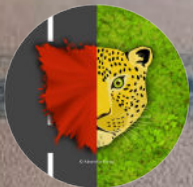


# Linear Intrusions

And the importance of cross stakeholder decision making



CONSERVATION  
OPTIMISM



Akansha



# Trigger Warning

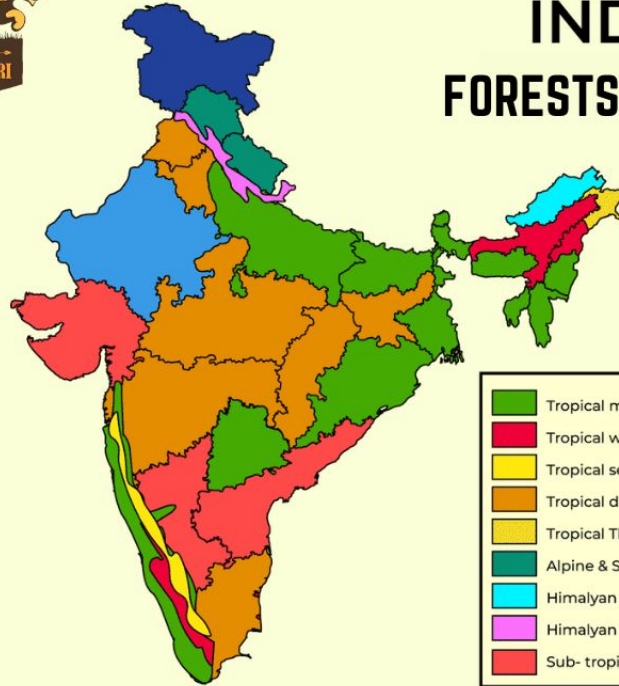
Some of the content that you may see in the slides can be disturbing but so is the conservation issue.

You can turn your face away from the image but we hope you will stop turning away your face from the problem

# Forests & Types in India



## INDIA FORESTS OF INDIA



- Tropical moist deciduous
- Tropical wet evergreen
- Tropical semi evergreen
- Tropical dry deciduous
- Tropical Thomy vegetation
- Alpine & Sub- alpine
- Himalyan Dry temperate
- Himalyan Moist temperate
- Sub- tropical coniferous

# Linear Intrusions



- Roads ✓
- Railways ✓
- Powerlines ✓
- Pipelines

# Stakeholder

- A stakeholder is someone who is directly or indirectly affected and impacted by changes to the ecosystem or regulations related to the ecosystem on which they may or may not be dependant for livelihood, income, safety, resources and the continuation of their existence

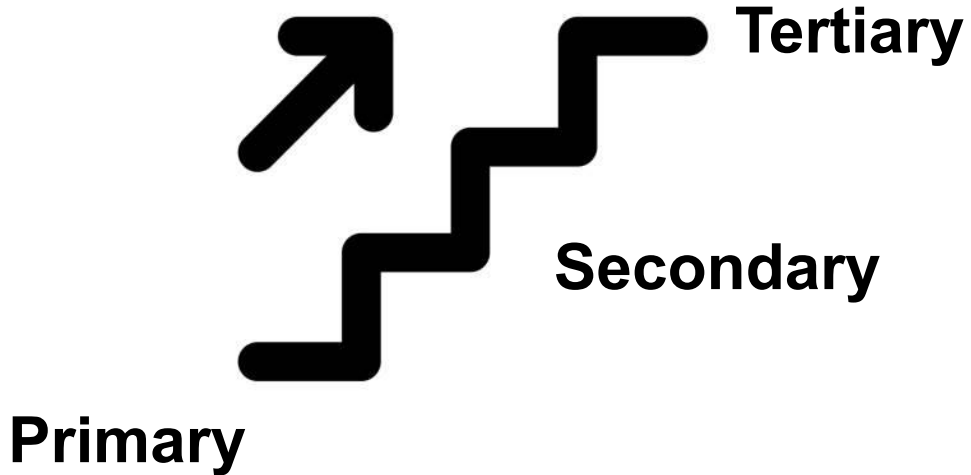
# Types of Stakeholders

- **Primary**
- Directly affected by it
- Have to incur the most amount of change that can or can not be damaging
- **Secondary**
- Not directly affected by the changes in the regulations and ecosystem
- But will be largely impacted by it
- **Tertiary**
- Not immediately impacted by the changes.
- Can be affected in the future or has minimum damage

# Stakeholder access & Privilege

**Factors that influence this :**

- Money
- Favouritism
- Education
- Community
- Access to decision making authorities



