A meeting of the Expert Committee for declaration of Eco-Sensitive Zones around Wildlife Sanctuaries/National Parks was held under the Chairpersonship of Dr. Amita Prasad, Additional Secretary on 5th October, 2016 in the Ministry of Environment, Forest & Climate Change, Indira Paryavaran Bhawan, New Delhi. The list of participants is annexed as **Annexure-1.** The following thirteen (13) proposals were considered for finalising the draft Eco-Sensitive Zone (ESZ) notifications:

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<th>S. N.</th>
<th>Protected Area</th>
<th>State</th>
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In addition, the proposal of Wildlife Institute of India (WII), Dehradun on “Processing and Notification of Eco-Sensitive Zones around Protected Areas and Preparation of Geospatial Database” was also considered in this Meeting.

2. At the outset, the Chairperson welcomed the Members of the Expert Committee and representatives of the State Governments of Bihar, Haryana and Delhi. The representative of Government of Rajasthan requested for another date for consideration of their proposals. The representative of Government of Haryana requested that the proposal for finalisation of ESZ for Bir Shikargarh WLS may be taken up later in other meeting. Representatives from the Government of Chhattisgarh did not turn up for the meeting. After agreeing to the request of
the State Governments of Rajasthan and Haryana, Chairperson requested the representatives of Bihar and Delhi for presentation of their proposals as per the Agenda.

3. Presentations of Proposals

3.1 Eco-sensitive Zone around Udaipur WLS, Bihar

The proposal of Udaipur Wildlife Sanctuary was deferred in the last ESZ meeting held on 4th July, 2016 on the request of the Govt. of Bihar.

Udaipur Wildlife Sanctuary is located in the West Champaran district in Bihar and it extends over an area of 887 hectares. An oxbow lake forms a part of the sanctuary which is known as the Sarainya Man. The fauna found here include the spotted deer, Barking deer, Hog deer, Blue bull, Indian Hare, Jackal, Fox, Wild boar, Porcupine, Monitor Lizard, Python. Among bird species it include Open billed Stork, Red crested Pochard, Gadwal, Purple Heron. The vulnerable or endangered wild fauna of importance in Udaipur Wildlife Sanctuary are Hog deer, Barking deer and Python. The area of the proposed Eco-Sensitive Zone is 3759 hectares with an extent varying between 1 km and 3.5 kms. The draft notification for declaration of an eco-sensitive zone around Udaipur Wildlife Sanctuary was published on 30.12.2015.

Shri Bharat Jyoti, APCCF & Director (E&F), Govt. of Bihar appraised the Committee about the proposal. The salient features of the ESZ are as follows:

- Area of PA: 887 hectares
- Proposed ESZ area: 3759 hectares
- Proposed Extent of ESZ: varying between 1 km and 3.5 kms

No comments were received from public/ stakeholders on this draft notification. Shri Bharat Jyoti stated that lake does not dry up during drought. He has mentioned that certain typological errors and nomenclature of Divisional Commissioner and DFO in Hindi Version of the draft Notification are required, details of which were sought. It was decided that Department of Animal & Fishery Resources could be included in the Monitoring Committee and also consulted in the preparation of Zonal Master Plan (Para. 2 of Draft notification) (Para. 5 of Draft notification).

The Committee after deliberations recommended the finalisation of the draft notification after incorporating the above mentioned changes.
3.2 **Eco-sensitive Zone around Gautam Buddha Wildlife Sanctuary, Bihar**

Gautam Buddha Wildlife Sanctuary is located in Gaya District of Bihar and Koderma and Chhatra districts of Jharkhand and spread over an area of 259.46 square kilometres (138.33 Sq Km in Bihar). The flora and fauna represent a rich biological significance of this region and consists of Leopard, Sloth Bear, Cheetal, Sambar, Nilgai, Wild Boar, Hyena, Jackal, Wolf, Jungle fowl, Python etc. A draft notification was published on 08.04.2016 declaring an Eco-Sensitive Zone of 149.25 square kilometres with an extent of upto 1 kilometre on Bihar side around the Gautam Buddha Wildlife Sanctuary.

Shri Bharat Jyoti, APCCF & Director (E&F), Govt. of Bihar appraised the Committee about the proposal. The salient features of the ESZ are as follows:

- **Area of the PA:** 259.46 sq. km (138.33 Sq Km in Bihar)
- **Proposed ESZ area:** 149.25 sq. km
- **Proposed extent of ESZ:** varying between 0.25 km and 4 km.

Generic comments were received from Shri Debi Goenka, Conservation Action Trust Mumbai. In addition, comments were also received from Adani Transmission Limited requesting to restrict the boundaries of the ESZ in the Western side for power grid Transmission line.

