

UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION

International Coordinating Council of the Man and the Biosphere (MAB) Programme

Thirtieth session

Palembang, South Sumatra Province, Indonesia

23 - 28 July 2018

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ITEM 10 OF THE PROVISIONAL AGENDA: PROPOSALS FOR NEW BIOSPHERE RESERVES AND EXTENSIONS/MODIFICATIONS/RENAMING TO BIOSPHERE RESERVES THAT ARE PART OF THE WORLD NETWORK OF BIOSPHERE RESERVES (WNBR)

1. Proposals for new biosphere reserves and extensions to biosphere reserves that are already part of the World Network of Biosphere Reserves (WNBR) were considered at the 24th meeting of the International Advisory Committee for Biosphere Reserves (IACBR), which met at UNESCO Headquarters from 5 to 8 February 2018.

2. The members of the Advisory Committee examined 27 proposals for new biosphere reserves (including one re-submission of a proposal for new biosphere reserve) and three requests for expansion/modification and/or renaming of already existing biosphere reserves and formulated their recommendations regarding specific sites in line with the recommendation categories as follows:

1) Proposals for new biosphere reserves or extensions/modifications/renaming to already existing biosphere reserves recommended for approval: the proposed site is recommended for approval as a biosphere reserve; no additional information is needed. For already existing sites, the proposed changes are recommended for approval.

2) Proposals for new biosphere reserves or extensions/modifications/renaming to already 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 already existing sites are recommended for approval **subject to** receiving the specific information as requested by the Advisory Committee. If the MAB Secretariat receives the information by 31st May 2018, it will be considered by the MAB ICC at its 30th session to be held from 23 to 28 July 2018 and the Council may approve the inclusion of the site in the WNBR. If submitted by 30 September 2018, the information will be assessed by the MAB ICC at its 31st session in 2019.

- 3) **Proposals for new biosphere reserves or extensions/modifications/renaming to existing biosphere reserves 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.

3. The MAB Secretariat received six notification for voluntary withdrawal: five from Australia (Wilson's Promontory Biosphere Reserve, Hattah Kulkyne/Murray Kulkyne Biosphere Reserve, Yathong Biosphere Reserve, Barkindji Biosphere Reserve and Prince Regent Biosphere Reserve) and one from the United States (San Dimas Experimental Forest).

4. The Bureau of the MAB ICC will consider the attached recommendations of the IACBR as well as the additional information received by the MAB Secretariat particularly with regard to nominations recommended for approval subject to receiving additional information. 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.

6. The MAB-ICC is invited to take note of the decision of five Australian sites (Wilson's Promontory Biosphere Reserve, Hattah Kulkyne/Murray Kulkyne Biosphere Reserve, Yathong Biosphere Reserve, Barkindji Biosphere Reserve and Prince Regent Biosphere Reserve) and one US site (San Dimas Experimental Forest) authorities for voluntarily withdrawal.

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

7. **Arly (Burkina Faso).** The Advisory Committee welcomed the well-prepared nomination for this area situated in the West African savannah. The Arly region is one of three areas of the W-Arly-Pendjari landscape, and constitutes a unique natural heritage. The proposed biosphere reserve has a core area of 218,429.651 ha, a buffer zone of 614,534.06 ha and a transition area of 1,287,715.73 ha. It encompasses a Ramsar site and a Natural World Heritage site.
8. The biological diversity observed in the proposed biosphere reserve is related to the remarkable heterogeneity of the plant formations, accentuated by the presence of the Pendjari stream, one of the main rivers and its tributaries. One of the major assets of this region is its wide variety of habitats ranging from sandstone crustal plateaus to water bodies of major rivers. The relief determines a diverse range of landscapes which are among the main tourist attractions of this region. There are five major types of habitats: wetlands with aquatic meadows, gallery forests, dry clear forests, and tree and shrub savannahs, which are the most common type of vegetation. The area is the natural habitat for a number of endangered plant species including *Vitellaria paradoxa*, *Azelia africana*, *Khaya senegalensis* and *Adansonia digitata*. Vulnerable and endangered animal species such as cheetah (*Acinonyx jubatus*), elephant (*Loxodonta africana*), lion (*Panthera leo*), leopard (*Panthera pardus*), damalisque (*Damaliscus lunatus korrigum*), oricou vulture (*Torgos*

tracheliotos) and crowned crane (*Balearica pavonina*) are also found on the site.

9. The main economic activities of the 685, 814 inhabitants are crop, livestock and agriculture. The main cultivated crops are cereal (millet, sorghum), cash crops (peanuts, cotton), potatoes and vegetables, while animal livestock includes donkeys, oxen, rams and goats.
10. The Advisory Committee commended the highly participatory process surrounding the designation of the biosphere reserve, which included several village information meetings that brought together local opinion leaders, traditional leaders and local leaders, the regional planning session of the Territory, which brought together technical services, NGOs and administrative authorities at the regional level, and the national validation workshop.
11. The Advisory Committee noted the lack of management plan for the entire proposed biosphere reserve, but acknowledged with satisfaction the provision of information on the composition of the management unit of the proposed biosphere reserve including the roles of each of the stakeholders. The Committee therefore recommended that the site **be approved** and the authorities are encouraged to seek funding and build the partnerships needed to implement the management plan. The Advisory Committee also acknowledged the cooperation between the proposed biosphere reserve and Pendjari Biosphere Reserve of Benin and encouraged the two countries to develop a transboundary site proposal.
12. **Mount Huangshan (China).** The proposed Mount Huangshan Biosphere Reserve, located in southern Anhui province, China, is situated in the hilly region of Nanling Range in southeast China. The total area of the proposed reserve 42,558.48 hectares (ha). The core area occupies 7,743.84 ha, the buffer zone covers 4,958.35 ha and the transition area encompasses 29,856.29 ha. There are no inhabitants within the core area and buffer zone, with a permanent population of 24,782 people in the transition area.
13. The area has been a UNESCO World Heritage site since 1990 and a UNESCO Global Geopark since 2004.
14. The forest ecosystem of the proposed site has been left most intact since the last glacial epoch. In addition, due to the impact of the Quaternary glacial period, Mount Huangshan has become a sanctuary for many ancient animals and plants. It is thus one of the distribution centres for ancient species in East Asia and the world.
15. With a forest coverage rate as high as 90.51%, the rich variety of the plant community and the complete vertical band spectrum, the area functions as an important germplasm gene bank and a hotspot for animal and plant species.
16. The proposed area is also an important water source for the Xin'An Jiang river system, the Changjiang river system, the Qing Yi river system and the Qiupu river system. In addition, it functions as an important migrating channel for many organisms between north and south China, a key 'beacon' for migratory birds, an important 'stepping stone' linking the Asia-Pacific West Bank islands with internal Eurasia and a hotspot of the West Pacific Rim biosphere stretching back to the Mesozoic era.
17. The buffer zone is not suitable for large-scale farmland cultivation due to the mountain topography. The main form of land use is tea plantation, which is conducive to the mountain climate or microclimate and does not affect the indigenous vegetation. Traditional tea cultivation and manufacturing technology reflects local residents' understanding of the harmony between people and nature.
18. The Advisory Committee noted that Mount Huangshan has played a very important role in ecological resource conservation and regional economic promotion, and provides solutions for exploring or testing sustainable development in the region. As development in the area focuses mainly on tourism, the Committee encouraged research into other development

options as well as alternative objectives related to the sustainable use of biodiversity.

