

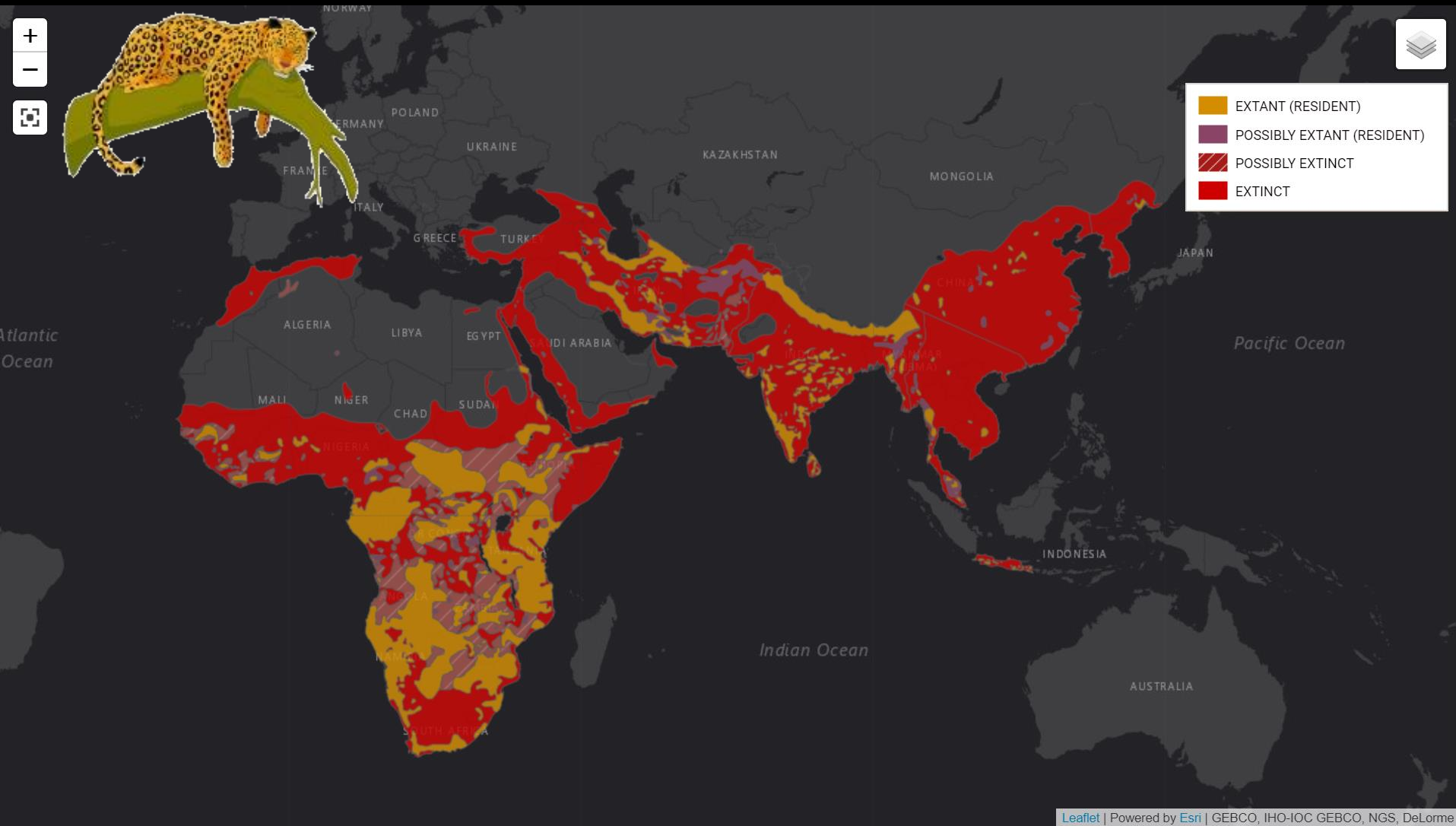
Leopard in a Tea-Cup: Human-leopard Interactions

Aritra Kshetry

**INSPIRE Fellow, Department of
Science and Technology**



About Leopards: Distribution



About Leopards: Subspecies

LEOPARDS

OF

THE

WORLD



So what is so special about them?

No, not this trick!



Most adaptable neighbours



Can Live Anywhere!



Can Eat Anything!



