

MINUTES OF 19TH EXPERT COMMITTEE FOR DECLARATION OF ECO-SENSITIVE ZONE (ESZ) AROUND WILDLIFE SANCTUARIES/NATIONAL PARKS HELD ON 4TH July, 2016 IN MINISTRY OF ENVIRONMENT, FOREST & CLIMATE CHANGE AT INDIRA PARYAVARAN BHAWAN, NEW DELHI

A meeting of the Expert Committee for declaration of Eco-Sensitive Zones around Wildlife Sanctuaries/ National Parks was held in the Ministry on 4th July, 2016 in the Ministry of Environment, Forest & Climate Change, Indira Paryavaran Bhawan, New Delhi, under the Chairship of Dr. Amita Prasad, Additional Secretary. The list of participants is annexed. The following thirty four (34) proposals were considered for finalising the draft Eco-Sensitive Zone (ESZ) notifications:

S N	Protected Area	State
1.	Valley of Flowers National Park	Uttarakhand
2.	Nandhaur Wildlife Sanctuary	Uttarakhand
3.	Consideration of Zonal Master Plan for Bhagirathi ESZ	Uttarakhand
4.	Consideration of Master Plan for Doon Valley notification	Uttarakhand
5.	Dhauladhar Wildlife Sanctuary	Himachal Pradesh
6.	Manali Wildlife Sanctuary	Himachal Pradesh
7.	Pin Valley National Park	Himachal Pradesh
8.	Nargu Wildlife Sanctuary	Himachal Pradesh
9.	Mehao Wildlife Sanctuary	Arunachal Pradesh
10.	Namdapha Tiger Reserve	Arunachal Pradesh
11.	Mouling National Park	Arunachal Pradesh
12.	Rabe Supse Wildlife Sanctuary	Arunachal Pradesh
13.	Kane Wildlife Sanctuary	Arunachal Pradesh
14.	Rajiv Gandhi Orang National Park	Assam
15.	Bherjan Borajan Wildlife Sanctuary	Assam
16.	Keibul Lamjao National Park	Manipur
17.	Nongkhyllem Wildlife Sanctuary	Meghalaya
18.	Sunabeda Wildlife Sanctuary	Odisha
19.	Debrigarh Wildlife Sanctuary	Odisha
20.	Udaipur Wildlife Sanctuary	Bihar
21.	Tamor Pingla Wildlife Sanctuary	Chhattisgarh
22.	Pamed Wildlife Sanctuary	Chhattisgarh
23.	Barnawapara Wildlife Sanctuary	Chhattisgarh
24.	Gomarda Wildlife Sanctuary	Chhattisgarh
25.	Semarsot Wildlife Sanctuary	Chhattisgarh

26	Bakhira Wildlife Sanctuary	Uttar Pradesh
27	Lakh Bahosi Bird Sanctuary	Uttar Pradesh
28	Samaspur Wildlife Sanctuary	Uttar Pradesh
29	Nawabganj Bird Sanctuary	Uttar Pradesh
30	Sandi Bird Sanctuary	Uttar Pradesh
31	Chilchila Wildlife Sanctuary	Haryana
32	Nahar Wildlife Sanctuary	Haryana
33	Bir Shikhadgarh Wildlife Sanctuary	Haryana
34	Ramnagar Wildlife Sanctuary	Jammu & Kashmir

2. At the outset, the Chair welcomed the members of the Expert Committee and representatives of the State Governments of Uttarakhand, Himachal Pradesh, Arunachal Pradesh, Assam, Manipur, Meghalaya, Odisha, Chhattisgarh, Uttar Pradesh, Haryana and Jammu & Kashmir.

The Chair stated that the Eco-sensitive zone is for the benefits of achieving environmental and conservation goals of State Governments and it should be inclusive in nature. She emphasised that in the management of all ESZ there should be provision of Skill Development and Employment generation for the local people. She stressed that Agro-Forestry, Eco-tourism should be integral part of ESZ and it should focus on solid waste management, water quality management of the water bodies. Further, she elaborated that for documenting the flora and fauna of the Protected Areas involvement of Botanical Survey of India (BSI) and Zoological Survey of India (ZSI) is important and state government should take help of BSI and ZSI in identification of species and classifying them under different categories such as endemic, endangered, threatened, critical etc.

3. Representatives of Uttarakhand Government requested for the deferment of the ESZ proposals of (i) Valley of flowers NP and (ii) Nandhaur WLS as these proposals are being revised by the state government and to be submitted separately. They further informed that the State Government is in the process of preparation of Revised Zonal Master Plan for Bhagirathi ESZ and for Doon Valley Notification which will be submitted in due course. This was agreed to.

Representatives of Government of Haryana requested that the proposal for finalisation of ESZ for Bir Shikargadh WLS may not be taken up in this meeting. This was agreed to.

It was informed that Govt of Bihar has sought deferment and the proposal of Udaipur WLS of Bihar was also deferred.

4. Before consideration of individual ESZ proposals, the Committee noted that the generic comments/observations received from Conservation Action Trust, Mumbai on the activities listed in regulated and prohibited categories in the various draft notifications being considered in the meeting could be adequately addressed within the provisions of the draft notification and the existing rules and regulations.

Thereafter, the Chair invited the representatives of the States to make presentations on their proposals.

5.0 The proposals were considered as per agenda:

Himachal Pradesh

5.1 *Eco-sensitive Zone around Dhauladhar Wildlife Sanctuary, Himachal Pradesh*

Dhauladhar Wildlife Sanctuary is located in Kangra District, Himachal Pradesh and spread over an area of 982.86 Square kilometres. The flora and fauna represent rich biological significance of this Sanctuary. Animals found in the region include the Himalayan Tahr, Himalayan Ibex, Musk Deer, Serow, Brown Bear, Snow Leopard etc. A number of species of birds such as Rock Bunting, Winter Wren, Western Tragopan, Monal, Koklash, Kaleej etc are also found in the Sanctuary. The habitat also harbours a number of species of butterflies such as Common Map, Common Brimstone, Nilgiri Clouded Yellow, Orange Bordered Argus, Queen of Spain Fritillary etc. In order to conserve and protect the area, an area of 982.86 Square kilometres was declared as Dhauladhar Wildlife Sanctuary. A draft notification for declaration of an eco-sensitive zone was published on 22.12.2015. The area of the proposed Eco-Sensitive Zone is 32.63 sq. kms with an extent up to 1 km along the southern and south west boundary of Dhauladhar Wildlife Sanctuary.

Shri N. P. S. Dhaulta, DFO (HQ), Govt. of Himachal Pradesh apprised the Committee about the proposal. The salient features of the ESZ are as follows:

Area of PA	: 982.86 sq. km
Proposed ESZ area	: 32.63 sq.km.

Proposed Extent of ESZ : Up to 1 km along the Southern & South West boundary.

No comments were received from public/ stakeholders on this draft notification. During deliberation Shri Dhaulta informed that public consultation yet to be done for this proposal and it may take about two to three months of additional time. The Committee recommended that the proposals be revised and resubmitted to the Ministry after public consultation for further consideration.

The Committee desired that the State Government may examine increasing the extent of ESZ from 1 km to 4km and a minimum of 500m. The Committee also proposed that the common names of flora and fauna should be provided along with scientific names, in consultation with BSI and ZSI, if required. The Committee after deliberations desired that the ESZ proposal be revised for extending the width of the ESZ along the PA after public consultations.

5.2 Eco-sensitive Zone around Manali Wildlife Sanctuary, Himachal Pradesh

Manali Wildlife Sanctuary is located in Kullu district, Himachal Pradesh is spread over an area of 29 square kilometres. The flora and fauna represent a rich biological significance of this region. The area has forests of Deodar, Fir, Spruce and Kall among conifers and a variety of broad leaved tree and other plant species including *Prunus*, *Acer*, *Juglans*, *Buxus*, *Rhododendron*, *Celtis*, *Betula*, *Ulmus*, *Aesculus*, *Alnus*, *Myrica*. The Sanctuary also provides a habitat for a diversity of fauna such as leopard, leopard cat, jungle cat, black bear, monkey, languor, barking deer, fish, snakes, etc. Besides these, many birds such as the long tailed minivet, bird eater flycatcher, common hoopoe, ring rosed parakeet, black kite, Himalayan griffon, common kestrel, booted eagle are also found in the sanctuary.

A draft notification was issued on 23.02.2016 declaring an eco-sensitive Zone of 15.68 square kilometres with an extent of upto 4 kilometres around the Manali Wildlife Sanctuary. There are no villages within the eco-sensitive Zone.

Shri N P S Dhaulta, DFO (HQ), Govt. of Himachal Pradesh apprised the Committee about the proposal. The salient features of the ESZ are as follows:

Area of PA : 29 sq. km

Proposed ESZ area : 15.68 sq.km.

Proposed Extent of ESZ : Up to 4 km

The proposal includes detailed of the flora, fauna and endangered species along with the GPS co-ordinate of PA and ESZ boundary. No comments were received from public/ stakeholders on this draft notification.

The Committee also proposed that the common names of flora and fauna should be provided along with scientific names, in consultation with BSI and ZSI, if required.

The Committee after deliberations recommended for finalization of the draft notification after submission of the aforesaid details.

5.3 *Eco-sensitive Zone around Pin Valley National Park, Himachal Pradesh*

Pin Valley National Park is situated in the Lahul-Spiti District of Himachal Pradesh and is spread over an area of 675 square kilometres. The entire area is very rich in biodiversity which are of historical, economic and medicinal significance. The key faunal species found in the said National Park are snow leopard, ibex, golden eagle, red fox, blue sheep and brown bear. A draft notification was issued for declaring an eco-sensitive zone area with an extent varying from 0 to 45.82 kms around the boundary of Pin Valley National Park in the State of Himachal Pradesh as the Pin Valley National Park covering an area of 1150 sq km along the northern and eastern boundary. The Pin Valley NP adjoins the Great Himalayan National Park along its western and southern boundaries and hence the ESZ is zero along these boundaries.

Shri N P S Dhaulta, DFO (HQ), Govt. of Himachal Pradesh apprised the Committee about the proposal. The salient features of the ESZ are as follows:

Area of PA : 675 sq. km

Proposed ESZ area : 1150 sq.km.

Proposed Extent of ESZ : upto 45.82 km.

The comments received from Conservation of Action Trust were considered.

The Committee proposed that the common names of flora and fauna should be provided along with scientific names, in consultation with BSI and ZSI, if required.

The Committee after deliberation recommended that the proposal for finalisation of draft notification after incorporating the aforesaid details.

