



Biodiversity, Pandemics and the Web of Life



*Man did not weave the web of life, he is merely a strand in it.
Whatever he does to the web, he does to himself*

Global pandemics are increasingly **zoonotic** in origin

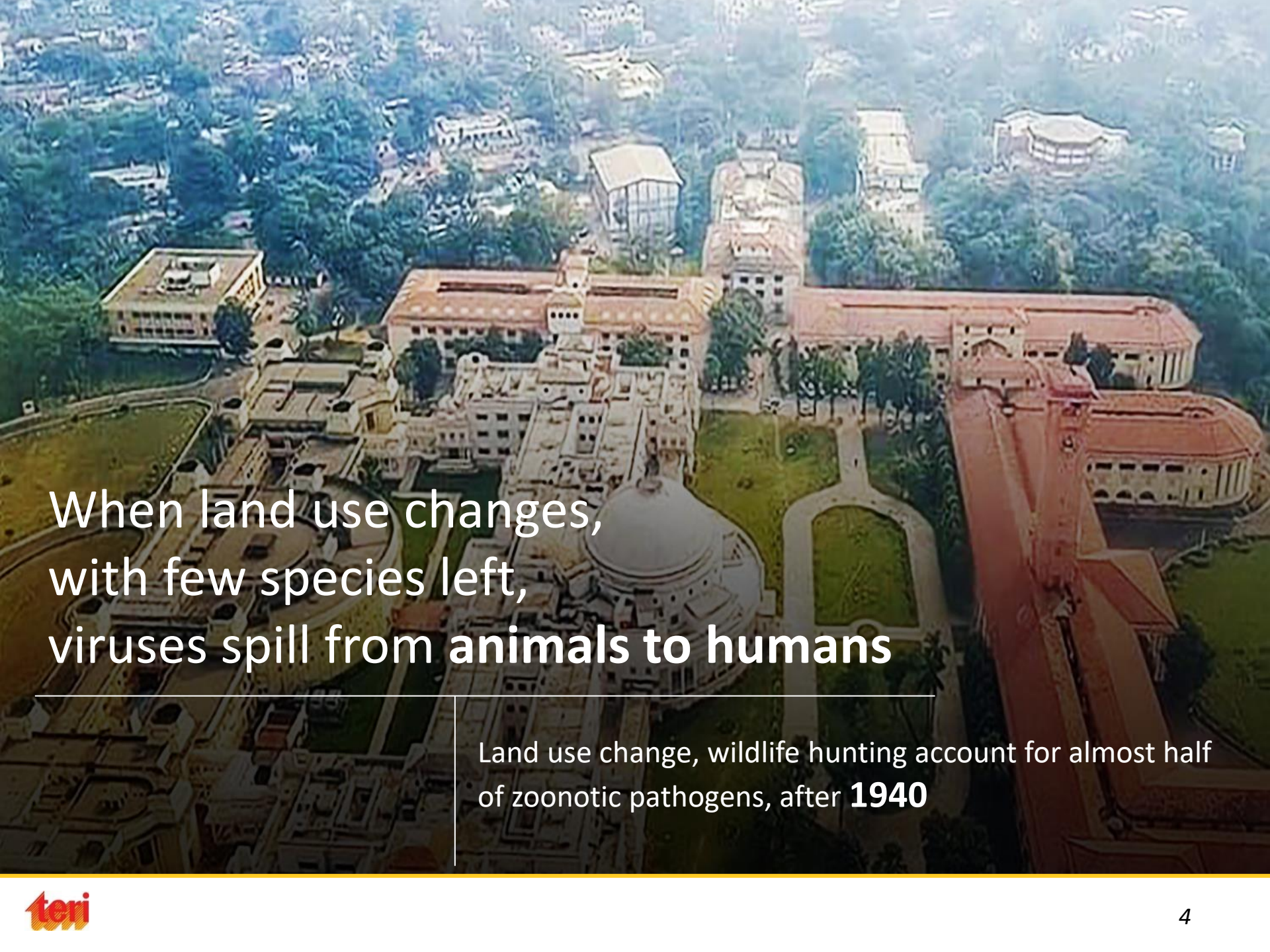


60%-75% of infectious diseases originate from wildlife

12,012 recorded outbreaks, between **1980-2013**,
affecting every country in the world