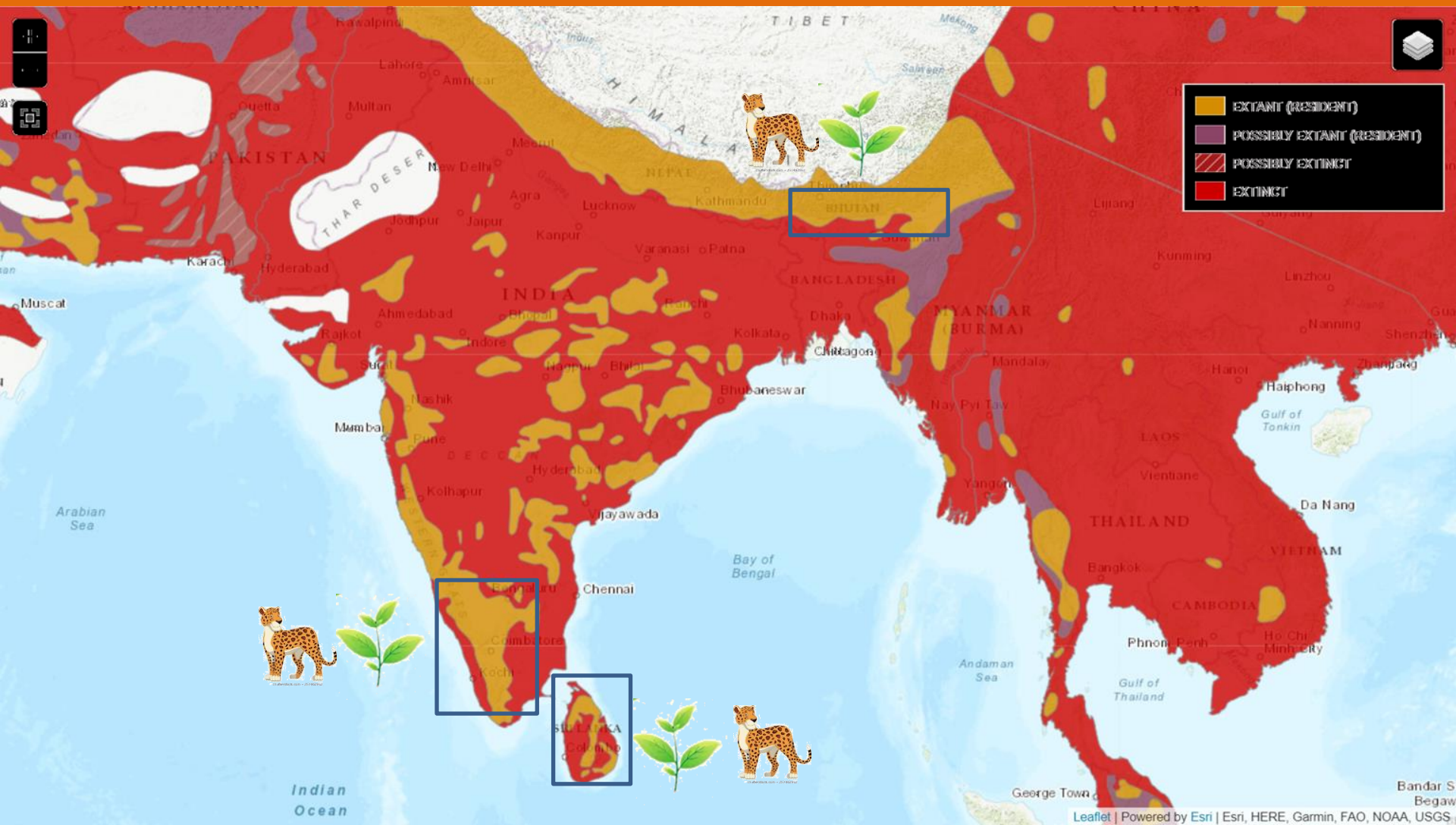
Can Cause Trouble!



Can Get Into Trouble!