5.4 Eco-sensitive Zone around Nargu Wildlife Sanctuary, Himachal Pradesh

Nargu Wildlife Sanctuary is located in Mandi District of Himachal Pradesh and spread over an area of 132.37 Square Kilometres. The flora and fauna represent rich biological significance of this Sanctuary. The area has forests of Deodar, Fir, Spruce and Kall among conifers and has a variety of broad leaved species. Among them are *Prunus*, *Acer*, *Juglans*, *Buxus*, *Celtis*, *Betula*, *Ulmus*, *Aesculus*, *Alnus*, *Myrica*. The fauna found in the area include Western Tragopan Himalayan Monal, Chukor, Koklash, Kaleej, Kusk Deer, Barking Deer, Leopard, Leopard Cat, Jungle Cat, Himalayan yellow throated marten, Black bear, Brown bear, Porcupine, Flying squirrel, Money and Langoor.

A draft notification dated 24.02.2016 was issued to declare an Eco-Sensitive Zone of 50.42 square kilometres with an extent of upto 1 kilometres around the Nargu Wildlife Sanctuary Wildlife Sanctuary. On the northern side is the Dhauladhar Wildlife Sanctuary.

Shri N P S Dhaulta, DFO (HQ), Govt. of Himachal Pradesh apprised the Committee about the proposal. The salient features of the ESZ are as follows:

Area of PA	:	132.37 sq. km
Proposed ESZ area	:	50.42 sq.km.
Proposed Extent of ESZ	:	up to 1 km

No comments were received from public/ stakeholders on the draft notification. The proposal included the details of the endangered species. During the presentation it was observed that at the north and south east no ESZ is proposed. The Committee suggested exploring the possibility of extending ESZ at north and south east side. The Committee also proposed that the common names of flora and fauna should be provided along with scientific names, in consultation with BSI and ZSI, if required.

The Committee after deliberations decided that the State Government to revise the proposal as given above.

5.5 Eco-sensitive Zone around Mehao Wildlife Sanctuary, Arunachal Pradesh

Mehao Wildlife Sanctuary (about 1.0 km from Roing nearest town and District headquarter of Lower Dibang Valley District of Arunachal Pradesh) encompassing about 281.50 square kilometres, was notified in 1980. The major vegetation types consist of subtropical forest, wet temperate forests, mix coniferous forests, tropical evergreen forest, subtropical broadleaved forest, wet temperate forest, coniferous and bamboo forests. The main tree species found in the sanctuary include *Terminaliamyriocarpa*, *Altingiaexcela*, *Duabangagrandiflora*, *Dilleniaindica*, *Mesuaferrea*, several *Ficus* species, *Quercus*, *Castanopsis*, *Pinusroxburghii*, *Taxusbaccata*, *Coptisteeta* and other species. About 60 species of mammals have been reported from the Sanctuary. These include carnivores such as clouded leopard, marbled cat, wild dog, spotted linsang, Himalayan black bear, red panda are recorded to occur in the Sanctuary. The herbivores include serow, goral, sambar, gaur, Takin and other species of mammals. Nearly 175 species of birds have been listed from the sanctuary such as Purple wood pigeon, Rufous necked Hornbil, Blyth's Tragopan and the rare Wedge-billed Wren-babbler and other species of birds. The presence of king cobra and banded krait are also reported. Some of the hill-stream fish species that occur in Mehao include *Garraannandalei*, *G. gotyla*, *Botiadayi* and *Aborichthyselongatus*.

The extent of Eco-sensitive Zone varies from zero kilometres to 100 metres from the boundary of the Mehao Wildlife Sanctuary. No eco-sensitive zone is proposed towards east-south, south and south-west of the wildlife sanctuary. The area of eco-sensitive Zone is 500.72 hectares.

Shri Ishwar Singh, CCF (WL), Govt. of Arunachal Pradesh apprised the Committee about the proposal. The salient features of the ESZ are as follows:

Area of PA	:	281.50 sq. km
Proposed ESZ area	:	500.72 Hectare
Proposed Extent of ESZ	:	0 to 100 meters

Representative of State Government requested for corrections in the draft notification as given below:

- I. Page 12 point no. 1 (extent and boundaries of ESZ), the area of ESZ be read as 437.7 ha instead of 500.72 ha
- II. Boundary description of ESZ at page 12 of the draft notification be replaced by "The boundary of eco sensitive zone starts from a point on the western boundary of the

sanctuary at geo-coordinates 28° 13' 27.062"N; 95° 47' 8.898"E, from thence, the boundary goes east wards for 100 meters up to the point 28° 13' 27.296"N; 95° 47' 4.855"E. Thence, the boundary goes northwards then eastwards and then southwards 100 meters parallel to the boundary of sanctuary up to the point at geo-coordinates 28° 8' 20.306"N; 96° 1' 32.657"E. Thence, westwards for 100 meters up to the sanctuary boundary up to the point 28° 8' 21.887"N; 96° 1' 30.896"E. Thence, southwards along the sanctuary boundary up to the starting point at geo-coordinates 28° 13' 27.062"N; 95° 47' 8.898"E."

No comments were received from public/ stakeholders on this draft notification. The Committee discussed feasibility of extending the width of ESZ. The Committee also proposed that the common names of flora and fauna should be provided along with scientific names, in consultation with BSI and ZSI, if required.

After detailed discussion the committee recommended that the revised proposal be submitted to the Ministry for further consideration.

5.6 Eco-sensitive Zone around Namdapha Tiger Reserve Wildlife Sanctuary, Arunachal Pradesh

Namdapha Tiger Reserve, located in district Chamlang in Arunachal Pradesh covering an area of 1807.82 kilometres was notified under the Wildlife (Protection) Act, 1972 in December, 2007 for the protection and conservation of tiger, co-predator, prey base and their habitat as inviolate area. The buffer zone of Namdapha Tiger Reserve covering an area of 245 square kilometres was also notified under the Wildlife (Protection) Act, 1972 on 15th June, 2012 along with core area is among the largest contiguous block of tropical rain forest in the country and is extremely important in maintaining contiguity within the north-east Indian forest. The Reserve is extremely important in maintaining contiguity within the north-east Indian forest, playing a vital role in maintenance of water and regime of the region. The broad forest types of the area are tropical wet semi evergreen to evergreen forest, sub-tropical broad leaved forest and sub-temperate broad-leaved forest. The major mammalian species include *Elephas maximus*, *Panthera tigris*, *Panthera pardus*, *Neofelis nebulosa*, *Ursus thibetanus*, *Macaca assamensis*, *Trachypithecus pileatus*, *Cervus unicolor*, *Muntiacus muntjak*, *Naemorhedus goral*, *Sus scrofa*, *Cuon alpinus*. The bird fauna largely comprise of babblers, flycatchers, jungle fowl, kingfishers, laughing thrushes, nighters, nuthatches, etc.

Other fauna broadly comprise of frogs as- *Bufo* sp., *Duttaphrynus* sp., *Hyla* sp., *Megophyrus* sp., etc and reptiles such as lizards- *Calotes* sp., *Japalura* sp., *Hemidactylus* sp., *Varanus* sp., Skinks such as *Eutrophis* sp., *Lygosoma* sp., snakes such as – *Python* sp., *Ahaetulla* sp., *Amphiesma* sp., *Bungarus* sp., *Naja* sp., *Ophiophagus* sp., tortoises such as - *Cuora* sp., *Pangshura* sp.. The aquatic bodies harbours various fish species such as *Danio* sp., *Barilius* sp., *Semiplotus* sp., *Puntius* sp., *Tor* spp., *Chagunius* sp., *Garra* sp., *Noemacheilus* sp., *Glyptothorax* sp. etc..

A draft notification dated 08.12.2015 was published in the Gazette of India for declaring an eco-sensitive zone around Namdapha Tiger Reserve. The extent of eco-sensitive zone varies from zero metres to 1400 meters from the boundary of the Namdapha Tiger Reserve. The extent of Eco-sensitive Zone is zero meters towards north, where Namdapha Tiger Reserve shares boundary with Kamlang Wildlife Sanctuary and zero meters towards east and south sharing Indo-Myanmar international boundary.

Shri Ishwar Singh, CCF (WL), Govt. of Arunachal Pradesh apprised the Committee about the proposal. The salient features of the ESZ are as follows:

Area of PA	:	1807.82 sq. km
Proposed ESZ area	:	43.143 sq.km.
Proposed Extent	:	0 to 1400 meters

During the presentation, he requested for following corrections in the draft notification:

- i. The boundary description at page 11 of the draft notification be replaced by “Starting from a point at the northwest corner of the park boundary at geo coordinates 27° 39' 1.458"N; 96° 24' 2.362"E, the boundary of ESZ goes westwards up to the point 27° 39' 1.868"N; 96° 23' 44.149"E. Thence, the boundary goes southwards passing through the points at geo coordinates 27° 37' 38.950"N; 96° 24' 30.064"E, 27° 35' 50.503"N; 96° 23' 58.711"E, 27° 35' 10.259"N; 96° 23' 13.420"E, 27° 31' 57.162"E; 96° 22' 56.006"E, 27° 30' 36.126"N; 96° 23' 2.173"E, 27° 30' 59.083"N; 96° 21' 53.302"E, 27° 31' 24.308"N; 96° 20' 23.629"E, 27° 31' 47.568"N ;96° 18' 59.926"E, 27°30' 51.077"N ;96°16' 16.399"E, 27°29' 38.605"N ;96°16' 40.300"E, 27°28' 3.137"N ;96°18' 20.779"E, 27°26' 33.065"N ;96°18' 41.209"E, 27°25' 39.356"N ;96°18' 39.154"E, 27°25' 9.804"N ;96°18' 42.494"E, 27°24' 21.877"N; 96°18' 30.546"E, 27°23' 22.679"N ;96°20' 16.379"E, 27°23' 19.172"N ;96°20' 43.019"E, 27°23' 9.010"N ;96°21' 41.335"E, 27°23' 4.009"N ;96°23' 8.599"E,

27°22' 25.205"N ;96°23' 44.578"E, 27°21' 34.042"N; 96°24' 50.900"E, 27°21' 21.071"N; 96°25' 49.080"E, 27°20' 32.690"N ;96°25' 27.026"E, 27°19' 41.380"N ;96°26' 1.806"E, 27°18' 58.892"N ;96°26' 40.182"E, 27°18' 3.240"N ;96°26' 52.721"E. Thence, eastwards up to the park boundary at geo coordinates 27° 18' 5.396"N; 96° 27' 6.433"E. Thence, along park boundary on the southern, eastern and northern side up to the starting point at geo coordinates 27° 39' 1.458"N; 96° 24' 2.362"E."

No comments were received from public/ stakeholders on this proposal.

The Committee desired that the Satta Government may examine the feasibility of extending the ESZ by at least 1km on the SW side. The Committee also proposed that the common names of flora and fauna should be provided along with scientific names, in consultation with BSI and ZSI, if required. The Committee recommended that people knowing the local language should be involved in the public consultation to convince the local villagers especially the Lissu tribe to extend the ESZ width along the south east and east side of the PA.

The Committee after deliberations recommended the proposal be reviewed for revision by the State Government and details provided thereof.