19. The Committee noted with satisfaction that the Mount Huangshan Biosphere Reserve Management Plan has been produced for the period 2017-2026 and that the Joint Management Committee has been established.
20. The Advisory Committee welcomed this submission, commended the Chinese authorities for the very well written and high-quality nomination dossier, and recommended that Mount Huangshan **be approved** as a biosphere reserve. The Committee invites the Chinese authorities to provide a map showing the areas and zonation of the World Heritage juxtaposed with those of the biosphere reserve.
21. **Mt. Kumgang (Democratic People's Republic of Korea)**. Geographically located in the middle of the Great Paektu Mountain Range and linked with adjacent marine areas in the east, the proposed biosphere reserve encompasses the areas of Kosong County, Kumgang County and Tongchon County in Kangwon Province. The proposed site covers approximately 262,589 ha in total including a core area of 22,213 ha, a buffer zone of 50,651 ha and a transition area of 189,725 ha.
22. Mt. Kumgang is a forest-oriented ecosystem linked to coastal, agricultural and freshwater ecosystems. The area includes many endemic species and rare species of either global or national significance. The area is home to 1,228 plant species and 258 vertebrate species of which 46 plant species and 42 vertebrate species are threatened. The coastal area and natural lakes include the habitats of migratory birds that use the East Asia-Australasian Migratory Pathway. The wintering area of the Red-crowned Cranes is protected by the state.
23. The core area covers approximately 8.4% of the entire area of the proposed reserve, and has a unique and vulnerable alpine forest ecosystem that hosts threatened and endemic species. The buffer zones cover approximately 19.3% of the entire area and are located on the terrestrial and marine parts of the proposed reserve. The transition area covers approximately 72.3% of the entire area concerned. Tourism in the buffer zones supported by strong infrastructure, and agriculture, fruit farming and fishery in the transition area are the main economic activities in the proposed reserve.
24. The agricultural area of the proposed Mt. Kumgang biosphere reserve covers approximately 10.3% of the entire area of the proposed site. Fishery is also an important economic activity in the transition area after agriculture. Forestry activities in the transition area are concentrated on plantations. In addition to the exploitation of medicinal plants, wild fruits and edible herbs also bring economic benefits to local people.
25. Mt. Kumgang is renowned as one of six famous mountains, eight scenic spots and three sacred mountains in Korea, and is well known throughout the country and across the world.
26. The government has set long-term goals to develop the Wonsan-Kumgangsán International Tourist Zone, which includes Mt. Kumgang area as a central feature. Accordingly, it has prepared a plan to develop this international tourist zone and has made efforts to implement it.
27. A management policy or plan for the area as a biosphere reserve has not yet been established and is currently under consultation with all concerned stakeholders.
28. The Advisory Committee noted with satisfaction that marine areas were included in the proposed biosphere reserve (buffer zone and transition area) and occupy 6.4% of the total area.
29. The Committee commended the national authorities for their major efforts towards

conservation over a large area including mountains, wetlands, coasts and marine areas.

30. The Advisory Committee welcomed this nomination, congratulated the DPR Korean authorities for the very well written and high-quality proposal, and recommended that Mt. Kumgang **be approved** as a biosphere reserve.
31. **Khangchendzonga (India)**. The proposal for Khangchendzonga Biosphere Reserve was submitted to the 2012 MAB ICC and deferred. The new submission takes into account all the recommendations from 2012 and provides new and updated information.
32. The proposed site encompasses an area of 293,112 ha and is located in the state of Sikkim, India, bordering Nepal to the west and Tibet (China) to the north-west. The core area covers 178,400 ha, the buffer zones cover 83,592 ha and the approximate size of the transition areas is 31,120 ha. The site is one of 34 biodiversity hotspots in the world.
33. The proposed site is one of the highest ecosystems in the world reaching elevations of 1,220 metres above sea level (masl) to over 8,586 masl. It includes a range of ecoclines varying from subtropical to arctic, as well as vast natural forests in different biomes that support an immensely rich diversity of forest types and habitats resulting in high species diversity and endemism.
34. The core area is a major transboundary Wildlife Protected Area. The southern and central landscape which makes up 86% of the core area is situated in the Greater Himalayas, while the northern part of the area which accounts for 14% is characterized by trans-Himalayan features. Buffer zones are being developed to promote ecotourism activities. Plantation and soil conservation works are also being carried out. Over 118 species of the large number of medicinal plants found in Dzongu Valley are of ethno-medicinal utility. The transition zone is targeted for eco-development activities, afforestation, plantations of medicinal herbs and soil conservation measures. The main economic activities are agricultural and horticultural crops, animal husbandry, pisciculture, dairy, poultry farming and so on. The promotion of ecotourism in the transition zone is being planned and promoted as a priority to ensure local people's livelihoods.
35. Traditions of conserving forest and wildlife already form part of the culture of the Sikkimese people. Accordingly, the relationship between the proposed biosphere reserve and local peoples gradually improved as rights of access to the local resources of the buffer zones and traditional ways of life were secured.
36. The proposed site is a transboundary biodiversity hotspot conservation area bordering China to the North and Nepal to the west. It provides an opportunity for a joint collaboration on transboundary conservation of biodiversity resources.
37. The proposed biosphere reserve area has high religious significance and cultural values. The core zone – Khangchendzonga National Park – was designated a World Heritage Site in 2016 under the 'mixed' category. Many of the mountains and peaks, lakes, caves, rocks, stupas (shrines) and hot springs function as sacred and pilgrimage sites.
38. The Advisory Committee commends the Indian authorities for its cultural and religious conservation efforts. The Committee noted that the long-term Management Plan for the proposed site is under preparation and encouraged its finalization by national authorities. It also encouraged the continuation of transboundary conservation activities and the strengthening of transboundary cooperation with China and Nepal.
39. The Advisory Committee congratulated the Indian authorities for their well-prepared proposal and recommended that Khangchendzonga **be approved** as a biosphere reserve.
40. **Berbak-Sembilang (Indonesia)**. The proposed Berbak-Sembilang Biosphere Reserve is

located on the southeast coast of Sumatra in South Sumatra and Jambi Provinces, Indonesia. The total contiguous area of the proposed site covers 3,819,837.28 hectares (terrestrial 3,667,336.26 ha, marine 152,501.02 ha), consisting of core area of 502,666.97 ha (terrestrial 458,655.23 ha, marine 44,011.74 ha), buffer zone of 922,965.29 ha (terrestrial 814,476.01 ha, marine buffer 108,489.28 ha) and transition area of 2,394,205.02 ha (terrestrial only).

41. The core area of the proposed site includes Berbak and Sembilang National Park as well as two wildlife reserves. Berbak and Sembilang are two of the seven Ramsar sites in Indonesia which account for 110,000 ha of undisturbed peat swamp forest ecosystems and 60,000 ha of freshwater swamp forests, mangrove forest areas and lowland forest areas commonly found surrounding riverbanks with a swamp depth of up to 10 m.
42. The proposed core area has a high biodiversity making it a suitable habitat for various Sumatran flora and fauna, rare species and the Ramsar site. It thus performs an important function for Indonesia and even the world.
43. The buffer zone of the proposed biosphere reserve is composed of forest production areas, protected areas, industrial forest plantations and local farming (traditional agriculture).
44. The transition area is dominated by the production area, which includes oil palm plantation, traditional rubber plantation, industrial forest plantation, traditional farming (rice fields, dry fields, gardens, etc.), settlements (villages, small city), forest production, rivers and small lakes, and so on.
45. The buffer zone and the transition area are inhabited by the Melayu, a local ethnic group, and Java, Batak, Makassar and Chinese immigrants. There is no evidence of inter-ethnic conflicts in terms of social interaction.
46. The Advisory Committee noted that the proposed biosphere reserve has developed an Integrated Management Plan 2018-2022. In this regard, it encouraged the Indonesian authorities to develop specific policies and actions to promote sustainable development in the area.
47. The Advisory Committee also noted with satisfaction the expansion of mangrove forests. As there are many potential challenges to ensuring protection for biodiversity, such as the conversion of natural ecosystems into oil palm plantations, the Committee encouraged the governmental authorities to introduce specific measures to reduce existing threats and restore degraded ecosystems.
48. The Advisory Committee welcomed the cooperation between various local, national and international organizations and NGOs.
49. The Advisory Committee congratulated the Indonesian authorities on their well-written and high-quality nomination dossier and recommended that Berbak-Sembilang **be approved** as a biosphere reserve.
50. **Rinjani-Lombok (Indonesia)**. The proposed Rinjani-Lombok Biosphere Reserve includes Lombok Island (Nusa Tenggara Barat Province) and forms part of the Lesser Sunda region. Its topography consists of relatively flat coastal areas and hilly and mountainous areas of varying elevations. The highest peak is Mount Rinjani, which reaches 3,726 m above sea level and is the second highest volcanic mountain in Indonesia.
51. The total area of the proposed Rinjani-Lombok Biosphere Reserve is 459,086.62 ha consisting of a core area of 41,330.00 ha, a buffer zone of 109,443.30 ha and a transition area of 308,323.32 ha. The core area which is characterized by tropical mountain rainforest forms the conservation area of Gunung Rinjani National Park. The buffer zone includes

protected forest, production forest, cultivated areas and settlements. The transition area incorporates rice fields, horticulture areas, agriculture land, plantations, settlements and urban areas.