# Impact of ignoring vulnerable stakeholder

- **Uneven consequences on the most vulnerable stakeholder putting their livelihood, safety or existence at risk**
- **Directly affects the non human stakeholders since the primary or vulnerable stakeholders have the highest access to them.**
- **Creates animosity and mistrust among each other and other stakeholders**
- **Feel unheard and non included in decisions of the lands they have inhabited for generations**

# The non-human stakeholder



# Identifying stakeholders

- Divide these stakeholders as primary, secondary and tertiary based on the explanation before for the conservation issue of highways passing through a popular national park
- Tiger
- People living in buffers
- Forest Departments
- Road construction company
- Politician
- Tourism Businesses
- Regulatory authorities
- Police officers
- Construction labourer

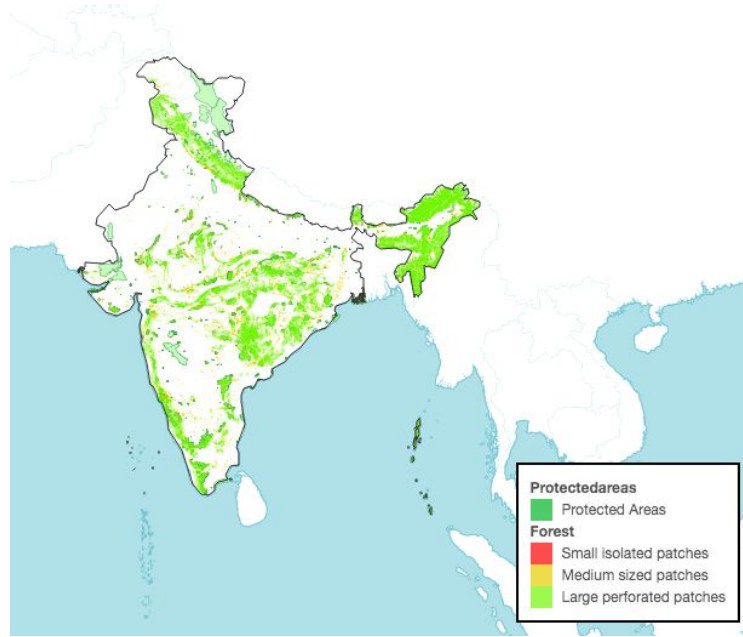
# Identifying stakeholders

- Primary
- Secondary
- Tertiary

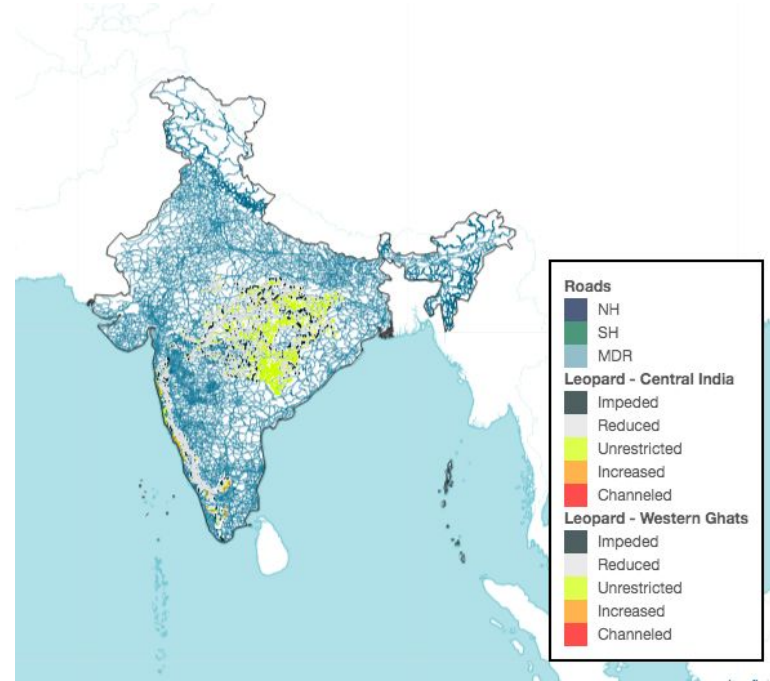
**THIS VIDEO IS A WITNESS TO SAY THAT...**

