

UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL

ORGANIZATION

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

Thirty-third session

Abuja, Nigeria and online (Hybrid meeting)

13 – 17 September 2021

ITEM 11: EXAMINATION OF NEW BIOSPHERE RESERVES NOMINATIONS AND PROPOSALS FOR EXTENSION/MODIFICATION/RENAMING TO DESIGNATED BIOSPHERE RESERVES THAT ARE PART OF WORLD NETWORK OF BIOSPHERE RESERVES

1. Nominations for new biosphere reserves and proposals for extensions/modifications/renaming to biosphere reserves that are already part of the World Network of Biosphere Reserves (WNBR) were considered at the 27th meeting of the International Advisory Committee for Biosphere Reserves (IACBR), which met online from 8 to 12 March 2021.
2. The Advisory Committee examined twenty-three (23) proposals for new biosphere reserves including two (2) transboundary sites, and two (2) requests for extensions and/or renaming of existing biosphere reserves.
3. The Advisory Committee formulated their recommendations regarding specific sites in line with the recommendation categories as follows:
 - ***Proposals for new biosphere reserves or extensions/modifications/renaming to existing biosphere reserves recommended for approval***: the proposed site is recommended for approval as a biosphere reserve; no additional information is needed. For existing sites, the proposed changes are recommended for approval.
 - ***Proposals for new biosphere reserves or extensions/modifications/renaming to existing biosphere reserves recommended for approval pending the submission of specific information***: the proposed site is recommended for approval as a biosphere reserve or the proposed changes for existing sites are recommended for approval subject to receiving the specific information requested by the Advisory Committee. Initially planned, if the information is received by the MAB Secretariat by 30 May 2021, it will be considered by the MAB-ICC at its

33rd session, scheduled in June 2021, and the Council may approve the inclusion of the site in the WNBR. If submitted by 30 September 2021, the information will be assessed by the MAB-ICC at its 34th session in 2022. **However, due to COVID-19 outbreak, the MAB Bureau decided to extend until 31st August 2021 the deadline for MAB Secretariat to receive additional information to be considered at the 33rd of MAB ICC. Therefore, the Council will consider additional information received by 31st August 2021 at this 33rd session.**

- ***Proposals for new biosphere reserves or extensions/modifications/renaming to existing biosphere reserves were recommended for deferral***: the proposed site is recommended for deferral or the proposed changes for existing biosphere reserves are recommended for deferral as they **do not meet** the criteria of the Statutory Framework of the World Network of Biosphere Reserves, and/or major clarifications with regard to application of the Statutory Framework to the proposed area are requested by the Advisory Committee. The relevant national authorities are therefore invited to revise the nomination and/or provide the requested clarifications for submission to the MAB Secretariat at their earliest convenience.
4. The Bureau of the MAB ICC will consider the recommendations of the IACBR below as well as the additional information received by the MAB Secretariat particularly with regard to nominations recommended for approval subject to receiving additional information by 31st August 2021. The Bureau will recommend for the consideration of the MAB ICC final decisions on all sites included in this document.
 5. The MAB ICC is invited to decide on the new sites for inclusion in the WNBR and extensions/modifications and/or renaming of biosphere reserves already included in the WNBR that could be approved.

New nominations recommended for approval

6. **Átl'ka7tsem/Howe Sound (Canada).** The Advisory Committee welcomed this proposal from Canada.
7. As one of the southern-most fjords in Canada, Átl'ka7tsem/Howe Sound (AHSBR) is located directly adjacent to Vancouver of British Columbia, Canada's third largest city. The total area of AHSBR is 218,723 ha with combined terrestrial and marine components.

8. The mountainous coastal ecosystems of Howe Sound support a high diversity of terrestrial wildlife species, among the highest in Canada, due primarily to the spatial heterogeneity of the Pacific Ranges. Approximately 721 native terrestrial animal species potentially occur in the Howe Sound region.
9. For the past 10,000 years, Átl'ka7tsem/Howe Sound has been settled by First Nations people whose livelihoods and cultural identity have been supported and inspired by the area's lands, waters and contributing watersheds.
10. Átl'ka7tsem/Howe Sound contains a total population of almost 50,000 persons, the vast majority of which are permanent residents. People living in the region enjoy a diverse economy based on forestry, tourism, recreation and service-based businesses.
11. The Howe Sound Biosphere Region Initiative Society (HSBRIS), a registered non-profit organization, will assume responsibility for the management and coordination of the proposed Átl'ka7tsem/Howe Sound Biosphere Reserve (AHSBR). Members of the HSBRIS Board and participants in the AHSBR Roundtable will be a balanced representation of First Nations, federal, provincial and local governments, various commercial sectors and civil society. The area is collectively managed by various levels of government at multiple scales reflecting a diversity of jurisdictions, values, administrative boundaries and plans.
12. The main objectives of the proposed biosphere reserve are to establish and manage an overarching holistic land and marine use plan for the Átl'ka7tsem/Howe Sound region that is mutually recognized and respected by First Nations, civil society, stakeholders and all levels of government, to protect and conserve biodiversity in the region and to be a model for best practices and a place where people live in harmony with nature by bringing together First Nations, NGOs, academia, industry and civil society.
13. The Advisory Committee welcomed the fact that the designation would help to develop a comprehensive plan/policy for land and marine management/cooperation that would strategically guide the management of all land and waters in the Howe Sound area and create a unified vision and plan for the region and avoid fragmented planning.

14. The Advisory Committee commended the authorities for the quality of the nomination proposal and acknowledged that it represents the culmination of a long process. The Advisory Committee recommended that the site **be approved.**
15. **Martinique (France).** The Advisory Committee welcomed this proposal from France.
16. Martinique is an island with an area of 1,128 km², 70 km long and 12 to 30 km wide, located in the volcanic arc of the Petites Antilles in the Caribbean. The northern part is mountainous with recent volcanic centres such as Mount Pelée, the only active volcano on the island. The southern part is made up of ancient, partially eroded volcanic centres, known as mornes, mixed with plains. The coasts are formed by numerous bays and coves, and are home to beautiful mangroves.
17. Martinique belongs to the Caribbean hotspot which is one of the world's 35 biodiversity hotspots. Its richness is unique due to the endemism of many species and the rare - but also endangered - heritage character of the habitats that shelter them.
18. The population of Martinique is about 380,000 inhabitants. The urban density is low, despite the fact that Martinique, with a density of 350 inhabitants per km², is the second most densely populated region in France. The economy of the island is essentially based on three sectors: agriculture, agro-food industry and tourism. The usable agricultural area occupies about 20% of the surface of the island and is mainly used for livestock farming (30.7%), banana (22.8%) and sugar cane (17.8%). The 40% of the agro-food activity of the island is represented by the drinks sector including agricultural rum, fruit juices and sodas, etc.
19. A management plan was drawn up following the consultation and co-construction phase in collaboration with the population. Nature and culture are at the heart of the project, as the inhabitants wish to get to know them better, in order to be able to preserve and perpetuate them. A management committee will be set up by the association, so-called the Martinique Biosphere Reserve Association, carrying and coordinating the project,.

20. The Advisory Committee welcomed the detailed nomination proposal and congratulated the authorities for the participative approach adopted for its development. The Advisory Committee recommended that the site **be approved**.
21. **Moselle Sud (France)**. The Advisory Committee welcomed this proposal submitted by France. The proposed biosphere reserve encompasses a mosaic of landscapes, ecosystems and species along the Lorraine slopes of the Vosges covering 139 257 ha.
22. The territory is mainly rural and distinguished by two major themes of sustainable development: tourism and agriculture. On the agricultural side, the territory is largely oriented towards extensive cattle and sheep breeding coupled with polyculture. Tourism is focused on themes related to the benefits of natural or cultural resources, and more generally on a 'nature' destination.
23. The overall population is growing slightly but is aging due to the departure of young people to attractive neighbouring cities. The resident population is estimated at 76,609 inhabitants.
24. The PETR Pays de Sarrebourg is the only coordinator of the proposed biosphere reserve. It will be responsible for coordinating governance during the first ten years of the management plan, and will also be in charge of coordinating the steering committee and the management committee of the proposed biosphere reserve.
25. The Advisory Committee took note that the stakeholders involved in the preparation of the management plan are the elected officials, socio-professionals, public institutions, inhabitants, associations, local and regional institutions, and financial backers. The management plan has created a place for young people in governance, potentially involving eco-delegates of the territory. The proposed site is also willing to give voice to young people and to contribute to innovative solutions as part of the national network.
26. The main objectives of the proposed biosphere reserve are to preserve ordinary and extraordinary natural heritage; to accompany and experiment with opportunities for sustainable development, in order to better understand, value and transmit them to future generations; establish a dynamic of scientific research mindful of local problems and as a source of solutions for global issues

(e.g. climate change, invasive alien species); and to preserve and better value historical, linguistic and archaeological cultural heritage, so as to create an identity specific to the territory.