52. The proposed reserve has a very high level of biodiversity with various types of forest vegetation (i.e. savannah forest vegetation, lowland rainforest and mountain rainforest). About 40% of the forests in the proposed Rinjani-Lombok biosphere reserve area are primary forests. The characteristics of flora and fauna in the region of the proposed reserve are representative of forms of Asian and Australian species with high levels of endemism, linked to the area's location within the Wallacean region.
53. The buffer zone and the transition area have the potential to produce horticultural plants (vegetables and fruits), crops (rice, annual crops) and plantation crops (coffee, cacao), and animal husbandry (milk cows, goats, chickens and others). Tourism activities in this area revolve around the natural scenic beauty of Gunung Rinjani and the culture of the Sasak community. The Sasak community has a unique cultural heritage maintained over centuries up to the present day.
54. The Advisory Committee commended Indonesian authorities for their efforts to restore the degraded forests. It noted that the proposed biosphere reserve is a pilot project for the implementation of REDD (*Reducing Emissions from Deforestation and Forest Degradation*) in Lombok Island. Income generated from carbon compensation is envisioned as a sustainable source of financing for the reserve.
55. The proposed site has an initial Integrated Management Plan. In this regard, the Committee encouraged Indonesian authorities to develop specific policies and actions to promote sustainable development in the reserve. The Coordination Forum for the Management of Rinjani-Lombok Biosphere Reserve, established by the Governor of Nusa Tenggara Barat, functions as an umbrella to coordinate the development of the biosphere reserve at every stage from planning, implementation, monitoring and evaluation to strategy development and the implementation of innovations.
56. The Advisory Committee noted that all the areas covered by the proposed biosphere reserve are terrestrial and highlighted the absence of a marine ecosystem. It therefore asked the national authorities to describe the marine environment and fishing and explain the exclusion of marine areas from the biosphere reserve. The Committee encouraged the authorities to consider the inclusion of marine areas including mangrove areas. As there are many challenges to ensuring protection of biodiversity, the Committee encouraged the governmental authorities to provide specific measures to reduce existing threats and restore the degraded ecosystems.
57. The Advisory Committee commended the Indonesian authorities on their well-written and high-quality nomination dossier and recommended that Rinjani-Lombok **be approved** as a biosphere reserve.
58. **Kopet Dag (Iran)**. The proposed biosphere reserve covers part of the Kopet Dag mountain range and contains exquisite natural and cultural landscapes. The Kopet Dag mountain range is located along the common border between Iran and Turkmenistan and extends in northwest and southeast directions. The Golul and Sarani Protected Area, or the former Sarani National Park, located in the Kopet Dag mountain range, is one of the oldest protected habitats in Iran.
59. The proposed biosphere reserve is located 31 km north of Shirvan, and shares a 30-km border with Turkmenistan. The total area of the proposed site is 34,484 ha. The core area consists of two zones with areas of 1,911 ha and 254 ha covering a total area of 2,165 ha. The buffer zone includes two zones covering 16,432 ha. The transition area covers 15,887 ha.

60. The wild ancestors of many species of animals and plants originated in Kopet Dag, and the area is known today as the endemic centre or origin of several exclusive species. The ecological region of Kopet Dag is an important part of the Irano-Anatolian hotspot, whose primary focus includes conserving many of the endangered species in this area. The proposed site is characterized by high biological diversity and the diversity of its ethnic groups and cultures (i.e. high biocultural diversity). From the perspective of environmental and human linkages, the juniper tree and the leopard are accorded special status among the communities of this region.
61. There are 19 villages as well as nomadic settlements. The main economic activities are agriculture and livestock, which result in land degradation due to enhanced land use, regardless of its potential. In the transition zone, agricultural and livestock activities should aim to reduce pressure on pastures and woodlands, and control and minimize soil erosion.
62. The Advisory Committee commended the Iranian authorities for their efforts to integrate conservation of cultural diversity and biological diversity. It recommended them to develop an integrated Management Plan for the biosphere reserve and encouraged to implement specific measures to reduce existing threats and restore degraded ecosystems.
63. The Advisory Committee noted that Iran has conducted a project entitled 'Participatory management of the "Golul Sarani" protected Area, with a view to the feasibility of establishing a peace park (TBC) and Biosphere Reserve'. However, due to the restrictive policies of Iran and Turkmenistan, especially along their political borders, the Iranian authorities elected to begin the process by creating a biosphere reserve and promoting the region. This may lead to cross-border talks on transboundary conservation.
64. The Advisory Committee congratulated the Iranian authorities on their well-written proposal and recommended that Kopet Dag **be approved** as a biosphere reserve.
65. **Quirimbas (Mozambique).** The Advisory Committee congratulated the authorities on the well-prepared nomination of the first biosphere reserve for Mozambique. The Quirimbas area is located in the Cabo Delgado province and encompasses one of the largest protected areas in the country, the Quirimbas National Park. The park has been designated as a Ramsar site and is recorded in the tentative list of the World Heritage site. It consists of a collection of 11 islands, a combination of marine parks and a freshwater system including the Montepuez River, as well as Lake Bilibiza, a bird sanctuary.
66. With a total area of 1,481,234 ha divided into a core area of 416,113 ha, a buffer zone of 426,098 ha and a transition area of 639,023 ha, the proposed biosphere reserve combines marine and terrestrial ecosystems. These support 3,000 floral species of which 1,000 are endemic, 23 species of reptiles including five species of marine turtles inscribed on the IUCN Red List, 140 species of mollusks, 10 species of amphibians, 447 species of birds, 375 species of fish, 750 species of insects, 46 species of terrestrial mammals including four of the 'big five' (elephant, lion, buffalo and leopard) and eight species of marine mammals including whales and dolphins.
67. The area has a population of 166,885 inhabitants whose main economic activities are fishing, animal husbandry, tourism, arts and crafts, and water transport. The Advisory Committee commended the authorities for preserving local cultural diversity including the artistic traditions of the Makonde tribe.
68. The Advisory Committee appreciated the wide participatory process undertaken during development of the nomination dossier and the collaborative platform established to enhance stakeholder participation. The Committee encouraged the authorities to collaborate and pursue consultations with the 700 inhabitants of the villages of Pedreira, Mussemuco and Namitil located in the core area – a situation inherited from National Park

status – and to monitor their activities to ensure compatibility with the conservation function of the core area.

69. The Advisory Committee commended the national authorities for the presence of seven meteorological stations in the area that support climate change impact monitoring.

70. The Advisory Committee recommended that the site **be approved** and encouraged the authorities to:

- Integrate conflict management into the proposed management plan and submit a copy to UNESCO after completion.
- Work to ensure the functionality of three non-functional meteorological stations to generate information on climate change.
- Develop a monitoring system for deforestation and fires.

71. **Maasheggen (The Netherlands)**. The Advisory Committee welcomed this proposal by the Netherlands. The proposed site is a small agricultural river landscape in the Meuse valley, located in the south-eastern part of the Netherlands, shaped by continuous interaction between people and nature. The site is used for hay meadows and cattle grazing, and includes the oldest and largest network of natural hedges in the Netherlands. The landscape comprises a mosaic of small agricultural fields enclosed by hedges, aged pollard trees, sand dunes, forests, lakes (former meanders), wet meadows and reed beds. It also contains xeric sand calcareous grasslands and lowland hay meadows. The main risks to the site are flood risks and agriculture intensification.

72. The total area of the proposed biosphere reserve is 6,700 ha. The core areas cover 665 ha and consist of Natura 2000 sites and nationally protected areas that form part of the Nature Network Netherlands (NNN), which is owned by the state and Brabants landschap. The majority of the buffer zone, which covers 2,735 ha, is included in the NNN and is managed under a management plan that combines farming and nature conservation and focuses on hedge networks. The transition area covers 3,300 ha and consists of 11 villages, roads and a mix of crops. Residential areas cover 825 ha and are home to about 40,000 inhabitants located inside and in the immediate surroundings of the perimeter.

73. The proposed area provides an obvious opportunity to explore and demonstrate collaborative approaches to sustainable development and sustainable tourism on a regional scale. The vision for the site is to become a green catalyst for sustainable development, reconciling economic, social and environmental needs – a ‘space for memories in the northern Meuse Valley’. It focuses on four development themes: water systems, urban expansion, recreation and riverine hedges. The Advisory Committee noted the high level and integration of entrepreneurs and citizens participating in energy-reducing initiatives towards becoming an energy-neutral region.

74. The Advisory Committee commended the Netherlands authorities for the quality of the proposal and recommended that the site **be approved**.

75. The Advisory Committee invited the Netherlands authorities to provide more detailed information on how the BASICS programme, tourism activity development and sustainable management of farmlands are funded, implemented and coordinated by the proposed biosphere reserve within the buffer zone and transition area.

76. **Charyn Biosphere Reserve (Republic of Kazakhstan)**. The territory of the proposed biosphere reserve is situated in the basin of the Charyn River. This unique biogeosystem is located in the central part of the Ili intermontane basin in the southeast of Kazakhstan. The reserve unites the canyon-like valley of the Charyn River with relict ash forest, adjacent areas of deserts with exotic relief, and steppes of the Central Asian type in the Ulken-Boguty Mountains. A unique geographic feature of the territory is the penetration of extreme arid

desert ecosystems into the territory of China and Mongolia.

