MINUTES OF 17<sup>TH</sup> EXPERT COMMITTEE FOR DECLARATION OF ECO-SENSITIVE ZONE (ESZ) AROUND WILDLIFE SANCTUARIES/NATIONAL PARKS HELD ON 30<sup>th</sup> MAY, 2016 IN THE 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 30<sup>th</sup> May, 2016 in the Ministry of Environment, Forest & Climate Change, Indira Parayavaran Bhawan, New Delhi, under the Chairpersonship of Dr. Amita Prasad, Additional Secretary. The list of participants is annexed. The following thirty one (30) proposals were placed for consideration for finalising the draft Eco-Sensitive Zone (ESZ) notifications:

SN	Protected Area	States
1	Barda Wildlife Sanctuary (WLS)	Gujarat
2	Gaga Great Indian Bustard WLS	Gujarat
3	Nalsarovar WLS	Gujarat
4	Porbander WLS	Gujarat
5	Velavadar WLS	Gujarat
6	Khijadiya WLS	Gujarat
7	Hingolgarh WLS	Gujarat
8	Lankamalleshwara WLS	Andhra Pradesh
9	Kambalkonda WLS	Andhra Pradesh
10	Manjeera Corcodile WLS	Telangana
11	Kesu Brahmananda Reddy National Park (NP)	Telangana
12	Brahmgiri WLS	Karnataka
13	Attivery WLS	Karnataka
14	Arabithittu WLS	Karnataka
15	Rangayyanadurga Four Horned Antelope Sanctuary	Karnataka

16	Ghataprabha WLS	Karnataka
17	Rannebennur Black Buck WLS	Karnataka
18	Kalsubai Harishchandragad WLS	Maharashtra
19	Dyanganga WLS	Maharashtra
20	Lonar WLS	Maharashtra
21	Sagareshwar WLS	Maharashtra
22	Anerdam WLS	Maharashtra
23	Phansad WLS	Maharashtra
24	Bhamragarh WLS	Maharashtra
25	Yedshi Ramling Ghat WLS	Maharashtra
26	Gangewadi Great Indian Bustard	Maharashtra
27	Nahargarh WLS	Rajasthan
28	Ramsagar WLS	Rajasthan
29	Bhainsrodgarh WLS	Rajasthan
30	Kesarbagh WLS	Rajasthan

2. Chairperson welcomed the members of the Expert Committee and representatives of the State Governments of Andhra Pradesh, Telangana, and Maharashtra. Dr. Prasad stated that the objective of establishing an eco-sensitive zone is to ensure an additional protective zone for the wildlife and their habitat, while at the same time ensuring that the area within an ESZ develops sustainably and people "living in harmony with nature". Dr. Prasad emphasised that after the finalisation of the draft notifications, the State Governments need to prepare Zonal Master Plans for the various activities which are regulated/promoted within the ESZ. A Monitoring Committee also requires to be constituted expeditiously vide provisions of the Notification. The local communities are an important stakeholder and should be made aware of the notification and its proposed implementation. These could be through notices in Panchayat Offices, leaflets with FAQs in local languages and through Mobile Applications and through local TV and Radio channels. Information on environment-friendly technologies and measures for

water, soil conservation, habitat and wildlife conservation could also be shared with the local communities on a regular and sustained basis through various fora. The States could also initiate Modelling Studies for the conservation of the Protected Areas and the ESZs.

3. Representative of Government of Karnataka informed that the Draft Notifications on ESZ proposals have been approved/are under approval of Cabinet; however no presentation was proposed for this meeting. Chairperson stated that a presentation before the ESZ Committee would be essential to consider all objections/comments received on the various proposals before finalising the draft. In view of this, consideration of the 6 draft Notifications of Karnataka ESZ proposals was deferred for the next ESZ meeting.

Government of Rajasthan sought deferment with respect to their proposals. Proposals of Gujarat were also deferred as no representatives of the State Government attended the meeting.

4. Before consideration of individual ESZ proposals, the Committee took note of the generic comments/observations received from Conservation Action Trust, Mumbai. The Committee was of the view that the ESZ proposals should be specific to each Protected Area and the activities listed in regulated and prohibited categories in the various draft notifications could be adequately addressed within the provisions of the final notification and vide existing rules and regulations.

