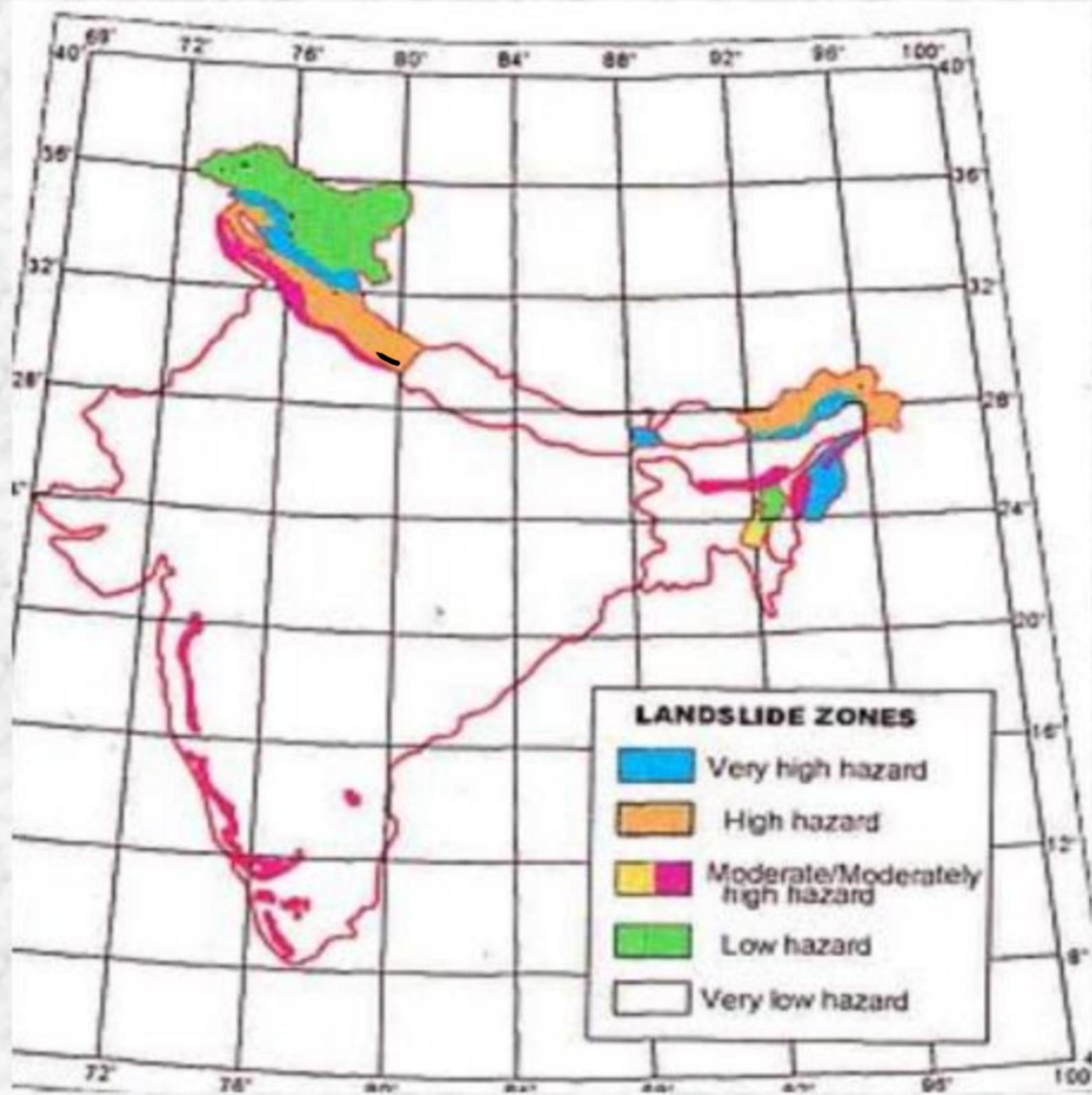




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# Causes

Natural

→ Steep slope

→ lesser stability (Earthquake)

→ Rainfall / cloudburst / hLOF

(WH)

Anthropogenic

→ Deforestation

→ Land use changes

↳ unsustainable mining processes.