5.7 Eco-sensitive Zone around Mouling National Park, Arunachal Pradesh

Mouling National Park is located in Upper Siang District in the State of Arunachal Pradesh and forms a part of Eastern Himalaya Biodiversity Hotspot encompassing about 483 square kilometres. The broad forest type of the area are tropical and semi evergreen, sub-tropical broad leaved forest and sub temperate broad- leaved forest. The major vegetations are subtropical forest, wet temperate forests, mix coniferous forests and bamboo forests. The flora and fauna represent rich biological significance of this Sanctuary. The important trees include *Terminalia myriocarpa*, *Altingia excelsa*, *Cinnamomum* Spp. *Magnolia* spp., *Terminalia bellerica*, *Bambax ceiba*, *Castanopsis indicam*, *Mesua ferrea*, *Phoebe goalparensis*. Bamboo species include *Dendrocalamus hamiltonii*, *Pseudostrachyum polymorphum*. Cane species include *Calamus floribundus*, *C. flagellum* are found in the Sanctuary.

The main species of animals found in the sanctuary are *Panthera tigris*, *Neofelis nebulosa*, *Felis viverrina*, *Panthera pardus*, *Macaca assamensis*, *Mumtiacus muntjak*, *Vuloes*

bengalensis, *Lutra lutra*, *Herpestes edwardsi*, *Selenarctos thibetanus*, *Caprolagus hispidus*, *Canis lupus*, *Hystrix indica*, *Canis aureus*, *Felis chaus*, *Budorcas taxicolor*, *Sus scrofa*, *Capricornis sumatraensis*, *Nycticebus coucang*, *Macaca mulatta*, *Ailurus fulgens*, *Moschus moschifeus*, etc. About 115 species of birds such as Grey-headed woodpecker, Golden babbler, Hill Myna, Laughing thrush, Monal pheasant, Great Barbet, Mountain eagle, Bulbul, Hill partridge, Babbler, Magpie Robin, Cuckoo, Grey Drongo, Tree pie, Green pigeon, Dove, Wild fowl, parakeet etc. occur in the sanctuary. The reptiles found in the National Park include Python, Vine snake, Cobra, Pit viper, Tree snake, Kukri snake, Trinket snake, Krait snake, forest *Calotes*, Skink, Yellow monitor, etc. are known to occur in the sanctuary and the aquatic bodies provide a habitat for a variety of fish species and amphibians. Butterflies species such as *Acraea violae*, *Catopsilla crocale*, *Donaos genutia*, *Donaos limniace*, *Listeria Spp*, *Graphium Agamemnon*, *Melanitis Leda*, *Dicophora Spp*, *Delias eucharis*, etc are also found in the National Park.

Shri Ishwar Singh, CCF (WL), Govt. of Arunachal Pradesh apprised the Committee. Draft notification of the ESZ proposal was published on 24th February, 2016. The salient features of the ESZ are as follows:

Area of PA	:	483 sq. km
Proposed ESZ area	:	236 sq.km.
Proposed Extent	:	Up to 5.6 km

During the presentation, he requested for following corrections in the draft notification:

- i. The boundary description at page 18 & 19 of the draft notification be replaced by "Starting from a point at Geo-coordinates 28° 31' 33.370"N; 94° 42' 1.292"E, the eco-sensitive zone boundary goes northwards up to the point 28° 33' 1.753"N; 94° 42' 11.617"E, then up to peak point 1755 at geo-coordinates 28° 39' 49.590"N; 94° 42' 47.916"E. Thence, eastwards up to peak point 2125 at 28° 39' 52.070"N; 94° 46' 20.071"E, then up to peak point 1500 at 28° 41' 56.011"N; 94° 48' 44.525"E, then up to peak point 1190 at 28° 41' 12.408"N; 94° 52' 5.707"E, then up to peak point 1310 at 28° 41' 36.823"N; 94° 54' 18.266"E. from thence, south-eastwards up to peak point 680 at 28° 40' 5.887"N; 94° 54' 44.370"E, then up to point 28° 37' 20.053"N; 94° 56' 52.123"E, then up to the peak point 475 at 28° 36' 54.400" N; 94° 58' 6.287"E. thence, at 198° up to point 28° 33' 20.815"N; 94° 59' 27.323"E. thence, the boundary of ESZ goes 200 meters parallel along a tributary of Sirnyak nallah up to the point at geo-coordinates 28° 28' 41.070"N; 94° 59' 43.721"E. then the boundary goes

westwards 200 meters parallel along the southern boundary of the park up to starting point at Geo-coordinates 28° 31' 33.370"N; 94° 42' 1.292"E."

No comments were received from public/ stakeholders on the draft notification. The Committee discussed on the possibility of extending the width of ESZ. The Committee also proposed that the common names of flora and fauna should be provided along with scientific names, in consultation with BSI and ZSI, if required. After detailed discussion the committee recommended that the revised proposal be submitted to the Ministry for further consideration.

5.8 Eco-sensitive Zone around Rabe Supse Wildlife Sanctuary, Arunachal Pradesh

Yordi Rabe Supse Wildlife Sanctuary located in West Siang District in the State of Arunachal Pradesh is part of Eastern Himalaya Biodiversity Hotspot encompassing about 397 sq kms. The broad forest type of the area are tropical and semi evergreen, sub-tropical broad leaved forest and sub temperate broad- leaved forest. The flora and fauna represent rich biological significance of this Sanctuary. The area is reported to have good species richness, floral and faunal diversity, while animal census is yet to be carried out inside the sanctuary area. The major tree species includes *Terminalia myriocarpa*, *Altingia excelsa*, *Amoora wallichii*, *Ailanthus grandis*, *Cinnamomum* Spp. *Magnolia* spp., *Canarium resiniferum*, *Terminalia bellerica*, *T. chebula*, *Bambax ceiba*, *Sterculia villosa*, *Castanopsis indicam*, *Bischofia javanica*, *Albizzia lucida*, *Syzygium cuminii*, *Mesua ferrea*, *Dillenia indica*, *Kydia calycina*, *Phoebe goalparensis*, *Artocarpus chaplasi*. Important Bamboo species include *Dendrocalamus hamiltonii*, *Bambusa pallid*, *Pseudostrachyum polymorphum*. Cane species include *Calamus floribundus*, *C. flagellum*. Palm species include Toko Palm (*Livistonia jenkensii*). These forests are equally rich with varied animal life. Some of the major mammalian species include *Elephus maximus*, *Panthera tigris*, *Panthera pardus*, *Neofelis nebulosa*, *Ursus thibetanus*, *Macaca assamensis*, *Trachypithecus pileatus*, *Cervus unicolor*, *Muntiacus muntjak*, *Naemorhedus goral*, *N. sunmatraensis*, *Sus scrofa*, *Cuon alpines*, etc. The bird fauna largely comprise of Babblers, Eagles, Flycatchers, Junglefowl, Kingfishers, Laughingthrushs, Minvits, Nighters, Nuthatchs, etc and the herpeto fauna broadly comprise of frogs as- *Bufo* sp., *Duttaphrynus* sp., *Hyla* sp., *Megophyrus* sp., etc and reptiles such as lizards - *Calotes* sp., *Japalura* sp., *Hemidactylus* sp., *Varanus* sp., skinks such as- *Eutrophis* sp., *Lygosoma* sp., snakes such as *Ramphotyphlops* sp., *Python* sp., *Ahaetulla* sp., *Amphiesma* sp., *Bungarus* sp., *Naja* sp., *Ophiophagus* sp., Tortoises such as- *Cuora* sp., *Pangshura* sp. The aquatic bodies harbours various fish species including *Danio* sp., *Barilius*

sp., *Semiplotus sp.*, *Puntius sp.*, *Tor spp.*, *Chagunius sp.*, *Garra sp.*, *Noemacheilus sp.*, *Glyptothorax sp.*

In order to provide an additional safety zone around the National Park, the Ministry brought out a draft Notification dated 19.02.2016 for declaring an eco-sensitive zone of 27 square kilometres with an extent upto 1 kilometre (North-West) and 500 meter (South-West) around the protected area. There are no villages inside the eco-sensitive zone.

Shri Ishwar Singh, CCF (WL), Govt. of Arunachal Pradesh apprised the Committee about the proposal. The salient features of the ESZ are as follows:

Area of PA	:	397 sq. km
Proposed ESZ area	:	27 sq.km.
Proposed Extent of ES:		Up to 1 km (North West) and 500 meter (South West)

During the presentation, Shri Singh requested for following corrections in the draft notification:

- i. The boundary description at page 18 in annex. I of the draft notification be replaced by "The boundary of ESZ starts from a point at geo-coordinates 28° 24' 56.808N; 94° 31' 34.975", thence, the boundary goes northwards for 1 km up to the point 28° 25' 27.469"N; 94° 31' 48.490"E. Thence, westwards and thence, southwards 1 km parallel along the boundary of the sanctuary up to the point 28° 20' 20.418"N; 94° 23' 39.109"E. Thence, for 1 km eastwards up to sanctuary boundary at 28° 20' 22.330"N; 94° 24' 14.508"E. Thence, southwards along the western boundary of the sanctuary up to the point 28° 11' 31.394"N; 94° 21' 29.830"E. Thence, southwest wards for 500 meters up to the point 28° 11' 20.879"N; 94° 21' 14.987"E. Thence, the boundary goes 500 meters parallel along the sanctuary boundary up to point 28° 7' 59.405"N; 94° 26' 1.982"E. Thence, north-eastwards for 500 meters up to the sanctuary boundary 28° 8' 11.00"N; 94° 26' 14.327"E. Thence, eastwards then northwards and westwards along the sanctuary boundary up to the starting point at geo-coordinates 28° 24' 56.808N; 94° 31' 34.975"."

No comments have been received from public/ stakeholders on this draft notification. The Committee discussed on the possibility of extending the width of ESZ. The Committee desired that the scientific names along with the common name of flora and fauna be furnished, in consultation with BSI and ZSI, if required.

After detailed discussion the committee recommended that the revised proposal be submitted to the Ministry for further consideration.

5.9 Eco-sensitive Zone around Kane Wildlife Sanctuary, Arunachal Pradesh

Kane Wildlife Sanctuary is situated in the foot hills in the district West Siang, Arunachal Pradesh and was established in 1991 covering an area of 55.18 sq km and notified as a Sanctuary in 2007. The area is rugged mountainous with few gently slopes with a tributary of river Siri (Jiadhol) and many rivulets and streams. The Wildlife Sanctuary consists of semi-evergreen forest, consisting of tropical semi-evergreen forest to sub-tropical moist forests. The Sanctuary harbours a rich biodiversity of flora and fauna and is home to many endangered and threatened species such as elephants, tigers, and their prey base. The habitat consists of many species of trees, bamboo, wild banana. The Sanctuary also provides a habitat for many resident and migratory birds such as babblers, eagles, flycatchers, kingfishers, laughing thrushes, etc. Reptiles such as snakes, lizards and skinks and many species of fish are also found in the water bodies of the area.