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

### 5.0 The proposals were considered as per agenda.

## 5.1 Eco-sensitive Zone around Lankamalleshwara Wildlife Sanctuary, Andhra Pradesh

The Lankamalleshwara Wildlife Sanctuary is located in the hill range of Kankamallai in the Deccan Plateau in District Kadapa (Kadapa and Proddatur Forest Divisions), Andhra Pradesh. It is home to one of the most endangered and

least known birds in the World, namely, the Jerdon's Double Banded Courser which is endemic to the State of Andhra Pradesh. A number of rare and endangered species such as the Leopard, Sambhar, Cheetal, Wild Dog and a number of reptilian and bird species are also found in the Sanctuary. The forests are mostly Southern Tropical dry deciduous and are home to a large population of sanders (Pterocarpus santallinus) which is endemic to the region. Numerous streams also across the Sanctuary and join River Pennar, which forms the main drainage for the catchment of the Sanctuary. The Sanctuary has a number of perennial springs and water reservoirs.

Representative, Government of Andhra Pradesh apprised the Committee about Lankamalleshwara Wildlife Sanctuary and the proposed ESZ.

The Lankamalleshwara Wildlife Sanctuary is spread over an extent of 464.42 sq km, of which an area of 263.92 sq km falls in Kadappa Forest Division and an area of 200.50 sq km falls in Prodattur Forest Division. Draft notification of the ESZ proposal was published on September 10, 2015. The salient features of the ESZ are as follows:

Area of PA : 464.42 sq.km

Proposed ESZ area: 338 sq km

Proposed Extent : upto one kilometre of the WLS

It was informed that a total of 17 villages fall within the ESZ area. It was informed that the area is biologically rich and is also a tiger habitat.

The Committee after deliberations recommended for finalisation of draft notification as there were no changes proposed and no specific comments on the ESZ proposal has been received.

## 5.2 Eco-sensitive Zone around Kambalkonda Wildlife Sanctuary, Andhra Pradesh

Kambalkonda Wildlife Sanctuary is situated in the vicinity of Vishkapatnam City in Andhra Pradesh and is spread over an area of 7139 hectares (71.39 sq km).

The entire sanctuary comes within the district of Vishakapatnam. The Sanctuary has a rich biodiversity comprising of 73 tree species, 39 herbs and shrubs, 18 species of climbers, 2 species of bamboo, 7 species of grass and 23 mammals, 7 reptiles, and more than 90 species of birds. The Sanctuary is home a to a number of rare and endangered fauna such as the Panther, Bear, Wild Boar, Sambhar, Barking Deer, Spotted Deer, Jackal, and Wild Dog.

Representative, Govt. of Andhra Pradesh apprised the Committee about the proposal. The draft notification was published on January 7, 2016. The extent of eco-sensitive zone is 3051 ha (30.51 sq km) of area and the range of the extent of ESZ is 100m to 1360m and a mean distance of 0.575 kilometres surrounding the PA. Salient features are as given below:

Area of PA : 7139 ha

Proposed ESZ area: 3051 ha

Proposed Extent: 100 meters to 1360m

It was informed that a high wall along a distance of 13km distance of the ESZ boundary has been proposed along areas of the city which are highly populated. It was stated that there is no change in the area, width (extent) of the ESZ and all conditions in the draft would be adhered to.

The Committee after deliberations recommended that the proposal for final notification.

## 5.3 Eco-sensitive Zone around Manjeera Crcodile Wildlife Sanctuary, Telangana

Manjeera WLS is located at a distance of about 5km from Sangareddy and about 60km from Hyderabad. The Sanctuary is a waterbody between two dams – Manjeera and Singoor Projects. There are an estimated 600 crocodiles in this reservoir which is also a habitat for 5 species of fish, 10 species of amphibians, 26 species of reptiles, 18 species of mammals and over 170 species of birds which includes resident and migratory birds such as Oriental Darter, Black Ibis, Glossy Ibis, Black Winged Stilt, Painted Storks, Open Billed Storks, Spoon Bills, Comb Ducks, Cotton Teals, Whistling Teals, Red Crested Pochards, Common Pochards,

Brahminy Ducks, Grey Pelicans, Brown Headed Gulls, Bar Headed Geese, Osprey, Marsh Harrier, Mademoiselle Cranes and swallows. Mammals include Leopard (Panther), Sloth Bear, Nilgai, Chital or Spotted Deer, Sambhar, Wild Pig, Four Horned Antelope, Indian Wild Dog Jungle Cat, etc. The Sanctuary is dotted by nine islands and support submergent and emergent vegetation.