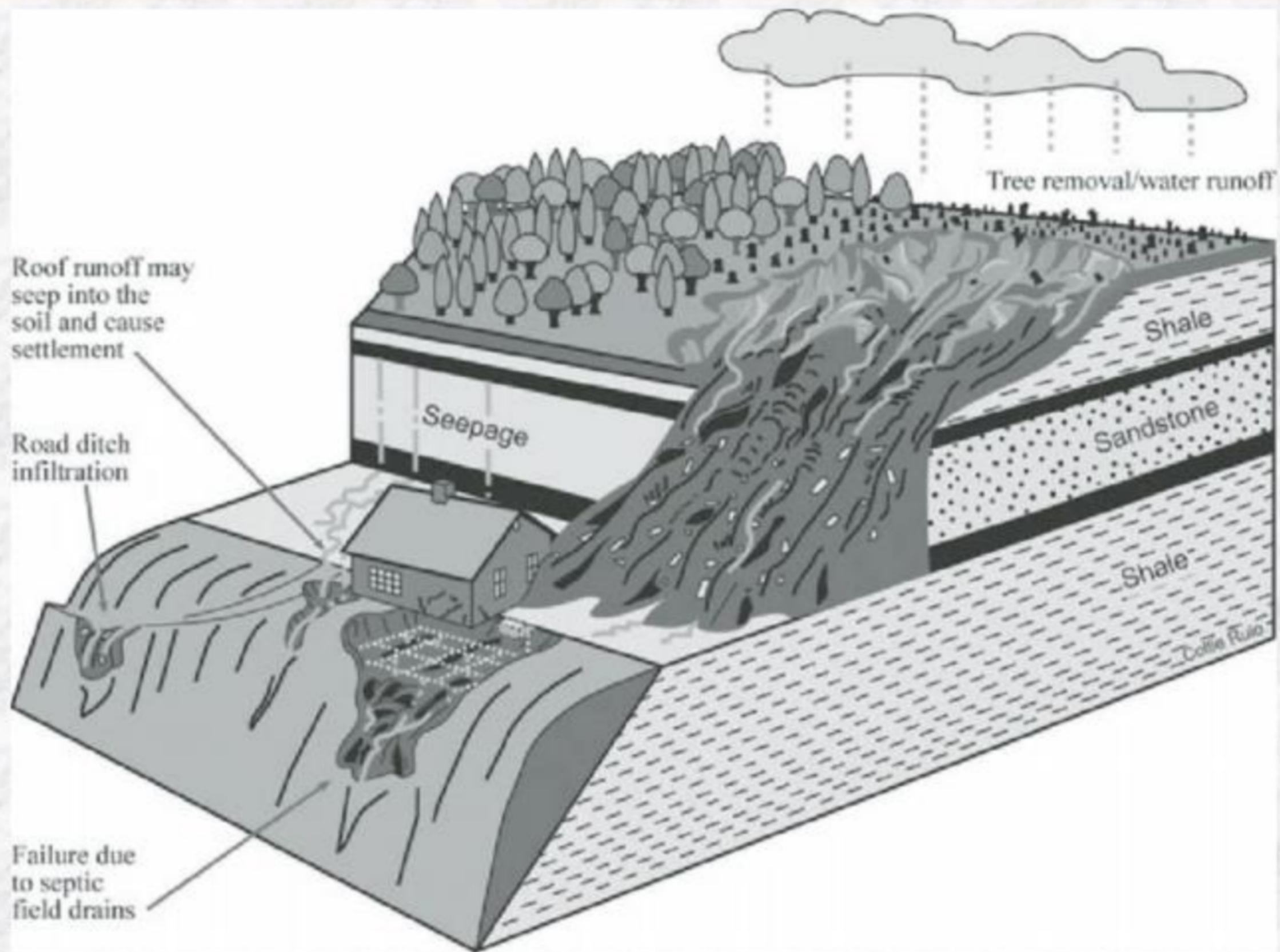
↳ large hydropower projects

# UPSC

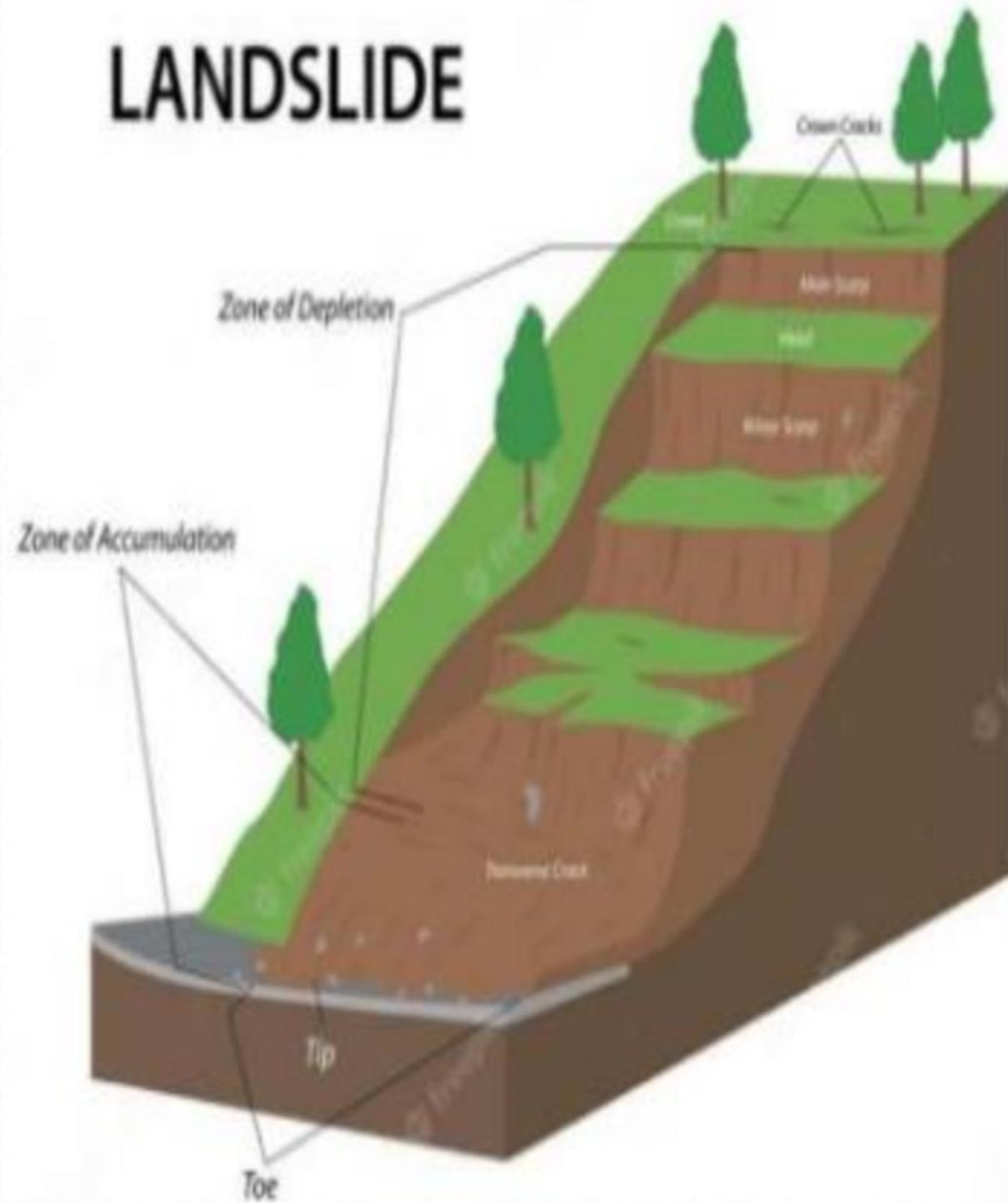
State	Total no. of landslide events	State	Total no. of landslide events
Mizoram	12,385	Nagaland	2,132
Uttarakhand	11,219	Sikkim	1,569
Tripura	8,070	Himachal Pradesh	1,561
Arunachal Pradesh	7,689	Karnataka	1,904
Jammu and Kashmir	7,280	Tamil Nadu	690
Kerala	6,039	West Bengal	172
Manipur	5,494	Haryana	100
Maharashtra	5,112	Ladakh	23
Meghalaya	2,639	Goa	03
Assam	2,569	Total	80,933

Landslide hotspot areas in India (1998-2022). (Source: Landslide Inventory of India, Landslide Atlas of India, ISRO)