In order to provide an additional protective area around the sanctuary, a draft notification dated 03.09.2015 for declaring an eco-sensitive zone has been proposed for an area of 95.90 ha and extent of which varies from 50m in the eastern and southern side and 100m-500m in the northern side of the Kane Wildlife Sanctuary.

Shri Ishwar Singh, CCF (WL), Govt. of Arunachal Pradesh apprised the Committee about the proposal. The salient features of the ESZ are as follows:

Area of PA	:	55.18 sq. km
Proposed ESZ area	:	-
Proposed Extent of ESZ:		50 meters to 500 meters (50 meters in the Southern Eastern side; 100 to 500 meters in the Northern side)

During the presentation, Shri Singh requested for following corrections in the draft notification:

- i. At page 10, draft notification, Para 1, the area of WLS should be read as 31.0 Sq. Km. instead of 55.18 Sq. Km.
- ii. At page 11, point no 1, extent and boundaries of ESZ, the area of ESZ should be read as 6.83 sq. km instead of 95.90 Ha.

- iii. At page 11, point no 2, the boundary description should be replaced by “The eco-sensitive zone boundary starts from a point at geo-coordinates 27° 38' 27.092" N; 94° 34' 59.538" E, at the south west corner of the sanctuary, then the boundary goes westwards for 500 meters up to the point 27° 38' 27.226"N; 94° 34' 41.048"E. Thence, the boundary of eco-sensitive zone goes 500 meters parallel along the sanctuary boundary up to the point 27° 42' 9.882"N; 94° 38' 30.941"E. Thence, southwards for about 400 meters up to the point 27° 41' 57.674"N; 94° 38' 31.596"E. Thence, the boundary goes 100 meters parallel along the sanctuary boundary up to the point 27° 41' 11.926"N; 94° 40' 57.421"E. Thence, the boundary goes 50 meters parallel along the sanctuary boundary up to the point 27° 40' 18.894"N; 94° 41' 24.410"E. Thence, westwards 50 meters parallel to sanctuary boundary up to the point at geo-coordinates 27° 38' 25.634" N; 94° 34' 59.563"E, thence, northwards for 50 meters up to the starting point at geo-coordinates 27° 38' 27.092" N; 94° 34' 59.538" E.”

The comments received from Conservation Action Trust were considered. The Committee desired that the scientific names along with the common name of flora and fauna be furnished, in consultation with BSI and ZSI, if required.

After detailed deliberations the Committee recommended for the finalization of draft notification with the above changes.

Assam

5.10 *Eco-sensitive Zone around Bherjan Borjan Wildlife Sanctuary, Assam*

The Bherjan-Borajan-Padumoni Wildlife Sanctuary including three distinct segments of forest patches Bherjan, Borajan and Padumoni situated in Tinsukia District in the State of Assam having an area of 1.06 square kilometres, 4.39 square kilometres and 1.76 square kilometres respectively totalling 7.21 square kilometres was declared a protected area on 13th October 1999. The sanctuary attracts primate populations especially Hoolock Gibbons and important primates such as slow loris, pig tailed macaque, Assamese macaque and other animals like shrew, Chinese pangolin, jackal, leopard cat, leopard including about 83 species of forest dwelling birds. The sanctuary area has some significant patches of remnants of Assam valley tropical wet evergreen forests interspersed with seasonal swamp forest and Assam alluvial plains semi evergreen forests. The sanctuary area has many types of fauna which *inter alia* include 24 species of mammals such as short-tailed mole, shrew,

capped langoor, leopard, barking deer, porcupine, and also includes 83 species of birds such as pond heron, cattle egret, great hornbill, woodpecker, house sparrow.

In order to provide an additional protective area around the sanctuary, a draft notification dated 09.12.2015 was published for declaring an area with an extent varying from 0.52 kilometre to 1.571 kilometre as eco-sensitive zone in respect to Bherjan segment, and from 0.937 km to 1.396 kilometre in respect to Borajan segment and 0.628 kilometre to 0.897 kilometre in respect to Padumoni segment as Eco-Sensitive Zone of Bherjan, Borajan and Padumoni Wildlife (BBPWL) Sanctuary. There are three Eco-sensitive Zones located in Tinsukia District around the three separate segments of Bherjan-Borajan-Padumoni Wildlife Sanctuary. The total area of Eco-Sensitive Zone is 37.89 square kilometres comprising of 8.94 square kilometres for Bherjan, 21.41 square kilometres for Borajan and 7.54 square kilometres for Padumoni with an extent varying from 0.52 kilometre to 1.571 kilometres as eco-sensitive zone in respect to Bherjan segment, and from 0.937 kilometres to 1.396 kilometres in respect to Borajan segment and 0.628 kilometre to 0.897 kilometre in respect to Padumoni segment.

Shri M K Yadav, APCCF (P & D), Govt. of Assam apprised the Committee. Draft notification of the ESZ proposal was published on 10th December, 2015. The salient features of the ESZ are as follows:

Area of PA	:	7.21 sq. km
Proposed ESZ area	:	37.89 sq.km
Proposed Extent	:	0.52 km to 1.571 for Bherjan segment, 0.937 km to 1.396 km in Borajan segment, and 0.628 km to 0.897 km in Padumoni segment.

Comments received from Conservation Action Trust were discussed during the meeting. The Committee desired that the scientific names along with the common name of flora and fauna be furnished, in consultation with BSI and ZSI, if required. It was also proposed to include representative of State Biodiversity Board in the Monitoring committee. It was also mentioned to include map from the State remote sensing agency. The Committee also suggested exploring the possibility of generating local employment.

The Committee after deliberations recommended the proposal on the basis of the aforesaid comments.

Rajiv Gandhi Orang National Park, Assam

Representative, Govt of Assam requested for deferment of the proposal and the proposal was deferred.

Manipur

5.11 *Eco-sensitive Zone around Keibul Lamjao National Park, Manipur*

Keibul Lamjao National Park was formed in 1977 for conservation of its unique ecosystem where the floating mass of entangled vegetation, formed by the accumulation of organic debris and biomass with soil particles (locally known as Phumdi) provides major habitat of a very high faunal and floral diversity. Keibul Lamjao National Park is well known as a floating National Park in the World and is the last natural refuge for critically endangered and endemic Manipur Brow-antlered deer (*Rucervuselidii*), locally known as Sangai and other fauna such as Hog Deer, Large Indian Civet, Common Otter, Small Indian Civet, Wild Boar etc, besides a variety of aquatic and avi-faunal species;

A draft notification was issued dated 09.12.2015 for declaring an eco-sensitive zone for Keibul Lamjao National Park, Manipur. The extent of ESZ varies from 0.64 kilometres to 8.43 kilometres from the boundary of the Keibul Lamjao National Park. The area of Eco-sensitive Zone is 176 square kilometre.

Shri Kereilhouvi Angami, PCCF (WL), Govt. of Manipur apprised the committee about the proposal. The salient features of the ESZ are as follows:

Area of PA	:	-
Proposed ESZ area	:	176 sq.km
Proposed Extent	:	0.64 km to 8.43 kms

No comments were received from public/ stakeholders on this draft notification. The Committee desired that the scientific names along with the common name of flora and fauna be furnished, in consultation with BSI and ZSI, if required. Also, it was mentioned to include date on the Google Map. The state government proposed to correct the village list with few addition and deletion of village names. The committee also suggested exploring the possibility of using CAMPA funding for the relocation of Sangai. The Committee after deliberations recommended the proposal on the basis of the aforesaid comments.

Meghalaya

5.12 *Eco-sensitive Zone around Nongkhylllem Wildlife Sanctuary, Meghalaya*

Nongkhylllem Reserved Forest was constituted in stages during the regime of the erstwhile British Government during 1909-1939 due to abundance of wildlife and good quality of habitat. The eastern part of Nongkhylllem Reserve of 29 square kilometre area was converted to a Wildlife Sanctuary in 1981 and the remaining part of the Reserve Forests was subjected to intensive protection and conservation measures and it is due to this, that these forests have retained their pristine value. The area comprises fully of hills and valleys, along which, flow numerous streams that join the rivers such as Umtrew, Umtasor and Umsaw which surround the area. The altitude of the area ranges from 200 meters to 800 meters and the highest point is Mawkyndah with an altitude of 965 meters. Steep hill slopes are not common and occur only along certain portions of the banks of Umtrew and Umtasor rivers.

The Sanctuary and the Reserve Forests fall in the (North Eastern India) region classified as a global bio-diversity hot spot under the Eastern Himalayan Endemic Bird Area and this area is rich in floral and faunal biodiversity. The Nongkhylllem Wildlife Sanctuary is tropical mixed evergreen forests, in the northern portion of Nongkhylllem, the vegetation is mostly moist deciduous type of Forest, towards the southern portion the deciduous components decrease gradually with more percentage of evergreen species including some sub-tropical and some temperate; as a whole, the general woody vegetation presents a homogenous appearance mixed with bamboo forests and grassy slopes and the vegetation changes with altitude presenting a three-storey appearance where large trees with spreading crowns and tall boles forming the top canopy which act as shelter for varieties of epiphytes. Sal is the dominant tree species in the area; however a large number of tree species are found.

The area harbours over 50 species of mammals and 25 species of reptiles; of 140 species of mammals listed in Schedule-I to the Wildlife (Protection) Act, 1972, about 30 species are found here, notable species being the Clouded Leopard, Leopard, Hoolock gibbon, Elephant, Gaur, Binturong and Great Indian Hornbill; many water bodies and streams in and around the area are good breeding sites for endangered species of fish such as the Hill Mahseer, Chocolate Mahseer and reptiles such as the Khasi Hills Water Tortoise and the Water monitor lizard, which have become very rare.

With more than 400 species of birds in less than 200 square kilometre area, Nongkhylllem Wildlife Sanctuary and adjacent areas including the Nongkhylllem Reserved Forest and Umiam reservoir and undoubtedly important areas from conservation and bio-diversity point of view and the endangered species such as the Rufous necked hornbill have become extremely rare due to habitat shrinkage and poaching.

Some species have been recorded for the first time in Meghalaya, these include Great Crested Grebe, Black necked Grebe, Red necked Grebe, Indian Shag, Little green heron, Tiger of Malay Bittern, Greater adjutant stork and Black headed gull. Threatened and near-threatened species include the Darter, Darden's or Blyth's Baza, Painted Stork, lesser or Himalayan Grey-headed fish eagle, Black or king Vulture, Long-Billed vulture, white necked vulture, white legged Falconet, white cheeked Hill Partridge, Wood Snipe, Tawny Fish Owl, Blyth's Kingfisher, Rufous necked Hornbill, Spangled Drongo, Spotted winged Stare and Grey Sibia have also been recorded during the survey and some in the recent past.

A draft notification dated 18.12.2015 was published for notifying an area to an extent varying from 335.07 metres to 8.43 kilometres from the boundary of the Nongkhylllem Wildlife Sanctuary in the State of Meghalaya as the Nongkhylllem Wildlife Sanctuary Eco-sensitive Zone. The extent of Eco-sensitive Zone varies from 335.07 metres to 8.43 kilometres from the boundary of the Nongkhylllem Wildlife Sanctuary and the total area of the Eco-sensitive Zone is about 202.87 square kilometres.