77. The floristic diversity of the proposed Charyn Biosphere Reserve includes about 1,000 species of higher vascular plants belonging to 426 genera and 90 families. These account for 18% of the flora of Kazakhstan (totalling 5,600 species). The fauna of the proposed biosphere reserve is rich and diverse. There are four species of tailless amphibians, which account for 33% of the batrachians of Kazakhstan. Of these, two species – Danatina toad and Siberian frog – are listed in the Red Data Book of Kazakhstan (1996). A significant number of floral and faunal species are listed in the IUCN Red Data Book.
78. The total area of the proposed biosphere reserve territory amounts to 239,731 ha. The core area occupies 9,427.5 ha, the buffer zone covers 117,622.5 ha and the transition area encompasses about 112,681 ha.
79. People have long inhabited the entire Charyn river valley with its wealth of animals and plant resources. During the twentieth century the population engaged mainly in agriculture. At present, the area covered by the proposed biosphere reserve accounts for the highest proportion of tourists visiting the southeast of Kazakhstan. Effective organization of tourists helps to reduce environmental pressures on the most valuable areas. The region's potential is linked to the development of eco-recreational tourism, as well as cattle breeding and plant growing. The experience of eco-recreational tourism development in the biosphere reserve territory may be successfully replicated in other parts of Kazakhstan at the regional level. The natural conditions of the proposed Charyn Biosphere Reserve and adjacent areas are very varied, lending themselves to the development of diversified agriculture and tourism.
80. The area also contains famous natural monuments – the only one in Eurasia (the second after Canada), the relict Ash Grove covering an area of 5,000 ha and the famous Kazakhstan canyons of the Charyn and Temerlik rivers.
81. The area is managed by the Charyn State National Park administration and the Biosphere Reserve Coordination Council, created in 2017. The present Management Plan of the Charyn State Nature National Park describes the management of the core, buffer and main parts of the transition zones. Some land users also have evolved their own Management Plans in accordance with the Management Plan of the proposed reserve. The Advisory Committee recommends to develop a single integrated Management Plan.
82. The Advisory Committee asked the national authorities to clarify the protection status of the western area of the buffer zone.
83. The Advisory Committee noted with satisfaction that the UNDP/GEF project facilitated *inter alia* training and professional development for state nature reserve staff and exchange of experiences at the national and international level.
84. The Advisory Committee congratulated the Kazakhstan authorities on their well-written and high-quality proposal and recommended that Charyn **be approved** as a biosphere reserve.
85. **Zhongar Biosphere Reserve (Republic of Kazakhstan).** The proposed Zhongar biosphere reserve is located on the northern macroslope of Zhetysu Alatau ridge and incorporates the entire range of mountain ecosystems characteristic of the mountains of Tien Shan and Central Asia. The total area of the proposed reserve covers 645,548 ha. The core area occupies 142,927 ha, the buffer zone covers 312,721 ha and the transition area amounts to about 189,900 ha. The core area and buffer zone correspond to the territory of Zhongar State National Nature Park. The core area is strictly protected under the *nature reserve regime* of the national park, which encompasses the natural mountain complex of the Zhetysu Mountains.

86. The main economic sectors in the transition zone are agriculture and processing industries. Notable types of industrial production include sunflower oil, flour and natural water. Lands are mainly used for grazing and as hayfields. Small farms use lands for cattle grazing and planting cereals. Road infrastructure in the territory of the proposed biosphere reserve consists mainly of ground tracks between the cordons.
87. At the present time, the territory of the proposed biosphere reserve has acquired global importance as the location of the wild apple gene bank.
88. The proposed biosphere reserve is managed by the Zhongar State National Park administration and the Biosphere Reserve Coordination Council, created in 2017. The Coordination Council is a collegial public body created to introduce effective management policies and to promote the sustainable use of resources, alternative activities, and resource-conserving and resource-restoring technologies.
89. The Advisory Committee noted that the Centre for GIS and Remote-Sensing 'Terra' elaborated a study on the socio-economic situation and cultural impact of the biosphere reserve on the territory, within the UNDP/GEF project 'In-situ conservation of the mountain agrobiodiversity in Kazakhstan' and governmental projects on establishing a nature park in 2010 and extension of the territory of the reserve in 2015.
90. The Advisory Committee commended the Kazakhstan authorities for their effort to conserve the biodiversity and landscape of the National Park.
91. As combining the separate management plans of the National Park and other areas may not be sufficient to ensure effective coordination and management of the entire biosphere reserve, the Advisory Committee has encouraged the national authorities to prepare one inclusive management plan covering the whole area of the biosphere reserve in the near future.
92. The Advisory Committee noted with satisfaction the submission of additional information regarding measures to cope with threats and encouraged the Kazakhstan authorities to enforce these measures in an effective manner.
93. The Advisory Committee congratulated the national authorities on the well-prepared proposal and recommended that Zhongar **be approved** as a biosphere reserve.
94. **Suncheon Biosphere Reserve (Republic of Korea).** The proposed Suncheon Biosphere Reserve is situated on the southern tip of the Korean Peninsula in East Asia. It includes the two tallest mountains in Suncheon City, Mt. Mohusan (919 m) and Mt. Jogyesan (887 m), which together form a small mountain range with diverse ridges and hills that stretch towards the coastline in the southeast. In addition, Mt. Jogyesan is home to traditional Buddhist temples renowned in the Republic of Korea that have been designated as a National Scenic Site and a Provincial Park.
95. The eco-axis of the proposed site is divided into two areas – terrestrial ecosystems which centre on Mt. Jogyesan and coastal tidal flat wetland ecosystems in Suncheonman Bay. River ecosystems function as corridors between the terrestrial and coastal ecosystems, forming healthy ecological networks.
96. The proposed Suncheon biosphere reserve covers an area of 93,840 ha (terrestrial: 91,040 ha, marine: 2,800 ha), consisting of core areas (9,368 ha), buffer zones (20,985 ha) and a transition area (63,487 ha).
97. There are two core areas – a wetland ecosystem composed of Suncheonman Bay and Dongcheon Estuary (both designated Ramsar Wetlands), and a mountain ecosystem consisting of Jogyesan Provincial Park. Two buffer zones surround the core areas and

include two reservoirs close to Jogyesan Provincial Park. The transition area is composed mainly of agricultural and residential areas, and private forests.

98. Each ecosystem of the proposed site brims with rich biological and landscape resources including various crustaceans and fish and shellfish, medicinal herbs, temple landscapes, communities of Reed (*Phragmites communis*) and East Asian Seepweed (*Suaeda japonica*), and aquatic ecosystem-based landscape resources such as the Sangsaho Lake and Juamho Lake reservoirs.
99. The proposed site is a biodiversity hotspot with diverse habitats and species adapted to the unique natural environment of Suncheon including the ecosystems of the southern coast, inland wetlands and mountains.
100. The buffer zones and transition area are home to rural, fishing and mountain-dwelling villagers who utilize ecosystem services to maintain their economic activities, such as cultivating rice, medicinal herbs and special products including plums and persimmons, and collecting forestry products. They are supported and guided by the Suncheon City Government and the Jeollanamdo Provincial Government.
101. The entire administrative area of Suncheon City is proposed as a biosphere reserve, with a single local government responsible for management of the proposed site. Suncheon City has a population of 281,389 with 104,507 households, and a population density of about 304.6/km².
102. The Advisory Committee commended the authorities for their proactive approach in demonstrating conservation and sustainable development. The Committee noted with satisfaction the involvement of the local government in the entire process. It further commended the national authorities for their successful efforts to restore the Suncheonman Bay tidal flats within the core areas and buffer zones.
103. The Advisory Committee congratulated the national authorities for the high-quality of the nomination dossier and recommended that Suncheon **be approved** as a biosphere reserve.
104. **Mountainous Urals (Russian Federation).** The Advisory Committee welcomed this proposal from the Russian Federation for the Mountainous Urals Biosphere Reserve. The proposed area covers 173,578 ha and is located in the Southern Urals at the boundary of Europe and Asia, in the West Eurasian Taiga. The dominant ecosystems are mixed coniferous broad-leaved forests which occupy one-third of the proposed area, secondary mixed coniferous small-leaved forests and mountain taiga spruce-fir forests.
105. The central part of the proposed site covers the northern section of middle-altitude mountain ridges of the Southern Urals. Mountain ranges with summits of 800 m to 1,178 m and mountain valleys are interconnected via a variety of 'boulder streams'. A sub- and low-mountain steep-sloping relief with summits of 500-830 m characterize the western part of the site. The eastern part consists of quite steep ridges and steep, sloping mountain ridge elevations (with summits up to 500-900 m), which alternate frequently with tectonic depressions covered with lakes and deeply incised swampy valleys. There is a well-developed river network of which the largest lake is Lake Turgoyak. There are two reservoirs on the proposed territory with high water storage capacity. About 12,000 people inhabit the site.
106. The main objective of the site is to transition from extractive industries and mining to a sustainable development model based on sustainable biological natural resource management, tourism and secondary use of mining fields. This includes rehabilitation of damaged landscapes after mining field depletion, as well as conservation of the mountain Taiga natural complexes of the Southern Urals, while ensuring the welfare of the population.