Representative, Govt. of Telangana apprised the Committee about the proposal. Draft notification was published on 9<sup>th</sup> November, 2015. The salient features of the ESZ are as follows:

Area of PA : --

Proposed ESZ area: 65.28 sq km

Proposed Extent : Upto one kilometre

The ESZ area supports 12 villages of two Mandals – Sadasivapet and Medak districts. It was stated that there is no change in the area, width (extent) of the ESZ and all conditions in the draft would be adhered to.

The Committee desired tat details of area of the PA should be provided. The Committee after deliberations recommended that the proposal for final notification.

# 5.4 Eco-sensitive Zone around Kesu Brahmananda Reddy (KBR) National Park, Telangana

Kesu Brahmananda Reddy (KBR) National Park is located within a densely populated residential and commercial area in the metropolitan city of Hyderabad. The National Park is not only a 'green lung' for the residents of Hyderabad but also acts as a carbon sink and is a vestige of a vast bio-diversity of flora, fauna and natural rock formations representative of the Deccan Plateau, and includes more than 600 plant species, 20 mammal species, 20 species of reptiles and amphibians, hundreds of species of insects and invertebrates. The total area of the Park is 142.50 ha (1.42 sq km).

There are no open or forest area around the KBR National Park and only a width of 25m to 35m of Hyderabad Metropolitan Development Authority Walkway is available as open space around the National Park. This area has been proposed as

an ESZ for the KBR Park in the proposal of the State Government forwarded to the Ministry and published as a draft ESZ Notification dated 18<sup>th</sup> December 2015.

The Committee was informed that an e-mail dated 19.05.2016 has been received from Principal Chief Conservator of Forests (WL), Govt of Telangana requesting for deferment of the consideration of the proposal. The Committee also noted that objections have been received by the Government in regard to proposed revision of the Walkway of 25-30m to 3-7m by the State Government in view of a proposed Multi Level Grade Separator Flyover along the National Park under the State Government's "Strategic Road Development Plan (SRDP)". This has raised citizens' concerns regarding the preservation of the ecology of the Park and the fall in tree cover. The State Government has been requested to evaluate other options available *in lieu* of a flyover, at least for the stretch adjoining the Park.

[It has been further brought to the notice of the ministry that the Hon'ble National Green Tribunal (NGT), Southern Zone, Chennai has *suo motu* passed an Order dated 2<sup>nd</sup> May 2016, whereby Commissioner, Hyderabad has been asked to maintain *status quo* on the matter of tree cutting for the proposed project. The Hon'ble High Court has also ordered that no trees should be cut.]

Since all these concerns have not been addressed in the proposal of the State Government, the proposal was deferred until a response is received from the State Government on the aforesaid issues.

## 5.5 Eco-sensitive Zone around Kalsubai Harishchandragad Wildlife Sanctuary, Maharashtra

Kalsubai Harishchandragad Wildlife Sanctuary is situated in Akole and Rajur Tehsils of Ahmadnagar district and shares boundary with Igatpuri Taluka of Nashik district, Shahpur and Murbad Talukas of Thane district and Junanr Taluka of Pune district in the State of Maharashtra.

The Wildlife Sanctuary is located within Western Ghats and is one of the biological hotspots of Western Ghats. It is spread over an area of 361.71 sq km. The forests in

the region consist of tropical semi-evergreen forests. It is home to rich variety of

wildlife comprising of Leopard, Giant Squirrel, Wild Boar, Blacknaped Hare, Wild

Cat, Hyeana, and about 130 species of avi-fauna. The area is also rich in 93

reptilian species, 21 types of mammals, and 130 types of birds. Many of these

species are endemic. The region is the origin of Rivers Pravera and Mula which join

the Godavari.

Draft notification was published on 6th November, 2015. The salient features of ESZ

are as follows:

Area of PA : 361.71 sq km

Proposed ESZ area: 300.72 sq. kms

Proposed Extent

1.6km to 4.0 km

It was informed that the water body has not been included as part of the proposal as a dam exits in the vicinity and the water body is also used for commercial

purposes.