Shri P. S. Nongbri, CCF (WL), Govt. of Meghalaya apprised the Committee about the proposal. The salient features of the ESZ are as follows:

Area of PA	:	-
Proposed ESZ area	:	202.87 sq.km
Proposed Extent of ESZ	:	335.07 meters to 8.43 kms

No comments have been received from public/ stakeholders on this draft notification. The Committee desired that the scientific names along with the common name of flora and fauna be furnished, in consultation with BSI and ZSI, if required. The Committee also desired that the date of the Google Map presented to the Committee should mentioned in the map for all

ESZ proposals. The Committee after detailed deliberations recommended the proposal on the basis of the aforesaid comments.

Odisha

5.13 *Eco-sensitive Zone around Sunabeda Wildlife Sanctuary, Odisha*

Sunabeda Wildlife Sanctuary (about 540 kms from Bhubaneswar city) in district Nuapada, Odisha and is an important site for integration of in-situ and ex-situ conservation of wildlife is well known for its rich biodiversity having 149 species of plants, 32 species of mammals, 94 species of aves, 6 species of amphibians, 41 species of reptiles, 12 species of fishes and 20 species of invertebrates. a number of wild animals especially Tiger (*Panthera tigris*) use this Sanctuary for their habitat and other key species found in the protected area are, Royal Bengal Tiger, Leopard, Indian Bison, Hyena, Barking Deer, Chital, Sambar, Wild pig, Sloth Bear, Ratel, Wild Dog, Porcupine, Nilgai, Four-horned antelope, Hare, Jackal, Monkey, Peafowl , Hill myna, Jungle fowl.

It is necessary to conserve and protect the wildlife and biodiversity of the area, an additional protective zone is proposed to be declared as eco-sensitive zone vide a draft notification dated 10.12.2015 which notifies an area to an extent varying from 2.5 kilometres to 20 kilometres from the boundary of the Sunabeda Wildlife Sanctuary in the State of Odisha as the Sunabeda Wildlife Sanctuary Eco-sensitive Zone. The extent of eco-sensitive zone is spread over an area of 88,389 hectares with the extent of ESZ varying from 2.5 kilometres to 20 kilometres from the boundary of the Sunabeda Wildlife Sanctuary. The extent of Eco-sensitive Zone is zero kilometre towards west of the Wildlife Sanctuary, where the sanctuary sharing border with Chhattisgarh State. A total of 122 villages fall within the Eco-sensitive Zone.

Shri D. Biswal, Special Secretary, Govt. of Odisha apprised the Committee about the proposal. The salient features of the ESZ are as follows:

Area of PA	:	-
Proposed ESZ area	:	88389 hectares
Proposed Extent	:	2.5 to 20 kms

No comments were received from public/ stakeholders on this draft notification. During the discussion it was suggested to explore the possibility of further extending ESZ on the western side. The committee recommended approaching the Chattisgarh government and exploring the possibility of common ESZ with of Udanti Sitanadi Tiger reserve of Chattisgarh in the western side of the PA. The Committee desired that the scientific names along with the common name of flora and fauna be furnished, in consultation with BSI and ZSI, if required.

The Committee after deliberations recommended submission of revised proposal on the basis of the aforesaid comments.

5.14 *Eco-sensitive Zone around Debrigarh Wildlife Sanctuary, Odisha*

Debrigarh Wildlife Sanctuary is an important site for in-situ conservation of wildlife and its habitat in the state of Odisha is home to an immense array of biodiversity consisting of over 40 species of mammals, 234 species of birds, 41 species of reptiles, 12 species of amphibians, 42 species of fishes, 39 species of odonates, 85 species of butterflies and 38 species of spiders and extremely important in the national context because of significant population of Schedule-I species such as Leopard, Indian Gaur and Four-horned Antelope. The sanctuary is fringed on the east and north by the huge man-made water body of Hirakud reservoir, thus forming one of the select few sanctuaries in the state supporting both terrestrial and aquatic biodiversity; which further attracts a significant number of migratory waterfowl during winter. The wildlife sanctuary is home to over 250 plant species, many of which have ethno-botanical and medicinal value.

In order to conserve and protect the area, an area around the Debrigarh Wildlife Sanctuary is proposed as eco-sensitive from ecological and environmental point of view and a draft notification dated 10.12.2015 declaring an area to an extent upto 5 kilometres from the Debrigarh Wildlife Sanctuary in the State of Odisha as the Debrigarh Wildlife Sanctuary Eco-sensitive Zone. The extent of ESZ is upto 5 kilometres from the boundary of the Debrigarh Wildlife Sanctuary. The area of eco-sensitive zone is 34690. A total of 78 villages fall within the eco-sensitive zone.

Shri D Biswal, Special Secretary, Govt. of Odisha apprised the Committee about the proposal. The salient features of the ESZ are as follows:

Area of PA	:	353.81 square kilo meters
Proposed ESZ area	:	591.42 hectare
Proposed Extent	:	Up to 5 kms.

Comments received from Shri Anil Singewar, Director, Plant Bargarh Cement Works, were discussed during the meeting. State government mentioned that the Dongri Lime stone mine is used for captive use for the cement factory and the Government of Odhisa planning to keep keep the captive mine out side the ESZ boundary. Accordingly the width of the ESZ boundary will be reduced to about 2 kilo meters. The committee agreed to the proposal and recommended that a revised proposal with revised GPS co-ordinates of ESZ, revised ESZ area, revised list of villages coming within the ESZ area may be submitted to Ministry.

Bihar

Udaipur Wildlife Sanctuary

Govt of Bihar has sought deferment of consideration of the proposal.

Chhattisgarh

5.15 Eco-sensitive Zone around Tamor Pingla Wildlife Sanctuary, Chhattisgarh

Tamor Pingla Wildlife Sanctuary is located in district Surajpur, Chhattisgarh and is an important protected area known for its rich habitat consisting of a variety of flora and fauna including leopard, spotted deer, barking deer, four horned antelope, blue bull, wild boar, Indian bison, sloth bear, etc. Tamor Pingla Wildlife Sanctuary is spread over an area of 608.527 square kilometre. Tamor Pingla Wildlife Sanctuary along with Ghurughasi Das National Park forms a national corridor for tigers with Betala National Park in Jharkhand and with Sanjay Dubari Tiger Reserve in Madhya Pradesh.

In order to conserve and protect the area, an additional protective layer around the Tamor Pingla Wildlife Sanctuary is proposed as eco-sensitive zone vide draft notification dated 18.01.2016 to conserve and protect the area the extent and boundaries around the protected area of Tamor Pingla Wildlife Sanctuary from ecological, environmental and biodiversity point of view. An eco-sensitive Zone of 362.80 square kilometres (including 254.98 square kilometre reserve and protected forest and 107.82 sq.km Revenue area) with

an extent of 2 kilometres from the periphery of the Tamor Pingla Wildlife Sanctuary has been proposed.

A total of twenty two villages fall within the Eco-sensitive Zone, namely Chakdehi, Rakasganda, Pendri, Bonga, Badwarkala, Ramkola, Dhuria, Bhelkachh, Ghui, Barpatia, Khopdra, Chutki, Koldri, Putki, Bedmi, Nawadih, Karwan, Tamki, Jajwal, Chikni, Basnara and Deori.

Shri S. K.Singh, APCCF (WL), Govt. of Chhattisgarh apprised the Committee about this proposal. The salient features of the ESZ are as follows:

Area of PA	:	608.527 sq. Kms.
Proposed ESZ area	:	362.80 sq. Kms.
Proposed Extent Of ESZ	:	2 kms.

No comments were received from public/ stakeholders on this draft notification. The Committee desired that the scientific names along with the common name of flora and fauna be furnished, in consultation with BSI and ZSI, if required. The State government mentioned that it has proposed Tamor Pingla as a Tiger Reserve. It also proposed some minor changes in the coordinate and regulated activities (para 20 Insulation of electric lines) of the draft notification.

After deliberations committee recommended that the proposal be dropped.

5.16 Eco-sensitive Zone around Pamed Wildlife Sanctuary, Chhattisgarh

Pamed Wildlife Sanctuary is situated in District Bizapur, Chhattisgarh and spread over an area of 442.230 Sq. km. is known for its rich habitat of varieties of flora and fauna including Baisan, Leopard, Nilgai, Sambhar, Kotari, Wildboar, Wild dog, Wild Cat, Peacock, Langur, Macaque Monkey, Chital, Bear with tropical moist mixed deciduous forest, tropical dry deciduous forest, mixed forest with and without Teak, dry evergreen forest, aquatic vegetation. The sanctuary also provides an extension of habitat to Indrawati Tiger Reserve.

It order to conserve and protect the area from ecological and environmental point of view, a draft notification dated 25.02.2016 to declare an area around the protected area of Pamed Wildlife Sanctuary as Eco-sensitive Zone has been issued. As per this, an area to an extent of 1 km all around the boundary of Pamed Wildlife Sanctuary in the State of Chhattisgarh is being notified as the Pamed Wildlife Sanctuary Eco-sensitive Zone. The Eco sensitive Zone is spread over an area of 62.73 square kilometres with an extent of 1 km around the boundary of Pamed Wildlife Sanctuary excluding portion on the Western side of the Sanctuary which shares boundary with the State of Telangana. A total of 7 villages fall within Eco-sensitive Zone .

Shri S. K. Singh, APCCF (WL), Govt. of Chhattisgarh apprised the Committee about the proposal. The salient features of the ESZ are as follows:

Area of PA	:	442.230 sq. Kms.
Proposed ESZ area	:	62.73 sq. Kms.
Proposed Extent ESZ	:	1 km.

No comments were received from public/ stakeholders on this draft notification. The Committee desired that the scientific names along with the common name of flora and fauna be furnished, in consultation with BSI and ZSI. The State Government proposed some minor changes in the coordinate and regulated activities (para 20 Insulation of electric lines) of the draft notification. The Committee appreciated the maps provided for Pamed ESZ proposal and desired that the maps also include 8-10 km area around the PA-ESZ boundary.

After deliberations committee recommended the proposals with the suggested changes (State government to provide details of text).

5.17 Eco-sensitive Zone around Barnawapara Wildlife Sanctuary, Chhattisgarh

Barnawapara Wildlife Sanctuary is located in Raipur Division, District Balodabazaar, Chhattisgarh and is located at a distance of about 100 kilometre from Raipur city. Barnawapara Wildlife Sanctuary is spread over an area of 244.66 square kilometres. It is an important protected area known for its rich habitat consisting of a variety of flora and fauna including leopard, bison, sloth bear, sambhar, blue bull, spotted deer, barking deer, hyeana,

wolf, jackal, fox, jungle cat, mongoose, hares, common langur, wild dog, wild boar, etc. It forms a watershed for the River Mahanadi and its tributaries – the Balamdehi and Jonk rivers. Barnawapara Wildlife Sanctuary forms a watershed for the River Mahanadi and its tributaries – the Balamdehi and Jonk rivers.