**"THE ANIMALS ARE NOT CROSSING THE ROAD,,, FACT IS ,  
THE ROAD IS CROSSING THE FOREST"**



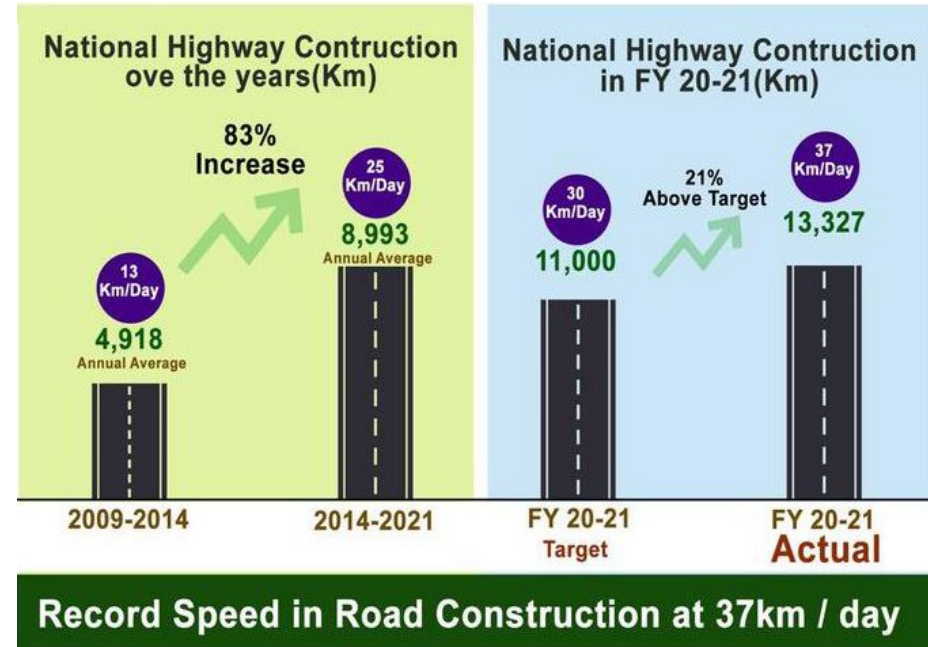


**TERRESTRIAL CONNECTIVITY OF INDIA**  
(71.22 million hectares)



**INDIA'S DENSE ROAD NETWORK**  
(5.89 million kilometres)

- India has the second-largest road network in the world, spanning a total of 5.89 million kilometres (kms).
- Over the last one year, India has added more than than **13,000 Km** of highways to its already dense road network at about **33.7Km per day**.
- With more than 21% of India's geographical area under, these roads criss cross through some of the most dense, ecologically fragiles forests of the country
- As per recent reports, there has been a **71.5% reduction** in the number of large forest patches in India
- And more than **70 % of the protected areas** have linear infrastructure passing through them.
- In the last 7 years more than **12290 Ha.** of forest lands have been approved for clearance for the construction of roads (about the size of **23,000 football fields**)
- 2400 more road projects worth a total of **21054.50 Ha.** (same size as 5 Delhi cities) are currently in the pipeline for clearance.



# In Maharashtra, one leopard is dying every two days

## INDIA NEWS

### Pregnant leopard killed in road accident on Mumbai's Western Express Highway

The leopard was rescued by a team of the Sanjay Gandhi National Park (SGNP) and brought to the facility's leopard rescue centre but could not be saved.

### Last Year, One Leopard Died Every Day, This Year 218 Have Died In Just Four Months So Far

22.5 K Shares



### Maharashtra lost 87 leopards in 140 days; 33 in road accidents

Vijay Pinjarkar / TNN / Updated: May 24, 2021, 09:35 IST

### Leopard deaths in accidents rose by 278% in 10 years, shows data

Leopard deaths in train and road accidents have increased over the past 10 years with a 278% rise from 2010 to 2019.



HARYANA

### Leopard found dead on Surajkund road in Faridabad

## MUMBAI NEWS

India saw 83 leopards killed in road and train mishaps in 2019, highest in 10 yrs

### Alarming rise in tiger, leopard deaths in country in first six months

DELHI

### Leopard killed in accident on highway

### Leopard dies in road mishap

### NH-948 turns death trap for leopards

*This range in Ramanagaram territorial division has a healthy population of leopards, elephants and sloth bears.*