The State Government representatives informed that a road passes through the

WLS and vehicular movement even during night time may be included under

regulated category. It was clarified that this activity has been included under

'Regulated Category' in the draft notification.

The Committee after deliberations recommended finalising the draft notification.

5.6 Eco-sensitive Zone around Dyanganga Wildlife Sanctuary, Maharashtra

Dyanganga Wildlife Sanctuary is situated in the central Deccan Plateau

Buldhana in district of Maharashtra and is home to a number of rare and

endangered mammals such as the Panther, Sloth Bear Wolf, Hyeana, Nilgai, Wild

Boar, Pea fowl, Black Buck.

Representative, Govt of Maharashtra made a brief presentation. Draft

notification was published on 20th November, 2015. The salient features of ESZ are

as follows:

Area of PA : --

Proposed ESZ area: 336.21 sq. kms

Proposed Extent : from 1.380km to 8.10km

It was informed that the proposed ESZ is spread across 47 villages in Buldhana district of Maharashtra. The ESZ is bounded on the eastern and Northern side by dense forests. Gram Panchayats of all villages have been consulted at the DCF/CCF levels. A Joint Committee has been constituted of Gram Sabhas. Local MLAs are also included when consent is obtained. Agriculture is the main activity. The State Government has requested shifting of "use of commercial wood" (except sawmill and other such wood based industries) from prohibited to regulated. In addition, "Right of Way' for cattle grazing could also be permitted.

The Committee agreed to promote cottage industries which could use NTFP, however the use of commercial firewood requires to be strictly regulated. The Committee sought details of area of the Sanctuary along with colour map demarcating the PA and ESZ boundary and showing land use features. The Committee recommended finalising the draft notification subject to furnishing these details and inclusion of Maharashtra Remote Sensing Centre as a Member of the Monitoring Committee and changes as proposed by the State Government above.

### 5.7 Eco-sensitive Zone around Lonar Wildlife Sanctuary, Maharashtra

Lonar Wildlife Sanctuary is situated on the right side of Lonar Mantha Highway in Buldana district, Maharashtra over an area of 3.83 sq km. A lake within the Lonar Sanctuary known as the Lonar Lake is the third largest lake formed from basaltic rock due to meteorite impact. The Sanctuary has a variety of flora and tree species and also harbours faunal species such as Hyeana, Wolf, Leopard, Jungle Cat, etc

Representative, Govt. of Maharashtra apprised the Committee about the proposal. The draft notification was published on November 20, 2015. The salient features are as follows:

Area of PA : 3.83 sq. kms

Proposed ESZ area : 1.92 sq km

Proposed Extent : 100m all along the boundary of PA

It was stated that the Lonar Crater Lake is more than 52,000 years old. The lake is highly alkaline (pH 10.5). The original RF was notified as a Sanctuary and a100m wide area has been proposed around the Sanctuary as ESZ. A few temples and monuments declared as 'Heritage Sites' by Archaeological Survey of India are also located in and around the Sanctuary. Lonar Town has a population of about one lakh and is located at the edge of the Sanctuary. Sewage Treatment Facility ahs been installed. The town is close to border of three districts.

The Committee observed that 'ejecta' from the crater could also be considered as part of ESZ, however after deliberations, the Committee decided that the ESZ be retained as 1.92 sq km as consultations have not been done for extending the areas to cover areas of 'ejecta'.

The Committee after deliberations recommended finalisation of the draft notification with the provisions contained therein with a condition to change the activity of overflying of balloons, etc from prohibited to regulated category.

## 5.8 Eco-sensitive Zones around Sagareshwar Wildlife Sanctuary, Maharashtra

Sagareshwar Wildlife Sanctuary is a cultivated forest without any perennial source of water under planned afforestation programme by the locals and foresters. It is a Southern Dry Mixed Deciduous and Southern Thorn Forest with hill slopes covered by grasslands. Density of forest is low (0.4). The Sanctuary harbours a variety of wild fauna such as the Hyeana, wolf, fox, sambhar, black buck cheetal and wild boar. Sagareshwar Sanctuary also has a religious, cultural and archaeological significance. The Sanctuary is known for its complex of temples, including Lingeshwar Temple, and Kaal Bhirav Temple belonging to Satvahana period. The name of the Sanctuary Sagareshwar is based on an old Shiva Temple. The Sanctuary has been renamed as "Yashwantrao Chavan Sagareshwar Sanctuary". The total area of the Sanctuary is 10.87 sq km. The ESZ is spread over an area of 3.68 sq km. Agriculture is intensively practiced.