In order to conserve and protect the area from ecological and environmental point of view, a draft notification dated 24.02.2016 has been issued for declaring an area of 93.997 square kilometre (this includes 81.86 square kilometres of Reserve Forest and Protected Forest) to an extent upto one kilometre from the boundary of Barnawapara Wildlife Sanctuary as eco-sensitive. A total of 21 villages, namely Achanakpur, Bhinmori, Dhawalpura, Dhebikhar1, Ghatmurwa, Gidhpuri, Jamhar2, Jamhar7, Jamhar8, Jogidipa, Khurmuri, Konjia, Ladadih, Mohda, Nawagaon, Pakrid, Phurphundi, Rawan, Sahiyabhata, Taldadar, Tenduchhua fall within Eco-sensitive Zone.

Shri S K Singh, APCCF (WL), Govt. of Chhattisgarh apprised the Committee about the proposal. The salient features of the ESZ are as follows:

Area of PA	:	244.66 sq. Kms.
Proposed ESZ area	:	93.997 sq. Kms.
Proposed Extent	:	Up to 1 km.

No comments were received from public/ stakeholders on the draft notification. Based on discussion, the Committee suggested exploring the possibility of increasing the ESZ width. The Committee desired that the scientific names along with the common name of flora and fauna be furnished, in consultation with BSI and ZSI, if required. The Committee appreciated the maps provided for Barnawapara ESZ proposal and desired that the maps also include 8-10 km area around the PA-ESZ boundary.

After deliberations the Committee recommended to submit revised proposal for further consideration.

5.18 Eco-sensitive Zone around Gomarda Wildlife Sanctuary, Chhattisgarh

Gomarda Wildlife Sanctuary is located in district Raigarh, Chhattisgarh and is spread over an area of 277.820 square kilometres and forms an important protected area known for its

rich habitat consisting of a variety of flora and fauna including mammals, birds, amphibians, reptiles, fish, varieties of butterflies and insects and a number of waterfalls such as Tamtora, Adharpani, Khapan, adding richness to the scenic beauty of the natural landscape endowed with rich biodiversity and forests.

It order to conserve and protect the area from ecological and environmental point of view, a draft notification dated 11.03.2016 has been issued for declaring an area of 107.50sq km (this includes 39.5 sq kms of reserve and protected forest) with an extent varying upto 1 kilometre from the boundary of the Gomarda Wildlife Sanctuary as eco-sensitive. A total of 48 revenue villages fall within Eco-sensitive Zone.

Shri S. K. Singh, APCCF (WL), Govt. of Chhattisgarh apprised the Committee about the proposal. The salient features of the ESZ are as follows:

Area of PA	:	277.820 sq. Kms.
Proposed ESZ area	:	107.50 sq. Kms.
Proposed Extent	:	Up to 1 km.

No comments were received from public/ stakeholders on the draft notification. Based on discussion, the Committee suggested exploring the possibility of increasing the ESZ width in the south and south western side of the PA. The Committee desired that the scientific names along with the common name of flora and fauna be furnished, in consultation with BSI and ZSI, if required. The Committee appreciated the maps provided for Gomarda ESZ proposal and desired that the maps also include 8-10 km area around the PA-ESZ boundary.

After deliberations the Committee recommended to submit revised proposal for further consideration.

5.19 Eco-sensitive Zone around Semarsot Wildlife Sanctuary, Chhattisgarh

Semarsot Wildlife Sanctuary is situated in district Balrampur, Chhattisgarh of an area of 430.361 square kilometres and is an important protected area known for the rich habitat of varieties of flora and fauna including panther, Chital, Kotari, Hyena, Sloth bear, Peacock etc.. It provides a habitat for migratory elephants with perennial water sources of waterfalls. The Sanctuary consists primarily of Sal forests.

It order to conserve and protect the area from ecological and environmental point of view, a draft notification dated 30.03.2016 has been issued for declaring an area of 137.30 square

kilometres and an extent of 1 kilometre all around the boundary of Semarsot Wildlife Sanctuary as eco-sensitive zone. A total of 23 villages fall within the eco-sensitive zone.

Shri S K Singh, APCCF (WL), Govt. of Chhattisgarh apprised the Committee about the proposal. The salient features of the ESZ are as follows:

Area of PA	:	430.361 sq. Kms.
Proposed ESZ area	:	137.30 sq. Kms.
Proposed Extent	:	1 km.

No comments were received from public/ stakeholders on the draft notification. Based on discussion, the Committee suggested to explore the possibility of increasing the ESZ width in the west side of the PA. The Committee desired that the scientific names along with the common name of flora and fauna be furnished, in consultation with BSI and ZSI, if required. The Committee appreciated the maps provided for Semarsot ESZ proposal.

After deliberations the Committee recommended for submission of revised proposal for further consideration.

5.20 Eco-sensitive Zone around Bakhira Wildlife Sanctuary, Uttar Pradesh

Bakhira Bird Sanctuary is situated in district Sant Kabir Nagar, in the State of Uttar Pradesh, covering an area of 2.246 square kilometres. The sanctuary is an open habitat of large number and variety of migratory and resident birds. Apart from birds, the Sanctuary is also home to a variety of trees, shrubs, hydrophytes. About 40000 birds belonging to about 30 species have been spotted during winter seasons and the important birds visiting this sanctuary includes cormorants, herons, egrets, storks, pochards, coots, ducks, etc. Breeding of Sarus Crane and the Rare Black Necked Stork have been recorded in the sanctuary. The flora of this area is represented by semi- arid vegetation outside the sanctuary, and a typical aquatic vegetation of the lake in plains of North India.

In order to conserve and protect the area from ecological and environmental point of view, a draft notification dated 22.12.2015 has been issued for an extent of upto one kilometre around the boundary of the Bakhira Bird Sanctuary in the State of Uttar Pradesh as the Bakhira Bird Sanctuary Eco-sensitive Zone.

Ms. Renu Singh, CF, Govt. of Uttar Pradesh apprised the Committee about the proposal. The salient features of the ESZ are as follows:

Area of PA	:	2.246 sq. kms
Proposed ESZ area	:	-
Proposed Extent of ESZ	:	Up to 1 km.

No comments have been received from public/ stakeholders on the draft proposal. Considering the discussion the Committee suggested that the list of prohibited/regulated/promoted activities to be specific for conservation of bird sanctuaries considering the protected area is a water body/wet land. It was also suggested for including agro-forestry, medicinal plants, organic farming as promoted activities. The Committee discussed about the nitrate issue and suggested for including water quality and soil quality management along with skill development programme. The Committee desired that details of area of ESZ may also be provided.

The Committee after deliberations recommended the proposal for finalisation incorporating the aforesaid details.

5.21 *Eco-sensitive Zone around Lakh Bahosi Bird Sanctuary, Uttar Pradesh*

Lakh Bahosi Bird Sanctuary situated in the Kannauj district of Uttar Pradesh is spread over an area of 8.32 square kilometres and is located at a distance of about 38 kilometres from the district headquarter of Kannauj in the State of Uttar Pradesh comprised of forest land, gram samaj land, private land and other government land including two water bodies in the sanctuary, namely, Lakh and Bahosi, situated about 6 kilometre apart, and is known for its open habitat of large number of migratory and resident species of birds such as storks, herons, pochards, egrets, cormorants, etc;

In order to conserve and protect the area from ecological and environmental point of view, a draft notification dated 22.12.2015 to notify an area to an extent of 100 metre all around the boundary of Lakh Bahosi Bird Sanctuary in the State of Uttar Pradesh as the Lakh Bahosi Bird Sanctuary Eco-sensitive Zone has been published.

Ms. Renu Singh, CF, Govt. of Uttar Pradesh apprised the Committee about the proposal. The salient features of the ESZ are as follows:

Area of PA	:	8.32 sq. Kms.
Proposed ESZ area	:	-
Proposed Extent of ESZ	:	Up to 100 km.

No comments were received from public/ stakeholders on the draft proposal. Considering the discussion the Committee suggested that the list of prohibited/regulated/promoted activities to be updated considering the protected area as water body/ wet land. It also suggested for including agro-forestry, medicinal plants, organic farming. The committee discussed about the nitrate issue and suggested for including water quality and soil quality management along with skill development programme.

The Committee after deliberations recommended the proposal for final notification after receipt of the proposal from State Government incorporating the aforesaid details.

5.22 Eco-sensitive Zone around Samaspur Wildlife Sanctuary, Uttar Pradesh

Samaspur Bird Sanctuary is located in District Raibareilly, Uttar Pradesh, covering an area of 308.54 hectares and known for its open habitat of large number and variety of migratory and resident birds. The sanctuary is also home to a variety of trees, shrubs, hydrophytes and the faunal species that have a habitat here include molluscus, arthropods, annelids, amphibians, reptiles and several species of mammals.

In order to conserve and protect the area from ecological and environmental point of view, a draft notification dated 18.01.2016 to notify an extent varying from 1 to 2 kilometres around the boundary of Samaspur Bird Sanctuary as Eco-sensitive Zone has been published. There are a total of 6 villages falling in the Eco-sensitive Zone.

Smt. Renu Singh, CF, Govt. of Uttar Pradesh apprised the Committee. Draft notification of the ESZ proposal was published on 27th January, 2016. The salient features of the ESZ are as follows:

Area of PA	:	308.54 hectares.
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Proposed ESZ area : 3.085 km.

Proposed Extent : 1 to 2 km.

No comments were received from public/ stakeholders on the draft proposal. Considering the discussion the Committee suggested that the list of prohibited/regulated/promoted activities to be updated considering the protected area as water body/ wet land. It also suggested for including agro-forestry, medicinal plants, organic farming. The committee further discussed about the nitrate issue and suggested for including water quality and soil quality management along with skill development programme.

The Committee after deliberations recommended the proposal for final notification after receipt of the proposal from State Government incorporating the aforesaid details.

5.23 *Eco-sensitive Zone around Nawabganj Bird Sanctuary, Uttar Pradesh*

Nawabganj Bird Sanctuary is situated in district Unnao, State of Uttar Pradesh, covering an area of 224.60 ha. It is known for its open habitat of large number and variety of migratory and resident birds. Apart from birds, the sanctuary is also home to a variety of trees, shrubs, hydrophytes. The faunal species that have a habitat here include molluscus, arthropods, annelids, amphibians, reptiles and several species of mammal.

In order to conserve and protect the area from ecological and environmental point of view, a draft notification dated 20.01.2016 to notify an area to an upto 100 meters around the boundary of the Nawabganj Bird Sanctuary as Eco-sensitive Zone has been published.

Ms. Renu Singh, CF, Govt. of Uttar Pradesh apprised the Committee about the proposal. The salient features of the ESZ are as follows:

Area of PA : 224.60 hectares.