# UPSC



## LANDSLIDE



Mining activities  
Eg. Jharkhand  
Meghalaya

Causes of landslide

Heavy rainfall eg.  
Western Ghat

Earthquakes eg.  
Himalayan region

Deforestation and  
reduced tree cover on  
the mountains

## Types of landslides

Fall



Topple



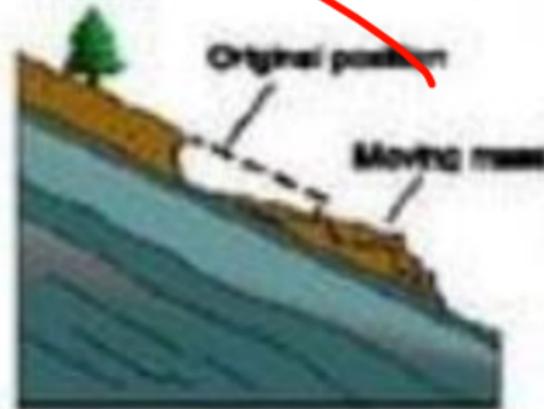
Slide



Spread



Flow



↳

Impact  
Impact



Infrastructural damage

→ loss of life and property

→ Source of flood

→ loss of biodiversity

→ Regional and social backwardness

## Way forward

NDMA

→ National landslide Risk management Strategy 2019

→ Hazard mapping

→ landslide monitoring and early warning system

→ land use policy, building codes; mountain zone regulations

→ Capacity building and public awareness

→

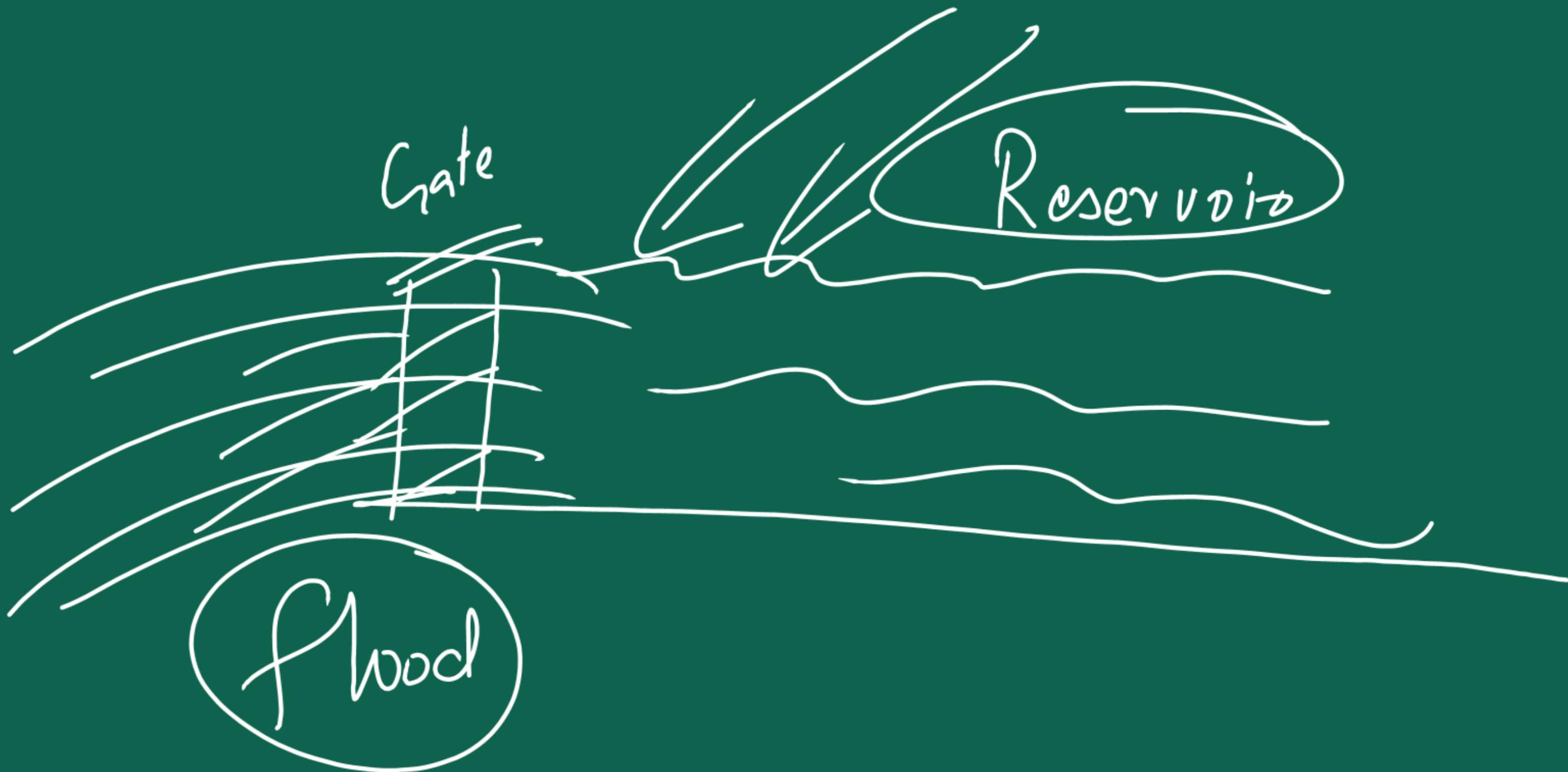
## Other suggestions

- Council of Himalayan states
- Building of <sup>series of</sup> walls in vulnerable zones
- Green wall → Afforestation.
- Environmental Impact Assessment of Himalayas.

