity building Activities Develop business and marketing plans Selection, planning Develop and implementation communications Provide support Develop Develop reports of BRs plan quidelines for, (biennial, and resources to and create, MAB committees monitoring) Dissemination Use of sites and and BR Networks partnerships activities in sites Communication and Resource Governance, Collaboration and Ecological Knowledge mobilization and Planning, M&E and sustainability networking Management partnerships reporting Inputs Human resources (quantity and Financial resources (UNESCO Time quality) and national funding) (10 years)

Annex 4. Case study: Mont Ventoux Biosphere Reserve – France

Country: France

Region: Provence Alpes Côte d'Azur

Designation Date: 1990

Administrative Authorities: Syndicat Mixte d'Aménagement et d'Equipement

du Mont Ventoux (SMAEMV)

Surface area (terrestrial): 89,408 ha

Core area(s): 2,126 ha
Buffer area(s): 26,830 ha
Transition area(s): 60,452 ha
Number of municipalities: 34
Number of inhabitants: 45 000

Location

Latitude: 44°10′N Longitude: 5°17′E

Centre Point: 44° 5′N - 5° 16′E

Brief presentation of the Mont Ventoux Biosphere Reserve

Mont Ventoux is located in-between the Alpine massif to the North and the Mediterranean massifs to the South and comprises a diverse relief with various microclimates and habitats. At 1,909 meters above sea level, his summit is notably rich in terms of flora with some sixty rare species identified so far.

Human activities are still traditional, agriculture occupies a predominant place in local socio-economic life: viticulture, livestock, aromatic plants, etc. Sports or recreational activities (hiking, skiing, cycling, etc.) also play a very important role in the economic development of the area, as well as ecotourism.



Source: Hydroconseil

History of the Mont Ventoux Biosphere Reserve

In 1972, Paul Grison, INRA researcher and Chairman of the Scientific Committee "Balance and Biological Control" of the Directorate General of Scientific and Technical Research, proposed to undertake a multidisciplinary action on the theme "Biological balances at Mont Ventoux". Until 1976, some fifteen research teams tackled specific local issues: climatology, analysis and interpretation of vegetation, populations of various groups of vertebrates and invertebrates, biological cycles of various plants and animals, the place and role of man, etc.

The conclusion of this work was that the Ventoux region was really rich and interesting in terms of natural sciences, conservation and local development. The team of researchers then proposed to establish an international recognition: the UNESCO Biosphere Reserve.

The "Syndicat Mixte d'Aménagement et d'Equipement du Mont Ventoux" (SMAEMV) then started a broad consultation bringing together elected officials and local stakeholders. It took more than two years to compile the important file: explaining this new and original status to local authorities, showing the interests of the elected officials concerned and provoking growing interest.

Finally, in July 1990, the "Biosphere Reserve" designation was attributed to this territory by UNESCO within the framework of its MAB programme. Since this date, the SMAEMV has been defining, leading and implementing the actions of the Mont Ventoux Biosphere Reserve

Since 1996, a Management Committee, bringing together elected representatives, administrations, managers, space users and local associations, has been assisting the coordinating structure in its choices. This Committee has drafted the management plan of the Biosphere Reserve, defining the actions to be implemented for the protection and enhancement of the natural heritage, sites and landscapes, support for sustainable economic development, and education.

Moreover, the Scientific Council of the Biosphere Reserve, composed of representatives of the natural and human sciences, is also supporting the Biosphere Reserve.

The periodic review carried out by UNESCO in 2017 highlighted the strengths and shortcomings of the Mont Ventoux Biosphere Reserve (e.g. educational deficiencies). Since then, the Biosphere Reserve has strengthened its activities: forest management, biodiversity protection, educational and awareness-raising activities, ecotourism (cycling, trail, climbing, etc.).

Indeed, historically, the Mont Ventoux Biosphere Reserve focused its activities on the massif, but in order to make its effects perceptible on a wider scale, the SMAEMV has gradually diversified its activities and its interlocutors: farmers, teachers, bird protection associations, etc. The benefits of the MAB programme at the scale of this Reserve have thus been extended both geographically and in terms of the profile of the beneficiaries.