27. The Advisory Committee recommended that the site **be approved** and further encouraged the authorities to develop a tourism management plan to ensure that tourism remains sustainable.
28. **Monte Grappa (Italy).** The Advisory Committee welcomed this proposal from Italy. Monte Grappa covers an area of 66,067.3 ha encompassing the territory of 25 municipalities. It consists of the Monte Grappa Massif and the foothills and high plains that surround it. It symbolizes the ecosystem dynamics of the Italian Pre-Alpine belt and links the Po Valley and the Eastern Dolomites.
29. The Advisory Committee took note that the proposal was introduced to the local communities as 'a laboratory of concrete and innovative ideas' that will encourage the local application of the 17 UN Sustainable Development Goals (SDGs). The intention is to pursue a positive future and the overall wellbeing of the community by supporting the green economy, the circular economy and corporate social responsibility in all sectors.
30. The 25 municipalities of the proposed biosphere reserve are home to 174,184 people. In demographic terms, the Monte Grappa shows 'symptoms' of gradual depopulation, which began at the end of the nineteenth century as result of the abandonment of settlements in medium-high areas of the Grappa massif, due mainly to a decrease in forestry and pastoral activities.
31. The Advisory Committee acknowledged the establishment of a steering committee for the implementation of the 'Steering Document for the Management Plan', which has been approved by the Municipal Council. It also recognized the cultural significance of the site with several strong and uniform elements linked to ancient and medieval archaeological sites and examples of artistic-architectural excellence.
32. The Advisory Committee therefore recommended that the site **be approved**.
33. **Kolsai Kolderi (Kazakhstan).** The Advisory Committee welcomed this proposal and congratulated Kazakhstan on its 13th nomination following the designation of its first biosphere reserve in 2012.

34. The proposed site is located in the northern Tien Shan mountain system, situated mainly on the northern slopes of the Kungei Alatau Range and partly on the southern side of the Zailiysky Alatau Range. The altitude limits of the proposed site range from 800 to 3800 m above mean sea level. The Shilik River in the territory is the largest river in the Northern Tien Shan, and originates from the glacier.
35. The unique mountain landscapes present contrasting natural conditions ranging from steppe foothills to the ice peaks of the alpine belt, and encompass plains, canyons, mountain ranges, stormy rivers and beautiful lakes framed by coniferous and deciduous forests. The slopes of the ridge are divided by numerous and deep gorges, resulting in a variety of landscapes within relatively small compartments of territory. The proposed site is home to many rare and endangered species, including Tien Shan brown bears, Stone martens, Snow leopards, Turkestan lynx, Pallars's cats and Argalis.
36. The potential for sustainable development is associated primarily with animal husbandry and crop production as well as ecological and recreational tourism. Tourism, in particular, is one of the most promising activities in the territory of the Almaty region and the proposed site has a great potential for ecotourism development.
37. The core areas are strictly protected areas of the Kolsai Kolderi State National Natural Parks (SNNP), which preserve the most valuable natural mountain ecosystems of the northern Tien Shan. The SNNP corresponds to the highest category of IUCN protected area classification, A1.
38. The buffer zones consist of three sub-zones of the SNNP for environmental stabilization, tourist and recreational activities, and limited economic activities, with a specially designated protected area creating a 2-3 km strip around the perimeter of the SNNP.
39. The transition area is located in the two districts of the Almaty Region: Talgar and Kegen. The land of the transition area is used mainly for growing crops, grazing livestock and haymaking. Settlements with about 8,000 people are located only in the transition area of the Kegen District.
40. On the southern and south-western boundary of the proposed site, which

includes the national border with Kyrgyzstan, no transition area is established adjacent to the buffer zone because of the presence of high mountain areas 3,000–4,500 m above mean sea level with no local residents.

41. Currently, the Management Plan for the Kolsai Kolderi SNNP (2019–2023), which is attached to the nomination dossier, covers the management of the core areas and buffer zones, which is also the territory of the SNNP. The plan also details the activities of the local population living and working in the transition area which neighbours the SNNP. In this sense, the management plan will form the main basis of the proposed biosphere reserve management plan.
42. The Advisory Committee took note that work on the integrated management plan commenced with the participation of stakeholders in mid-2020 and that the new management plan for the proposed reserve will be created over the next two years.
43. Noting the ongoing serious decrease of glaciation area in the Shilik River basin by almost 30% (86 km²) from 286.16 km² to 200.42 km² over 49 years (1955–2004), the Advisory Committee recommended that the nominating authorities continue monitoring and research on deglaciation in the nominated site and seek collaboration with other concerned biosphere reserves on joint activities such as monitoring, research and awareness raising.
44. The Advisory Committee also encouraged the nominating authorities to explore the creation of a transboundary biosphere reserve with Kyrgyzstan, which borders the southern boundary of the proposed site.
45. The Advisory Committee commended the Kazakhstan authorities for this nomination and recommended that the site **be approved**.
46. **Matšeng (Lesotho).** The Advisory Committee welcomed this proposal from Lesotho. The proposed biosphere reserve is located in an area in Lesotho's northern highlands, which forms part of the larger Maloti-Drakensberg Transfrontier Conservation Area (MDTFCA) and covers Lesotho and some parts of South Africa. The area is a representative example of a natural, minimally disturbed ecosystem within a globally significant bio-geographical region, characterized by endemism, distinct forms of genetic diversity and striking natural features.

47. The Maloti Mountains comprise a significant section of the Drakensberg altimontane grasslands and woodlands eco-region, as described by the Worldwide Fund for Nature. This highland area covers 11,913 km² and stretches from Lesotho to South Africa.
48. The proposed biosphere reserve encompasses two protected areas: the Tšehlanyane National Park and the Bokong Nature Reserve, with a designated core area of 7,570 ha, a buffer zone of 37,886 ha and a transition area of 66,577 ha.
49. The Tšehlanyane National Park (TNP) is home to some of the last indigenous woodlands remaining in Lesotho, with fine examples of Old Wood (*Leucosidea sericea*) (Cheche) conserved at the heart of this area, which provide a habitat for a number of undergrowth plants unique to this area. The highland is also classified as an endemic bird area of high priority, and is home to at least 1,400 species of plants, 250 species of birds, 50 species of mammals and 30 species of amphibians and reptiles. The grand eland (*Tragelaphus oryx*) and the endemic Lesotho fish, the Maloti Minnow Thoboshana (*Pseudobarbus quathlambae*) or the alpine endemic bird species, Drakensberg Siskin (*Crithagra symonsi*) are all found in the area.
50. With regard to land management, the proposed biosphere reserve will foster socio-cultural and ecologically sustainable forms of economic, human and conservation development, and also envisages the adoption of a landscape approach model to promote sustainable development.
51. To ensure a sustainable livelihood system, the proposed biosphere reserve will facilitate the establishment of a thriving biodiversity economy based on ecocultural tourism and climate-smart agriculture which will promote market-driven product development. This will be achieved through the promotion of ecocultural business enterprises that actively encourage the participation of all sectors.
52. The Advisory Committee commended the national authorities for providing support for research, monitoring, education and information exchange related to local, national and global issues of conservation and development.
53. The Advisory Committee also complimented the authorities on their well-prepared Integrated Management Plan and encouraged them to submit copies of the action plan and business plan as soon as they are available.
54. The Advisory Committee recommended that the proposed biosphere reserve **be approved**.

55. **Ashaafean (Libya).** The Advisory Committee welcomed the first nomination dossier from Libya.
56. The proposed site is located in the north-eastern end of the Nafusa Mountains. It belongs to the Mediterranean biogeographic region and encompasses a variety of habitat types including mountains, valleys (Wadi), arable land and plains.
57. The site contains dry woodlands and steppic grassland typical of North Africa, forming an ecotone between the Mediterranean climate region to the north and the hyper-arid Sahara Desert eco-region to the south.
58. The total area of the proposed biosphere reserve is 83,060 ha. A forest-related project was established in 1978, and approved as a nature reserve by a governmental decree (no. 394/1998), located within the Shaafean area. At present, this nature reserve constitutes the core area of the proposed biosphere reserve. It covers around 1,213 ha, accounting for 1.46% of the total area, and is characterized by its distinctive topography, with high mountains and deep valleys. The buffer zone extends over 11,888 ha (14.31%) and the transitional areas cover 69,969 ha (84.42%) of the total area.
59. The area is home to around 360 plant species and 48 animal species, and has been recognized for its preservation of rare, threatened and endangered fauna and flora. Some of the fauna are inscribed on the IUCN Red List, while flora such as *Linaria tarhunensis* Pamp. and *Ephedra allissima* Desf are indigenous to the Ashaafean area and Libya. Many of the plant species are also of ecological and economic importance including for medicinal and industrial purposes.
60. The area hosts a variety of local communities, with about 64,263 permanent residents of the city of Msellata and numerous villages. Around 13,550 transitional residents undertake seasonal grazing, wood collection and beekeeping.
61. Among the cultural services offered, the proposed core area is used for several outdoor recreational activities, mainly during spring and summer, while activities in the buffer zone include tourism and recreation, wood collection, grazing, beekeeping, farming and the collection of medicinal and aromatic plants. The buffer zone also hosts a few scattered villages, fragmented farms and small communities. In the transition area, people practise the same activities as in parts of the buffer zone in addition to collecting the edible fruits and seeds of wild plants.