Kashmirangan  
Report

## Western Ghat

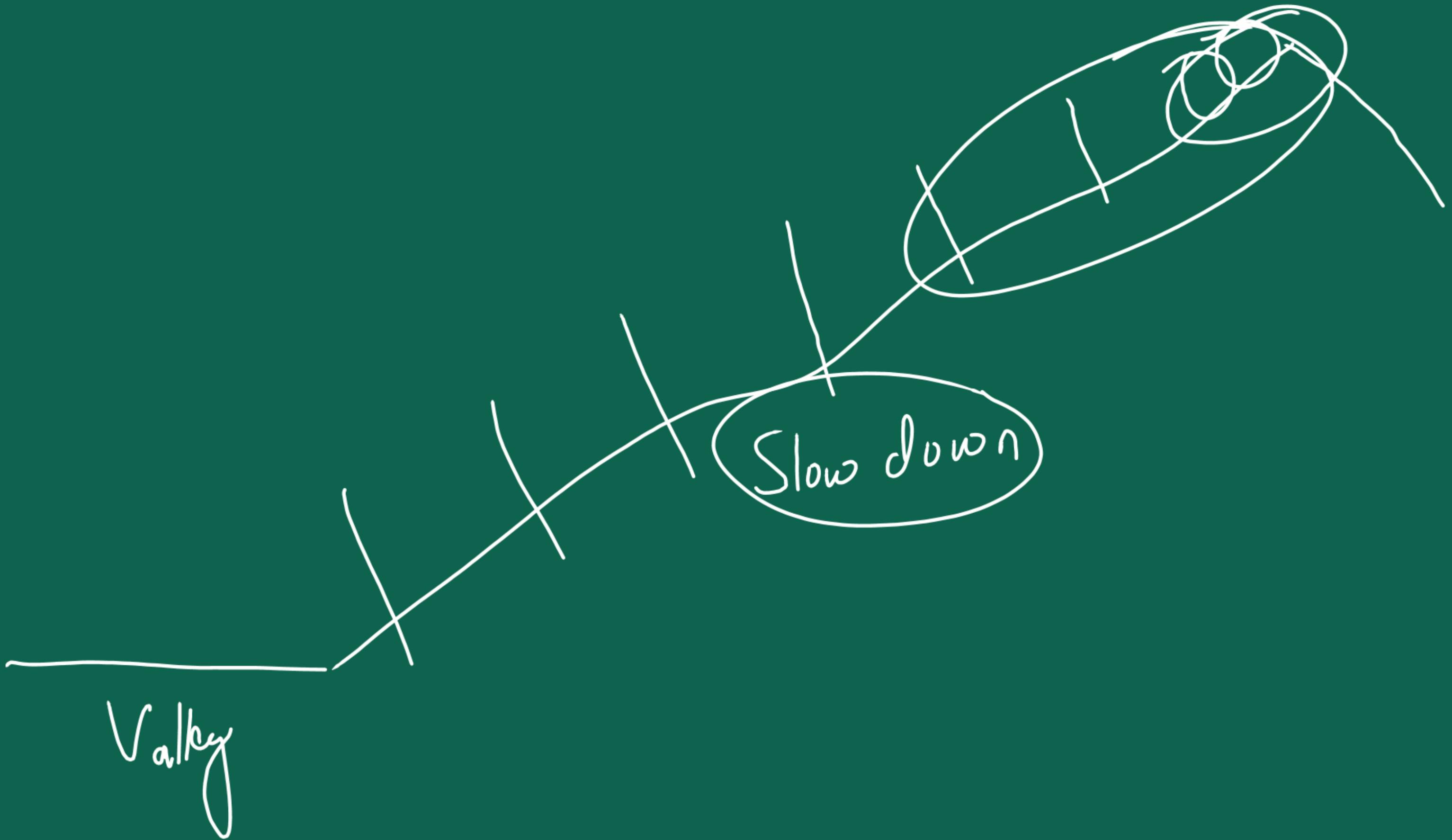
- Eco-sensitive Zones.
- Sustainable mining practices
- Land use Regulation strictness,
- learning from Rest of World.