Activities carried out in the Mont Ventoux Biosphere Reserve

There are four axes of activities in The Mont Ventoux Biosphere Reserve:

Natural areas and biodiversity

The Mont Ventoux Biosphere Reserve is committed to the protection and enhancement of natural areas and biodiversity through its integration into various national programmes and plans. For example, the Natura 2000, which is a European network of ecological sites whose two objectives are to preserve biological diversity and to enhance the natural heritage of the territories, while taking into account the social, economic, cultural and regional activities present on the designated sites.

Sites and landscapes

The Biosphere Reserve is committed to the preservation and enhancement of sites and landscapes, notably through the Mont Ventoux Interpretation Scheme project and the Ventoux Summit Rehabilitation project.

Sustainable socio-economic development

In order for the UNESCO's Biosphere Reserve designation to be of direct benefit to the inhabitants, the Mont Ventoux Reserve imagined a tool by which an individual, association, company or community would voluntarily commit to recognizing values and/or initiating actions in favor of this unique area: The Business Commitment Charter. In return, the respect of such commitments would enable it to benefit from the reputation of such a Reserve by highlighting the close partnership and the capital of trust established between them.

The aim of this approach is to bring together partners committed to sustainable local development within a local network, around a common identity and with a view to enhancing value. This mechanism is therefore shaped with the inhabitants and socioeconomic actors of Mont Ventoux.

The Mont Ventoux Biosphere Reserve was the first to use the "eco-actors" designation, which was then adopted by other Biosphere Reserves in France in particular.

Education and awareness

Finally, the Mont Ventoux Biosphere Reserves also expanded its educational and awareness-raising activities for young people, for example through the organization of educational programmes on the theme of eco-citizenship and solidarity in schools, colleges and high schools.

List of stakeholders met:

Organization	Contact
Syndicat Mixte d'Aménagement et d'Equipement du Mont Ventoux (SMAEMV) 830, Avenue du Mont Ventoux 84 200 CARPENTRAS +33 4 90 63 22 74	Ken REYNA SMAEMV's president Administrative Manager of the Mont Ventoux Biosphere Reserve
Cave Coopérative Vignerons du Mont Ventoux 620 route de Carpentras 84 410 BEDOIN + 33 4 90 65 95 72	Nadège DAMIAN Commercial manager
Nougats Sylvain Frères 4 Place Neuve, 84210 Saint-Didier + 33 4 90 66 09 57	Claire SYLVAIN Communication/marketing responsable
Ligue de Protection des Oiseaux – PACA 30 Avenue des Frères Roqueplan 13370 Mallemort	Magali GOLIARD Deputy Director
France Nature Environnement (FNE) Vaucluse 10 Boulevard du Nord, 84200 Carpentras + 33 4 90 36 28 66	Jean-Paul BONNEAU Members' representative

Annex 5. Case study: Gorges du Gardon Biosphere Reserve – France

Country: France

Region: Provence Alpes Côte d'Azur

Designation Date: 2015

Administrative Authorities: Syndicat Mixte des Gorges du Gardon

Surface area (terrestrial): 45,501 ha

Core area(s): 7,800 ha
Buffer area(s): 13,907 ha
Transition area(s): 23,794 ha
Number of municipalities: 26
Number of inhabitants: 188 653
Location: 43°54′17″N, 004°31′38″E

Brief presentation of the Gorges du Gardon Biosphere Reserve

In the heart of the limestone plateaux of Languedoc, the Gardon has carved its gorges over some thirty kilometres undulating through the Mediterranean landscape of the Uzège.

The Gorges du Gardon Biosphere Reserve is located in the Mediterranean biogeographic zone, considered one of the 34 biodiversity hotspots in the world. It covers more than 45,000 hectares combining scrublands, agricultural plains and yeast groves, bordered by a town of more than 250,000 inhabitants.

Tourism is the main economic engine of the region. It is mainly based on Roman and medieval archaeological sites and the Pont du Gard. Agricultural activity has undergone major economic changes over the last 10 years, but still provides 811 jobs in the biosphere reserve and offers a variety of products such as viticulture, olive growing, livestock farming, truffle growing and arboriculture, all of which have strong local roots.