Proposed ESZ area : -

Proposed Extent : Up to 100 meters

No comments were received from public/ stakeholders on the draft proposal. Considering the discussion the Committee suggested that the list of prohibited/regulated/promoted

activities to be updated considering the protected area as water body/ wet land. It also suggested for including agro-forestry, medicinal plants, organic farming. The Committee further discussed about the nitrate issue and suggested for including water quality and soil quality management along with skill development programme.

The Committee after deliberations recommended the proposal for final notification after receipt of the proposal from State Government incorporating the aforesaid details.

5.24 Eco-sensitive Zone around Sandi Bird Sanctuary, Uttar Pradesh

Sandi Bird Sanctuary is located in district Hardoi, Uttar Pradesh covering an area of 3.085 square kilometres. It is known for its open habitat of large number and variety of indigenous birds. Large number of migratory birds from Tibet, China, Europe and Siberia migrate here during winter. Apart from birds, a variety of biodiversity is conserved here which includes fish, reptiles, Amphibians, Molluscs, Algae, ferns.

In order to conserve and protect the area from ecological and environmental point of view, a draft notification dated 20.01.2016 to notify an area to an extent of upto 1km around the boundary of Lakh Bahosi Bird Sanctuary in the State of Uttar Pradesh as the Lakh Bahosi Bird Sanctuary Eco-sensitive Zone has been published. There are eight villages within the ESZ.

Ms. Renu Singh, CF, Govt. of Uttar Pradesh apprised the Committee about the proposal. The salient features of the ESZ are as follows:

Area of PA	:	3.085 sq.km.
Proposed ESZ area	:	-
Proposed Extent of ESZ	:	Up to 1 km.

No comments were received from public/ stakeholders on the draft proposal. The state government requested for correction of coordinate without any change in area and extend of the ESZ. Considering the discussion the Committee suggested that the list of prohibited/regulated/promoted activities to be updated considering the protected area as water body/ wet land. It also suggested for including agro-forestry, medicinal plants, organic

farming. The committee further discussed about the nitrate issue and suggested for including water quality and soil quality management along with skill development programme.

The Committee after deliberations recommended the proposal for final notification after receipt of the proposal from State Government incorporating the aforesaid details.

5.25 Eco-sensitive Zone around Chilchila Wildlife Sanctuary, Haryana

Chhilchhila Wildlife Sanctuary which is about 29 hectares in area, is a wetland, which attracts winter migratory birds and surrounded by fertile agriculture lands; And whereas, the sanctuary provides an ideal habitat for ground dweller and flying birds. Peafowl's, Grey Partridge, Black Partridge, Common Dove, Ring Dove, Brahamani Mayna, Common Mayna, Bubbler, Blue Robin, Tree pie, Myna, Sparrows, Crow Pheasant, Cattle Egrets, Little Egrets, Pond Horn, Paddy Bird, Common Teel, Shoveller, Stilt, Mallard, Poachard, Comb Duck etc. are the main birds species. Besides the above Neelgai, Wild Hare, Lizard and different species of snakes are found in the sanctuary. the composition and distribution of the forest vary due to the climatic condition, type of forest is mixed deciduous forest and there are plantation of *Eucalyptus* and Ber in the area. Besides this plant species like Kikar, Neem, Bargat, Pipal, Jamun and Belpathar are also found.

In order to conserve and protect the area from ecological and environmental point of view, a draft notification dated 08.01.2016 has been issued for declaring an area of 19ha and an extent of 80m all around the boundary of Chhilchhila Wildlife Sanctuary as eco-sensitive zone.

Shri P P. Bhojvaid, APCCF, Govt. of Haryana apprised the Committee about the proposal. The salient features of the ESZ are as follows:

Area of PA	:	29 hectares.
Proposed ESZ area	:	19 hectares
Proposed Extent ESZ	:	Up to 80 meters.

No comments were received from public/ stakeholders on the draft notification. The Committee after deliberations recommended for finalization of draft notification.

5.26 *Eco-sensitive Zone around Bir Shikadgarh Wildlife Sanctuary, Haryana*

The proposal was deferred on the request of representative of the State Government.

5.26 *Eco-sensitive Zone around Nahar Wildlife Sanctuary, Haryana*

Nahar Wildlife Sanctuary is a reserved forest of about 211 hectares situated in Rewari District of Haryana and is part of 'National Capital Region'. The area supports a good population of Black Buck, Jackal, Fox, Monitor Lizard and other small animals. It is also an important habitat for the Blu Bull, Jackal, Jungle Cat, Mongoose, Indian Cobra, Russel's Viper, Rat Snake, Peafowl, Indian Roller, Owl, Parakeet, Ring Dive, etc. Nahar Wildlife Sanctuary is important for its flora such as Ronj, Kikar, Khairi, Gular, Pikhan, Mulber, Pipal, Panwar, Hingota, Karil, Heens, Akash Bel, Kachri, Santa Santi, Dudhi, etc.

In order to conserve and protect the area from ecological and environmental point of view, a draft notification dated 01.06.2015 has been issued for declaring an area of 94ha and an extent of 100m all around the boundary of Nahar Wildlife Sanctuary as eco-sensitive zone.

Shri P. P. Bhojvaid, APCCF, Govt. of Haryana apprised the Committee about the proposal. The salient features of the ESZ are as follows:

Area of PA	:	211 hectares.
Proposed ESZ area	:	94 hectares
Proposed Extent ESZ	:	up to 100 meters.

Comments received from Conservation Action Trust, Mumbai were discussed during the meeting. The Committee after deliberations suggested to explore the possibility of extending the width of the ESZ on the north and the eastern side and recommended to submit revised proposal.

5.27 *Eco-sensitive Zone around Ramnagar Wildlife Sanctuary, Jammu & Kashmir*

Ramnagar Wildlife Sanctuary located on the Northern side of Jammu city. In the west, there are settlements of Janipura and Shangan. The Ramnagar Wildlife Sanctuary covers an area of 12.75 square kilometres. The flora and fauna represent rich biological significance of this sanctuary. Ramnagar Wildlife Sanctuary is known for habitat of large number of herbivores

and rich biodiversity of avifauna. The principal species include Common Indian Leopard, Rhesus Macaque, Barking Deer, Wild Boar, Nilgai, Porcupine, Red Jungle fowl, Pea Fowl, Python, Russel Viper (Cobra) Partridges and other avian species. Besides being important from wildlife conservation point of view, this area is ecologically very important being in the close proximity of Jammu city and it also forms catchment of River Tawi. The Ramnagar Wildlife Sanctuary area consists mainly of Northern Dry Mixed Deciduous Forest. The area is covered by dense mixed scrub forest with occasional Chir (*Pinus roxburghii*) trees. Phullai (*Acacia modesta*) predominate the area. Other common species are Khair (*Acacia catechu*), Silk cotton tree (*Bombax ceiba*), Amaltas (*Cassia fistula*), Baul (*Acacia arabica*), Shisham (*Dalbergia sissoo*), Mallotus phellipinensis, and Grewia optiva and few other species are Adhatoda vasica, Haldu (*Adinia cardifolia*), Bel (*Aegle marmelos*), Goat Weed (*Ageratum conyzoides*), Siris (*Albizia labbeck*), Khanwal (*Bauhinia purpuria*), Aak (*Calotropis procera*), Dodder (*Cascuta reflexa*), Toon (*Toona ciliata*).

In order to conserve and protect the area from ecological and environmental point of view, a draft notification dated 18.03.2016 notifying an extent of up to 1850.43 meters around the boundary of Ramnagar Wildlife Sanctuary in the State of Jammu and Kashmir as the Ramnagar Wildlife Sanctuary Eco-sensitive Zone. There are no villages falling within the area of the eco-sensitive zone.

Shri R K Gupta, Principal Secretary, Govt. of Jammu and Kashmir apprised the Committee about the proposal. The salient features of the ESZ are as follows:

Area of PA	:	12.75 sq.km.
Proposed ESZ area	:	-
Proposed Extent	:	1850.43 meters.

No comments have been received from public/ stakeholders on this draft notification. The Committee suggested including River Tawi on the east side of the PA under ESZ. The Committee was informed that sand mining operations in Tawi riverbed along the east side of the PA are being undertaken for construction activities for Jammu city which is adjoining the Sanctuary. In view of this, the State Government requested for exclusion of the stretch of River Tawi along the Wildlife Sanctuary. The Committee after discussions emphasised that sand mining could be undertaken beyond the ESZ area.

Based on deliberations, the Committee deferred the proposal for reconsideration of the State Government to include the stretch of River Tawi on the east side of the PA as part of ESZ.

6. Based on the draft notifications, comments received, presentations made on the proposals and discussions, the Expert Committee recommended eight (8) proposals; revision sought for sixteen (16) proposal deferred two (2); dropped one (1) and seven (7) proposals were not considered on the request of the State Government of Uttarakhand, Assam, Haryana, Bihar and Chattisgarh:

S N	Protected Area	States	Decision
1.	Valley of Flowers National Park	Uttarakhand	Not considered on the request of State Govt.
2.	Nandhaur Wildlife Sanctuary	Uttarakhand	Not considered on the request of State Govt.
3.	Consideration of Zonal Master Plan for Bhagirathi ESZ	Uttarakhand	Not considered on the request of State Govt.
4.	Consideration of Master Plan for Doon Valley notification	Uttarakhand	Not considered on the request of State Govt.
5.	Dhauladhar Wildlife Sanctuary	Himachal Pradesh	Revised proposal to be submitted by State Govt.
6.	Manali Wildlife Sanctuary	Himachal Pradesh	Recommended with the changes suggested by the Committee
7.	Pin Valley National Park	Himachal Pradesh	Recommended with the changes suggested by the Committee
8.	Nargu Wildlife Sanctuary	Himachal Pradesh	Deferred
9.	Mehao Wildlife Sanctuary	Arunachal Pradesh	Revised proposal to be submitted by State Govt.
10.	Namdapha Tiger Reserve	Arunachal Pradesh	Revised proposal to be submitted by State Govt.
11.	Mouling National Park	Arunachal Pradesh	Revised proposal to be submitted by State Govt.
12.	Rabe Supse Wildlife Sanctuary	Arunachal Pradesh	Revised proposal to be submitted by State Govt.
13.	Kane Wildlife Sanctuary	Arunachal Pradesh	Recommended with the changes suggested by the Committee
14.	Rajiv Gandhi Orang National Park	Assam	Not considered on the request of State Govt.
15.	Bherjan Borajan Wildlife Sanctuary	Assam	Recommended with the changes suggested by the Committee
16.	Keibul Lamjao National Park	Manipur	Recommended with the changes suggested by the Committee