The Tea-Cup Story



The North Bengal Story



Mosaic of Forests ,Tea and Agriculture

High density of people (700 per sq km)

High Human injuries (~50 per year)

Rare human fatalities (~10 per decade)

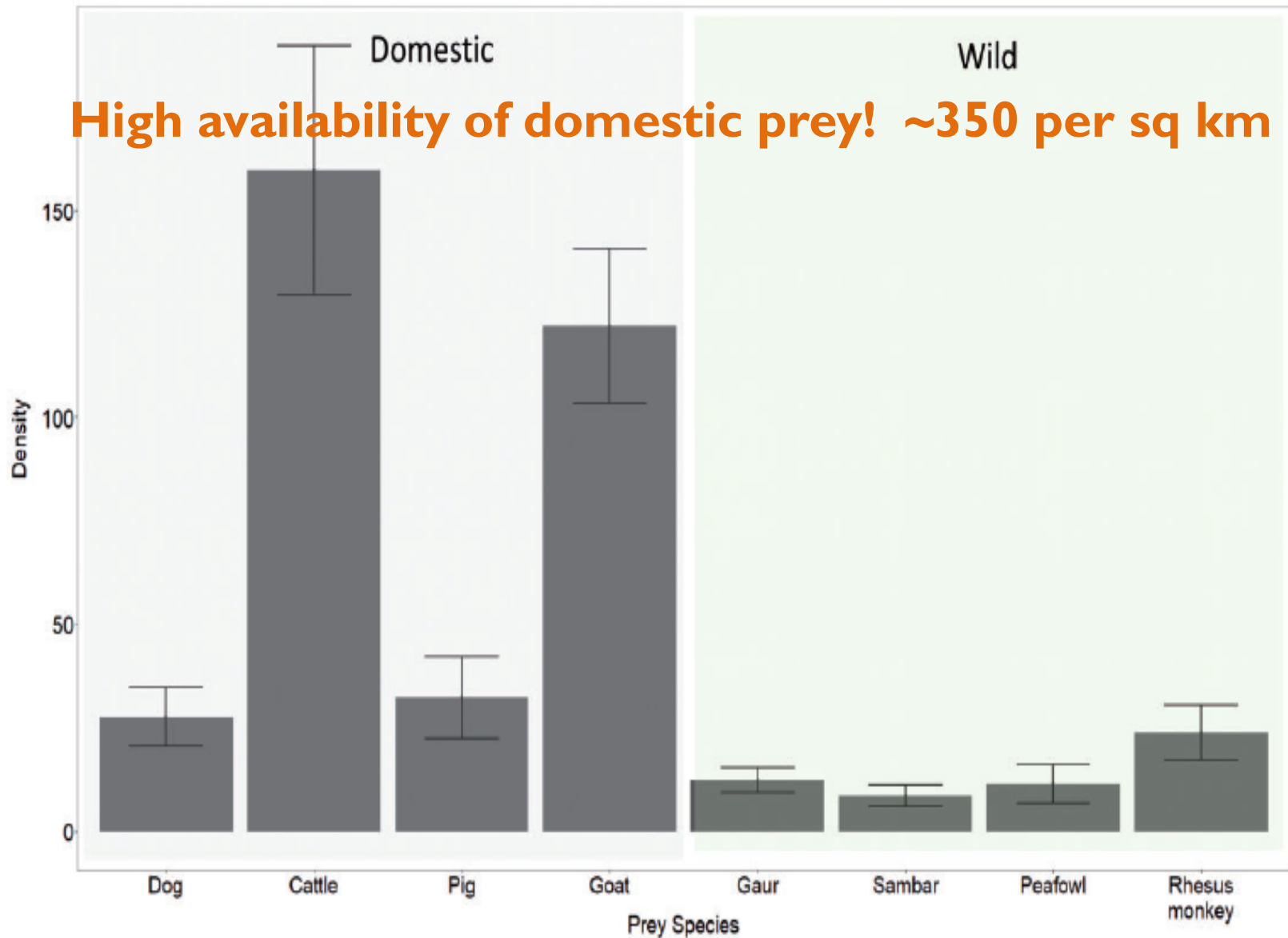
Conservation Challenges

High dependence on livestock ~70%

Table 1. Frequency of Prey Species Found in Scats ($n = 70$) of Leopards, Relative Biomass of Prey Consumed, and Relative Number of Prey Consumed in the Study Area in Northern West Bengal, India.