Source: Hydroconseil

Finally, many quarries are still present on the territory, and 13 of the 75 listed in the Gard have been in continuous operation since Roman times.

The request to integrate the Gorges du Gardon into the MAB programme was led by the "Syndicat Mixte des Gorges du Gardon", through a participatory process. Indeed, the Syndicate held meetings in various villages, and the Biosphere Reserve project was therefore co-constructed with about fifty inhabitants of the area's communes. They drew up a zoning map in a participatory manner.

Together, they also decided that the BR would focus on urban planning, the environment and agriculture problematics.

Activities carried out in the Gorges du Gardon Biosphere Reserve

The activities carried out in the Gorges du Gardon Biosphere Reserve are led by a very active network of 27 "eco-actors", who work mainly in the following areas:

- Eco-tourism
- Nature activities: canoeing, donkey and horse riding, hiking with a guide
- Organic agriculture
- Vineyards

By meeting the criteria of a precise set of specifications, and by signing the **eco-actors' charter,** each eco-actor makes individual commitments structured around four main themes:

Raising environmental awareness among the general public

The eco-actors inform their visitors about the natural heritage of the Biosphere Reserve and the rules to be respected so as not to disturb the environment. They can also make their visitors aware of ordinary biodiversity.

Ecological management of the site and activities (fluids, waste, green spaces...)

Each eco-actor is committed to reducing its impact on the environment. For example, they can think about the way they maintain their green spaces, commit to preserving water resources, reduce their energy consumption, etc.

Enhancement of the local cultural heritage

Each eco-actor contributes to the maintenance of the know-how derived from the cultural heritage of the Biosphere Reserve by bringing this heritage to life and discovering it.

Equity and maintenance of social links

Eco-actors participate in improving the well-being of populations through access to culture and nature and fight at its own scale against social exclusion.

During our visit to the Gorges du Gardon Biosphere Reserve, we therefore went to meet these eco-actors in order to exchange with them on the nature of their activities, their commitment within the MAB programme and what it brings them on a daily basis.

List of stakeholders met:

Organization	Contact
Syndicat Mixte des Gorges du Gardon Maison du Site 2, rue de la Pente Hameau de Russan 30190 SAINTE ANASTASIE	Céline BOULMIER Biosphere Reserve Programme Officer
Domaine de Malaïgue Organic viticulture and polyculture Rue du Puits 30700 BLAUZAC	François REBOUL Wine cellar manager / winegrower
Jardin Médiéval d'Uzès Botanical garden P Hôtel de ville, Rue Port Royal, 30700 UZES	Dominique FORCES Representative
Atelier d'Essences Productor of natural products and aromatherapy 118 rue de Saint Guignol 30210 SAINT-BONNET-DU-GARD	Virginie LEAUNE Representative
La Belle Vie Hotel-Restaurant 4 Avenue Paul Blisson 30210 SAINT-HILAIRE-D'OZILHAN	Sylvie CENATIEMPO Hotel-Restaurant' manager

Annex 6. Case study: Jabal Moussa Biosphere Reserve - Lebanon

Country: Lebanon Region: Kesrouan

Designation Date: 2009

Administrative Authorities: Kesrouan Region

Surface area (terrestrial): 6,500 ha

Core area(s): 1,250 ha
Buffer area(s): 1,700 ha
Transition area(s): 3,550 ha
Number of inhabitants: 8279
Location: 34°03′44″N – 35°46′10″E

Brief presentation of the Jabal Moussa Biosphere Reserve

The Jabal Moussa Biosphere Reserve (BR), overlooking the Mediterranean Sea to the west, largely represents the biogeographic region of "Sclerophyllous evergreen scrub and forests" within a Mediterranean biome. The mountainous relief of the reserve gives rise to several eco-zones, thus favouring a diversity that is home to many species.

The Jabal Moussa Biosphere Reserve, is very sparsely populated (8 279 inhabitants).

History of the Jabal Moussa Biosphere Reserve

The Biosphere Reserve was created in response to the development of quarries in the region in order to protect the area and Mount Moussa. Faced with the inaction of the Lebanese government to protect the natural areas of the country and thus this region, the association first integrated the MAB in order to obtain the Label of the reserve (Biosphere). It was once the reserve was classified that the Lebanese State recognized the reserve as a "natural site" with the associated protections (notably a ban on building or developing quarries in the area) in 2012.