107. The Advisory Committee commended the Russian authorities for the high-quality of the nomination and recommended that the designation of the site **be approved**. The Advisory Committee encouraged the authorities to create a biosphere reserve Coordination Council as indicated in the nomination form, where various stakeholders, including communities, businesses and NGOs, will be equally represented. The Advisory Committee requested an update on the creation of the stakeholder-based biosphere reserve management structure, as well as the progress of the overall biosphere reserve management plan by 30 September 2018.

New nominations recommended for approval pending the submission of specific information

108. **Betung Kerihun Danau Sentarum Kapuas Hulu (Indonesia)**. The proposed Betung Kerihun Danau Sentarum Kapuas Hulu Biosphere Reserve is located at the eastern tip of Kalimantan Barat province. The northern edge of the site borders Sarawak (East Malaysia), and the west and south edges border the Sintang and Melawi Regencies, respectively; the eastern edge of the site borders the Provinces of East Kalimantan and Central Kalimantan. The total area of the proposed biosphere reserve is 3,115,200.50 ha, comprising a core area of 944,090.96 ha, a buffer zone of 919,993.36 ha and a transition area of 1,251,116.18 ha.
109. The proposed reserve incorporates the entire territory of the Kapuas Hulu Regency area. The core area consists of two national parks, namely Betung Kerihun National Park and Danau Sentarum National Park, and functions as a habitat for several endemic flora and fauna species. The buffer zone and transition area have a potential to be used as a productive area including agriculture, plantation, horticulture, fishery, animal husbandry, as well as other productive activities such as tourism, industry, creative industries and so on.
110. The buffer zone includes protected and production forests, agricultural areas and human settlements. The transition area consists of settlements, agricultural areas (rice fields, dry fields, agroforestry, plantations, etc.). This area is a focus for sustainable development and a centre for productive activities.
111. Currently, forest areas in Kapuas Hulu are under threat of deforestation due to fire, logging and mining activities. Local stakeholders (the local community and policy-makers) are concerned about the impact of loss of forest cover on watershed hydrological functions, particularly water level and water quality.
112. The Advisory Committee noticed that non-conservation areas in the buffer zone and transition area contain gold mineral deposits that have recently been mined by local people. Other mineral resources with mining potential also exist but have not been exploited. The Committee has therefore asked the Indonesian authorities to provide documentation demonstrating that these activities will have no adverse impacts on the environmental conditions and biodiversity of the proposed biosphere reserve.
113. The Advisory Committee also highlighted an unclear section in the file which states that 'core area development of the proposed biosphere reserve adopt several concepts'. The Advisory Committee asked the national authorities to clarify the submitted information and to provide relevant legal documents guaranteeing that only activities compatible with the conservation function of the biosphere reserve are implemented in the core area.
114. The Advisory Committee welcomed the elaboration of the Integrated Management Plan 2018-2023 by the biosphere reserve. It also encouraged the Indonesian authorities to develop specific policies and actions to promote sustainable development in the proposed reserve.

115. The Committee congratulated the Indonesian authorities for the well-written and high-quality nomination dossier and recommended that Betung Kerihun Danau Sentarum Kapuas Hulu **be approved pending** submission of the following information by the authorities by 30 June 2018:
- documentation demonstrating that mining activities do not have any adverse impacts on the proposed biosphere reserve,
 - legal document(s) and measures guaranteeing that only activities compatible with the conservation function of the biosphere reserve are undertaken in the core area.
116. **Monte Peglia (Italy).** The Advisory Committee welcomed this proposal from Italy. The Monte Peglia site is located in the centre of Italy and is surrounded by the confluences of two river systems, the Tiber on the east and the Paglia on the west. To the north, the hills stretch beyond the area of the Municipality of San Venanzo and join up with the plain of Lake Trasimeno.
117. The site consists of an extensive forested area and constitutes an important natural pool of fauna, flora and fungi species that have emerged in the area of this ancient extinct volcano. These natural resources allow for activities compatible with sustainable development that aim to preserve and enhance the future social-economic evolution of the area. This approach is based on an underlying vision wherein everything forms part of a single unit: *unicum*. This is illustrated by Orvieto, the capital of a 'slow lifestyle' (*cittàslow*) together with Parrano and the thriving village of Ficulle. The permanent resident population amounts to around 25,660 inhabitants. The proposed biosphere reserve covers 42,342 ha and consists of three core areas, surrounded by a buffer zone forming two clusters embedded in a transition area. The core areas are protected as state-owned forests.
118. Coordination of the proposed reserve will be ensured by a diversity of institutions including the regional authority and the San Venanzo, Parrano and Ficulle municipalities, as well as the 'Association Monte Peglia Project per UNESCO'. The Advisory Committee noted that the Association Monte Peglia was established to implement a participatory approach during the nomination process and future management of the biosphere reserve, implemented in accordance with a Memorandum of Understanding with the Forest Agency.
119. The future challenges of the biosphere reserve relate to the reconstruction of farmhouses and the introduction of sustainable tourism and the socio-economic development of the area.
120. The Advisory Committee recommended that the site **be approved pending** receipt of the legal status of Sistema Territoriale di Interesse Naturalistico Ambientale (STINA) areas, as well as a detailed Management Plan for the proposed biosphere reserve by 30 June 2018.
121. **Valle Camonica – Alto Sebino (Italy).** The Advisory Committee welcomed this proposal from Italy. The proposed site is located in the eastern part of Lombardy and covers a total surface area of 135,565 ha. The area is characterized by typical alpine and pre-alpine valleys, ranging from valley bottom landscapes to the highest peaks of Europe and the Adamello glacier, and ends in the Iseo Lake, one of the largest basins of Italy. The core area consists of six separate areas which have been integrated into the Natura 2000 European Ecological Network. The majority of the core areas have been designated natural protected areas under regional law.
122. The main habitats are inland water bodies, rivers and lakes, woods and forests, glaciers, meadows and prairies. The current resident population amounts to 121,022 inhabitants. In addition to the wild flora and fauna, many species are related to the agricultural traditions of the valley. The Camonica Valley in particular has longstanding traditions linked to agriculture and farming. The main objective of the proposed site is to implement sustainable

development policies for the conservation of the mountain areas, their ecosystems and biodiversity, and to ensure the welfare of the local populations by preserving the landscape and traditional agricultural/farming activities.

123. The 'Comitato Permanente per la gestione della Riserva MAB di Valle Camonica – Alto Sebino' (or Permanent Committee) will be responsible of overall coordination of the biosphere reserve. The Committee will consist of representatives from the different management authorities, the municipalities and the main stakeholders representing natural and social issues in the area.
124. The Advisory Committee acknowledged the detailed information on the participatory approach employed during preparation of nomination file. It also noted that an action and cooperation plan has been prepared covering a 10-year period.
125. The Advisory Committee noted with satisfaction that public awareness activities were undertaken during the nomination process. It also noted that conservation of biodiversity in the biosphere reserve is linked to traditional local knowledge and thus provides an opportunity to foster the local economy.
126. The Advisory Committee commended the authorities on their well-prepared nomination file and recommended that the site **be approved** pending the submission of the following information by the authority no later than 30 June 2018:
- rationale on the northern and eastern parts of the biosphere reserve not surrounded by the transition area;
127. The Advisory Committee further recommended that the authorities analyse the impact of tourism and undertake socio-economic studies in the proposed biosphere reserve, and involve energy companies in biosphere reserve activities.
128. **Tsimanampesotse – Nosy Ve Androka (Madagascar)**. The Advisory Committee welcomed this new proposal submitted by the Madagascar authorities for Tsimanampesotse – Nosy Ve Androka, which includes two Ramsar sites located in the south-west of the country.
129. The area is a mosaic of terrestrial, coastal and marine ecosystems and is considered a biodiversity hotspot because it includes a range of sensitive, fragile and priority ecosystems, such as coral reefs, beaches, dunes, sea marshes, mangroves, gallery forest, littoral forest, xerophytic thickets and relicts of dry deciduous forest. The proposed biosphere reserve covers a total area of 1,777,019 ha comprising 1,475,069 ha of terrestrial area and 30,950 ha of marine area (core area: 394,452 ha; buffer zone: 221,142 ha; transition area: 1,161,425 ha).
130. The terrestrial part of the proposed site has only a small number of floristic and faunistic species, but a high rate of endemism reaching up to 90%. The flora include one critically endangered species (*Aloe suzannae*), and five endangered species (*Acacia menabeensis*, *Ehretia decaryi*, *Erythrophysa aesculina*, *Euphorbia decorsei* and *Lemuropisum edule*). The marine protected area is home to 13 mammal species including five that are endangered (*Mirza coquereli*, *Lepilemur leucopus*, *Lemur catta*, *Propithecus verreauxii* and *Galidictis grandidieri*) and four vulnerable species (*Eidolon dupreanum*, *Lepilemur petteri*, *Cryptoprocta ferox* and *Physeter macrocephalus*).
131. The Advisory Committee took note of the proposed core area, which consists of the national parks of Tsimanampesotse and Nosy Ve-Androka, and the Amoron'i Onilahy New Protected Area. The latter is an IUCN category V protected area located in the northern part of the site. This is managed through a specific spatial zonation scheme that establishes areas known as 'noyaux durs' (conservation), 'zone tampon' (activities including economic activities compatible with conservation) and 'zone de protection' (settlements, access rights