62. Many excursions are organized annually to the proposed biosphere reserve, with students from schools and university as well as researchers visiting Ashaafean for scientific purposes. The area of the proposed biosphere reserve also has significant potential to support environmental education and training, demonstration projects, research and monitoring related to biodiversity conservation, and sustainable development.
63. Farming is the main activity and is sustained by local communities living around the proposed site and on a larger scale across the whole region. Conservation and sustainable management plans aim to improve the awareness of farmers, among others, of ecologically sustainable agricultural among other activities.
64. The establishment of the biosphere reserve would aim to conserve the local biota and natural resources, and promote sustainable development in all activities related to the critical ecological status of the area. It would also aim to promote socio-economic development approaches that involve the local community.
65. The Advisory Committee commended the authorities on the composition of the steering committee, which will be responsible for the future management of the biosphere reserve, highlighting the broad scope of members representing all stakeholders and local communities.
66. The Advisory Committee noted that a management plan was developed in 1998 (in Arabic) for the Msellata Protected Area and National Park, which constitutes now the core area of the reserve.
67. The Advisory Committee recommended that the site **be approved** and encourages the authorities to allocate a budget for the reserve; to develop a management plan for the entire area including a timeframe; to outline the regulations, management structure and coordinating mechanisms in cooperation with local communities; to improve land management schemes in the area; and to provide information on the overall process and timeline.
68. **Avireri Vraem (Peru).** The Advisory Committee welcomed this new proposal submitted by the Peruvian authorities.
69. The proposed biosphere reserve is located in central Peru in the provinces of Satipo and La Convención, east of the capital city of Lima. It covers a total area of 4,110,762.685 ha, including a core area of 878,191.807 ha, a buffer zone of 1,220,256.518 ha and a transition area of 2,122,314.36 ha.

70. The core area of the proposed biosphere reserve is composed of four national natural protected areas located along the Vilcabamba-Amboró Conservation Corridor. The proposal also encompasses the Peruvian part of the Tropical Andes Hotspot for Biodiversity.
71. Avireri Vraem encompasses a wide range of altitudes from 280 m to 6,271 m above mean sea level at its maximum height. Accordingly, the site hosts 13 different ecosystems spread across different climate zones. The area also provides habitats for 257 endemic fauna species, 307 endemic and endangered flora species including plants with medicinal and cultural uses, and 115 endangered fauna species, as categorized by the IUCN Red List of Endangered Species.
72. The proposed biosphere reserve is home to approximately 458,701 inhabitants, whose main economic activities are agriculture, cattle-raising, fishing and subsistence hunting. Recent years have seen the development of ecotourism which is now a source of socio-economic growth. Several -indigenous and native communities live within the proposed biosphere reserve and eight different languages are spoken throughout the region. The resultant local cultural heritage – in both tangible and intangible forms – is a defining element of the diverse identity of Avireri Vraem.
73. The Advisory Committee congratulates the country for having carried out a participatory nomination process that involved local stakeholders and communities.
74. The proposed biosphere reserve would be managed by the Biosphere Reserve Board, which would also be in charge of the administrative authority. A management plan would be adopted once the area has been designated as a biosphere reserve.
75. The designation of the site as a biosphere reserve would serve to reinforce the inclusive and sustainable development of the region by establishing a unique link in the ecological corridor between two existing biosphere reserves in Peru (the Oxapampa Ashaninka Yanesha and Manu biosphere reserves). The reinforcement of the corridor would further improve the quality of ecosystems, providing a habitat for wildlife, settlers and native communities.
76. The Advisory Committee welcomed this nomination proposal and recommends that the site be **approved**.

77. The Advisory Committee also expressed its concern about hydrocarbon and mining exploration in the buffer zone and concessions in the area, and requested that the MAB Secretariat be kept regularly informed about this situation.
78. **Wando Archipelago (Republic of Korea).** The Advisory Committee commended the Republic of Korea for this well-prepared nomination dossier.
79. The proposed site is located at the southernmost tip of the Korean Peninsula in Northeast Asia. It consists of 55 inhabited islands, including the main Wando Island, Gogeumdo, Cheongsando and Bogildo, 210 uninhabited islands and the surrounding waters.
80. The rich biodiversity is the result mostly of a warm oceanic climate created by the Haenam Peninsula which blocks north-westerly winds.
81. The main objectives of the proposed biosphere reserve are to conserve terrestrial and marine biodiversity up to the northern limit of the warm temperate forests, to promote sustainable development in harmony with nature based on terrestrial and marine ecosystem services, and to establish the basis for participatory ecosystem conservation and wise use through voluntary participation and decision-making of local residents.
82. Wando's ecological environment includes a number of elements of conservation-worthy value, notably 'village forests and groves,' or *Maeulsup* in Korean. These have been formed and managed for hundreds of years to protect homes and farmlands from heavy winds and continue to be conserved and managed by local residents until today. Another example is *Gudeuljangnon*, the terraced rice paddy designated as a Nationally Important Agricultural Heritage site in 2013 and as a Globally Important Agricultural Heritage System (GIAHS) site in 2014 by the Food and Agriculture Organization (FAO).
83. Wando's development strategy embraces the clean development concept that maintains a healthy natural environment, minimizes environmental pollution, and thus retains and improves the island's aesthetic and recreational values. Communities and the government recognize that the image of Wando as a uncontaminated and pure area underpins its tourism and especially the marketability of its seafood products.
84. Many traditional uses of ecosystems highlight their harmonious relationship with the natural environment. Today, ecosystem service benefits derived from the use of traditional methods are generally accorded a higher value. One such

example found in a Wando village is *Haenyeo*, the female divers who harvest from the sea. Participatory harvesting methods are also characteristic of the local management of forest and marine ecosystems, with the traditional *Jubae* system forming an integral part of modern village-level fishing cooperatives. New forms of community-led initiatives are also emerging with strong engagement among young people both within their localities and across the region.

85. The proposed biosphere reserve is preparing a joint research system to enhance cooperation with other island biosphere reserves. One initiative has already been launched with the Clayoquot Biosphere Reserve located in Vancouver Island, Canada.
86. The Advisory Committee acknowledged the receipt of additional information on preparation of a management plan including a tentative timeframe for finalization. A participatory and collaborative process for drafting the plan has already been initiated but due to circumstances related to the COVID-19 pandemic, efforts to convene stakeholders in 2020 encountered numerous obstacles and delays. A management plan for the proposed biosphere reserve will be established in alignment with the land development plans of Jeollanam-do Province and Wando-gun County, and will be also linked to the management plan for Dadohaehaesang National Park. Emphasis will be placed on revitalizing cooperative governance with local residents, especially in relation to management of the national park. This approach will permit the creation of a 'one-stop-shop', which will also integrate the management of National Scenic Areas and Natural Monuments, which are currently overseen by the Cultural Heritage Administration.
87. The Advisory Committee noted that consolidation of the management of national parks, cultural heritage and local sustainable development strategies will contribute to a community-based management system for environmental and cultural resources. The Committee encouraged the national authorities to finalize a detailed management plan and to submit the extended summary in English to the MAB Secretariat.
88. The Advisory Committee commended the Republic of Korean authorities for this nomination and recommended that the site **be approved**.
89. **Kuznetsky Alatau (Russian Federation)**. The Advisory Committee welcomed this proposal from the Russian Federation.

90. The Kuznetsky Alatau ridge is one of the major geomorphological regions of Western Siberia. Extending sub-meridionally, the ridge is a relatively low, complex mountain structure that borders the Minusinsk Basin and the Abakan ridge to the east, the Chulym–Yenisei Basin to the north, the Kuznetsk Basin to the west and the Nenya-Chumysh Basin to the southwest. The total area of the proposed biosphere reserve covers 2,698,772 ha and hosts a total population of 138,632 inhabitants.
91. The proposed biosphere reserve is conceived as an environmental, socio-economic, cultural and educational institution, contributing to the development of new sustainable practices and the revival of ethnic culture, and designed to attract investment into the regional economy. The proposed site will not only focus on biodiversity conservation, but also provide environmental services for the population. In order to maintain environmental, recreational and social services for the population, new joint managerial approaches will be designed for the proposed site.
92. The Advisory Committee noted that the mountains of the Kuznetsky Alatau range and its unique natural sites attract recreational, environmental and educational tourism, with more than 100,000 tourists visiting the buffer and transition areas of the proposed biosphere reserve annually. The Advisory Committee also acknowledged a plan to develop ethno-ecological programmes to preserve the traditional culture and nature management practices of the Shorian people (the local ethnic minority), which include local cuisine, customs, rites, cultural traditions, attractions, historical sites and monuments, in order to promote environmental behaviour by tourists and respect for local customs and traditions. A plan also exists to develop and implement innovative programmes for the sustainable livelihood of local people, such as projects to support and develop environmentally-oriented small businesses, the promotion of local organic products, etc.
93. The Advisory Committee welcomed the detailed nomination proposal and highlighted the involvement of indigenous peoples among the governing bodies.
94. The Advisory Committee recommended that the site **be approved**.
95. **Farasan Islands/Juzur Farasan (Saudi Arabia)**. The Advisory Committee members welcomed the first nomination dossier from Saudi Arabia. They praised the quality of the various sections of the nomination dossier and the comprehensiveness and richness of the information presented.