Representative, Govt. of Maharashtra apprised the committee about the proposal. The draft notification was published on November 16, 2015. The salient features are as follows:

Area of PA : 10.87 sq km

Proposed ESZ area: 3.68 sq km

Proposed Extent : average 100 meters

Representative, State Government requested for shifting of 'Overflying of baloons, planes, etc' from prohibited to regulated, which was agreed to. The Committee after deliberations recommended the finalisation of the notification with the aforesaid change.

# 5.9 Eco-sensitive Zone around Aner Dam Wildlife Sanctuary, Maharashtra

Aner Dam Wildlife Sanctuary is situated about 60km from Dhule in Dhule-Jalgaon districts of Maharashtra. It is spread over an area of 82.95 sq kms. The Sanctuary area is rich in biodiversity of birds, butterflies, snakes, mammals, frogs, and vegetation such as grasses.

Representative, Government of Maharashtra apprised the committee about the proposal. The draft notification was published on 23<sup>rd</sup> November, 2015. A total of 21 villages fall within the proposed ESZ.

The salient features in the draft Notification are as follows:

Area of PA : 82.95 sq. kms

Proposed ESZ area: 474.87 sq km

Proposed Extent : 2.25km to 12km

However, after consultations, the area of EZ has been reduced to 69.42 sq km with a minimum of 100m to 3km.

The Committee after deliberations desired that the proposal be revised with the new ESZ boundaries along with maps and list of villages, etc for further consideration of the matter.

#### 5.10 Eco-sensitive Zone around Phansad Wildlife Sanctuary, Maharashtra

Phansad Wildlife Sanctuary is situated in Raigad district of Maharashtra and is spread over an area of 69.79 sq km. The Sanctuary has variety of forests – semi-evergreen, evergreen and moist deciduous and is home to a variety of fauna including Leopard, Indian Giant Squirrel, vulture, Malabar Grey Hornbill, and a number of other bird species. The Sanctuary is located close to the coast on the western side and breeding of Olive Ridley turtles and bird species such as the Sea Eagle have been recorded.

Representative, Government of Maharashtra apprised the committee about the proposal. The draft notification was published on November 30, 2015. The salient features are as follows:

Area of PA : 60.79 sq km

Proposed ESZ area: 10.96 sq km

Proposed Extent : 100m to 2.75 km from the boundary of Phansad

WLS

The area and extent of ESZ has been proposed and a minimum extent of 100m was agreed to after consultations of the local communities upto the Gram Panchayat level.

The Committee agreed to the State Government's request that the Conservator, Thane district be a member of the Monitoring Committee and the DCF to be the Member-Secretary. The Committee also agreed shifting of activity-commercial use of firewood (except saw mills and other wood based industries) and overflying of balloons, etc from prohibited to regulated category. The Committee desired that introduction of exotic species should be done only after consulting the State Biodiversity Board. The Committee desired that a representative of the State Biodiversity Board be a member of the Monitoring Committee in all ESZ proposals.

The Committee after deliberations recommended the finalisation of the notification with the aforesaid changes.

## 5.11 Eco-sensitive Zone around Bhamragarh Wildlife Sanctuary, Maharashtra

Bhamragarh Wildlife Sanctuary is located in district Gadchiroli, Maharashtra and is spread over an area of 104.38 sq km. The Sanctuary ahs a rich biological diversity of 245 plant species, 193 bird species, 73 species f herbs, 15 species of shrubs, 47 species of grasses, and 69 species of trees. Of these, 151 species are medicinal plants.

Representative, Government of Maharashtra apprised the committee about the proposal. The salient features are as follows:

Area of PA : 104.38 sq. kms

Proposed ESZ area: 85.75 sq kms

Proposed Extent : 3 to 6km

The proposed ESZ covers 7 villages.

The Committee a agreed shifting of activity 'overflying of balloons, etc' from prohibited to regulated category. The Committee after deliberations recommended for finalisation of draft notification with the aforesaid changes.