	Prey species	A (%)	x (kg)	Y (kg/scat)	D (%)	E
Domestic	Cattle (<i>Bos</i> sp.)	27.03	60.00	1.80	48.22	7.07
	Goat (<i>Capra</i> sp.)	8.58	25.00	1.62	13.75	4.84
	Pig (<i>Sus</i> sp.)	6.24	40.00	1.75	10.83	2.38
	Dog (<i>Canis familiaris</i>)	5.13	18.00	1.48	7.50	3.66
Wild	Rhesus macaque (<i>Macaca mullata</i>)	10.49	6.00	0.95	9.90	14.51
	Rodent species	5.25	0.50	0.49	2.56	45.01
	Bird species	1.70	2.00	2.05	1.07	15.17
	Gaur (<i>Bos gaurus</i>)	0.81	60.00	1.80	1.44	0.21
	Muntjac (<i>Muntiacus muntjac</i>)	1.08	20.00	1.53	1.63	0.72
	Jungle cat (<i>Felis chaus</i>)	1.20	6.00	0.95	1.13	1.66
	Viverrid sp.	1.00	2.00	0.64	0.63	2.78
	Chital (<i>Axis axis</i>)	0.41	55.00	1.80	0.73	0.12
	Hare species	0.65	2.00	0.64	0.41	1.81

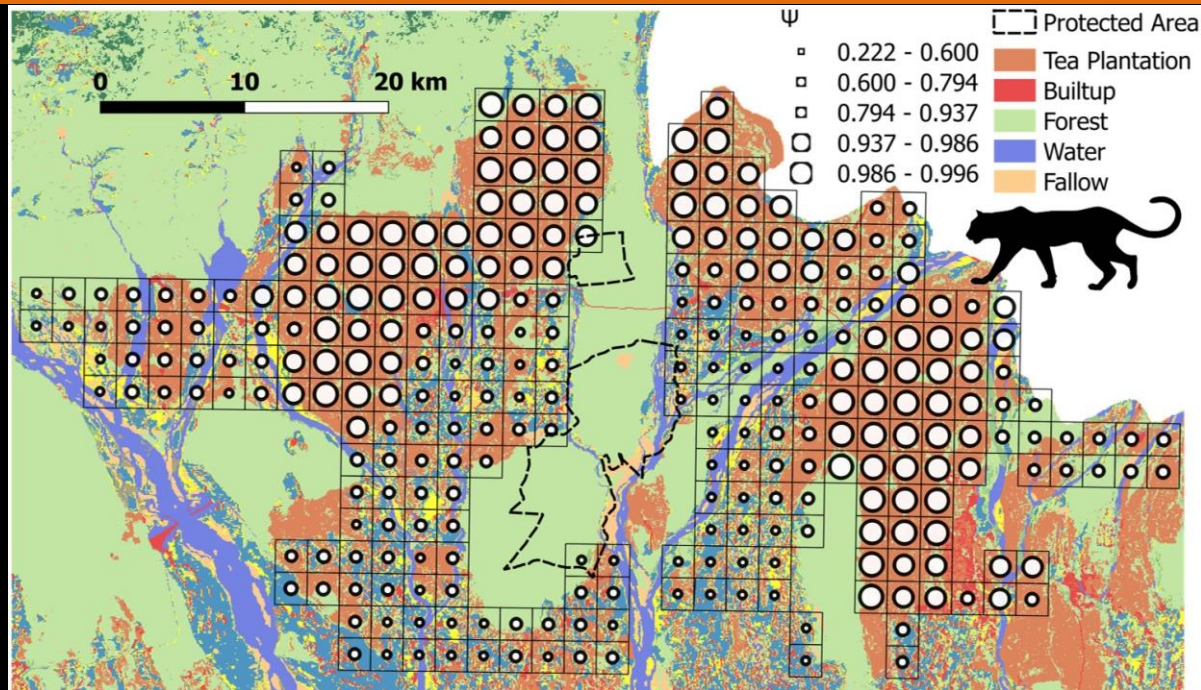
Livestock Damage: A Closer Look



Livestock Damage: What we learn?

- **Leopards eat whatever is more available and accessible**
- **No selection towards any prey type**
- **Tea-estates have abundant livestock**
- **One leopard home range ~10 sq km**
- **Could contain 3000 livestock**
- **Needs to kill only 50-60 per year**
- **Damage per family is often negligible, hence not reported**

Conservation Opportunities



- 942 sq km out of 1200 sq km non forested area has leopard presence
- Protected Area dedicated for leopard conservation only 88 sq km
- Reserve forests available for leopard conservation ~100 sq km
- Potential for leopard conservation over 5 times the area !
- Leopard tourism? Conservation reserves?