In nature,
viruses **ebb and flow**
from one species to another





When land use changes,
with few species left,
viruses spill from **animals to humans**

Land use change, wildlife hunting account for almost half
of zoonotic pathogens, after **1940**

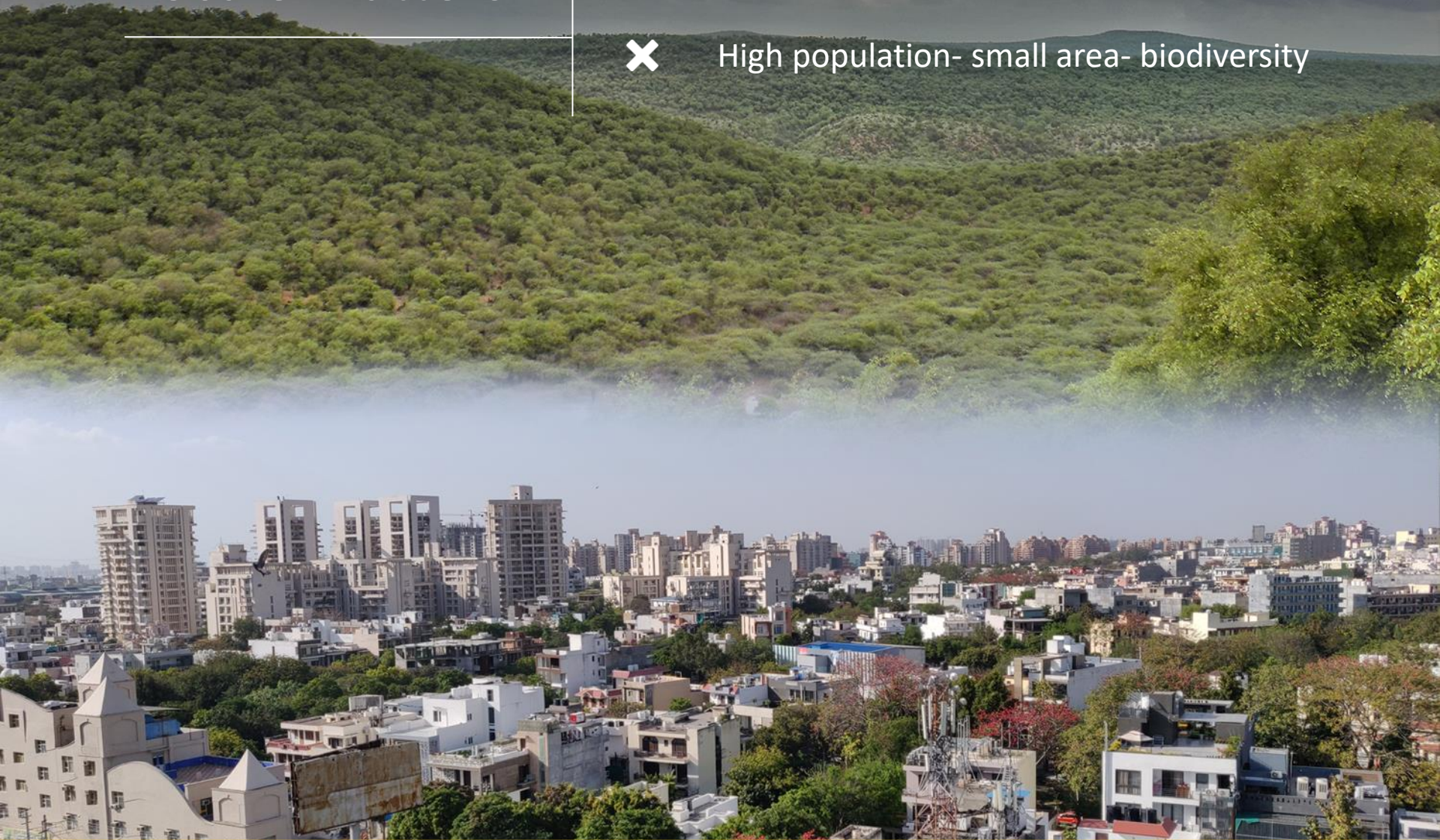
Scale matters



High population- large area- biodiversity