and production areas). These zones can be compared to the core area (conservation), buffer zone (economic activities compatible with conservation) and transition area (cooperation area) of biosphere reserves. The same designations are applied to the two national parks.

132. The population in the transition area amounts to just over 100,000 people. The main economic activities are agriculture, livestock farming and fishing. Other activities such as trade, transport, catering and hospitality are conducted at the level of large agglomerations. The Advisory Committee acknowledged the transfer of management rights on natural resources on public lands in the buffer zone to the local communities in accordance with national laws.
133. The Advisory Committee also took note of areas that have been granted mining or oil permits, some of which are located in the buffer zones of the proposed reserve. The Malagasy authorities indicated that only one of the mining contractors in the buffer zones has provided an environmental impact assessment (EIA).
134. The Advisory Committee welcomed this nomination proposal and recommended that the site **be approved pending** receipt and approval of the following information by 30 June 2018, to be considered by the next MAB Council:
- Revised zonation compatible with the land use management of the two national parks and the IUCN category V Protected Area, as described in their decree of creation, which is in line with the biosphere reserve land use and activities requirements for the core area, buffer zone and transition area
 - EIA reports for all mining contractors operating in buffer zones or an explanation as to why these EIA are not yet available.
135. **Lower Prut (Moldova).** The Advisory Committee welcomed this first proposal from Moldova for a biosphere reserve located in the south of the country encompassing the Prut River and floodplain lakes. The surface area of the proposed reserve covers 14,771 ha and is home to 70,000 inhabitants. Two-thirds of the surface area of the site is occupied by Lake Beleu. A Ramsar wetland area stretches from the left side of the Prut River, covering around 8,500 ha of water, meadow, forest and wetland ecosystems. The aquatic vegetation includes 14 species of vascular plants.
136. The main economic activity in the proposed reserve is agriculture, which provides 90% of the local population's income. The sustainable development of the reserve will include the development of organic farming as well as the production of medicinal plants. Around 7,000 ha of wetlands in the lower Prut region will be restored creating new habitats for flora and fauna. Regarding education, the proposed area will serve as a site for open-air lessons for local schools and the university. A museum will also be created. Regarding energy, 6,000 ha could be used for the cultivation of trees of native species to heat houses. Further development of the drinking water supply system will involve drilling new boreholes, while respecting the regime of protected zones near drinking water sources. In terms of ecological projects, the restoration of habitats in the lower part of the River Prut through the recovery of reed belts is under consideration to facilitate improvement in water quality.
137. The Advisory Committee noticed the presence of an oil exploitation field adjacent to the proposed biosphere reserve. While the nomination form stated that the level of oil products in the water is below officially allowed levels, and that the authorities responsible for management of the field will provide funding (e.g. for education and cultural activities), it is unclear whether and how the authorities responsible for the field will be involved in the management or monitoring of the biosphere reserve.
138. The Advisory Committee recommended that the site **be approved pending** submission of the following information by the authorities by 30 June 2018:
- a comprehensive draft Management Plan for the biosphere reserve including details of how

the authorities responsible for management of the oil exploitation field will be involved in the management of the biosphere reserve.

139. **The Mura River (Slovenia).** The Advisory Committee welcomed this proposal from Slovenia. The proposed biosphere reserve is located in the eastern part of Slovenia and covers the area of the Mura River (28,652 ha). The proposed site includes the largest preserved complex of floodplains in Slovenia, where the interweaving of natural factors and human presence has created an exceptional cultural riverine landscape.
140. Numerous historical and cultural landscapes are found along the Mura River. Thousands of years of human presence have contributed to a great number of native domestic animal breeds and cultivated plant varieties, which enrich the biodiversity in the proposed reserve.
141. The human population amounts to 37,800 inhabitants. Their main sources of income are agriculture, industry, forestry and tourism. Tourism is one of the priority economic activities for the majority of regional and local development programmes. Projects such as certification and branding of tourism services and agricultural products originating from the biosphere reserve will be considered. One major objective of the proposed biosphere reserve is the revival and modernization of floodplain management.
142. The Advisory Committee applauded the detailed submission and appreciated the many initiatives already taking place in the area of the proposed biosphere reserve. While many of the buffer zones are either official protected areas or serve as de facto buffer zones (as agreements have been reached with land owners about restrictions on land use), in some cases there appears to be confusion about the distinction between buffer zones and transition areas.
143. The Advisory Committee noted that industrial development is taking place in or near the proposed biosphere reserve, and urges the responsible authorities to engage with the private sector actors involved to explore ways of reducing the negative impacts from industrial developments.
144. After examination of the nomination form, the Advisory Committee recommended that the site **be approved pending** submission of the following information by the authorities by 30 June 2018:
- a comprehensive draft Management Plan for the biosphere reserve including details of how actors in the industrial sector may be involved in the biosphere reserve with a view to reducing negative impacts;
 - provide more detailed information on the participatory management structure for the overall governance of the proposed area;
 - further clarification of the distinction between buffer zones and transition areas, and an explanation of the lack of buffering around some parts of core areas.
145. **Marico (South Africa).** The Advisory Committee welcomed the nomination of this unique freshwater ecosystem by the national authorities. The proposed reserve consists of the Molemane, Molopo and Marico river systems.
146. The proposed biosphere reserve covers a total area of 447,268.49 ha (core area of 21,499 ha, buffer zone of 64,350 ha and transition area of 361,419 ha) and lies in two administrative districts. It has a permanent population of 34,000 and attracts a large number of tourists. The main economic activities are subsistence agriculture, livestock production, game ranching, minor irrigation and tourism (fishing, scuba diving).
147. The ecosystem is characterized by wetlands and a dolomitic system, which constitute a valuable part of South Africa's natural heritage and form the main watershed of the Limpopo river system. The savannah and grassland biomes support vulnerable plant species such as *Searsia maricoana* and *Searsia ciliate*. Among the endemic fauna are 73 species of

mammal such as the African elephant *Loxodonta africana*, black rhinoceros *Diceros bicornis minor* and lion *Panthera leo*, 31 species of fish including *Enteromius motebensis* (Marico Barb) and *Chetia flaventris* (Canary kurper), 77 aquatic macro-invertebrates including nine species of dung beetles, 29 species of butterfly, 46 species of reptile including the black mamba and Nile crocodile, 315 species of bird including the near-threatened Melodious Lark *Mirafra cheniana* and Cape Weaver *Ploceus capensis*, and 15 species of amphibian.