During the presentation, it was stated that half of the total area of the protected area is in Jharkhand. It is the catchment of the plains of Gaya and two rivers Mahanee and Gauri flow into the Falgu river. There are 70 revenue villages located in the ESZ area. It was also mentioned that a new Railway line (for Dedicated Freight Corridor - Dankuni – Ludhiana) has been proposed through Gautam Buddha WLS at the eastern extremity of the proposed ESZ. In the final ESZ notification it should have special reference to this project under regulated category subject to approval of State Board for Wildlife and National Board for Wildlife with the conditions of appropriate mitigation and compensatory measures as decided by the authorities.

On the request of Adani Power Limited to reduce the ESZ in the western end for Transmission Line it was decided that it is feasible to align new Transmission Line outside of ESZ as there is already a transmission line in that portion and further crowding should be avoided. The Chairperson suggested that for promoting tourism, home stay could form a viable alternative to big commercial hotels and it should be promoted to provide a source of
earning to the local people. It was also suggested that biodiversity conservation may be promoted to support livelihood of the local people.

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

4.3 Eco-sensitive Zone around Pin Kusheshwarasthan Bird Sanctuary, Bihar

Kusheshwar Asthan Bird Sanctuary is situated in the Darbhanga District of Bihar and is spread over an area of 29.21 square kilometres. It has a fresh water lake and its adjoining area is of immense ecological, faunal, floral, geomorphological, religious and natural importance and has myriad aquatic flora and fauna. This Bird Sanctuary is home to many species of water plants, abundant species of fish. About forty species of local birds with fifteen rare and endangered species of migratory birds from Nepal, Tibet, Bhutan, Afghanistan, China, Pakistan, Mongolia Siberia and other countries flock to the area in the winter season. The temple of Lord Shiva inside the sanctuary is traced back to the epic period and is of immense religious importance, and some important bird species marking presence in this area are Dalmatian Pelican (Pelicanus erisups), Indian Darter (Anlinga rufa), Bar-Headed Goose, White Winged Wood Duck (Cairiva scutulata), Marbled Teal (Marmaronetta anqustrostris), Baers Pochard (Aythya baeri), Siberian Crane (Grus leuogranus), Indian Skimmer (Rynchops albicollis), Oriental Qoosander (Merqus goosander), Whistling Teal, Kingfisher, Purple Moor-Hen, etc; and some important aquatic plant species are Jalkumbhi, Narkat, Wild Rice, Blue Water Lili, Hydrela, Muskgrass, etc. Other flora include Ficus religiosa, Ficus bengalensis, Ficus infectona, babool, etc; and important fish species are Rehu, Katla, Singhi, Garai, Bami, Ichna etc. Terrestrial wildlife commonly contain Rhesus macaque, Wild Boar, Jackal, Nilgai, etc. and reptiles include tortoises such as Harhi and Ahua and water snakes Cherna, Machalidhi, Basmha and Darrar. The sanctuary receives water from floods spill of rivers Kamla Balan, Purani Kamla, Kosi, Bhutahi and Jeevachh thereby preventing flooding and water logging of nearby agricultural lands. It acts as a water reservoir and also recharges the ground water in the process. A draft notification was published on 19.05.2016 declaring an eco-sensitive zone area with an extent varying between 0 to 500 metres from the boundary of Kusheshwar Asthan Bird Sanctuary.

Shri Bharat Jyoti, APCCF & Director (E&F), Govt. of Bihar appraised the Committee about the proposal. The salient features of the ESZ are as follows:
Area of the PA: 29.21 sq. km
Proposed ESZ area: 32.93 sq. km
Proposed extent of ESZ: 0.5 kilo meter to 3 kilo meters from the boundary of Kusheshwar Asthan Bird Sanctuary.

The comments received from Conservation Action Trust, Mumbai were considered. It was stated that Kusheshwarasthan Bird Sanctuary is a wetland eco-system, and is located in 36 revenue villages. There have been objections due to a proposed new railway line of 10 kilometres length that would passe through the wetland and the ESZ. The New Railway Line project from Sakri to Hasanpur (sanctioned in 1996-97 and pending till date) would pass through the Bird Sanctuary and its proposed ESZ. The Railways have given detailed justification regarding the railway line. The representatives of the State Govt requested that the final ESZ notification should have a special reference to this project under regulated category subject to approval of State Board for Wildlife and National Board for Wildlife and with the appropriate mitigation and compensatory measures. After detailed deliberations, this was agreed to. However, the Committee decided that the railway station should be constructed outside the ESZ boundary.