High population- small area- biodiversity



We need biodiversity-integrated **zoning** to reduce contact between animals and humans

As in **Biosphere Reserves**

Core zone: conserve gene pool (Protected Areas)

Buffer zone: conserve resources

Transition zone: mixed land use; man-nature harmony

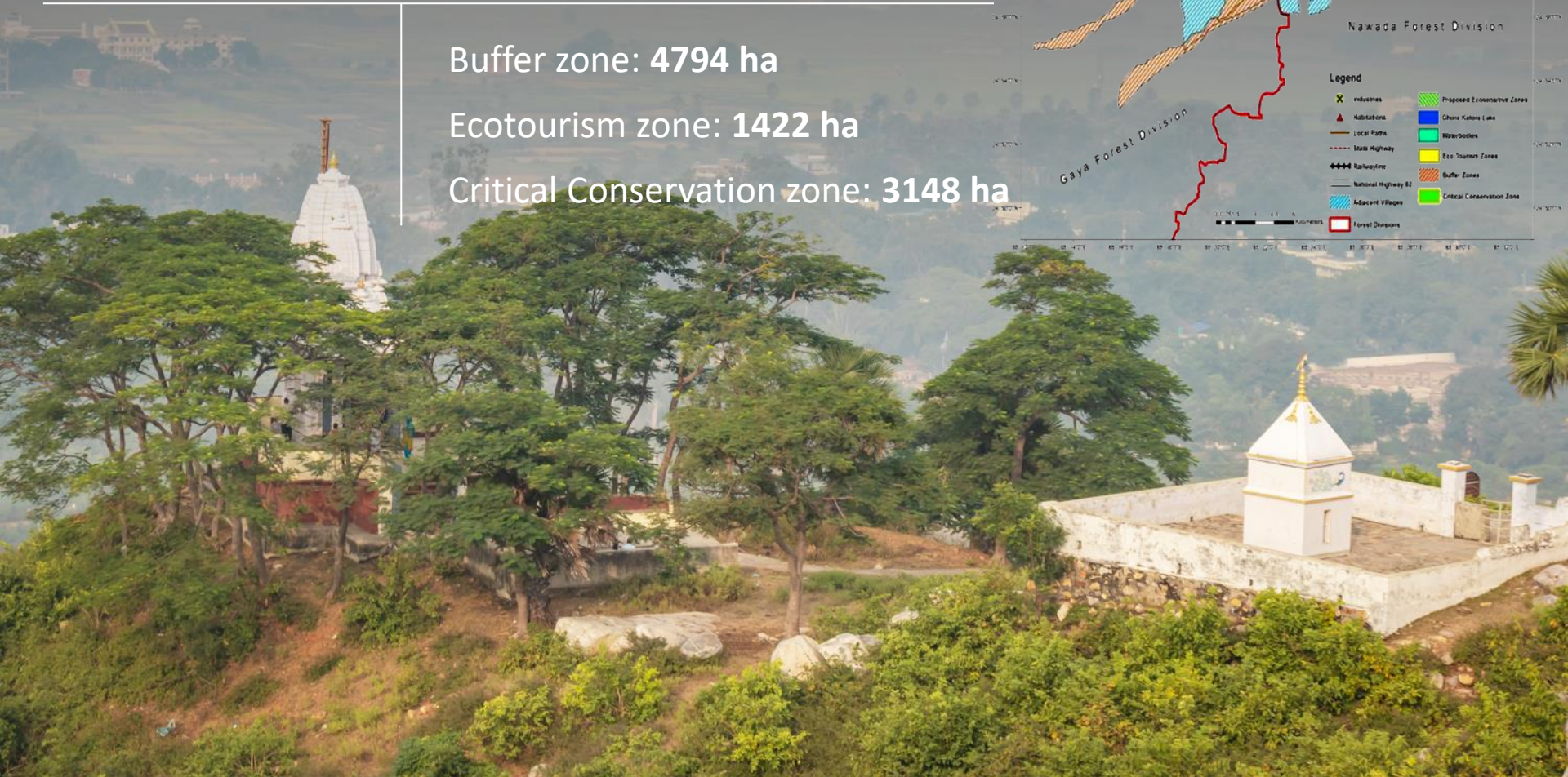
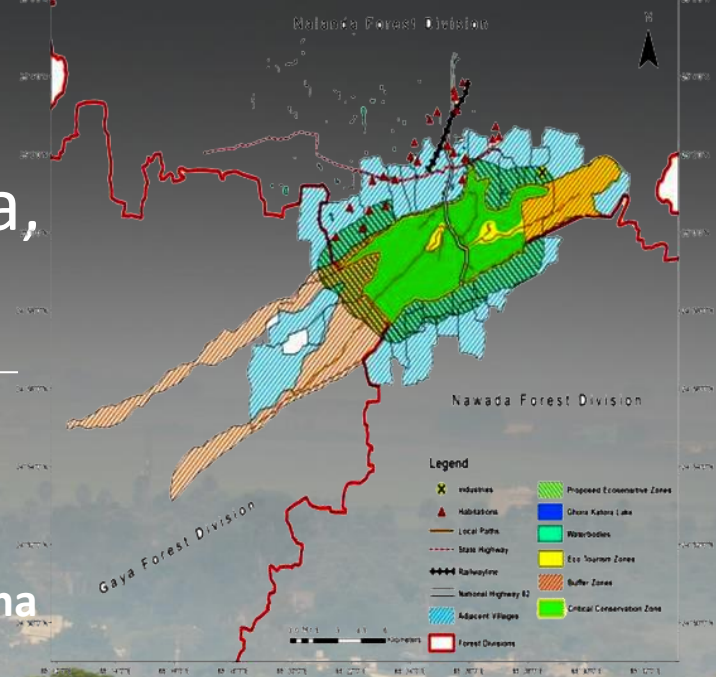