148. The Advisory Committee noted the challenges of invasive fish species and seepage from mines through dolomite ground water, the practice of conservation-friendly agriculture and the presence of 920 residents in the core area. The Advisory Committee encouraged the authorities to address these issues through an integrated Management Plan and to minimize resource-use conflicts related to mineral deposits in the transition area.
149. The Advisory Committee commended the authorities for the participatory approach employed in the development of the biosphere reserve application and the proposed management structure in view of the high proportion of private ownership.
150. The Advisory Committee recommended that the site **be approved pending** receipt of the following information by 30 June 2018:
- either a satisfactory explanation of the activities involved in conservation-friendly agriculture and how they are compatible with the conservation function of the core area, or a revision of the zonation of the core areas with conservation-friendly agriculture added to the buffer zone,
 - information on how tourism impacts are to be addressed in the core area.
151. **Ponga (Spain).** The Advisory Committee welcomed this new proposal submitted by the Spanish authorities. The proposed biosphere reserve is located in southern Asturias in the eastern area of the Cantabrian Mountains, and encompasses the administrative territory corresponding to the municipality of Ponga. The proposed biosphere reserve is located between the Spanish biosphere reserves of Redes and Pico de Europa. The reserve covers an area of 20,506 ha with a core area of 10,827 ha, a buffer zone of 9,173 ha and a transition area of 506 ha.
152. The proposed biosphere reserve is a remote area of sparsely populated mountains and forests that coincides with the Ponga municipality and the Ponga Natural Park, and is located on the northern slopes of the Cordillera Cantabrica in the Asturias. The chain of mountains is known as the 'Cordal de Ponga'. The area is renowned for its steep terrain with altitudes ranging from 213 m to 2,142 masl. Deep green valleys climb to vertiginous peaks, passing through extensive beech forests. The majority of the vegetation consists of mixed deciduous woodlands, composed of species such as sycamore, alder, ash, chestnut, oak and hazel.
153. The region contains many animal species, a large number of which are protected. Among these are the endangered brown bear (*Ursus arctos arctos*) and the western capercaillie (*Tetrao urogallus*), both of which are emblematic of the Cantabrian Mountain range. Other faunal species include the grey wolf (*Canis lupus*), golden eagle (*Aquila chrysaetos*), Egyptian vulture (*Neophron percnopterus*) and European tree frog (*Hyla arborea*).
154. The proposed biosphere reserve has only 655 inhabitants distributed over 20 centres, including the main village, San Juan de Beleño. An ageing population characterizes the demography. The inhabitants' way of life centres on the use of natural resources, notably livestock and rural tourism.
155. The area is home to a rich cultural heritage. Several archaeological remains provide evidence of Bronze Age habitation. During the period of Roman colonization, Ponga

belonged to the territory of Cantabria. The first documented reference to Ponga is found in the time of Alfonso IX of León.

156. Traditional constructions in the area consist largely of native materials such as stone, wood and tile that retain their original uses. The unique granaries of Beyusco are a particular highlight. The area also hosts a unique traditional folklore, language and cuisine, which have been passed down from generation to generation and remain alive today.
157. The Regional Hunting Reserve of Ponga which occupies almost the entire proposed area is managed through a Technical Hunting Plan that is prepared annually by the technical services of the Department of the Environment.
158. The Advisory Committee recommended the establishment of integrated management with the Redes and Pico de Europa biosphere reserves.
159. Although the proposal is well prepared, the Advisory Committee recommended that the site **be approved pending** receipt of information by 30 June 2018 demonstrating that hunting activities have no impact on conservation of the core area.
160. **Gombe Masito Ugalla (Tanzania)** The Advisory Committee congratulated the authorities of Tanzania on the submission of this nomination for one of the key tourism areas in Western Tanzania and an iconic site for chimpanzee research. The area includes the Gombe National Park, which forms the core area, village forest land reserves in Mtanga, Mwamgongo, Mgaraganza, Bubango and Chankele, and local authority forest reserves in Masito, Tongwe East and Tongwe West, which function as buffer zones. The proposed site has a total area of 1,658,466 ha including part of Lake Tanganyika, with a core area of 5,640 ha, a buffer zone of 889,026 ha and a transition zone of 763,800 ha.
161. The total population of the proposed biosphere reserve amounts to about 455,000. The area is a source of medicinal plants such as *Aspillia pluriseta* and *Annona senegalensis*. It also provides fuel wood, food, fibre and construction materials that support the livelihoods of over 311,000 people. The main economic activities are fishing, agriculture, livestock production and tourism.
162. Faunal species present in the area include African elephants, ornate frogs and eight primate species including an endangered subspecies of blue monkey (*Cercopithecus mitis doggetti*), a vulnerable subspecies of red colobus monkeys (*Procolobus badius tephrosceles*) and a viable population of blue-red-tailed hybrids (guenons). Plants species include a species discovered in and named for Gombe (*Pleiotaxis gombensis*). The natural vegetation of Gombe also protects important water catchments, reducing silting into the lake.
163. The aquatic ecosystem is part of Lake Tanganyika, the longest and deepest lake in Africa and the world's second largest and second oldest lake, having existed for about 12 million years. Biodiversity includes over 300 species of fish of which 250 are cichlids, 250 species of birds, reptiles such as the water cobra and the Tanganyika water snake.
164. The Advisory Committee commended the authorities for their numerous initiatives to address the logistical functions of the reserve through a strong network of research institutions and donor partners, and for the implementation of the existing plan for Gombe National Park. The Advisory Committee noted with concern the absence of a clear management framework and coordinating structure for the entire proposed biosphere reserve. They also noted the presence of refugee settlements in the Mishamo area.
165. The Advisory Committee recommended that the site **be approved pending** receipt of the following information by 30 June 2018:
- a proposed management structure for the area,

- descriptions of refugee camps and conflicts between refugees, the local environment and local communities.
166. The Advisory Committee encouraged the authorities to ensure proper and permanent representation of all stakeholders in management decisions and to integrate conflict-management measures into the proposed Management Plan.
 167. **Wadi Wurayah (United Arab Emirates).** The Advisory Committee welcomed the nomination file for the Wadi Wurayah Biosphere Reserve, which was received digitally. The original paper file is however compulsory as the Emirati authorities were informed by the MAB Secretariat in September 2017.
 168. Wadi Wurayah is situated in the Emirate of Fujairah and consists of a water catchment area in an arid climate, designated under the Ramsar Convention, and part of the Haiar mountain range. The site hosts a rich fauna and flora endemic to the Arabian Peninsula. It is one of the last Emirati places to feature traditional farming practices and includes a monument of cultural and historical importance, the Al Bidiyah Mosque, the oldest extant mosque in the Emirates, which dates back to the fifteenth century.
 169. The Advisory Committee acknowledges the substantial efforts of the proposed reserve in training, research and public awareness-raising, which has targeted rangers, schools and youth associations, and involves the Fujairah municipality, the private sector and local communities, as well as international conservation tools such as the SMART (spatial Monitoring and Reporting Tool) programme.
 170. While promoting the protection of native habitats and their biodiversity, the proposed Biosphere Reserve further targets improvements in communication and the stronger involvement of stakeholders in the decision-making process.
 171. The proposed core area (12,000 ha) and buffer zone (9,950 ha) belong to Wadi Wurayah National Park and the transition zone includes the town of Al Bidiyah. The buffer zone hosts parts of key infrastructure related to water harvesting as well as three dams established before the National Park, which are used mainly to recharge the underground aquifer and reduce flood risks in nearby settlements. The transition zone (5,779 ha) does not fully surround the buffer zone because of the border with the Emirate of Sharjah, where an express highway along the borders of both Emirates is under construction.
 172. The Wadi Wurayah site will develop a Management Plan based on the master plan of the Emirate of Fujairah, applicable by the end of 2018. Under this plan, ecotourism should be developed, declining traditional practices revitalized, and research and outreach further strengthened, notably with religious and tribal leaders. Further emphasis should be placed on the protection of wildlife corridors, the rehabilitation of affected areas and waste management. A 'majlis' (community hall) should be established to enhance collaboration within the surrounding community, along with a local advisory board coordinated by the park director.
 173. The social structure of Wadi Wurayah is described as relying on male leadership and decision-making. While the nomination file reports changes in women's access to better education and employment, and more opportunities for women in community organization and decision-making, there is a lack of tangible information in this regard. The future Management Plan for Wadi Wurayah foresees a series of initiatives targeting adequate representation of women in all consultative bodies, as well as in the park's planning and management processes.
 174. In the endorsement section of the submission file, signatures are missing for the representatives of local communities in the municipalities of Fujairah and Bidda Fujairah, which jointly manage the transition zone.

175. The Advisory Committee recommends the nomination of Wadi Wurayah as a biosphere reserve **be approved pending** receipt of the following by 30 June 2018:
- the missing endorsement signatures for the representatives of local communities in the municipalities of Fujairah and Bidha Fujairah,
 - indicators regarding women's involvement in the future Management Plan for the biosphere reserve, in order to comply with UNESCO's priority on gender equality,
 - further information regarding planned sustainable development projects in economic sectors, in addition to ecotourism,
 - clarification of actions (monitoring, policies, etc.) to be taken to address threats to migratory birds posed by high-voltage power lines, and the number of goat herds in the core zone.
176. The Advisory Committee also encourages the Wadi Wurayah site to extend the transition zone to other surrounding municipalities in the near future, and to explore the inclusion of marine areas.
177. Finally, the United Arab Emirates are invited to establish a National Committee for MAB in accordance with the increase in the number of biosphere reserves in the country.