96. The nomination dossier concerns the archipelago of Juzur Farasan, a group of islands located at the extreme south-west of the country near the Yemeni border. The area combines both marine and terrestrial areas, accounting for 91% and 9% of the proposed site respectively. However, both landscapes and seascapes constitute a typical complex of important ecosystems, recognized for their outstanding universal value in the South Red Sea. The surface area of the proposed biosphere reserve covers 820,000 ha, and the main biogeographic regions to which the terrestrial vegetation cover belongs are the Tihamah Plain and the Tihamah Hills.
97. The Farasan Islands were designated a prime protected area in 1996 by Royal Decree, encompassing typical landscapes and seascapes, a variety of ecosystems, and multiple flora and fauna species.
98. As the site was subject to controlled hunting and later designated as a national protected area, the core area and buffer zone fall under legal protection. The main function of the core area, which accounts for around 35% of the total area, is to ensure the long-term protection and conservation of key natural habitats and species in terrestrial and marine areas of the islands. The buffer zone also covers 35% of the proposed biosphere reserve establishing a massive boundary between the dedicated large core area and the transition area (30% of the total area), where the most intensive development and urban expansion is expected to take place over the long term. As a result, the core areas of the proposed biosphere reserve harbour all critical ecosystems and habitats required to ensure the sustainability of viable populations of representative terrestrial and marine flora and fauna.
99. The islands host the largest population of Idmi gazelle in Saudi Arabia, high concentrations of nesting pink-backed pelican, osprey, sooty falcon, crab-plover, white-eyed gull, lesser crested tern, white-cheeked tern, Red Sea (brown) noddy and other seabirds, as well as notable species such as dolphins, whales, dugongs, green turtles, hawksbill sea turtles and manta rays. The terrestrial part of the proposed site is a subtropical desert where annual rainfall does not exceed 70 mm, and is home to *Gazella farasani* and *Acacia ehrenbergiana*. The islands are also embellished with coral reefs and a range of valuable and well-protected coastal wetlands such as red and black mangroves, seagrass beds, saltmarshes and macro-algal reefs of high conservation importance.
100. The Farasan Islands are nationally recognized as an Important Plant Area hosting rare and endemic species such as *Kickxia corallicolais*, *Glossonema sp. aff. boveanum* and *Dipcadi sp.* near the coast north of Farasan

town, and *Cucumis sp. aff. prophetarum*. The proposed biosphere reserve also hosts three of 13 recorded stands in Saudi Arabia of the threatened red mangrove, *Rhizophora mucronata*, a relict population of Dugong dugon listed as vulnerable on the IUCN Red List, and three species of dolphins which visit frequently the coastal waters, namely: the long-snouted spinner dolphin (*Stenella longirostris*), the bottlenose dolphin (*Tursiops truncatus/T. aduncus*) and the Indo-Pacific humpback dolphin (*Sousa chinensis*).

101. The remote nature of the islands and their relative inaccessibility have contributed to the preservation of many ancestral traditions related to agriculture. Local people still farm on constructed slope terraces and employ traditional methods of irrigation, while others undertake small-scale fishing. Local communities also use traditional forms of small-scale subsistence agriculture in areas where shallow wells are maintained and used to irrigate local plants varieties such as cereals and vegetables.
102. For millennia, the islands have been used for artisanal fishing and pearl hunting, with some subsistence farming (dates and sorghum) and small-scale grazing (mainly goats). Gazelles were hunted but sustainably managed and preserved by the islanders. Populations of mangroves and animals, including fish, coral, turtles and birds, were naturally protected by isolation, low levels of human use and a system of rotational fishing.
103. Under protection since 1988 as Controlled Hunting Reserve, the Farasan Islands has maintained an extensive research and monitoring programme addressing both terrestrial and marine ecosystems and species, with education and awareness programmes targeting local communities including schools, farmers, fishermen, youth and local leaders.
104. The protected area is also part of the Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of Aden (PERSGA) programme network and has benefited from its research and monitoring programmes for more than 20 years. This has included long-term monitoring of coral reefs and key species of fish and sea mammal in and around the islands, including sharks, dolphins, dugongs, sea turtles and other species. The new management approach adopted for the islands views the proposed biosphere reserve as an opportunity to update and expand research and monitoring programmes on the islands, with the aim of better aligning them with management objectives adopted for the three zones. Such an integrated management approach links conservation of biodiversity with the sustainable development of resources and improvement in their utilization, underpinned by more effective community education and a stakeholder outreach programme.

105. Tourism is a recent development in Juzur Farasan. In order to prevent undesirable impacts, those responsible for the biosphere reserve project are proposing a good model of ecotourism, while also working on crucial issues related to governance and management, with an apparent view to ensuring sustainability.
106. The first management plan for the proposed biosphere reserve was prepared in 2000. This comprehensive document suggested a plethora of objectives and activities to ensure the protection and sustainable use of the unique biodiversity of the islands. In 2019, the Saudi Wildlife Authority (SWA) deployed a regional expert to work with the SWA central team and the local team in the Farasan Islands protected area to develop a management plan for the period 2021–23. The main purpose was to create a transitional management tool to apply the biosphere concept as the main management framework for future planning and management of the protected area.
107. Establishment of the biosphere reserve would serve as a national and potentially regional model for integrated conservation and development, where core natural values and attributes are safeguarded along with their associated cultural values (both tangible and intangible) through a network of effectively managed core areas. The sustainable socio-economic development of local communities is intertwined with the maintenance of ecosystem services in a well-designed buffer zone, and the development of services and facilities is permitted through a well-designed transition area limited to main human settlements and access routes.
108. The overall aim is to strike a balance between the obligation to protect and conserve the important biodiversity of the site, both terrestrial and marine, while at the same time respond to the increasing needs and demands of local and national stakeholders and interest groups. This coincides with the vision of the Kingdom to adopt a new strategy for economic development at national and local levels by adopting a more diversified approach to generating income including through tourism and other sectors.
109. The Advisory Committee recommended that the site **be approved** and noted that the nomination dossier was prepared with a level of high professionalism and dedication, boding well for its future as a biosphere reserve.
110. **Ribeira Sacra e Serras do Oribio e Courel (Spain).** The Advisory Committee welcomed this new proposal submitted by the Spanish authorities.

111. The proposed biosphere reserve is located in the autonomous community of Galicia, between the provinces of Lugo and Ourense in the northwest of Spain. The proposal covers a total area of 306,534.77 ha, including a core area of 53,237 ha, a buffer zone of 51,250 ha and a transition area of 202,048 ha.
112. An area of great natural beauty and cultural richness, the proposed biosphere reserve extends across the Sil canyons and the River Miño, one of the main rivers in Galicia. Its overall altitude ranges from 105 m to 1,641 m above mean sea level. According to the Köppen-Geiger climate classification, the region is identified as temperate. However, the varying topography of valleys, tertiary depressions and mountain foothills hosts a diversity of microclimates. The dominant ecosystems are scrubland, deciduous forests and agro-ecosystems.
113. The different ecosystems provide habitats to numerous endemic and endangered species, highlighting the relevance of strengthening biodiversity conservation strategies. In addition, several exotic invasive species are present in the area. In this regard, the biosphere reserve designation would constitute an instrumental asset, providing the means to the relevant authorities, institutions and programmes to collaborate on methods to actively control these invasive species. The proposed area is home to 1,214 species of vascular flora, representing 52.7% of the entire floristic diversity of Galicia, as well as 277 species of fauna, most of which are conserved in existing protected areas of varying levels.
114. An estimated population of 75,203 inhabitants lives in the proposed site. The main economic activities are agriculture and livestock farming, with an emphasis on balance and harmony between eco- and agro-systems. Tourism and ecotourism also contribute to economic development of the area. In addition, research and educational activities devoted to conservation and sustainable management of the area have increased recently.
115. The proposal encompasses one UNESCO Global Geopark, six Natura 2000 sites and several other protected natural areas. Beyond its natural attributes, Ribeira Sacra e Serras do Oribio e Courel is also rich in cultural heritage, notably caves and rock shelters, petroglyphs, megaliths, ancient settlements, monasteries, churches and bridges. The Way of St. James, which was inscribed on the UNESCO World Heritage List in 1993, runs through the proposed biosphere reserve, attesting to the high cultural value of the region.