Wildlife Management Plan of Pant Wildlife Sanctuary in Nalanda, developed by TERI

Buffer zone: **4794 ha**

Ecotourism zone: **1422 ha**

Critical Conservation zone: **3148 ha**



A photograph of a park with large, mature trees and green grass. Two wooden benches are visible in the foreground. The sun is shining brightly through the trees, creating a warm, hazy atmosphere. The text is overlaid on the left side of the image.

We need to build and protect regional and city level **Green Corridors**

To enhance biodiversity in the midst of
high population density



Sanjay Van Park, New Delhi



Sanjay Gandhi National Park, Mumbai

Small water bodies can revive biodiversity in rural India

A large flock of birds, possibly terns, is seen flying in the sky above a rural landscape. The landscape features a pond, a small building, and a large number of birds on the ground near the water.

They are a refuge for species which have disappeared from larger, damaged water bodies

And if we they are connected to each other with green corridors, they will spawn a biodiversity-rich ecosystem

A photograph of a middle-aged man with a mustache, wearing a white turban and a plaid shirt, smiling and holding a large bundle of green grass. He is standing in a lush green field. The background is slightly blurred, showing more greenery and a distant building.

**But citizens and
communities need
to be on board**

As key actors in restoration and shareholders of benefits

Both green corridors in urban areas, and water bodies in rural areas have multiple benefits which are amenable to benefit sharing

Targets and resources to district collectors is the best way for meaningful action