Minimizing Challenges

**Reducing
Accidental
Injuries**

```
graph TD; A([Reducing Accidental Injuries]) --> B([Modify Leopard Behaviour]); A --> C([Modify Human Behaviour]);
```

**Modify
Leopard
Behaviour**



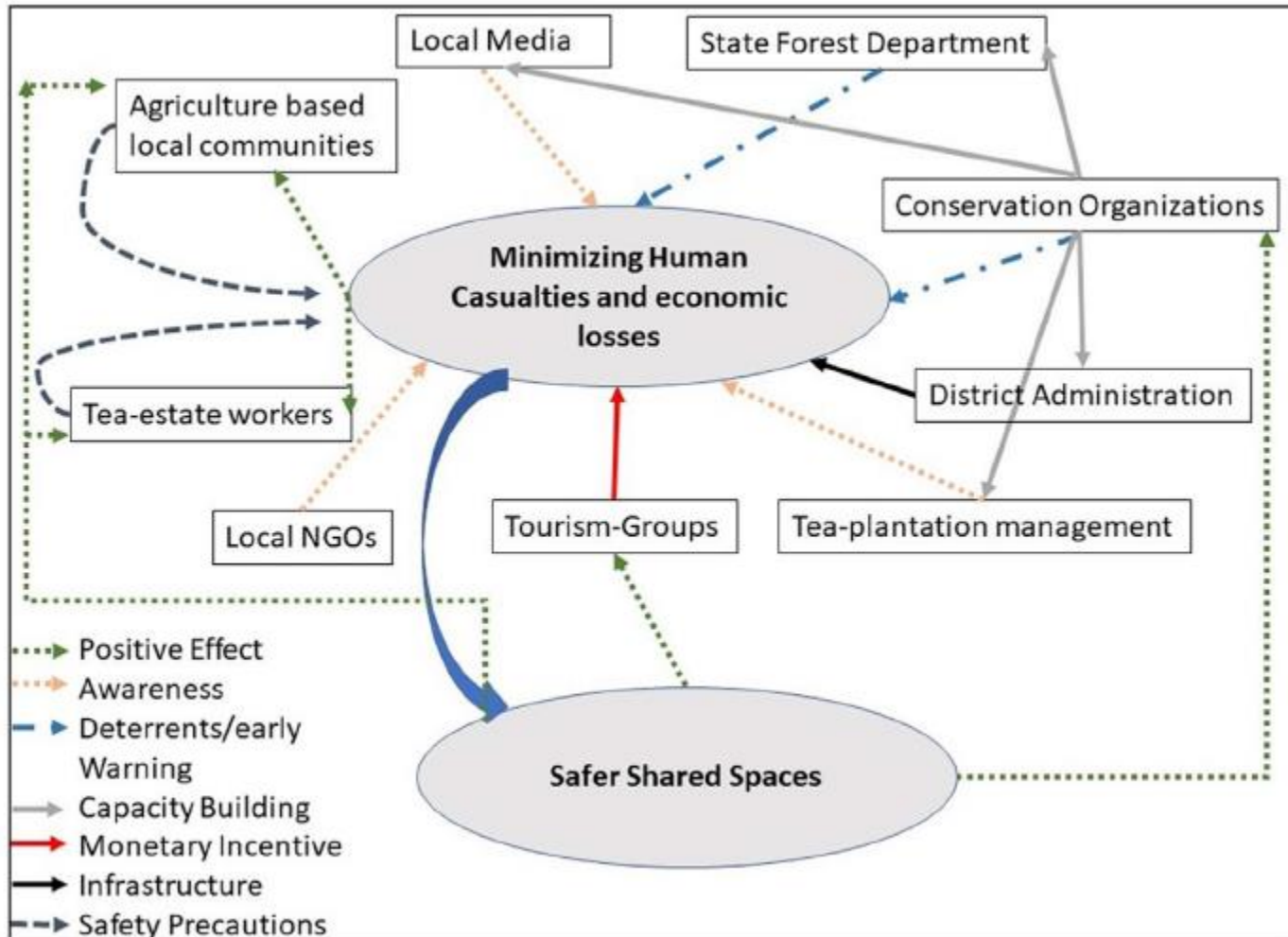
**Modify
Human
Behaviour**

Exactly! But how?



Engage Stakeholders

b.



Enable Local Communities



Know the Species



12/7/2019 6:18 PM ID:3

Cuddeback

Know the Species



Know the People



Enable Coexistence

Do not try this at home!



Thank you



1/17/2020 11:26:03 PM