Expert from the Wildlife Institute of India (WII) stated that when the area is visited by a large number of water birds when water accumulates in the wetland during monsoon seasons, however, during lean season the place is utilised for agricultural purposes, which may be agreed to. It was decided that Department of Animal & Fishery Resources could be included in the Monitoring Committee and also consulted in the preparation of Zonal Master Plan (Para. 2 of Draft notification) (Para. 5 of Draft notification).

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

4.4 Eco-sensitive Zone around Valmiki Sanctuary and Valmiki Tiger Reserve, Bihar

Valmiki Wildlife Sanctuary, Valmiki National Park and Valmiki Tiger Reserve, are situated in the West Champaran District of Bihar and spread over an area of 898.73 square kilometres. The tracts referred to above as Valmiki Wildlife Sanctuary, Valmiki National Park and Valmiki Tiger Reserve have special and locally unique landscapes and vegetation comprising of Terai areas of the outer Siwaliks of the Himalayan foothills with mosaic of varied landforms and ecosystems consisting of forested hills and valleys, riverine open woodlands, grasslands and swampy areas which shelter rich diversity of flora and fauna including Tiger, Leopard,
Wolf, Wild dog, Hyena, Jungle Cat, Civet, Otter, Gaur, Sambhar, Chital, Barking Deer, Hog Deer, Sloth bear, Python, Mugger, Langur, Bandar, Vulture and numerous species of birds. Many of the species are being vulnerable and endangered. The western end of the protected area is bounded by Bihar-Uttar Pradesh border. A draft notification dated 19.05.2016 was published to declare an Eco-Sensitive Zone with an area of 835.76 square kilometres and the extent varying between 3.5 kilometres to 5 kilometres from the boundary of the Valmiki Wildlife Sanctuary, Valmiki National Park and Valmiki Tiger Reserve.

Shri Bharat Jyoti, APCCF & Director (E&F), Govt. of Bihar appraised the Committee about the proposal. The salient features of the ESZ are as follows:

- Area of the PA: 898.73 sq. km
- Proposed ESZ area: 835.76 sq. km
- Proposed extent of ESZ: varying between 2.5 km to 9 km (zero towards UP border side)

Generic comments received from Conservation Action Trust, Mumbai were considered in the meeting. During the presentation, it was stated that at present there are 28 tigers recorded from the sanctuary. The extent of the ESZ is varying between 2.5 kilometres to 9 kilometres with exception of 0 kilometre towards the UP border side. During the presentation, it was also mentioned that a new border road in Indo-Nepal border zone for strategic purposes is to be constructed in the ESZ but it will be outside the Protected Area. There was a suggestion from the representative of the State Government that a new activity may be included for construction of new roads. It was clarified that the ESZ Notification provides for augmentation of infrastructure and civic amenities to meet requirements of the locals.

It was decided that Field Director and District Magistrate could be included in the Monitoring Committee. The Committee also agreed to limiting the list of activities in the Final Notification to only those pertaining to the Bird sanctuary. The expert committee suggested that a proper survey of the flora and fauna in the ESZ area may be carried out.

The Committee after deliberations recommended for finalization of the draft notification after incorporating the aforesaid details.
4.5 Eco-sensitive Zone around Asola Bhatti WLS, Delhi

Asola Bhatti Wildlife Sanctuary, located in National Capital Territory (NCT) of Delhi is spread over an area of 19.57 square kilometres. It shares its boundary with Haryana in Southern and Eastern side. The flora and fauna represent rich biological significance of this sanctuary and the species found in the protected area are Nilgai, Jungle cat, small Indian Civet, Common mongoose, Jackal, Indian porcupine, five striped palm squirrel, Cheetal, Rufous tailed hare, Rhesus monkey, around 200 species of resident and migratory birds. The faunal diversity is represented by 17 species of mammals, around 201 species of birds, 12 species of reptiles, 5 species of amphibians, 63 species of butterflies and 05 species of dragonflies. The sanctuary consists of a mixture of indigenous and exotic species. It is known to harbour around 83 species of trees, 30 species of shrubs, 95 species of herbs, 18 species of grasses and 4 species of sedges.

A draft notification dated 15.06.2016 was issued to declare an Eco-Sensitive Zone of 15.55 square kilometres with an extent up to 1 kilometre around the boundary of Asola Bhatti WLS.

Shri Arvind Kumar Shukla, Chief Wildlife Warden, Government of Delhi appraised the Committee about the proposal. The salient features of the ESZ are as follows:

- Area of PA: 19.57 sq. km
- Proposed ESZ area: 15.55 sq. km
- Proposed Extent of ESZ: Up to 1 km around the PA

No comments were received from public/ stakeholders on this draft notification. During the presentation, it was stated that the sanctuary was part of a mining area in the past and the deeply dug mining pits are now act as stop over destination for the migratory birds. It was also mentioned that movement of leopard was recently cited in the sanctuary. He further added that Deer's and hyenas are also reported; few eagles have been noticed too. Since the PA is located in an area of old mine, the water table is low at 400 meters. The minimum extent of the ESZ was sought. Chairperson stated that water conservation could be added in list of promoted activities and also in the Zonal Master Plan.