116. At the inter-regional level, the proposed site would expand westward the ecological corridor formed by other biosphere reserves in the Cantabrian Mountains and various protected ecosystems on the European Atlantic Coast.
117. The Advisory Committee congratulates the national and local authorities on the excellent quality of the proposal and recommends the adoption of the committee and management plans to ensure the active participation of all local stakeholders.
118. The Advisory Committee welcomed this proposal and recommended that the site be **approved**.
119. The Advisory Committee also recommended that the authorities seek to establish synergies with the other UNESCO designated sites.
120. **Doi Chiang Dao (Thailand).** The Advisory Committee welcomed this proposal and congratulated the country on the new nomination, the first since its last biosphere reserve designation in 1997.
121. The proposed Doi Chiang Dao Biosphere Reserve is located in Chiang Dao District of Chiang Mai Province. It is the only region in Thailand covered with sub-alpine vegetation, found also in the Himalayas and down through the southern part of China.
122. Rains infiltrating through limestone formations have created a number of caves. The largest and most important of these is Chiang Dao Cave, located in the core area. The cave is renowned for a Buddhist temple in the Lanna style and a place where the legend of Chao Luang Chiang Dao originated, and is thus revered as a sacred place. Numerous underground creeks converge to form the Ping River to the east of the proposed site.
123. A traditional gravity-based irrigation system called *Maung Fai* is also a notable feature of the area, numerous examples of which have been maintained in accordance with local practices and knowledge over almost 800 years.
124. The proposed site is an ecotourism destination with natural and cultural activities in the Chiang Dao Cave and the Yang Pu Toh Hot Spring, birdwatching along the Mae Kong River (e.g. Crested Kingfishers) and skygazing with dark sky views of the Milky Way.
125. The core areas, which account for 41.92% of the total area, have been

strictly protected as the Chiang Dao Wildlife Sanctuary for more than 40 years. The north-western tip of the core area, which is not surrounded by a buffer zone or transition area, borders the Pha Daeng National Park.

126. The buffer zones consist mostly of secondary forest and reforested area, belonging to the Chiang Dao Wildlife Sanctuary, the Chiang Dao National Reserve Forest and areas designated for agricultural land reform. These areas are targeted for ecologically friendly economic activities.
127. One of the two transition areas is located at the eastern end of the site; the other is surrounded by the western section of the buffer zones. Both areas are administrated by regional and local authorities.
128. The Advisory Committee acknowledged that the conceptual framework of the biosphere reserve management is consistent with the existing plans of the districts, sub-districts and the Sanctuary. The outline of expected activities and budget for the ten years after biosphere reserve designation has been formulated as a draft management plan, and includes a timeframe for the development of a detailed integrated management plan.
129. The Advisory Committee took note of a policy of payment for ecosystem services (PES) operating in the southern buffer zone. A forest village, Ban Pang Ma-O (PMO), sells branded forest-shade coffee, the packaging of which informs buyers that their purchase helps maintain the forest which provides water-regulating services for the Ping River.
130. The Advisory Committee also noted that the proposed site presents a good model for visitor impact management, which can be as a reference by other fragile ecosystem destinations. Previously, the summit of Doi Luang Chiang Dao and the opium fields were subject to high visitor numbers. At present, only nature research visits are permitted on the summit and are regulated by strict controls and impact mitigation measures. The summit is also well managed with zero waste.
131. The Advisory Committee commended the national authorities on this nomination and recommended that the site **be approved**. According to the nomination dossier, expansion of the Chiang Dao Wildlife Sanctuary in the western end of the buffer zones is underway. The Advisory Committee therefore

recommended that the zonation of the site be adapted accordingly once the expansion is finalized.

132. **Kon ha Nung (Viet Nam).** The Advisory Committee welcomed this proposal submitted by Viet Nam.

133. Kon ha Nung is located in the highlands of Central Viet Nam, the so-called 'Roof of Indochina', the highest peak of which reaches over 1,700 m. Two nationally protected sites, covering 57,439.83 ha, serve as the core areas of the proposed biosphere reserve: Kon Ka Kinh National Park and Kon Chu Rang Nature Reserve. Both are located in Gia Lai Province.

134. The proposed site is home to rare species and is characterized by a high level of biodiversity. The Kon Ka Kinh National Park (first core area) was established to protect rare and endemic species including the Kon Ka Kinh Laughingthrush (*Garrulax konkakinhensis*), rare mammals such as *Megamuntiacus vuquangensis*, *Muntiacus Truongsonensis* and *Pygathrix nemaeus*, and other animal species. *Pygathrix cinerea* is a rare and endemic primate species of Viet Nam, classified as critically endangered (CR), with only about 1,000 individuals in the wild. Kon Ka Kinh National Park is also home to the largest population of douc langur in Viet Nam, with about 250 individuals. The Kon Chu Rang Nature Reserve (second core area) forms part of the Kon Tum Plateau Endemic Bird Area and has been recognized as one of the most important bird zones in Viet Nam.

135. The buffer zone covers an area of 152,693.98 ha and is clearly defined consisting of the territory surrounding or adjacent to the core areas where only activities that do not contravene conservation objectives can be implemented. A combination of land uses are concentrated in the buffer zone with different forest types protected by local households through individual land and forest allocation contracts (between the National Park and local households).

136. The proposed site has a large transition area covering an area of 203,377.86 ha. Activities have been implemented in this area to create sustainable livelihoods for local people with a view to reducing pressure on the Nature Reserve. Such activities include hi-tech agricultural development, afforestation, ecotourism, cultural tourism and the Central Highlands Gong Culture Festival.

137. The Advisory Committee found a significant discrepancy in the total size of the proposed area, which was given as 13,511.67 ha instead of 413,511.67 ha. Accordingly, the Committee requested that the dossier be adjusted to reflect the correct size.
138. Sustainable development of the proposed site is based on the traditional knowledge of local communities including indigenous and folk knowledge about production aspects, social organization and cultural identity, specifically folk knowledge (*Pon đík-pon đing* or *ponđíp-ponring*), knowledge about labour and production, and knowledge about society. Policies formulated by the Gia Lai Province People's Committee on land allocation, forest allocation to households, payment for forest ecosystem services and the development of ecotourism combined with nature conservation are considered the correct approaches for Gia Lai Province.
139. Gia Lai people live mainly on rice cultivation. The main crop harvested is upland rice, although wet rice is grown to a lesser extent. Alongside farming, Gia Lai people also raise livestock and poultry to ensure self-sufficiency and exchange for necessities. Their shifting economy is associated with hunting and gathering. Men hunt, trap animals in the forest, and fish and shrimp in lagoons, lakes, rivers and streams. Women collect vegetables, bamboo shoots, fruits from the forest, crabs, snails and mussels.
140. The Advisory Committee noted that the organizational arrangements of the proposed site make provision for the participation of a suitable range of public authorities, local communities and private interests, to carry out the biosphere reserve functions.
141. All activities in the proposed core areas are coordinated by the current Forest Protection Department's Management Board, as the areas in question are owned by the National Park. The Director of the Department of Agriculture and Rural Development is also the Standing Deputy Head of the Biosphere Reserve Management Board. The existing management boards of the National Park and the Nature Reserve will play a key role in the Biosphere Reserve Management Board.
142. The Committee acknowledged that the national authorities had provided a detailed outline of the management plan and a timeframe for finalization with a date of the end of 2021, if the site is approved.

143. The Advisory Committee commended the Vietnamese authorities for this nomination and recommended that the site to **be approved**.
144. **Nui Chua (Viet Nam).** The Advisory Committee welcomed this new proposal submitted by Viet Nam.
145. The proposed site encompasses the terrestrial and marine areas of Ninh Thuan Province, Central Viet Nam, and is located at the end of the Truong Son Mountain Range where the climatic conditions are harsh with sunny, hot and arid weather and minimal rainfall. The proposed site is a representative area in terms of biodiversity with a rich and diverse mosaic of ecosystems distinctive to the south-central region of Viet Nam, including unique semi-arid vegetation, sea turtle nesting beaches and coral reefs.
146. The total population amounts to 447,162 including the main ethnic groups of Kinh, Cham, Raglai, Hoa, Tay, Nung and Muong, all of whom have diverse ethnic cultures with artistic and religious forms of architecture, and numerous rituals and large festivals.
147. The core areas and buffer zones have been designed based on the Nui Chua National Park system. The National Park is one of 200 globally important ecological regions identified by WWF as the Annamites. The conservation value of mammal fauna in the National Park is very high with many globally rare and valuable species. Initial statistics show that out of 83 currently known mammals, up to 25 species belong to vulnerable, endangered and critically endangered categories on the IUCN Red List, including Black-shanked doucs (*Pygathrix nigripes*) and Silver-backed chevrotains (*Tragulus versicolor*).
148. The terrestrial and marine core areas are strictly protected sub-zones of the Nui Chua National Park designated for ecological restoration, and are uninhabited.
149. The buffer zones are also sub-zones of the National Park, located adjacent to the core areas, where environmentally friendly economic activities (e.g. agriculture, fishing, tourism, etc.) are carried out in accordance with the management regulations of special use forests and marine protected areas.
150. Numerous, diverse regional economic activities take place in the transition area. However, as the proposed biosphere reserve will be managed in accordance with the master plan of the Ninh Chuan Province and the

conservation and development plan of Nui Chua National Park, the transition area is not defined in the northern and north-eastern part of the buffer zone, where are beyond the application range of the plans.

