

# Eco-sensitive Zones and Ecologically Fragile Lands in Kerala: Known and Unknown

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## ABSTRACT

Eco-Sensitive Zones or ecologically fragile lands are areas within 10 km around protected areas, national parks and wildlife sanctuaries. ESA are notified by The Ministry Of Environment, Forest And Climate Change (MoEFCC) under the environment protection act 1986. In the case of places with sensitive corridors, connectively and ecologically necessary patches, crucial for landscape linkage, even areas beyond 10 km can also be included in the eco-sensitive zone. The Western Ghats are a mountain range that covers an area of 140,000 sq km spread across six states, including Kerala and runs parallel to India's western coast. Two consecutive years of unprecedented floods and landslides have killed hundreds of people in Kerala. However, the state government is still undecided on whether to notify areas falling under the Western Ghats as eco-sensitive zones (ESZs) to avert further disasters. The Western Ghats Ecology Expert Panel (WGEEP), headed by noted ecologist Madhav Gadgil had in 2011 submitted a report recommending measures for the region's protection. The primary aim is to regulate certain activities around national parks and wildlife sanctuaries to minimize the negative impacts of such actions on the fragile ecosystem encompassing the protected areas.

**Key words :** *Eco-sensitive Zones, Ecologically fragile lands*

## Introduction

Two sequential years of floods and landslides have killed hundreds of people in Kerala, but the State Government is yet to decide whether to declare areas in the Western Ghats as Eco-Sensitive Zones (ESZs) to avoid further calamities (Kerala Forest Department, 2012). The Western Ghats is a mountain range covering an area of 140,000 sq km in six states including Kerala (Gopakumar *et al.*, 2012). It runs parallel to the west coast of India. Gadgil report, the following Kasturirangan report, E F L Law farmers cannot sell taken that many of the causes of the current situation of the eco-sensitive zone notification of

all sectors, with the uncompromising the forest areas of land purchased was the loan-counter, obliges held. Many development activities in the hilly areas have been hampered by the enactment of these laws. The Madhav Gadgil Committee was set up by the Union Ministry of Environment in 2010 to study the Western Ghats and suggest conservation measures.

## Ecology

Palakkad district covers a quarter of the proposed ecologically sensitive areas around wildlife sanctuaries. This includes not only settlements and towns but also the National Highway. It covers an area of about 3.91 lakh acres. It covers an area of more

than 500 sq. Km in Palakkad district alone. Parambikulam Tiger Reserve Ecologically Sensitive Area 331.35 sq. Km, Choolanur Peacock Sanctuary (3.86 sq km), Silent Valley National Park (148 sq km), and other sensitive areas of Peechi-Vazhani Wildlife Sanctuary are included in Palakkad District. The following is a list of wildlife sanctuaries and ecologically sensitive areas (Forest Conservation Act, 1980).

A list of wildlife sanctuaries and ecologically sensitive areas

Wildlife Sensitive Sanctuaries	Area (Sq.Km)	Eco-Zone Area (Sq. Km)
Silent Valley NP	237.52	148
Mathikettan Shola NP	12,82	17.5
Chinnar WLS	90	23.4
Chulannur WLS	3.4	8.86
Aralam WLS	55	10.13
Kottiyoor Wildlife Sanctuary	30	12.9
Kurinjimala WLS	32	9.3
Eravikulam NP	97	33.7
Mangalavanam Bird WLS	0.027	0.53
Neyyar WLS- Peppara WLS	181	3.64
Parambikulam WLS	643	331.35
Peechi-Vazhani WLS	125	131.54
Wayanad WLS	344	118.59
Shendurney WLS	172	116
Thattekadu WLS	25.16	28.44
Chimmony WLS	85	92.53
Idukki WLS	105	88.2
Anamudi NP	7.5	30.7

Source: ESZ of Govt. Notification Report 2020

### Eco-Sensitive Zones Larger Than Forest

The forest cover includes areas adjacent to wildlife sanctuaries, including Thattekkad Mathikettanchola and Anamudichola. The areas where the High Court is located are also not sensitive. There is no answer to the question of whether the exclusion of farms and settlements in hilly areas is an impediment to declaring the eco-sensitive Zone excluding houses and government institutions in the city of Kochi.

### Why Eco-Sensitive Zones Notification

The objective of the eco-sensitive zones Notification near Wildlife Sanctuaries is to develop a type of impact defences around protected areas. These will act as a transition zone between the high security zone and the low protected area. The National Board of

Wildlife says there are no absolute bans on activities in the environmentally sensitive area, but restrictions only when necessary.

### Various Reports and Laws on Environmental Protection

**1. Gadgil Committee Report:** The Gadgil Committee Report On March 4, 2010, the Union Ministry of Environment and Forests appointed a committee headed by eminent ecologist Madhav Gadgil to report on the environmental problems of the Western Ghats and adjoining areas. The committee, which has identified 134 ecologically sensitive areas in 142 taluks in 44 districts in Maharashtra, Goa, Gujarat, Karnataka, Tamil Nadu and Kerala, submitted its report. There are 25 sensitive areas in 12 districts of Kerala (Gadgil, 2012).

**2. The Kasturirangan Report:** The Central Government has appointed a new committee headed by Dr Kasturirangan, an astronomer and a member of the Planning Commission, to study the Gadgil Committee's report on the impact of agriculture and human habitation on a wide range of areas. 35% of the areas were included as Ecologically Sensitive Areas. ESA covered 13,108 sq km in 123 villages in Kerala (Kasturirangan Report).

**3. Oommen V Oommen Committee:** The Kerala State Government has appointed a committee headed by Dr. Oommen V Oommen, former Chairman of the State Biodiversity Board, to make recommendations to the Centre on the basis of the complaint that the Kasturirangan report includes settlements and farms. Oommen v Oommen recommended 9,993 sq km of ESA excluding forest land as an ecologically sensitive area and excluding private land.