BENGALURU

### Leopard killed in hit-and-run accident



SPECIAL CORRESPONDENT

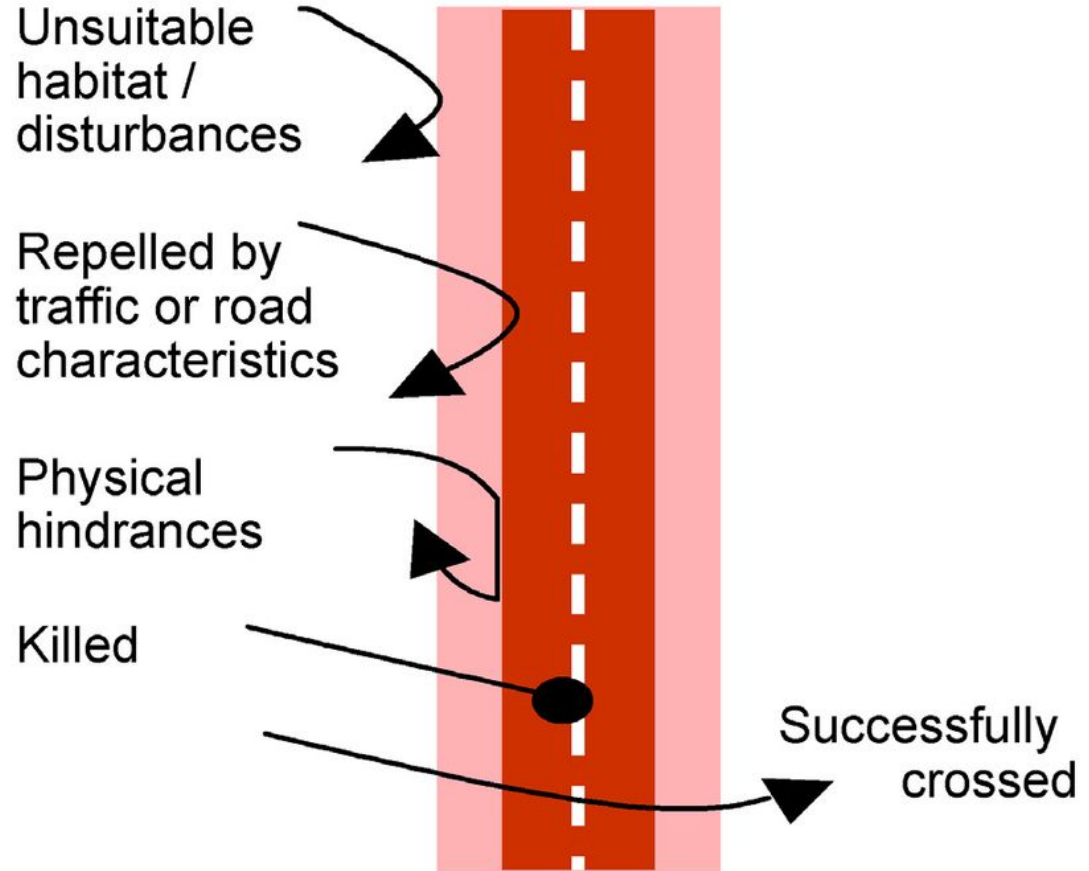
JANUARY 04, 2021 08:15 IST  
UPDATED: JANUARY 03, 2021 21:15 IST



**Roadkilled nightjar**

# Impacts

- Barrier Effect
- One rule can not be applicable for all animals



# The possible solutions :



- Underpasses & Overpasses
- Bypass roads
- Speed limit monitoring in wildlife area and strict fines
- Proper reporting and documentation system
- Accessible vet services and rapid response for roadkills

# Railway vs forest area



Indian Railways: Why trains still kill thousands of cattle every year. Indian trains ran over more than 13,000 cattle in 2022 according to data released by the government. This is up 24% from 2019, when 10,609 cattle were hit by trains, according to numbers shared by nine of 17 railway zones in India with the BBC.

# Powerlines



Around 1,300 wild animals had been electrocuted across India due to deliberate and accidental electrocution between 2010 and 2020, reveals a data compiled by NGO Wildlife Protection Society of India (WPSI).

Animals, including large mammals like elephants and birds, can be tragically electrocuted by power lines, especially in areas with high-tension wires passing through their habitats.

# How we can help?

- Helping create awareness
- Signing petitions, raise your voice
- Demanding accountability & change
- Slowing down for wildlife
- Being mindful about animals while driving
- Provide medical aid and report to the department in case you come across a kill

# Current mitigation measures



Thousands of wild animals die on India's roads every year. You can prevent the next accident.

Download the Roadkills app from [www.roadkills.in](http://www.roadkills.in) or the Google Play Store.

The illustration shows a hand holding a smartphone that displays a map with a red location pin. The background is a stylized landscape with green trees and a road. A roadkill sign is visible on the road, and a white bird is shown on the road surface. The text and logos are positioned at the top of the illustration.

**ROAD KILLS** Wildlife Conservation Trust

# The possible solutions :



- Underpasses & Overpasses
- Bypass roads
- Speed limit monitoring in wildlife area and strict fines
- Proper reporting and documentation system
- Accessible vet services and rapid response for roadkills

# What slows things down?

- Interference in effective mitigation
- Pseudo stakeholders
- Regulatory bodies and their understanding as well as biases
- External influence

# Vulnerable vs Primary Stakeholder

# Assumptions about vulnerable stakeholders

Mitigation vs actual  
impact. Who benefits?



now everywhere human has entered.

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AKANSHA  
TIWARI

#Brakeforwildlife