Source: Hydroconseil

When the BR - and the Jabal Moussa protection association - was designated (2009) and integrated into the MAB Programme, the creators conducted a "survey" of the area in partnership with the University of Saint Joseph in Beirut in order to identify the stakeholders who were already making a living from tourism or who were willing to develop activities to welcome visitors in connection with the BR or simply to become involved in the management and protection of the BR.

Several of the association's employees started out as local guides and became increasingly involved, some of them even becoming managers of the association. The association then helped several actors to set up their activity (mainly through training courses) and integrated them into the tour itinerary (booking tables for lunch or sandwiches upon confirmation of the visit, booking overnight stays in the guesthouses, etc.). They have also developed support for the production of "local products" with a label issued on the labal Moussa's association.

Activities carried out in the Jabal Moussa Biosphere Reserve

In the Jabal Moussa BR, the transition zone comprises about 54.5% of the Reserve.

The main activities are: forest land use, charcoal production, traditional agricultural activities, fruit tree planting, grazing, quarrying and seasonal recreation.

The local communities earn direct income from the sale of handicrafts, and also derive income from renting rooms or houses for visitor accommodation, cooking to provide healthy local food for participants in village workshops, guiding tourists to visit the reserve, and selling tourist items.



Source: Hydroconseil

List of stakeholders met:

Organization	Contact
Association for the Protection of Jabal Moussa	Pierre DOUMET President of the Association
Central kitchen of the Association for the Protection of Jabal Moussa Cooking of local products	Marc ATTALAH Director of the central kitchen of the association for the protection of Jabal Moussa
Association for the Protection of Jabal Moussa	Joseph KHALIL Guard, responsible for the entrance to the reserve and the sale of products / Reception and management / Supervision of visitors
Chez Houda Guesthouse	Nazih & Houda NADER Responsible of the Guesthouse
Dimitriades Guesthouse	Murielle DIMITRIADES Responsible of the Guesthouse

Annex 7. Terms of Reference

Terms of Reference (ToR)

Mid-term Evaluation of the Man and the Biosphere (MAB)
Programme Strategy (2015-2025) and its Lima Action Plan (2016-2025)

I. Background

- Launched in 1971, UNESCO's Man and the Biosphere Programme (MAB) is an Intergovernmental Scientific Programme that aims to establish a scientific basis for the improvement of relationships between people and their environments. It combines the natural and social sciences, economics and education to improve human livelihoods and the equitable sharing of benefits and to safeguard natural and managed ecosystems, thus promoting innovative approaches to economic development that are socially and culturally appropriate and environmentally sustainable.
- One of its main tools consists of the World Network of Biosphere Reserves (WNBR), which was itself launched in 1976 and is UNESCO's third-oldest network of sites, after the Ramsar Convention Sites (1971) on wetlands and World Heritage Sites, which were established in 1972. There currently exist some 701 biosphere reserves in 124 countries all over the world, including 21 transboundary sites on the territory of two or more countries. Biosphere reserves integrate biological and cultural diversity, recognising the role of traditional and local knowledge in ecosystem management.
- 3. Current serious concerns about the state of the biosphere, including pertaining to climate change and loss of biodiversity (Spratt & Dunlop, 2019), amounting to notions that 'the house is on fire', underline the crucial importance of the MAB Programme. This develops the basis within the natural and social sciences for the sustainable use and conservation of the resources of the biosphere and for the improvement of the overall relationship between people and their environment. It predicts the consequences of today's actions on tomorrow's world and thereby increases people's ability to efficiently manage natural resources for the well-being of both human populations and the environment.