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

178. **Thuringian Forest Biosphere Reserve – extension and renaming, former Vessertal-Thuringian Biosphere Reserve (Germany).** This extension and renaming of the Vessertal-Thuringian Forest Biosphere Reserve is in line with the MAB Council 2011 recommendation to enlarge the area to meet the criteria of the statutory framework.
179. Following an intensive participatory process which involved a large number of stakeholders, including external support, the transition area has been extended from 14,570 ha to 24,697 ha, and is accompanied by an increase in the size of the buffer zone. With the proposed extension the site now covers 34,000 ha encompassing a diversity of ecosystems, fauna and flora, and providing support for local communities with a view to becoming a model region for sustainable development. Increased cooperation with sectors such as tourism and mobility were enhanced during the extension process. The tourism and forestry sector dominate the area. Over the next few years, the main areas of focus of the biosphere reserve will be forest conversion, climate change, and demographic change, cooperation with the World Network of Biosphere Reserves, sustainable mobility and sustainable development. The total population now numbers 99,522 spread over 22 municipalities.
180. The new name, 'Thuringian Forest', is the result of consultation processes with strong support from the municipalities. It takes into account the doubling of the area, strengthens the identification of municipalities and citizens with the biosphere reserve, and will be important for tourism.
181. The Advisory Committee noted that some of the core areas in the proposed zonation lack buffering. However, the authorities explained the buffering functions are provided by the geomorphologic characteristics of the terrain.
182. The Advisory Committee commended the German authorities for the high quality of the nomination and participatory process and recommended that the extension and name change of the site **be approved**. The Advisory Committee encouraged the authorities to create a permanent consultation mechanism through a change in status of the dialogue Committee of municipal representatives used in the discussion process for the expansion of the biosphere reserve.

183. **Ticino, Val Grande Verbano Biosphere Reserve – extension and renaming of the former Valle del Ticino Biosphere Reserve (Italy).** The Advisory Committee welcomed this proposal from Italy which consists of the extension and renaming of the ‘Valle del Ticino’ Biosphere Reserve. The reserve was recognized in 2002 and submitted its periodic review in 2014. Wooded and semi-natural areas covering 154,887 ha of the extended new biosphere reserve now constitute 46.6% of the entire site compared to 36,497 ha (24.3%) prior to the extension. The extension also increases the surface of wetlands and water bodies (0.16% and 6.6%, respectively) with the presence of large sub-alpine Insubrian lakes including Lake Maggiore and Lake Varese.
184. The site also includes World Heritage sites (the Sacri Monti and Pile dwelling areas) and UNESCO Global Geoparks (the Sesia Val Grande Geopark). The site was extended to include the Novarese Hills as well as the Natural Park of Monte Fenera and the Baragge Natural Reserve. Several protected areas will be added to the territory of the Ticino catchment basin, highlighting the importance of the Ticino corridor and including new key ecosystems in Piedmont territory and Lombardy, extending to the valley of Valcuvia and the Val Veddasca, the northernmost part of Varesotto. The total resident population amounts to approximately 1 million in 217 municipalities covering a surface area of 262,626 ha.
185. The Advisory Committee noted that some of the core areas in the proposed zonation scheme are not entirely protected by a buffer zone and converge, in part, with transition areas. The authorities explained that the transition areas directly adjacent to the core areas are under regulatory constraints provided for in the Territorial Management Plans and can therefore maintain their natural values and characteristics as well as buffering functions.
186. The Advisory Committee commended the Italian authorities for the high quality of the nomination and recommended that the extension and name change of the site **be approved**. The Advisory Committee encouraged the authorities to use the biosphere reserve as a tool to solve increasing problems with urban sprawl, excessive concentration of visitors and water pollution.

Extension, re-zoning or renaming of existing biosphere reserves recommended for approval pending the submission of specific information

187. **Land of the Leopard Biosphere Reserve – renaming of former Kedrovaya Pad Biosphere Reserve (Russian Federation).** The Advisory Committee welcomed this proposal from the Russian Federation which consists of the renaming of Kedrovaya Pad, designated in 2004. The ‘Land of the Leopard’ stretches from the coast of Amur Bay near the Russia-China border to the southern borders of Poltavsky Refuge in the Ussuri taiga, to the state border of the Russian Federation with the streambed of River Tumannaya. Forests cover 87% of the total area. The main objective of the site is to protect and restore the core area and buffer zone from the impacts of human activities with the participation of local communities. The main scientific research in the reserve is long-term monitoring and study of populations of Amur leopard (*Panthera pardus orientalis*) and Amur tiger (*Panthera tigris altaica*), with a view to preserving and restoring their populations. The site is also home to species of global conservation significance, endangered environments and 44 rare and endangered species of vertebrate animals, as well as 150 species of plants.
188. One of the key objectives of the site is tourism development through the involvement of local community members, with the aim of creating new jobs and offering training in environmentally and economically sound activities. An ecological education programme is available for local and regional schools in association with the Centre for Ecological Education. A number of cooperation, coordination and social partnership agreements have been made for the protection, breeding, rehabilitation and sustainable use of wildlife resources, ecosystems and objects, with the aim of creating conditions for harmonious co-existence between people and nature. A strategy for development (2017-2022) was also

developed with the aim of achieving the principal functions of the biosphere reserve. A Coordinating Council will consist of representatives of various governmental and private organizations, various economic sectors and population groups, whose lives and activities are directly linked to this unique region.

189. The Advisory Committee recommended that the site **be approved pending** receipt of the following information by 30 June 2018:
- Explanation as to why there is no buffer zone adjacent to the southern core area or a rationale for the lack of buffering.

New nominations recommended for deferral

190. **Chocó Andino de Pichincha (Ecuador).** The Advisory Committee welcomed this new proposal submitted by the Ecuadoran authorities. The proposed biosphere reserve is located in northwestern Ecuador in the Pichincha province, northwest of the capital city of Quito. The reserve covers an area of 286,805.53 ha with a core area of 73,897.16 ha, a buffer zone of 94,039.80 ha and a transition area of 118,868.57 ha.
191. The Chocó Andino de Pichincha covers a wide altitudinal range between 360 m and 4,480 m above sea level. The region encompasses the humid moist forest of the Chocó-Darien, which extends from Panama to the Ecuadorian West and the Northern Andean Mountain Forests. Natural fragmentation of the western moist forests has resulted in the rapid evolution of new endemic species. Around 10,000 species of plants have been reported of which about 2,500 are endemic.
192. The region is considered a biodiversity hotspot hosting some 270 species of mammals, 210 species of reptiles, 200 species of birds and 130 species of amphibians. These include the spectacled bear (*Tremarctos ornatus*), Ecuadorian mantled howler (*Alouatta palliata aequatorialis*), pacarana (*Dinomys branickii*) and olinguito (*Bassaricyon neblina*), as well as endemic species such as the Choco toucan (*Ramphastos brevis*), Pichincha rocket frog (*Hyloxalus toachi*) and speckle-faced parrot (*Pionus tumultuosus*).
193. The proposed area has a population of approximately 880,000 inhabitants of which 157,958 live in the core area, 347,879 in the buffer zone and 374,856 in the transition area. The main economic activities are retail trade and industrial manufacturing. The population also engages in agriculture with a focus on planting fruit and vegetables, as well as the cultivation of sugar cane in Pacto and Nanegal, fish farming including the breeding of trout and tilapia, and livestock rearing.
194. Numerous archaeological sites are present in the area linked to the Yumbo culture, which flourished on the rich, volcanic mountainsides of the Pichincha Volcano. The Yumbo used their skills as farmers and merchants to become indispensable to neighbouring tribes, but like many South American tribes, fell victim to diseases such as smallpox, resulting in their decimation in the first two decades following European colonization. Nevertheless, the culture survived until the eruption of the Pichincha Volcano in 1660, which left a thick layer of ash across Tulipe and the surrounding area and resulted in the disappearance of the Yumbo people.
195. Once the biosphere reserve is approved, a management Committee will be established. A budget plan for the biosphere reserve is missing but projects supported by the municipalities in the biosphere reserve are mentioned.
196. The Advisory Committee welcomed this nomination proposal and recommended that the site **be deferred**. The Committee encourages a resubmission by Ecuador that includes a clear revision of the zonation, mainly with reference to the 18% (or 158,000 people) living in the core area. Clarification of the economic activities taking place in the core area is

requested as well.