17.	Nongkhyllem Wildlife Sanctuary	Meghalaya	Recommended with the changes suggested by the Committee
18.	Sunabeda Wildlife Sanctuary	Odisha	Revised proposal to be submitted by State Govt.
19.	Debrigarh Wildlife Sanctuary	Odisha	Revised proposal to be submitted by State Govt.
20.	Udaipur Wildlife Sanctuary	Bihar	Not considered on the request of State Govt.
21.	Tamor Pingla Wildlife Sanctuary	Chhattisgarh	Dropped
22.	Pamed Wildlife Sanctuary	Chhattisgarh	Recommended with the changes suggested by the Committee
23.	Barnawapara Wildlife Sanctuary	Chhattisgarh	Revised proposal to be submitted by State Govt.
24.	Gomarda Wildlife Sanctuary	Chhattisgarh	Revised proposal to be submitted by State Govt.
25.	Semarsot Wildlife Sanctuary	Chhattisgarh	Revised proposal to be submitted by State Govt.
26.	Bakhira Wildlife Sanctuary	Uttar Pradesh	Revised proposal to be submitted by State Govt.
27.	Lakh Bahosi Bird Sanctuary	Uttar Pradesh	Revised proposal to be submitted by State Govt.
28.	Samaspur Wildlife Sanctuary	Uttar Pradesh	Revised proposal to be submitted by State Govt.
29.	Nawabganj Bird Sanctuary	Uttar Pradesh	Revised proposal to be submitted by State Govt.
30.	Sandi Bird Sanctuary	Uttar Pradesh	Revised proposal to be submitted by State Govt.
31.	Chilchila Wildlife Sanctuary	Haryana	Recommended with the changes suggested by the Committee
32.	Nahar Wildlife Sanctuary	Haryana	Revised proposal to be submitted by State Govt.
33.	Bir Shikhadgarh Wildlife Sanctuary	Haryana	Not considered on the request of State Govt.
34.	Ramnagar Wildlife Sanctuary	Jammu & Kashmir	Deferred

7. In addition, the Committee also decided that:

1. BSI and ZSI will provide PA specific Flora and Fauna list to all State Governments.

2. The Wildlife Division will provide the list where PAs are located adjacent to each other across inter-state boundaries and to be followed up with the State Governments for sending proposals of ESZ for their side of the Sanctuary/National Park/Tiger Reserve.
3. Common names of flora and fauna along with scientific names of flora and fauna (in italics and in brackets) should be mentioned along with their in consultation with BSI and ZSI.
4. The following activities will be added in the list of promotional activities:
 - Agro-forestry
 - Skill Development
 - Environmental awareness
 - Organic farming
 - Para-taxonomy for awareness of students and local communities on the flora and fauna in the area
5. The following activity will be included in the list of regulated activity:
 - Solid waste management
 - Tourism to be replaced by the word 'eco-tourism'

The Chair reiterated the request to State Governments to follow the Criteria sent earlier for preparation of ESZ proposals and Guidelines on PowerPoint presentations to be before the Expert Committee as given at **Annexure-2**.

The meeting ended with vote of thanks to the Chair.

Annexure-1**List of Participants of the 19th Expert Committee on ESZ held on 4th July, 2016****Members of Expert Committee**

1. Dr. Amita Prasad, Additional Secretary, Chair
2. Dr. Sarnam Singh, Indian Institute of Remote Sensing, ISRO, Dehradun
3. Shri Sanjay Kumar Agarwal, Assistant Director, Forest Survey of India, Dehradun
4. Dr. Gautam, Scientist, WII Dehradun
5. Shri Sandeep Chauhan, Scientist 'D', Botanical Survey of India, Kolkata
6. Shri Kailash Chandra, Director (I/C), Zoological Survey of India
7. Shri V R S Rawat, ICFRE, Dehradun, Uttarakhand
8. Shri K. Chandra Sekar, Scientist 'D', GB Pant Institute of Himalayan Environment & Development
9. Shri Subrato Bose, Additional Director, MOEF & CC
10. Dr. T. Chandini, Adviser, MoEF&CC
11. Shri S P Vashishth, DIG(WL)

Ministry of Environment, Forest and Climate Change, GOI

1. Shri Pankaj Verma, Joint Director
2. Dr. Ashish Kumar, Deputy Director
3. Dr. Satya, Deputy Director
4. Ms. Jafrin Farha Hussain, Research Assistant

Officials of State Government of Arunachal Pradesh, Assam, Manipur, Punjab, Meghalaya, Uttar Pradesh, Bihar, Jharkhand, Tripura, Odisha, and Himachal Pradesh**Uttarakhand**

1. Dr. Saket Badola, Deputy Director, Corbett NP, Govt. of Uttarakhand
2. Dr. Chandrashekar Sonewal, DFO Haldwani, Govt. of Uttarakhand

Himachal Pradesh

3. Shri N P S Dhaulta, DFO (HQ), Govt. of Himachal Pradesh

Arunachal Pradesh

4. Shri Ishwar Singh, CCF (WL), Govt. of Arunachal Pradesh

Assam

5. Shri M K Yadav, APCCF(P&D), Assam Forest Dept., Govt. of Assam

Manipur

6. Shri Arun R.S, DCF, Govt. of Manipur
7. Shri Shambhu Singh, Additional C.S. , Govt. of Manipur
8. Shri Kereilhouvi Angami, PCCF (WL), Govt. of Manipur

Meghalaya

9. Shri P.S. Nongbri, CCF (WL), Govt. of Meghalaya

Odisha

10. Shri D Biswal, Special Secretary, Government of Odisha
11. Shri Siddhanta Das, PCCF(WL), Government of Odisha
12. Shri Sandeep Nayak, DFO, Himkund, Government of Odisha
13. Shri Vishwanath Neelannavar, IFS, DFO, Sunabeda, Government of Odisha

Chhattisgarh

14. Shri S K Singh, APCCF (WL), Govt. of Chhattisgarh
15. Shri C S Tiwari, IFS, Dy. Director, Govt. of Chhattisgarh

Uttar Pradesh

16. Shri Ashok Kumar, Special secretary, Govt. of Uttar Pradesh
17. Shri Kuruvilla Thomas, CCF(WL), Govt. of Uttar Pradesh
18. Smt. Renu Singh, CF, Govt. of Uttar Pradesh

Haryana

19. Shri P P Bhojvaid, APCCF & CWLW, Govt. of Haryana

Jammu and Kashmir

20. Shri R K Gupta, IAS, Principal Secretary, Govt. of J & K
21. Shri Lalit Sharma, DFO (WL), Govt. of J & K

ANNEXURE-2**A. CHECKLIST FOR PREPARATION OF ESZ PROPOSALS**

1. Coloured maps (in A3 or A4 size) to be provided in soft and hard forms: As a reference, the maps prepared by Govt of Chhattigarh for Pamed, Gomarda, Semarsot, Barnawapara and Tamor Pingla may be looked up from MoEF&CC's website: enufor.nic.in/Rules and Regulations/ESZ Notifications/Chhatisgarh (The area shown for all 4 maps should cover not only the PA, ESZ **but also the surrounding area of 7-10km around the PA-ESZ areas.**)
 - i. Location of PA/ESZ on a district/state map.
 - ii. Map based on the latest **Survey of India topo sheets** showing landuse features using standard colour codes for maps such as forests/vegetation (green colour), water bodies (blue), settlements (brown), wasteland (grey), agriculture (yellow) etc. for PAs, ESZ and demarcating the boundary of PA and the ESZ. In addition, the map should also include area extending all around the PA, **upto 7-10 km beyond ESZ boundary.**
 - iii. **Map based on Remote Sensing Satellite image or Google earth image** showing the distinct landuse features and demarcating the boundary of PA and the ESZ. In addition, the map should also include area extending all around the PA, **upto 7-10 km beyond ESZ boundary.**
 - iv. (Geo-coordinates) Latitude and Longitudes (in DMS, i.e., Degree/Minutes/Second Format) based on prominent locations should be shown in a **tabular form** in the proposal as well as **on maps of Protected Area and ESZ** along with legend of land-use.
 - v. Scale Bars on all maps need to be compulsorily depicted along with legends of land use classification which should be depicted by standard colour code.
 - vi. Tables and text on the maps should be readable on the A-4/A-3 size sheet of paper.
2. State Remote Sensing Centres & GIS Centres should be part of delineation and mapping of the PA, ESZ and forest areas.
3. Scientific names of all floral and faunal species need to be provided in the list of flora and fauna along with their common names in the ESZ proposal.
4. List of rare/endangered, endemic, threatened species of flora and fauna found in the PAs/ESZs in the ESZ proposal.
5. Detailed justification needs to be provided in case, the ESZ is less than 500m in width. The width of ESZ should be provided in a range (min to max.)
6. Member-Secretary of the State Bio-diversity Board should also be made a member of the Monitoring Committee.

7. Detailed justification needs to be provided in case the ESZ is less than 500m in width. The width of ESZ should be provided in a range (min to max.) and reflected with detailed boundary description along with GPS coordinates of prominent locations in both the text as well as a legend alongside the map.

B. GUIDELINE FOR PRESENTATIONS BEFORE ESZ COMMITTEE

1. Power point presentations may kindly be made before the ESZ Committee
2. Hard Copies of the Presentation should also be circulated during the presentation and soft copy to the officers in MOEF&CC.
3. The PPT presentation should cover the following:
 - a. Salient features of the ESZ proposal indication size of PA, size of ESZ along with width (range should provide maximum and minimum width)
 - b. **MAPS**
 - i. Maps - As a reference, the maps prepared by Govt of Chhattigarh for Pamed, Gomarda, Semarsot, Barnawapara and Tamor Pingla may be looked up from MoEF&CC's website: *envfor.nic.in/Rules and Regulations/ESZ Notifications/Chhatisgarh*
(The area shown for all 4 maps should cover not only the PA, ESZ **but also the surrounding area of 7-10km around the PA-ESZ areas.**)
 - ii. Location map of the PA in the district, State
 - iii. Map showing Location Map of the PA on a SOI **topo sheet** showing landuse features using standard colour codes for maps such as forests/vegetation (green colour), water bodies (blue), settlements (brown), wasteland (grey), agriculture (yellow) etc. for PAs, ESZ and demarcating the boundary of PA and the ESZ.
 - iv. In addition, the map should also include area extending all around the PA, **upto 7-10 km beyond ESZ boundary.**
 - v. Map should include details of villages, towns, and settlements in and around the PA and ESZ and any infrastructure and industrial projects, if any in the PA, ESZ and 7-10 km around the PA.
 - vi. A separate **Google Earth map** demarcating PA and ESZ boundary and showing the terrain features and land use features of PA including water bodies, ESZ and area of 7-10km around the PA. The Date of the map should also be displayed.
 - c. Whether regulations such as CRZ, Wetland regulations, etc are applicable to the PA and ESZ.

- d. Description of bio diversity with a list of rare, threatened and endangered species of flora and fauna along with Common names.
 - e. Justification of the ESZ area. In case it is less than 500m, a detailed justification may be provided.
 - f. Details of consultative process followed.
 - h. Summary of Comments and responses on the draft Notification
 - i. Details of court cases, if any and status thereon
-