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**Item 14 of the Provisional Agenda:
UNESCO Strategy on Climate Change and MAB and WNBR Activities**

1. The UNESCO Strategy for Action on Climate Change was adopted by the UNESCO Executive Board in 2008. The Strategy focuses on three main areas: (i) building and maintaining the climate change knowledge base: science, assessment, monitoring and early warning; (ii) promoting mitigation and adaptation to climate change through enhanced education and public awareness; and (iii) moving towards a carbon/climate-neutral UNESCO. The Strategy was complemented in 2009 by a Plan of Action developed for the implementation of the Strategy (see SC-10/CONF.201/INF.4).
2. Biosphere reserves feature prominently in the Strategy and in the Plan of Action. In particular, biosphere reserves and the WNBR are called upon for assessing and monitoring climate change and for promoting field learning and community-based climate change mitigation and adaptation, forest management and for contributing to policies and practices related to Reducing Emissions from Deforestation in Developing Countries (REDD).
3. Prior to the fifteenth Conference of the Parties (COP 15) to the United Nations Framework Convention on Climate Change (UNFCCC), Copenhagen, 2009, the Director-General developed a UNESCO Climate Change Initiative that builds on the UNESCO Strategy for Action on Climate Change and that aims at reinforcing its effective implementation and to give UNESCO's climate-related work a higher international profile (see SC-10/CONF.201/INF.6).
4. The Initiative will draw upon the iconic values of the biosphere reserves and World Heritage sites for showcasing adaptation and conservation measures, as well as their potential contribution to mitigation and compensation efforts benefiting from a functioning international REDD finance mechanism. Especially vulnerable sites will serve as learning laboratories to nurture sustainable livelihoods.
5. The Madrid Action Plan (MAP) highlights climate change as one of the most serious and globally significant challenges to society and ecosystems around the world today. A challenge that the MAP asserts that MAB and the WNBR can help address through an integrated approach.
6. According to the MAP, for the Natural Sciences as well as other Programme Sectors of UNESCO, biosphere reserves can be areas for demonstrating adaptation measures for natural and human systems, assisting the development of resilience strategies and practices. Buffer zones and transition areas of biosphere reserves may also be used to test many mitigation tactics and strategies. In numerous biosphere reserves, carbon can be sequestered as in forest

and wetland systems. In all of them capacity can be built for low-carbon economies using a mix of technology- and labour-based social enterprises. From a social sciences point of view, the political dimensions of changing lifestyles can be explored. The range of biosphere reserves and the systems they represent will provide valuable lessons for the rest of the world.

7. Target 24 in the MAP subsequently calls for several actions by individual biosphere reserves, MAB National Committees, Regional Networks, National Commissions for UNESCO to use biosphere reserves as learning sites for research, adaptation and mitigation in relation to climate change (see Table 1).

Table 1 – Climate change related targets and actions in the Madrid Action Plan

TARGET	ACTIONS	TIME	SUCCESS INDICATOR	RESPONSIBILITY FOR ACTION	PARTNER
24. Use biosphere reserves as learning sites for research, adaptation, mitigation in relation to climate change	24.1 Use mountain BRs as field observatories of global change impacts on the environment, economy and human well-being, based on the GLOCHAMORE Research Strategy	2012	Number of mountain BRs with active research and capacity enhancement programmes	Individual BRs, MAB National Committees, Regional Networks	MRI, organizations working on climate change, research, academic and outreach institutions, and Thematic Networks
	24.2 Use of research results to assist countries in developing and implementing policies for sustainable mountain development	2013	Number of countries with policies for sustainable mountain development	Individual BRs, MAB National Committees, National Commissions for UNESCO, Regional Networks	MRI, IUCN
	24.3 Develop strategies for other ecosystems in collaboration with relevant national and international organizations	2011	Number of strategies applied	Individual BRs, MAB National Committees, National Commissions for UNESCO, Regional Networks	UNFCCC, CBD, UNCCD, and Thematic Networks
	24.4 Carry out training courses for different ecosystem types related to climate change, in particular using the ERAIFT regional flagship project for tropical forests and certified forestry as a climate change mitigation approach	2011	Number of training courses carried out	MAB National Committees, National Commissions for UNESCO, Regional Networks	UNFCCC, CBD, UNCCD, and Thematic Networks

8. In line with MAP Target 24, Actions 24.1 and 24.2 are well on-track to meet their respected target years for implementation. In relation to Action 24.3, the MAB Council at its 21st session (Jeju, Republic of Korea) created the Global Network of Island and Coastal Biosphere Reserves Contributing to Action on Climate Change and Sustainable Development as one of the MAB Programme thematic networks. Other ecosystems, such as drylands, possibly building on the MAB project on Sustainable Management of Marginal Drylands (SUMAMAD), as well as forests should also be considered.

9. In view of the significant attention now given to forests in the context of climate change mitigation and adaption, such as in discussions under the UNFCCC on REDD, the work of the Regional Post-graduate Training School on Integrated Management of Tropical Forests and Lands (ERAIFT, Kinshasa) is rapidly becoming of increased strategic importance for Africa and the world at large.

10. ERAIFT contributed actively to the success of the UNESCO MAB - Pro-Natura Congo Basin Biosphere Bio-Carbon Forum and Training Seminar (Brazzaville, 20-24 April 2010) based on which MAB is now well-placed to engage regional stakeholders to undertake concrete steps

toward strengthening the biosphere reserve network in Central Africa and using Congo Basin biosphere reserves as pilot sites to combat deforestation, protect biodiversity and promote sustainable development through bio-carbon modalities. At the larger regional scale, this is also the ambition of the developing Africa Bio-Carbon Initiative (ABC) of the MAB Programme.

11. Based on the ecosystem, South-South cooperation and regionally-based networks and MAB climate change initiatives, several of which are benefiting from support through the UNESCO-MAB Secretariat and the UNESCO Field Offices, there could also be scope for elaborating a global observatory of biosphere reserves for climate change knowledge, research, mitigation and adaptation work. In line with the UNESCO Initiative on Climate Change, such a WNBR Climate Change Observatory could contribute, *inter alia*, to the sharing of information, good practices and local knowledge from the WNBR and seek to muster the combined strengths of MAB, IHP, IOC, IGCP, MOST and World Heritage.

12. A stock-taking exercise whereby information on ongoing and planned future MAB-related climate-change activities throughout the WNBR is collected and synthesized could possibly be a good start towards the establishment of a WNBR Climate Change Observatory.

13. The Council is invited to discuss the implementation of MAP Target 24. In particular, the Council is invited to consider the benefits of asking Member States and partners to communicate to the MAB Secretariat their ongoing and planned future MAB and WNBR activities related to climate change. The Council may also wish to make recommendations concerning ecosystem-specific MAB and biosphere reserve strategies and express its views on a WNBR Climate Change Observatory.