### 5.12 Eco-sensitive Zone around Yedshi Ramling Ghat Wildlife Sanctuary, Odisha

Yedshi Ramling Ghat Wildlife Sanctuary is situated in Osmanabad district of Maharashtra extending over an area of 22.37 sq km. The Sanctuary is home to Black Buck, Hyeana, Palm Civet, Wolf, Wild Pig, Jungle Cat, Fox, Rabbits, Porcupine, Fox, etc. Vegetation of the area includes shrub forests, plantation blocks and grasslands. Major tree species includes Sandalwood

Representative, Government of Maharashtra apprised the Committee about the proposal. The draft notification was published on 23<sup>rd</sup> November 2015. The salient features are as follows:

Area of PA : 22.37 sq. kms

Proposed ESZ area: 2.97 sq kms

Proposed Extent : 100m all around the boundary of the Sanctuary

Number of villages falling within the ESZ is 11.

The Committee after deliberations recommended for revisit of the proposal to consider the inclusion of more areas in the ESZ.

# 5.13 Eco-sensitive Zone around Gangewadi New Great Indian Bustard Wildlife Sanctuary, Maharashtra

Gangewadi New Great Indian Bustard Wildlife Sanctuary is situated in Solapur and Osmanabad districts of Maharashtra and spread over an area of 1.98 sq km and is a habitat of the Great Indian Bustard. It is also a sanctuary for reptiles, amphibians, butterflies, spiders and invertebrates.

Representative, Government of Maharashtra apprised the committee about the proposal. The draft notification was published on  $2^{nd}$  November, 2015. The salient features are as follows:

Area of PA : 1.98 sq.km

Proposed ESZ area: 7.05 sq km

Proposed Extent : upto 675m

The proposed ESZ area covers 4 villages.

The Committee suggested whether a 100m buffer could be created along boundary of the Sanctuary which has presently zero ESZ. The Committee after deliberations desired to consider receipt of response of the State Government on the matter.

**6.** Based on the consideration of 13 proposals of draft ESZ notifications, comments received, presentations made on the proposals and discussions, the Expert Committee recommended nine (9) proposals, revision of four (4) and deferred one (1), as per details given below:

SN	Protected Area	State	Recommendation
1.	Lankamalleshwara WLS	Andhra Pradesh	Recommended
2.	Kambalkonda WLS	Andhra Pradesh	Recommended
3.	Manjeera Corcodile WLS	Telangana	Recommended
4.	Kesu Brahmananda	Telangana	Deferred

	Reddy (KBR) National Park (NP)		
5.	Kalsubai Harishchandragad WLS	Maharashtra	Recommended
6.	Dyanganga WLS	Maharashtra	Recommended
7.	Lonar WLS	Maharashtra	Recommended
8.	Sagareshwar WLS	Maharashtra	Recommended
9.	Anerdam WLS	Maharashtra	Revision of proposal on the proposed revised area, complete with maps, etc
10.	Phansad WLS	Maharashtra	Recommended
11.	Bhamragarh WLS	Maharashtra	Recommended
12.	Yedshi Ramling Ghat WLS	Maharashtra	Revision to include more areas in the ESZ and submit revised proposal
13.	Gangewadi Great Indian Bustard	Maharashtra	Revision of extent from zero ESZ to 100m

7. Chairperson desired that a format for submission of ESZ proposals and a brief guidelines/instructions for making Power Point Presentations be circulated to all State Governments and be also annexed to the minutes so that the proposals cover all the requisite issues and are presented on a power point as desired by the Committee. This is given at **Annexure-2** to the minutes.

The meeting ended with vote of thanks to the Chair.

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### Annexure-1

# List of Participants of the 17<sup>th</sup> Expert Committee on ESZ held on 30<sup>th</sup> May 2016

#### **Members of Expert Committee**

- 1. Dr. Amita Prasad, Additional Secretary, Chairperson
- 2. Dr. T. Chandini, Adviser, MoEF&CC
- 3. Dr. Sarnam Singh, Indian Institute of Remote Sensing, ISRO, Dehradun
- 4. Shri Sanjay Kumar Agarwal, Assistant Director, Forest Survey of India, Dehradun
- 5. Dr. Sandeep Kumar Rant, Associate TCP, TCPO, Ministry of Urban Development, GOI
- 6. Dr. S.A. Hussain, Scientist G, WII Dehradun
- 7. Shri Paramjit Singh, Director, Botanical Survey of India, Kolkata
- 8. Shri Kailash Chandra, Director (I/C), Zoological Survey of India
- 9. Shri K. Chandra Sekar, Scientist 'D', GB Pant Institute of Himalayan Environment & Development
- 10. Shri S P Vashisht, DIG(WL)