- Thus, the MAB Programme has a clear place within the greater architecture of UNESCO and its different programmes, which has the overarching aims of achieving peace and equitable and sustainable development as per its 37 C/4 Midterm Strategy (UNESCO, 2014). A more harmonious co-existence of human beings and the rest of the biosphere will contribute to both of these overarching aims, which are themselves crucial to the continuation of human civilisation. UNESCO has 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. There exist potential synergies with various other UNESCO programmes, including the International Hydrological Programme (IHP), the International Geoscience and Geoparks Programme, the Intergovernmental Oceanographic Commission (IOC), the Management of Social Transformations (MOST) Programme and the Global Action Plan (GAP) on Education for Sustainable Development (ESD).
- In terms of governance, the MAB Programme is overseen by its International Coordinating Council of the Man and the Biosphere (MAB) Programme, usually referred to as the MAB Council or ICC, which consists of 34 Member States elected by UNESCO's General Conference. The MAB ICC decides upon new biosphere reserves. At its meetings, the Council elects a chairperson and five vice-chairpersons, of which one functions as a rapporteur, which form the MAB Bureau. In addition, the MAB Programme counts with an International Support Group (ISG), open to the participation of all Member States who have their Delegations at UNESCO Headquarters. The International Advisory Committee for Biosphere Reserves is the primary scientific and technical committee body advising the International Coordinating Council (ICC) of MAB and the Director-General of UNESCO on matters pertaining to the WNBR. The Committee is composed of twelve members, who are appointed for four years by the Director-General, after consultation with the Member States and/or the National Committees for the Man and the Biosphere Programme of the countries concerned.
- 6. Building international, regional, sub-regional and ecosystem-specific networks is a key feature of the MAB programme. Regional and sub-regional networks have a key role in the exchange of information and experience regionally, namely in: Africa (AfriMAB); Latin America and the Caribbean, Portugal and Spain (IberoMAB); Europe and North America (EuroMAB); Arab States (ArabMAB); Asia and the Pacific (East Asian Biosphere Reserve Network, EABRN); Pacific Biosphere Reserve Network

- The day-to-day management of the MAB Programme is in the hands of the MAB Secretariat at UNESCO Headquarters (HQ) in Paris. In terms of regular programme staffing, the responsible unit currently has 7 professional posts at HQ (one D1 at 50%, two P5, two P4, one P3 and one at P2-level). The Sector has 44 professionals in Field Offices, some of whom contribute to MAB Programme activities. In the 39 C/5 integrated budget framework, the regular programme funds amount to US\$ 847,703 for ER5 and US\$ 988,880 for ER6, respectively.
- The MAB Programme has gone through a significant evolution, in particular since 1995, following its second international conference on biosphere reserves in Seville, Spain. This led to the Seville Strategy and a Statutory Framework of the WNBR, which were both approved by the UNESCO General Conference in 1995. The Third World Congress of biosphere reserves (Madrid, 2008) led to the Madrid Action Plan (MAP), which built on the Seville Strategy and covered the period from 2008 to 2013. The UNESCO Internal Oversight Service (IOS) Evaluation Office evaluated the MAP in 2013-2014, leading to a number of recommendations.
- The MAB Strategy (2015-2025) was adopted by the 38th Session of the UNESCO General Conference in 2015. It was operationalised into the Lima Action Plan (LAP), which was agreed at the 4th World Congress of Biosphere Reserves in Lima, Peru, in 2016. The MAB Strategy requested that an evaluation framework be developed and implemented in close co-operation between the MAB Secretariat and UNESCO's IOS Evaluation Office. In line with this, the MAB Secretariat within the Natural Sciences Sector of UNESCO requested the IOS Evaluation Office to undertake an independent mid-term evaluation of the MAB Strategy (2015-2025) and LAP. These terms of reference outline the characteristics of this evaluation.
- To conduct this evaluation, UNESCO IOS Evaluation Office seeks to recruit a suitable consultant or consultancy team as per the parameters set out below.

