

BIOSPHERE RESERVE DIVISION

1. Background: Biosphere Reserves are areas of terrestrial and coastal / marine ecosystems or a combination thereof, which are internationally recognized within the framework of UNESCO's flagship programme on Man and Biosphere (MAB) and are recognized in accordance with the statutory framework formulated MAB programme of UNESCO. The idea of designation of Biosphere Reserves was initiated by UNESCO in 1973-74 under its Man and the Biosphere (MAB) Programme. The MAB launched in 1971 by UNESCO proposes an interdisciplinary research agenda and capacity building, aiming to improve the relationship of people with their environment globally. The Biosphere Reserves thus are meant to represent characteristic ecosystems in different biogeographic regions and consider human communities as their integral component. Broadly, the objectives of designation of a Biosphere Reserve include: i) ensuring in-situ conservation (at all levels of biodiversity ranging from genes to ecosystems) in totality as part of wider ecosystem; ii) widening the understanding (through research and monitoring) of components of ecosystems; iii) achieving integrated development (improved quality of life for indigenous communities living in and around) of the area. The Biosphere Reserves are, therefore, sites for experimenting with and learning about Sustainable Development.

1.2 Biosphere Reserves are nominated by National Governments and are required to meet a minimal set of criteria for designation as defined under Article 4 of the statutory framework of the MAB Program of UNESCO. The designation as a Biosphere Reserve is vested with the International Co-ordinating Council of the UNESCO MAB Programme, at the request of the Member State concerned. Member States can submit sites for designation of a Biosphere Reserve through the designation process determined by the Intergovernmental MAB Programme. There are at present 738 Biosphere Reserves in 134 countries, including 22 transboundary sites that belong to the World Network of Biosphere Reserves. The Biosphere Reserve Division of the Ministry of Environment, Forest and Climate Change implements a Centrally Sponsored Scheme (CSS) namely Conservation of Natural Resources and Ecosystems (CNRE), of which, a sub-scheme for Biosphere Reserve has been formulated. As a step towards management of a Biosphere Reserve, the Ministry of Environment, Forest and Climate Change provides financial assistance under the said Centrally Sponsored Scheme, for certain activities. The implementing agency for this Centrally Sponsored Scheme is the State Forest Department except in respect of the state of Madhya Pradesh, where it is being implemented by Environment, Planning and Coordination Organisation (EPCO). The targeted beneficiaries of the Scheme are primarily the population dependent on the Biosphere Reserves. Through the aforesaid CSS on Biosphere Reserve, grant-in-aid is provided to the states on 60:40 (Central: State) sharing basis except in case of North Eastern and Himlayan States, where, the ratio is 90:10, for conservation and management of the designated Biosphere Reserves. The Biosphere Reserve scheme is different from other conservation related schemes. It has the focus on the welfare of local inhabitants through provision of supplementary and alternate livelihood support to the people in the buffer

and transition zones in order to reduce biotic pressure on biodiversity of the natural reserves of core zone.

2. Biosphere Reserve Programme in India: Considering the diversity of ecosystems in the country and also recognizing the importance of Biosphere Reserves in ensuring long term conservation and sustainable use of India's representative and diverse biological diversity, the Indian Man and Biosphere (MAB) Committee identified potential sites for designation as Biosphere Reserves in 1979. Subsequently, in 1983 the Committee of Secretaries approved establishment of Biosphere Reserves in India for conservation of critical eco-systems. As a result, the Indian National Biosphere Reserve Programme was initiated in 1986, broadly following the UNESCO guidelines. The programme is primarily aimed to:

- *serve as a wider base for conservation of entire range of living resources and their ecological foundations, in addition to already established Protected Area (PA) network system.*
- *bring out representative ecosystems under conservation and sustainable use on a long term basis.*
- *ensure participation of local inhabitants for effective management and advise on means of improving livelihood of the local inhabitants through sustainable use.*
- *integrate scientific research with traditional knowledge of conservation, education and training as a part of the overall management of BR.*

2.1 In order to cover a wide representation of characteristic ecosystems from diverse biogeographic zones/provinces in the country, the Ministry of Environment, Forest and Climate Change has, as on December 2023, established 18 Biosphere Reserves. An analysis of BR designation in the country reveals that over the years India has responded positively towards increasing Biosphere Reserve network in the country. As of now, the designated 18 Biosphere Reserves in the country cover approximately 91,425.11 sq.km area.