Gate

Reservoir

flood





## TYPES OF DROUGHTS

Meteorological Drought

Hydrological Drought

Agricultural Drought

Ecological Drought

*Rainfall*

*water on surface/ground*

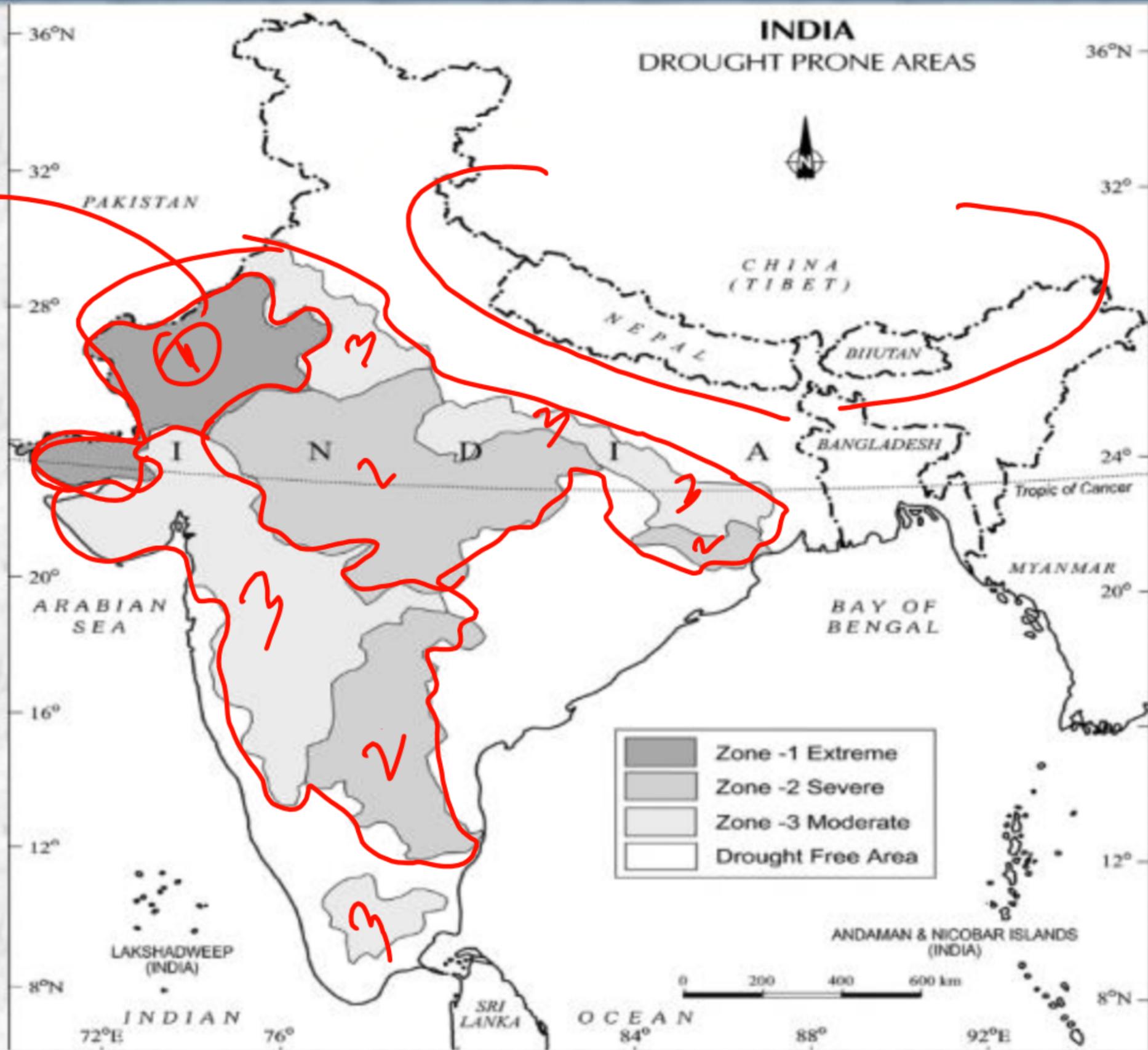
*less moisture in crop soil*

*Ecosystem under stress due to scarcity of water*



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Extreme



100 cm  
amount of  
Rainfall

evenness

Draught

declaration

25% less rainfall - draught

→ 26 - 50% less rainfall - moderate

less than 50% → Severe

Rainfall





# KHAN GLOBAL STUDIES

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**THANKS FOR WATCHING**