The Committee after deliberations recommended for finalization of the draft notification after incorporating the aforesaid details.
4. Proposal of Wildlife Institute of India, Dehradun on “Processing and Notification of ESZ around PAs and Preparation of Geospatial Database” (Extra Agenda Item)

Shri Gautam Talukdar, WII made a presentation on Processing and Notification of ESZ around PAs and Preparation of Geospatial Database. Based on the presentation, Chairperson suggested that ESZ is not a stand alone proposal; rather it is part of Protected Areas, therefore the whole process of notification of ESZ should be standardised and made online. The flow-chart prepared by WII should be made available to the State Governments. It was further stated that it should be a Decision Support System including a Mitigation Plan and available on the Ministry website. In addition, the proposal may also incorporate Training-cum-Capacity Building component for the state Department personnel. It was emphasised that the SHAPE files must accurately reflect the area demarcated on SOI Topo sheet and also in geospatial maps and the geo-coordinates must match.

While endorsing the proposal, the Committee after discussions decided that WII would submit a revised proposal with a concept note including revision of costs with inclusion of Training-cum-Capacity Building component immediately to the Ministry for consideration of fund support.

5. Based on the draft notifications, comments received on the draft notifications, presentations made on the proposals and discussions, the Expert Committee recommended five (5) proposals of Bihar; three (3) proposals Chhattisgarh were deferred, and five (5) proposals Rajasthan were not considered on the request of the State Government of Rajasthan:

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<td>6.</td>
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Chairperson suggested that WII should bring out the guidelines for Zonal Master Plan (ZMP) as early as possible so that it could be approved by the Hon’ble Minister. Chairperson emphasized that significance should be given to mitigation measures. In this context, representative, WII mentioned that a Manual on mitigation measures will be available soon. Chairperson suggested the addition of “mitigation plan” along with Agro-forestry. It was also decided that ZSI and BSI would undertake an inventory of the biodiversity in PAs and their ESZs and bring out a Compendium and also upload the same on Ministry and their websites. Both ZSI and BSI could also develop a Mobile Application on the biodiversity value existing in PAs and their ESZs for promoting environmental awareness.

It was also noted that some States are seeking repeated deferment on consideration of draft ESZ Notifications and as a result, there is considerable delay in the finalisation of Draft Notifications. It was decided to take up the matter with the concerned States.

6. The meeting ended with vote of thanks to the Chair.
Annexure-1

List of Participants in the 22th Expert Committee on ESZ held on 05th October, 2016

Members of Expert Committee

1. Dr. Amita Prasad, Additional Secretary, Chairperson
2. Shri S.A. Hussan, Scientist ‘G’, WII, Dehradun
3. Dr. Gautam, Scientist, WII, Dehradun
4. Shri Sarnarm Singh, Dean (A) & Group Director ER &SSG, IIRS, ISRO Dehradun
6. Dr. Kailash Chandra, Director, Zoological Survey of India, Kolkata
7. Shri Sanjay K Agarwal, AD, FSI, Dehradun
8. Dr. Sandeep Kumar, Associate TCP, Tour & Country Planning Organisation
9. Dr. P. Lakshminarasimyan, Scientist ‘E’ & HOD, BSI, WRC, Pune
10. Shri VRS Rawat, Scientist ‘F’, ICFRE
11. Shri S P Vashista, DIG(WL), MoEF&CC
12. Dr. T. Chandini, Adviser, MoEF&CC
13. Shri R.M. Bhardwaj, Scientist ‘E’, CPCB

Ministry of Environment, Forest and Climate Change, GOI

1. Shri Subrata Bose, Additional Director, MoEF & CC-Member Secretary
2. Shri Pankaj Verma, Joint Director
3. Dr. Vinod Joon, Deputy Director
4. Ms. Jafrin Farha Hussain, Research Assistant

Officials of Government of Delhi, Haryana, & Bihar

1. Shri A.K Shukla, CWW, Delhi, Department of Forests & Wildlife, Delhi
2. Shri Bharat Jyoti, APCCF & Director (E&E), Deptt. of Environment & Forests, Bihar
3. Shri P. P. Bhojvaid, CWLW, Haryana Forest Department
4. Shri Ranbir Singh, CF (WL), Forest Department, Haryana

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