151. The Advisory Committee noted that ecotourism has been carried out by six local ecotourism companies in buffer zones and the transition area. According to the policy of Payment for Forest Ecosystem Services (PFES), some revenue from ecotourism businesses using the forest environment are collected and invested in forest protection and improvement of the living standards of local people.
152. The Advisory Committee also took note that the Ninh Thuan Provincial People's Committee plans to establish the Management Board of the Nui Chua Biosphere Reserve following designation of the proposed Nui Chua Biosphere Reserve. It acknowledged that a detailed plan for organization arrangements was presented with a timeframe to establish a management board with an associated organizational structure and an advisory board for the proposed biosphere reserve.
153. A draft biosphere reserve management plan for 2021–2025 has been developed through stakeholder meetings. The draft plan was submitted as an annex of the nomination dossier. The biosphere reserve management plan will be consistent and integrated with the conservation and development plan of Nui Chua National Park (2013–2020) and the socio-economic development Masterplan of Ninh Thuan Province (up to 2020). The Advisory Committee noted that the draft biosphere reserve management plan was well structured and produced with the close involvement of stakeholders.
154. The Advisory Committee observed that the Ninh Thuan Province has expressed a keen interest in and plans to develop energy facilities such as wind turbines, solar farms and pumped storage hydroelectric plants. In this regard, the Advisory Committee highly recommends that, if the construction of the energy facilities and plants are planned in or close to the proposed site, steps should be taken by the nominating authorities to prevent or address any possible conflicts with or negative impacts to the ecosystem conservation (e.g. environmental impact assessments).
155. The Committee also recommended an assessment of tourism carrying capacity in the core areas, where the number of visitors has increased significantly, and the development of necessary measures to ensure the

operation of sustainable tourism.

156. The Advisory Committee commended the national authorities for this nomination and recommended that the site **be approved**.
157. **Uvs Lake Depression (Mongolia/Russian Federation).** The Advisory Committee welcomed this joint transboundary proposal from Mongolia and the Russian Federation.
158. The proposed transboundary biosphere reserve (TBR) in Mongolia and Russian Federation links the two existing biosphere reserves designated in 1997, which represent major biomes of eastern Eurasia, and additional neighbouring protected areas as follows:
 - on the Mongolian side, the Uvs Nuur Basin Biosphere Reserve, consisted of four State Protected Areas (SPA) (Uvs Nuur, Altan Els, Tsagaan Shuvuut and Turgen Uul), and the Tesiin Gol Nature Reserve are included in the proposed TBR; and
 - on the Russian side, the proposed TBR includes the Ubsunorskaya Kotlovina Biosphere Reserve, which contains five Zapovedniks (Uvs-Nuur, Mongun Taiga, Oruku-Shynaa, Ayskannyg, Yamaalyg) and two additional Zapovedniks of Ular and Tsugeer Els.
159. The Uvs Lake Depression is a core area of the Altay Sayan Eco-Region and one of the Global 200 Eco-Regions, whose intact natural conditions are relatively well preserved and support over 90% of important ecosystems and biodiversity on the planet. These areas are also vital for natural and environmental conservation (according to the description in the Russian legal documents), while the uniqueness of the basin and the diversity of natural zones within a limited small area enhances their rarity.
160. The core areas of the proposed TBR cover 125,893.09 ha. Their purpose is to protect the core habitat or breeding sites of Argali sheep, Snow leopard, Ibex, other mammals and migratory birds from humans and domestic livestock disturbance.
161. The total size of the buffer zones for the proposed TBR is 1,115,880.41 ha, and incorporates the buffer zones of the Russian side and the protection and limited use zones of the Mongolian protected areas. These zones function as the main distribution areas for Argali sheep and Snow leopards, water sources, and important distribution areas for other endangered fauna and flora.

162. The transition area covers 1,000,339.2 ha and provides potential habitats and corridors for endangered species.
163. The coordinating body of the proposed Uvs Lake Depression TBR is the Mongolia-Russian Joint Commission for the Transboundary Protected Area (TBPA), which was established by decrees of the relevant ministries of both countries based on an intergovernmental agreement signed by Mongolia and the Russian Federation on 31 May 2011. The Joint Commission will be responsible for all management issues.
164. The Advisory Committee noted that the joint management plan for the Uvs Lake Depression TBPA (2018–2022) was developed based on implementation results from the first joint management plan (2010–2015) and research and monitoring conducted in the region. The Committee also noted that communication strategy and activities form part of the joint management plan for the Uvs Lake Depression TBPA.
165. The Advisory Committee further noted that the management plan of the proposed TBR is based on seven strategic objectives. For each strategic objective, specific goals are formulated linked to a list of activities. However, the Advisory Committee noted the absence of actions contributing directly to the strengthening of nomadic ways of life. Actions related to better integration of pastoralism would help fulfil the development function of the proposed TBR.
166. The Committee welcomed the vision of the management plan, which states that the proposed TBR is ‘to become a model region for cooperation between the two countries and for sustainable development, where ecosystem biodiversity is protected and historical and cultural heritage is preserved’.
167. The Committee commended the participatory nature of the joint nomination process, which involved a number of workshops and meetings, and acknowledged the long-term efforts of both countries to promote and foster transboundary nature conservation.
168. The Committee also noted that due to COVID-19-related limitations stakeholders have interacted mainly through online media since the beginning of 2020.
169. The Advisory Committee commended the national authorities for the high quality of their proposal and recommended that the Uvs Lake Depression Transboundary Biosphere Reserve **be approved**.

170. The Advisory Committee further encouraged the Mongolian and Russian authorities to develop and implement activities to enhance fulfilment of the development function of the proposed TBR.
171. **Five-country Biosphere Reserve Mura-Drava-Danube (Republic of Croatia, Hungary, Republic of Serbia, Republic of Slovenia, Republic of Austria).** The Advisory Committee welcomed this transboundary biosphere reserve, the first to connect five countries.
172. The proposed five-country Transboundary Biosphere Reserve Mura-Drava-Danube (TBR MDD) comprises five individual biosphere reserves: the Mura-Drava-Danube Transboundary Biosphere Reserve (Republic of Croatia and Hungary), the Bačko Podunavlje Biosphere Reserve (Republic of Serbia), the Mura River Biosphere Reserve (Republic of Slovenia) and the Lower Mura Valley (Republic of Austria). The proposed TBR covers a total surface of 931,820 ha.
173. The area encompasses the largest and best preserved natural river system in Central Europe. Accounting for a substantial share of the European Green Belt, the Mura, Drava and Danube Rivers (MDD) form an approximately 600-km long, dynamic and interconnected lifeline through the Danube Basin. A coherent network of 13 major protected areas, with different protection status along the rivers, highlights the ecological values of the MDD and accounts for around 2.5% of the total Natura 2000 area of the five countries.
174. Comprising nearly 1,000,000 ha and stretching 700 km, the proposed TBR MDD forms Europe's largest coherent and dynamic river ecosystem. The proposed TBR acts as a backbone for the survival of representative habitats and species, while the wise use of its ecosystem services significantly benefit local populations. By 'thinking globally and acting locally', the States Parties jointly strive for harmonized management of the proposed TBR, creating a best practice model for international cooperation for river basin management. The TBR MDD is based on mutual trust and collaboration among all State Parties and the cross-sectoral participation of all relevant stakeholders and local communities. With respect to the historic dimensions of the region, the proposed TBR is also designed to build bridges between people and nature. Multiculturality is also a unique value of the proposed TBR MDD, which as the world's first five-country biosphere reserve, would function as a symbol of unity.

175. The joint mission of the proposed TBR MDD is the conservation, restoration and wise use of the Mura, Drava and Danube Rivers and their ecosystems.

176. The Advisory Committee welcomed the comprehensive proposal for a five-country TBR and recommended that the site **be approved**.

New nominations recommended for approval pending the submission of specific information

177. **Penang Hill (Malaysia).** The Advisory Committee welcomed this new proposal from Malaysia. The Committee noted that the nomination was first proposed in 2016 by Habitat Penang Hill, a private company that operates an ecotourism business, in close collaboration with the Penang State Government. The State Government subsequently appointed the Penang Hill Corporation (PHC) to take charge of the nomination project on behalf of the State Government.

178. Penang is one of the most popular tourist destinations in Malaysia and the proposed site with its many natural, historical and cultural attractions is one of the favourite spots. Traditional economic activities based around small-scale agriculture and artisanal fishing also take place in the area.

179. The Penang Hill complex (Penang Hill, in short) consists of a series of narrow, branched and steep-sided ridges with several subsidiary tops, comprising several hills, namely Laksamana Hill, Tiger Hill, Government Hill, Flagstaff Hill (the highest peak, 833 m) and Western Hill. The relief ranges from a complex in the high mountainous area in the northern, central and southern parts of Penang Island, to low-lying and flatland areas in the eastern and western parts. Penang Island also presents a mosaic of urban, agricultural and natural landscapes, including terrestrial and marine habitats.

180. The proposed site includes virgin evergreen lowland and hill dipterocarp rainforests surrounded by community farmlands that cultivate vegetables and spices, orchards, and marine areas that permit low-impact artisanal fishing activities.

181. The core areas cover 6,304 ha and consist of four main regions: Penang National Park (terrestrial and marine), six Permanent Forest Reserves, and several water catchment areas and dams. All the core areas are governed and

legally protected as national parks and permanent forest reserves.