11. II. Purpose and Use

- 12. In order to assist the MAB Secretariat, the ICC and other stakeholders to (a) understand its progress on the MAB Strategy (2015-2025) and the Lima Action Plan (2016-2025) at mid-term so as to (b) take corrective action where needed, this evaluation aims to assess and analyse the relevance, effectiveness, impact, efficiency and sustainability of the same. This will serve the overall purposes of learning and accountability.
- In pursuit of the main evaluation purposes, the evaluator(s) is/are expected to draw conclusions, formulate lessons learnt and articulate recommendations based on their assessment and analysis. They should provide evidence to Member States and donors about key achievements and added value of the MAB Programme and the WNBR and provide evidence of the contributions the programmes are making to the SDGs and, in particular but not only, SDG 13 on taking urgent action to combat climate change and its impacts, as well as the related Paris Agreement, and SDG 15 on Life on Land. These elements will facilitate accountability and learning by the target audiences of the evaluation.
- 14. The target audiences for this evaluation consist, primarily, of the MAB Secretariat within the UNESCO Natural Sciences Sector; the several entities composing the MAB Programme and, in particular, the ICC and the regional and thematic networks; the WNBR and specific biosphere reserves and Member States and, as secondary stakeholders, civil society organisations, notably non-governmental organisations (NGOs), wider academic and policy communities, the communities (women, men and youth) around biosphere reserves and donors.
- The expected evaluation recommendations (see § 12) will be followed up by a management response and an action plan from the Sector, which will outline concrete actions to be taken by specific actors in a given time-frame. Therefore, the evaluation is expected to lead to tangible outcomes in a clearly defined time as well as generate spaces for (self-) reflection by the wider MAB community, including the Secretariat and governing bodies.

16. III. Scope

- 17. The scope of this evaluation encompasses the first half, or mid-term, of the MAB Strategy (i.e. the period from 2015 to 2019) and the first four years of the Lima Action Plan (2016-2019), which is intended as a concrete roadmap towards the objectives of the MAB Strategy. In particular, the evaluation will examine progress towards the objectives of the MAB Strategy and achievement of the results (outputs and outcomes) in the Lima Action Plan, taking note of the performance indicators in that plan.
- 18. The responsibilities for each of the results are given in the Action Plan. In line with this, this evaluation is targeting the MAB Programme as a whole, with its full governance architecture (including the ICC and networks) and tools (notably, the WNBR) rather than only the work of the MAB Secretariat.
- 19. In terms of time-frame, then, the evaluation will cover the years 2015 through 2019, and its contributions to UNESCO's Expected Results 5 'Member States have strengthened management of natural resources towards the achievement of Sustainable Development Goals (SDGs) and targets related to biodiversity and climate change resilience' and 6 'Member States have developed UNESCO-designated sites as learning sites for inclusive and comprehensive approaches to environmental, economic and social aspects of sustainable development' as per

its 39 C/5 Programme and Budget covering the period 2018-2019. In general, the evaluation will adopt both a retrospective and a forward-looking perspective with action-oriented recommendations formulated on the basis of substantive findings, for example, opportunities for raising the profile of the MAB Programme and synergies.

20. The evaluator(s) should consider the evaluation of the Madrid Action Plan (MAP), undertaken in 2014, and its specific findings and recommendations. While these findings were limited by a number of significant constraints, the uptake of recommendations will have to be examined along with the effects that this has had on the issues they were meant to address.

21. IV. Evaluation dimensions and questions

- 22. In order to achieve these purposes, the evaluation will answer the following main questions pertaining to the above-mentioned evaluation dimensions:
 - a. **Relevance** of the MAB Strategy and the LAP and their alignment with other activities and agendas:
 - i. To what extent are interventions and outcomes undertaken in the framework of the MAB Strategy and the LAP and WNBR perceived as beneficial to Member States' needs and priorities?
 - ii. What has been the added value of this strand of work for the achievement of Sector objectives and the 2030 agenda?
 - iii. To which extent does the MAB Strategy and the LAP contribute to UNESCO's Priority Gender Equality objectives (as detailed in the Gender Equality Action Plan 2014-2021), i.e. was gender equality mainstreamed and were specific activities to address gender-based discrimination considered?
 - b. **Efficiency** of the implementation of the MAB Strategy and the LAP (extent to which resources are used cost effectively):
 - i. Are the resources invested in the MAB Strategy and the LAP used responsibly and do they generate appropriate value for money?
 - ii. What measures could lead to increased synergies and cost efficiencies?
 - c. **Effectiveness** and **impact** of UNESCO's work in support of the MAB Strategy and the LAP (outputs, outcome and impact):
 - i. Does the LAP adequately cover the strategic objectives and strategic areas of the MAB Strategy?
 - ii. To what extent has the LAP been achieved, based on performance indicators of the same?
 - iii. What difference has UNESCO's work in biosphere reserves at the country level made to ultimate beneficiaries, including girls and women, and to the inclusion of disadvantaged groups, such as indigenous peoples?