Biosphere Reserves in India

S.No.	Name of the BR	Year of Designation	Inclusion Year of WNBR	BR States	Location	Biogeographical Zone of BRs	Area (sq.km)
1	Nilgiri*	1986	2000	Tamil Nadu, Kerala and Karnataka	Part of Waynad, Nagarhole, Bandipur and Mudumalai, Nilambur, Silent Valley	Western Ghats	5520

2	Nanda Devi*	1988	2004	Uttarakhand	Parts of Chamoli District, Pithoragarh District & Bageshwar District	Western Himalayas	6407.03
3	Nokrek*	1988	2009	Meghalaya	In west Garo Hills	Eastern Himalayas	820
4	Gulf of Mannar*	1989	2001	Tamil Nadu	Indian part of Gulf of Mannar extending from Rameswaram island in the north to Kanyakumari in the south of Tamil Nadu and Sri Lanka	Coasts	10500
5	Sunderbans*	1989	2001	West Bengal	Part of delta of Ganges and Brahmaputra riversystem	Gangetic Delta	9630
6	Manas	1989		Assam	Part of Kokrajhar, Bongaigaon, Barpeta, Nalbari, Kamrup and Darrang Districts	Eastern Himalayas	2837
7	Great Nicobar*	1989	2013	Andaman and Nicobar Islands	Southernmost of the Andaman and Nicobar Islands.	Islands	1038.7
8	Simlipal*	1994	2009	Odisha	Part of Mayurbhanj	Deccan Peninsula	5569

					district		
9	Dibru-Saikhowa	1997		Assam	Part of Dibrugarh and Tinsukia districts.	Eastern Himalayas	765
10	Dehang-Dibang	1998		Arunachal Pradesh	Part of Siang and Dibang Valley	Eastern Himalayas	5111.50
11	Pachmarhi*	1999	2009	Madhya Pradesh	Parts of Betul District, Hoshangabad District and Chhindwara District.	Semi-Arid	4981.72
12	Khangchendzonga*	2000	2018	Sikkim	Parts of Kangchenjunga	Eastern Himalayas	2931.12
13	Agasthyamalai*	2001	2016	Kerala, Tamil Nadu	Neyyar, Peppara and Shenduruny Wildlife Sanctuary and their adjoining areas.	Western Ghats	3500
14	Achanakmar-Amarkantak*	2005	2012	Madhya Pradesh, Chhattisgarh	Part of Annupur, Dindori and Bilaspur districts	Maikala Hills	3835.46
15	Great Rann of Kutch	2008		Gujarat	Part of Kutch, Morbi, Surendranagar and Patan districts.	Desert	12454
16	Cold Desert	2009		Himachal Pradesh	Pin Valley National Park and surroundings, Chandratal and Sarchu &	Western Himalayas	7770

					Kibber Wildlife Sanctuary.		
17	Seshaschalam	2010		Andhra Pradesh	Seshachalam Hill Ranges covering parts of Chittoor and Kadapa districts.	Eastern Ghats	4755.58
18	Panna*	2011	2020	Madhya Pradesh	Part of Panna District and Chhatarpur District	Catchment Area of Ken River	2998.98
Total:							91,425.11

(12 BRs are under World Network of Biosphere Reserve (WNBR) of UNESCO and remaining 6 BRs are under consideration in WNBR of UNESCO)*

3. Global recognition: Keeping in mind the 2030 Agenda for Sustainable Development and the Sustainable Development Goals – the Biosphere Reserve programme in India has been implementing the Man and Biosphere (MAB) programme toward achieving the long term conservation and sustainable development goals enshrined within the concept of designation of a Biosphere Reserves. Inclusion in the WNBR from 10 to 18 in the past few years indicates an effective engagement of wide variety of stakeholders, enhanced synergies between Biosphere Reserves including data sharing and good communication strategy adopted. Creation of Trans Boundary Biosphere Reserves will be pursued with neighbour countries and above all enhancing adequate resources for the MAB programme in the country is being focused.

4. Contact details of nodal officers:

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