182. The terrestrial buffer zone takes the form of 50 m-wide strips within the protected areas along the boundary of the terrestrial core area. The marine buffer zone covers 0.5 nautical miles (around 926 m) outside the boundary of the marine core area. The total area of the buffer zones is 2,213 ha, accounting for 526 ha of the terrestrial part and 1,687 ha of the marine part of the area. The legal status of the buffer zones is based on the core areas that lie within. The transition areas occupy mostly the water catchment area and 0.5 nautical miles (around 926 m) outside the marine buffer zone. In 2016, a Special Area Plan for Penang Hill (SAP) was established as a unique tourism destination and sustainable hill settlement in a south-eastern part of the transition area (468.38 ha).
183. The Advisory Committee noted that the proposed buffer zones, especially the terrestrial ones in 50 m-wide strips, are not distinct from the adjacent core areas in terms of applied legal and management system and activities, and are not considered sufficiently large to function properly as a buffer zone of the biosphere reserve.
184. The Advisory Committee also pointed out that the iconic Penang Hill (Flagstaff Hill) attracts more than 1.6 million visitors a year, who arrive mostly by funicular train. From 2015 to 2017, on average, Penang Botanic Gardens received about 700,000 visitors per year, while Penang National Park received more than 100,000 visitors annually.
185. Preparation of the Penang Hill Biosphere Reserve Action Plan is underway and the nomination form and additional information include a detailed outline and description of the process. The plan will be developed within a year following designation of the biosphere reserve and will be reviewed three years after initial implementation and thereafter every five years.
186. The Advisory Committee acknowledged the long history of diverse and rich ecosystem research and a strong public–private partnership for conservation and development of the proposed site including the biosphere reserve nomination.
187. The Advisory Committee therefore recommended that the site **be approved pending** the submission of the following information by 30 May 2021:

- the steps to be taken to enlarge the terrestrial buffer zones and a timeframe;
- detailed information regarding the legal or managerial basis of the marine buffer and transition areas, and the process to ensure consistency with the fisheries zoning system of the Department of Fisheries of Malaysia, which designates all areas within 5 nautical miles of the shoreline as Zone A for traditional fishing gear operated by traditional fishers;
- a plan to integrate settlements in the Teluk Bahang, located between Penang National Park and Teluk Bahang Forest Reserve, where local residents undertake fishing activities, work as tour guides, and operate traditional food stalls and restaurants relying on the natural resources within the proposed site;
- correct figures for zone sizes which are inconsistent across the nomination dossier; and
- a corrected electronic version of the nomination form.

188. **Mountain Great Bogdo (Russian Federation).** The Advisory Committee welcomed this proposal submitted by the Russian Federation.

189. The proposed biosphere reserve is located in the north-east of the Astrakhan region, near the border with Volgograd and the Republic of Kazakhstan, and in the south-east of the East European Plain within the desert-steppe zone, in the Lower Volga provinces. The territory forms part of a semi-desert landscape zone. The proposed biosphere reserve has a total area of about 60,423 ha, comprising a core area of 6,819 ha, a buffer zone of 12,734 ha and a transition area of 40,860 ha, and includes the Bogdinsko-Baskunchasky Strict Nature Reserve, Lake Baskunchak and other unique land forms of archaeological significance. It is crossed by several bird migratory routes which are protected under the Ramsar Convention and is home to 230 species of birds from 51 families including 96 passerine species, as well as 12 species of reptiles, over 160 taxa of insects and 113 species of arachnids.

190. The population of the transition area with 823 inhabitants is multinational in composition with Russians, Kazakhs, Ukrainians, Chechens, Tatars, Koreans, Azerbaijanis and other peoples. The permanent population traditionally engages in agriculture and animal husbandry. The main economic sectors are agriculture including the traditional and medicinal use of natural

resources, recreation, nature conservation, and scientific and educational activities.

191. The vast territory of the buffer zone and transition area creates a favourable situation for improving the socio-economic living conditions of the local population based on the preservation and development of traditional, environmentally friendly forms of management (horse breeding, agriculture, handicrafts) as well as tourism services. The relevance of Lake Baskunchak as the main salt supplier in the country since 1861 is also notable.
192. The Advisory Committee noted that although the population table indicates that the buffer zone is uninhabited, the descriptive text accompanying the zonation gives a population of 200. The Advisory Committee appreciated the establishment of the Scientific and Technical Council and noted that the management plan, although not provided, is due to be finalized following approval of the biosphere reserve.
193. The Advisory Committee recommended that the site be **approved pending the** submission of the following information by 30 May 2021:
- a draft management plan/policy or detailed framework for the plan and evidence that it has been designed in a participatory manner; and
 - clarification regarding the exact size of the human population in the buffer zone.
194. **Lower Amudarya State (Uzbekistan).** The Advisory Committee welcomed this proposal and commended the Uzbekistan authorities on their efforts to nominate the second biosphere reserve in the country.
195. The proposed Lower Amudarya State Biosphere Reserve (LABR) is located in the northern part of the lower reaches of the River Amudarya about 220 km southeast of the former coast of the Aral Sea. The physio-geographical features of the lower reaches of Amudarya differ significantly from the surrounding sandy and stony deserts. Administratively, the site covers the Amudarya and Beruniy districts of the Republic of Karakalpakstan.
196. The proposed site is one of the largest areas of natural Tugai in Central Asia which, from a global perspective, is a unique and threatened ecosystem. The area provides an important habitat for plant and animal life and contains the highest biodiversity in the desert regions of Central Asia. The core areas

also function as a protected environment for Bukhara Deer (*Cervus hanglu bactrianus*), a threatened species whose natural habitat is the riparian forests of Central Asia.

197. The main objectives of the proposed biosphere reserve are to conserve and restore the natural landscapes, animal and plant species of Tugai forests, including those that are rare and endangered, as well as other natural objects and complexes characteristic of the riparian forests of Central Asia; to enhance its environmental status; to ensure the sustainable use of natural resources and the social well-being of people; to study natural processes; and to facilitate the development of ecological education, teaching and training.
198. The total size of the proposed site is 68,717.8 ha. The core areas (11,568.3 ha) have a strict protection regime and their main function is the preservation of Tugai forests and associated natural objects and complexes of the proposed biosphere reserve.
199. The buffer zones (6,731.4 ha) include forest areas and ecological corridors. Sustainable agricultural activities, the collection of medicinal and food/vegetable plants, the construction of certain types of building, recreation and eco-tourism, and other activities that fulfil development and logistical functions, are permitted in these zones.
200. The transition area (50,418.1 ha) is designated for the sustainable use of natural resources and includes agricultural lands, settlements and industry. In addition, experimental sites for testing sustainable technologies, as well as demonstration sites for sustainable land use fulfilling logistical support functions, are permitted.
201. The population of the LABR numbers 107,513. The core areas are uninhabited, and there are 34,950 permanent inhabitants in buffer zones and 72,463 in the transition areas. The Advisory Committee noted that the buffer zones are quite densely inhabited..
202. The LABR management plan (2021–2025), which is legally binding upon approval of the biosphere reserve, has been elaborated based on a review of previous management, as well as recent information including various reports and assessments (e.g. on Ecosystem Services) produced by organizations and projects operating in the area of the LABR.
203. The proposed Lower Amudarya Biosphere Reserve (LABR) is a state property and will be managed by a governmental authority.

204. A Coordinating Council has been established to ensure stakeholder involvement and participation in the design and carrying out of the functions of the biosphere reserve. In addition, a Commission composed of public representatives has been created by the management of the proposed BR and the *Khokims* (local governor/community leaders) of the transition areas in order to ensure public involvement in the activities of the LABR. The commission is equipped with the authority to participate in solving issues related to improvement of protection and development activities in the biosphere reserve. Public commissions, the LABR management and local government authorities (regional and district *Khokims*) developed a programme and monitor its implementation with a view to implementation of Uzbekistan's national Biodiversity Conservation Strategy for the period 2019–2028.
205. The Advisory Committee acknowledged the strong quality of the proposal. However, it noted that certain points concerning zonation remain unclear. According to the zonation map, the core area is not consistently surrounded by a buffer zone for its protection.
206. Therefore, the Advisory Committee recommended that the site **be approved pending** the submission of the following information by 30 May 2021:
- confirmation that the core areas are surrounded by buffer zones sufficient to ensure protection and a revised zonation map accordingly; and
 - clarification on the comparatively dense population in the buffer zones.

New nominations recommended for deferral

207. **Visherskiy Ural (Russian Federation).** The Advisory Committee welcomed this proposal submitted by the Russian Federation.
208. The territory of the proposed biosphere reserve is located in the extreme northeast of the Kama region, in the upper reaches of the River Vishera on the western slope of the northern Urals mountains. In terms of relief, the proposed site is divided into two sections: the western end is hilly, while the eastern end is mountainous. The overall territory occupies a total area of 600 008 ha.
209. The total population amounts to only 150 people, representing the lowest level of population density in the region at less than 0.01 people/ km². The centre of the settlement is Wels village, which was founded more than 100 years ago in connection with the construction of an iron smelter. The national composition of the territory is diverse with more than ten nationalities, including

the indigenous small ethnic group of the north, the Mansi, while Russians are dominant (about 90%). Ethnic groups have largely preserved their cultural traditions (including handicrafts, folklore and other forms of creativity), and celebrate national and religious (Orthodox) holidays. The population residing permanently in the transition area engages in agriculture (farming, cattle breeding), seasonal hunting, fishing and gathering (nuts, mushrooms, berries). A large proportion of the population participates in the organization of green (village) tourism.