- iv. To what extent has progress been achieved on the targets of SDG 13 and SDG 15 taking into account their indicators, in particular in Member States with biosphere reserves?
- d. **Sustainability** of UNESCO's work in support of the MAB Strategy and the LAP (extent to which benefits of activities are likely to be maintained after funding is withdrawn and potential for further development and scaling up):
- i. Has UNESCO's work in support of the MAB Strategy and the LAP contributed to long-term effects for individuals (women, men and youth), organisations and institutions?
- ii. To what extent is it likely that benefits ensuing from the MAB Strategy and the LAP will be maintained if funding were withdrawn?

V. Methodology

- 20. This evaluation project will rely on a generic, non-experimental evaluation design. While the bidder is free to propose their own methodologies, it is important that they be fit to answer the above-mentioned questions. In addition, the evaluation approach and data collection methods should be human rights-based and gender sensitive and data should be disaggregated by sex, age and disability where relevant. We would expect that the overall design will include several of the following methods of data collection:
- 21. a. A **document review** (compulsory) of relevant texts pertaining to the MAB Strategy, the LAP (including the Lima Declaration) and the MAB Programme and WNBR in general. This will be agreed at the start of the assignment.
 - b. A **theory of change workshop** (compulsory) with the designated evaluation reference group (see Section VI, below).
 - c. Semi-structured interviews (compulsory) with key stakeholders (face to face / phone / Skype) and beneficiaries. Based on the theory of change, these may include UNESCO current and former staff members and consultants; relevant

- government officials including UNESCO National Commissions; ICC members; research institutions and networks; NGOs; Category 2 Centres; UNESCO Chairs; MAB Youth Forum; biosphere reserves; ultimate beneficiaries, including the communities around biosphere reserves, ensuring adequate representation and participation of women, men and youth and, where applicable, indigenous people.
- d. An **online survey** (compulsory) directed at similar stakeholders as the ones mentioned under V.c.
- e. **Secondary analysis** (compulsory) of macro-level datasets pertaining to Sustainable Development Goal (SDG) indicators relevant to the programme and the action plan, if and where available.
- f. **Field mission(s)** (optional) to allow for direct observation at sites where the MAB Programme works, for example, biosphere reserves and their communities. If a field visit is considered, travel costs are to be included in the financial proposal.
- g. Other methods that the evaluator(s) may propose (optional).
- 2. The evaluator(s) should submit an inception report at the end of the initial stage of the evaluation to develop and agree upon the detailed methodological approach and work-plan. This will have to be presented and discussed at an inception meeting with the evaluation reference group. A draft version of the final report of the evaluation (see Section VIII) will have to be presented and discussed at a stakeholder workshop, with members of the reference group (Section VI).
- 23. The evaluation team will have to comply with United Nations Evaluation Group (UNEG) Norms and Standards for Evaluation, UNEG Guidelines for Integrating Human Rights and Gender Equality in Evaluations and UNEG Ethical Guidelines for Evaluation and take into account UNESCO's Priority Gender Equality Action Plan 2014-2021. In line with UNESCO's Evaluation Policy (2015), IOS aims to ensure that human rights and gender equality principles are integrated in all stages of the evaluation process.

VI. Roles and Responsibilities

- 24. The evaluation will be managed by UNESCO's Internal Oversight Service (IOS) and conducted by a(n) (team of) external consultant(s). The evaluator(s) is/are expected to contribute specific expertise in the field of evaluation along with knowledge and/or affinity with the substantive field. IOS is responsible for the quality assurance of all deliverables. The evaluation team will be expected to develop a theory of change (i.e. Intervention Logic for the programme), to develop a detailed evaluation methodology including the data collection tools, reflected in an evaluation matrix, to enable data collection and analysis, as well as to conduct fieldwork and to prepare the draft and final reports in English.
- 25. An evaluation reference group will be established to accompany the evaluation process and provide feedback on the inception report and draft evaluation report. The reference group will include members from the UNESCO Cabinet, the Division of Ecological and Earth Sciences, the Executive Office of the Natural Sciences Sector and the ICC. The reference group shall meet periodically during the evaluation, as necessary.
- 26. The evaluation team will commonly be responsible for their own logistics: office space, administrative and secretarial support, telecommunications, printing, travel, etc. Suitable office space will be provided for the consultants when they are working from UNESCO premises. The evaluation team will be responsible for administering and disseminating all research instruments, e.g. surveys. The Sector will provide access to relevant documentation and contact details of all relevant stakeholders and distribution lists. It will also facilitate access to UNESCO staff at both Headquarters and Field Offices.