#### Ministry of Environment, Forest and Climate Change, GOI

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

#### Officials of State Governments of Maharashtra, Telangana, Andhra Pradesh,

#### **Maharashtra**

- 1. Shri V.B. Suryava, Dy. Chief Forest Department of Roha, Govt. of Maharashtra
- 2. Shri Badve S.B., Dy. Chief Forest Department of Solapur, Govt. of Maharashtra
- 3. Shri NCS Bala, Dy. Chief Forest Department of Bhamagarh, Govt. of Maharashtra
- 4. Shri Uday Anasak, CCF Dhule, Forest Department, Govt. of Maharashtra
- 5. Shri Arvind Patil, CCF(T) Nashik, Forest Department of Maharashtra
- 6. Shri A.R. Mande, CCF, Aurangabad, Forest Department of Maharashtra
- 7. Shri Vijay Kumar Gog., Secretary Forest, Forest & Environment & Ecology Deptt.
- 8. Shri M.K. Rao, CCF, Kolhapur, Maharashtra Forest Deptt.
- 9. Shri S.B. Chavan, DEO Songali, Forest Dept.
- 10. Shri R.A. Satdikar, DEO Osmanabad, Forest Deptt.
- 11. Shri G.S. Sable ACF, Osmanabad, Forest Deptt.
- 12. Shri M.R. Gaykar, Sub-Divisional Forest Officer, Forest Deptt.
- 13. Shree Bhushan, PCR WL 2 CWLW, MFD, Maharashtra
- 14. Shri Sanjeev Gaur, CCF, Maharashtra

#### **Telangana**

- 15. Shri A.K. Srivastava, PCCF(WL) & CWLW Telangana
- 16. Shri Vikas A, Secretary, EFS&T, Deptt. of Tenangana

### Andhra Pradesh

17. Shri P.V. Raman, CCF(WL) & Eco-tourism An, A.P. Forest Dept.

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### A. GUIDELINES FOR PREPARATION OF ESZ PROPOSALS

- 1. Coloured maps (in A3 or A4 size) to be provided in soft and hard forms:
  - i. 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.
  - ii. **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.
  - iii. (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 landuse.
  - iv. Scale Bars on all maps need to be compulsorily depicted.
  - v. 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 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. Location of PA/ESZ on a district/state map.
- 6. 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.)
- 7. Member-Secretary of the State Bio-diversity Board should also be made a member of the Monitoring Committee.

#### B. GUIDELINE FOR PREPARATION OF MAPS IN ESZ PROPOSALS

- 8. Coloured maps (in A3 or A4 size) to be provided in soft and hard forms:
  - vi. 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.

- vii. **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.
- viii. Latitude and Longitudes (in DMS, i.e., Degree/Minutes/Second Format) should be shown in a tabular form in the proposal as well as on maps.
- ix. Scale Bars on all maps need to be compulsorily depicted.
- x. Tables and text on the maps should be readable on the A-4/A-3 size sheet of paper.
- 9. State Remote Sensing Centres & GIS Centres should be part of delineation and mapping of the PA, ESZ and forest areas.
- 10. Scientific names of all floral and faunal species need to be provided in the list of flora and fauna in the ESZ proposal.
- 11. List of rare/endangered, endemic, threatened species of flora and fauna found in the PAs/ESZs in the ESZ proposal.
- 12. Location of PA/ESZ on a district/state map.
- 13. 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.)

#### C. 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 presnetation 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. Location map of the PA in the district, State
  - c. 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.

- d. In addition, the map should also include area extending all around the PA, **upto 7-10 km beyond ESZ boundary.**
- e. 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.
- f. 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.
- g. Whether regulations such as CRZ, Wetland regulations, etc are applicable to the PA and ESZ.
- h. Description of bio diversity with a list of rare, threatened and endangered species of flora and fauna
- i. Justification of the ESZ area.
- j. Details of consultative process followed.
- k. Summary of Comments and responses on the draft Notification
- I. Details of court cases, if any and status thereon