210. The main purpose of the proposed biosphere reserve is to maintain a stable equilibrium between three important objectives: the conservation of biological diversity, the promotion of economic development, and the safeguarding of local cultural and historic values. The proposed site intends to become an environmental, socio-economic and cultural-educational centre promoting the development of new sustainable activities, restoring the culture of the native inhabitants of the Northern Ural, attracting additional funds to the regional economy, and improving the overall investment climate.
211. The Advisory Committee noted that the zonation does not meet the criteria, specifically with the absence of buffer zones in the north and east and other inconsistent elements as shown in the submitted maps. In addition, the Advisory Committee noted that the number of residents is very small and questioned whether the development function could be fulfilled properly. The Committee also highlighted the age of the management plan, which dates from the 1990s, and the lack of information on funding and a participatory approach.
212. The Advisory Committee therefore recommended that the proposal be **deferred**.
213. **Lower Zambesi Escarpment (Zambia) – resubmission.** The Advisory Committee congratulated the national authorities on their continued efforts to nominate the first biosphere reserve in the country.
214. With a total area of 7,406,383.49 ha, the proposed biosphere reserve has a core area of 281,541.37 ha, a buffer zone of 4,924,253.34 ha and a transition area of 2,200,588.78 ha. The core area, which includes the Lower Zambesi National Park and the confluence of the Chongwe and Chidulwe Rivers, has a unique aquatic ecosystem emanating from drainage of the area by the Chikongwe, Zambesi, Chindulwe, Mwambashi Nyampande and Ckakwenga Rivers.

215. The site includes the Zambia-Zimbabwe international border and a Transfrontier Conservation Area including the Mana Pools World Heritage Site of Zimbabwe, which also forms part of the Middle Zambezi Biosphere Reserve. The buffer zone consists of the Luano, Chiawa, Rufunsa and West Petauke Game Management Areas (GMAs). The area has a total population of nearly 1.8 million, whose main economic activities are the subsistence farming of cereals, vegetables and spices, fishing, apiculture and aquaculture.
216. The Advisory Committee appreciated the cultural diversity (17 ethnic groups) as well as biological diversity of the area and the extensive consultations undertaken by the authorities in response to previous comments on the nomination dossier made by the Advisory Committee in 2019, with particular reference to re-zoning of the proposed site and placement of the proposed copper mining concession in the transition area, the proposal by Mwembeshi Resources Limited to establish an environment fund to support biodiversity conservation in the area, and the provision of infrastructural development to communities.
217. The Advisory Committee noted that the General Management Plan of the National Park acknowledged the high possibility of exploitation of minerals. The Advisory Committee observed that the letter from the Mining Cadastral Department dated September 2020 indicated that the Ministry of Mines cannot deny the renewed intention on the part of Mwembeshi Resources Limited to undertake proposed copper mining for a period of 25 years in accordance with what has been granted by the government in 2011. However, prior approval of an updated environmental impact assessment (EIA) by the Zambia Environmental Management Authority is required before exploitation can start.
218. With due consideration of the need to promote transboundary cooperation between the two countries through the Transfrontier Conservation Area and the potentially significant impact of mine development on the ecological integrity and Outstanding Universal Value of the Mana Pools World Heritage Site, the Advisory Committee reaffirmed the requirement for biosphere reserves to be sites of excellence, upholding all conservation and development principles to help countries attain sustainable development.
219. The Advisory Committee observed that the proposed copper mine in the National Park impinges on sections of the buffer and transition areas, which are covered by National Park status and regulation, in contravention of provisions of IUCN Category II for Protected Areas. The Advisory Committee therefore requested that official information be sent to the MAB Secretariat, in due course,

to confirm that the section of the National Park to be mined has been re-categorized under IUCN Category VI, which allows for resource exploitation.

220. The Advisory Committee recommended that the proposal **be deferred** and requested that the MAB Secretariat liaise with the national authorities in order to organize a technical field visit to the proposed site to meet key stakeholders, ascertain the critical information and provide any necessary support prior to resubmission of the nomination.

Extension, re-zoning or renaming of existing biosphere reserves recommended for approval

221. **Lauca Biosphere Reserve (Chile).** The site is participating in the 'Process of Excellence and Enhancement of the WNBR'. The Advisory Committee welcomed the proposal for the extension of the Lauca Biosphere Reserve, established in 1981.

222. The proposal intends to extend the current total area from 358,000 ha to 1,026,567 ha by adding new buffer zones and transition areas, which would cover the communes of General Lagos, Putre and Camarones located to the northeast of Chile on the borders with Bolivia and Peru. After the extension, the biosphere reserve would comprise a core area of 137,883 ha, a buffer zone of 395,045 ha and a transition area of 493,639 ha.

223. The altitudinal range of the territory spans 2,800 m to 6,343 m above mean sea level, and includes three climate zones – arid (BWH), semi-arid (BSH) and ice cap (EF) -, according to the Köppen-Geiger climate classification. The topography is shaped by volcanoes and wetlands with bushlands and mountainous meadows. The Tropical Andes Biodiversity Hotspot extends through the territory designated for the biosphere reserve. This area is the most diverse and ecologically rich region of the biosphere reserve, making it a landmark and priority for conservation.

224. Approximately one-third of Chilean fauna is present in the region. Lauca also provides a habitat for endemic species and priority species for conservation. Due to the high ecological value of the region, a RAMSAR site and three national Wildlife Protected Areas are already located within the existing biosphere reserve.

225. The extended biosphere reserve would be home to a population of 4,734 permanent and 130 seasonal residents. This population includes 50 indigenous families and communities distributed among the three communes. Presently, the main languages spoken in Lauca are traditional Aymara and Chilean Spanish. According to national legislation, the region is classified as an Area for Indigenous Development. This status seeks to protect and strengthen the development and respect of indigenous peoples, their cultures, families and communities. The main socio-economic activities are undertaken by indigenous groups in the existing biosphere reserve, and consist mostly of camelid husbandry and agriculture. In addition, mining and renewable energy activities are undertaken in the transition area, while tourism is present throughout the three zones.
226. The extension of the biosphere reserve would provide the region and its communities with an opportunity to expand strong dialogue efforts and further share Indigenous knowledge.
227. The Advisory Committee congratulated the national and local authorities on their efforts to comply with the Statutory Framework of the WNBR, and the administration of the biosphere reserve for the establishment of a public–private management committee. The Advisory Committee welcomed the strong participation of the indigenous community in managing the biosphere reserve, which is fundamental to its successful implementation. The Committee also welcomed the two-year management plan, which, although short-term in conception, respects the worldview of the indigenous population.
228. The Advisory Committee therefore recommended that the requested extension of the biosphere reserve be **approved**.
229. The Advisory Committee also recommended:
- to set a long-term objective beyond the current two-year management plan in order to ensure the future effectiveness of the reserve, especially taking into consideration the mobilization of necessary funds;
 - to explore partnerships with other biosphere reserves involving indigenous peoples in their management system, in order to share best practices and lessons learnt; and

- to coordinate with Bolivian counterparts to foster synergies and/or joint work agreements, in consideration of the shared border with Bolivia.

230. **Appennino Tosco Emiliano Biosphere reserve (Italy) - extension.**

The Advisory Committee welcomed the proposal for extension of the Appennino Tosco Emiliano Biosphere Reserve.

231. The proposal encompasses a total of 498,613 ha, representing an increase of 275,384 ha since the initial designation in 2015, and includes 80 municipalities spread over 6 provinces: Modena, Parma, Reggio Emilia in the Emilian part, Lucca and Massa Carrara in Tuscany, and La Spezia in Liguria.

232. The permanent population amounts to about 378,424 inhabitants, with an increase of 277,124 permanent inhabitants since designation.

233. At least 122 species of birds, amphibians, fish and invertebrates of community conservation interest are found in the proposed site. The site's location on a climatic boundary further provides great floristic biodiversity, with at least 260 species of aquatic and terrestrial plants of community and regional conservation interest.

234. The land is predominantly used for agriculture (fodder, pasture, chestnut groves, olive groves, vineyards, grain), but tree-felling for the production of firewood is also widespread. Traditional practices such as hunting, fishing and mushroom picking, which were once a key part of the livelihoods of the local people, are now relevant predominantly in terms of cultural heritage and recreation and are widespread throughout the territory.

235. The process for extension application aimed to bring about an increase in cultural development and awareness, with a view to encouraging local communities to recognize the value of ecosystem services, of which they are the primary beneficiaries, and therefore to invest in motivating and training people, particularly youth. The aim was not solely to encourage them to remain in the territory, but also to provide opportunities – within broader cultural, educational and economic circuits – that would function as a lever for investments in the conservation and development of ecosystem services arising from the reserve.

236. The Appennino Tosco-Emiliano National Park would perform the functions of Coordination and Secretariat of the biosphere reserve, supporting the Management Committee and the Permanent Consultative Assembly, which are the main decision-making bodies for all matters regarding management of the biosphere reserve.
237. The Advisory Committee welcomed the high-quality proposal and congratulated the authorities on the quality of their work. It noted with satisfaction that the 2015 designation set a new goal to embrace a larger area and involve more local communities in living in harmony with nature. The Advisory Committee concluded that the site meets the criteria and recommended that the extension **be approved**.