**4. EFL Law:** The Kerala Forest Act (Vesting and Management of Ecologically Fragile Lands) provides for the acquisition of privately owned, ecologically important or adjoining land without any guarantee of compensation or rehabilitation. The land has been acquired under this Act in many parts of Kerala (EFL, notification, 2021).

**5. ESZ:** Steps have been taken to direct Eco-Sensitive Zones around National Parks and Wildlife Sanctuaries as per the directions of the Union Ministry of Environment and Forests. Most of the 23 Wildlife Sanctuaries in Kerala have been notified.

**The mental tensions created by the EFL Act on farmers**

The draft notification setting a certain distance around wildlife sanctuaries as an ecologically sensitive area has posed the biggest problem to farmers. Families of farmers in the area are in a desperate situation as the Centre has returned the recommendation of the State Forest Department to exclude outlying areas of the forest, including populated areas, from the ecological limit. Officials say there will be no evictions, but the restrictions, regulations and prohibitions are all intertwined, making farming and living impossible (Respondents we find).

These are areas where all the people in the area migrated 60-70 years ago. The present plantains, flour and yeast are planted by these settlers. Although there were restrictions on felling trees on the land provided by the forest department, they planted flax and flour for the needs of their future generations. But now the evil rules have been sharpened to cut if you lean over the barn.

#### **Important decisions to be taken on the basis of this study**

1. Do not create a barrier to cultivation in ecologically sensitive areas around wildlife sanctuaries and national parks.
2. Finalize the ESF of Matikettanchola Silent Valley Kottiyoor Mangalavanam.
3. Alteration Thattekkad ESZ from 28.444 sq km to 16 sq km.
4. Conversion the area of Aaralam ESZ 10.13 from 6 sq km to 7.13 sq km and also consider farmland and tribal housing areas in the south-west.
5. Change Idukki ESZ area from 88.238 sq km to 20.0714 sq km.
6. Kottiyoor ESZ area increased from 12.91 sq km to 10.27 sq km. South-southwest sides need to reduce the area over the years.
7. Modification the Malabar ESZ from 53.60 sq km to 42.5 sq km. Consider the hydropower project in the south and the tribal areas in the west, north and west.

In fact, not only Kerala but also the remaining five states located in the Western Ghats – Gujarat, Goa, Maharashtra, Karnataka and Tamil Nadu – have to notify the Environmentally Sensitive Zones (ESZ) as suggested by the various expert committees. “The notification is still in the draft stage. The states agreed to be notified, but they did not agree on how many townships to be notified. They still have to send the cards to us as per their decision,”

said CK Mishra, secretary of the Ministry of Environment. Canceled 2014 because all states rejected it, saying the proposed special economic zones would affect economic development in towns and villages. Karnataka’s Forestry Minister R Shankar told HT last year that the state government does not even agree to the ESZ concept as it would affect the state’s economy.

The draft notification for the implementation of ESZs in the Western Ghats is based on a report submitted in 2013 by a high-level task force led by Kasturirangan, former head of the Indian Space Research Organization. This report is a watered down version of the report provided by Gadgil. The Western Ghats, one of the eight biodiversity hotspots of the world, divided into three environmentally sensitive areas - ESZ 1, 2 and 3 - based on environmental and cultural criteria. Recommended that mining, including thermal power plants, should not be allowed in the ESZ 1 and 2, the panel also suggested not diverting streams or rivers for any energy projects in any special economic zones, except for the phasing out of plastic bags, which could result in the conversion of forest land to non-forest uses; Discourage the cultivation of annual crops on slopes in special economic zones, among other things.

The six countries rejected the Gudgill report, after which the centre did not consider it an official document. Meanwhile, several scientific studies conducted by various institutions have confirmed that the Western Ghats are very weak and need a special strategy. “Deforestation in Coorg is evidenced by the loss of forest cover from 40% (1973) to 24% (2018),” said Professor T.V. Ramachandra of the Indian Institute of Science, Bengaluru, who has published several articles on the Karnataka Department of the Western Ghats. The landscape of Coorg is ecologically fragile and there is a need to preserve the landscape structure to ensure the capacity - hydrological and structural stability, etc.

“The current state of the forests is fragmented and dominated by monoculture and [resort] building, with short-time heavy rainfall and vegetation removal from native species eroding the landscape’s ability to penetrate water.” Last year, Kerala experienced the worst floods in a century, he said. It claimed the lives of about 500 people. A year later, more than 120 people were killed in floods and landslides caused by torrential rains.

Sajen Kumar KS, Assistant Professor of Geology at the University of Kerala, stressed that it is neces-

sary to create a “map [distribution] of landslides” at the level of the panchayats. “The land uses there have to be changed. I was told in Puthumala that the cardamom wells would displace a large amount of soil and cause water infiltration. Farmers and the government let in a lot of water without taking into account the topography. The quarry that thrives in other parts is unscientific. Controlled in a tremor of up to 2 km. Of course this affects the fragile country here.” He added that the concept of SEZs notification in the Western Ghats is considered ‘anti-development’, despite much scientific evidence in its favour.

Most of the villagers in Wayanad and Malappuram were affected by the landslides. They are unaware of the concept of special economic zones and how they will affect their lives. “The legal clauses that make the declaration of special economic zones possible are very flexible. They can ensure that environmental protection and land use planning can go hand in hand. The way of these zones are often exclusive is often exclusive,” said KanchiKohli, legal researcher at the Delhi Center for Policy Research. Giving the impression that regulations or prohibition requirements have been set in. “It is important to understand that SEZs have the potential for circulation and comprehensive conser-

vation planning that can identify threats to conservation and livelihoods.”

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