VII. Qualifications of the team

- 27. The evaluation foresees a level of effort of around 60 days senior staff time and 30 days junior-to mid-level staff time. The evaluator(s) is/are expected to travel to Paris at least three times in the course of the assignment: to participate in a kick-off meeting/theory of change-workshop during the inception phase; to present the inception report; and for a stakeholder workshop to present the draft final report.
- 28. This concerns an assignment for a project team with at least a senior expert who is expected to have the following mandatory qualifications and experience:

- Broad expertise in programme evaluation, with a minimum of seven years of
 professional experience in this field demonstrating a strong record in designing,
 conducting and leading evaluations including at least five experiences leading
 an evaluation team. At least some of this experience will be in the Natural
 Sciences Sector.
- Experience with assignments for the UN, including experience with assignments focusing on multi-stakeholder partnerships, co-ordination and capacity building.
- An advanced university degree with relevance to the assignment.
- Excellent language skills in English (oral communication and report writing).
- 29. In addition, s/he and/or any additional member of the team will have the following mandatory qualifications:
 - Experience in gender analysis and gender in evaluation along with an understanding and application of UN mandates in Human Rights and Gender Equality.
 - At least good language skills in French (reading and oral communication).
- 30. Finally, s/he and/or any other team member will ideally have the following qualifications:
 - Understanding of governance of scientific programmes.
 - Other UN language skills (Spanish, Arabic, Russian and Chinese), which will be considered an asset.
- 31. Verification of these qualifications will be based on the provided curriculum vitae and may include a reference check. Thus, the names, titles and contact details of two references should be provided that can attest to the mandatory qualifications and experiences mentioned above. Moreover, a web link to or electronic copy of one recently completed report with relevance to the assignment should be provided with the technical proposal. It is mandatory that no team member have had any previous involvement in the development or implementation of the activities under review.

32. If there are several team members, a gender-balanced and culturally diverse team is strongly preferred. The evaluator(s) should make use of national and/or regional evaluation experience and include UNESCO evaluation focal points in the process where possible.

VIII. Deliverables and schedule

Deliverables

- 33. The assignment will consist of the following main deliverables:
 - a. The **inception report,** which should be presented at an inception meeting.
 This report will outline the detailed methodological approach to taking on the assignment and outline when and how the activities for this will be undertaken (work-plan) (max. 10 pp. excluding annexes);
 - b. The **draft evaluation report,** which should be presented at a stakeholder workshop. This report will have to be formatted in the UNESCO IOS Evaluation Office template for evaluation reports and report on (a) the evaluation background, including a description of the evaluand; (b) the evaluation methodology, including theory of change and evaluation matrix; (c) the evaluation findings; (d) conclusions and lessons learnt and (e) recommendations. In addition, it will include an executive summary of 2-4 pages (max. 40 pp. excluding annexes);
 - c. The final **evaluation report** and two-page newsletter. The report should be developed according to UNESCO IOS Evaluation Office guidelines. Additional communication products, such as an infographic, would be welcome.

Schedule

34. 33. The evaluation is expected to start in November 2019 and be concluded by April 2020, and consists of two distinct phases: Phase I commences mid-November and ends 31 December at latest, culminating in the inception report; Phase II commences early January 2020 and ends mid-April, culminating in the final evaluation report. Phase II is subject to availability of funds. The overall indicative timetable of key activities and deliverables is shown below:

Annex 8. Fyaluation matrix

Annex 9. Final data collection tools

Annex 10. Detailed level of achievement of LAP performance indicators, according to the MAB Secretariat

These annexes are available upon request at UNESCO IOS at **ios@unesco.org.**

