Geography Class 36

30th November, 2023 at 9:00 AM

MOUNTAINS OF PENINSULAR REGION: (9:24:12 AM):

- **Aravalis:** Starts from Gujrat and upto Delhi
- Old fold mountains, formed via folding.
- Caledonian mountains.
- Mt Guru Shikhar is the highest. 1722m
- **Vindhyas and Satpuras:**
- Block mountains formed during the carboniferous period.
- Faulting activity.
- Rift valley- Narmada and Tapi.
- **Western and Eastern Ghats:**

Vindhya Range
Narmada River
Satpura Range
Tapi River
order of Rift Valley as we move from North to South.

	Western Ghats	Eastern Ghats
Extent	Gujarat (south of Tapi) to kanyakumari	South of Mahanadi to Nilgiri (part of Western Ghats)
States	Gujarat (DDD&NH), Maharashtra, Goa, Karnataka, Kerala, Tamilnadu	Orissa, Andhra Pradesh, Telangana, Tamilnadu, Karnataka (some part of Chhattisgarh)
Continuity	Continuous	Discontinuous [* Due to the rivers coming from the west which have eroded the eastern Ghats]

Slope	These are taller	These are bit shorter
	Narrow	Wide
Topography	Highest peak- Anaimudi 2695m Overall height increases towards the south	Highest peak- Mahendragiri Some sources state that Zindgada's peak Height increases towards the North
Closeness with coast	More closer to the coast	Bit far from coast
Precipitation	Higher precipitation, from monsoon.	Lower precipitation, many from NE monsoon.
Vegetation	Vegetation in Western ghat is an evergreen type	Vegetation- Deciduous
Biodiversity	Higher Biodiversity in Western Ghat	Lower biodiversity in Eastern Ghat

all peaks are in Sahayadri Range

- **Parts of Western Ghats: (9:53:14 AM):**
- In Maharashtra and Karnataka- Called Sahayadri
- Mahabaleshwar peak, kalsubai Peak. (they are in Maharashtra and Krishna river originates from Mahabaleshwar)
- In Karnataka- Mulangiri peak and Baba Budan Hills. It is the origin of coffee.
- ~~Kedrumukh~~ peak- horse peak.
- Coorg hills.
- Nilgiri.
- Anaimalai Hills
- Palani hills
- Cardamom Hills
- **Parts of Eastern Ghats:**
- Mahendragiri (highest peak of Eastern Ghats with height 1501m which is present in Odisha)
- Nallamala hills
- Palkonda Hills- Tirupati is part of this
- Nandidurg.
- Javadi & Shevroy hills

tallest peak of Karnatka

India's most of Coffee cultivation happens here and Cafe Coffee Day also started from here

Kudremukh

Kudre means Horse in Karnataka

it was a pricley state. It is also known for its distinctive culture and they also contributed a lot in army. Kaveri river originates from this region.

both Western and Eastern Ghats merge here that is why we will see richest diversity of life here. Largest density of tiger and elephant are found here. Here biosphere reserve is also present that is Nilgiri Biosphere Reserve. Bandipur Tiger Reserve is there which was declared as India's first tiger reserve along with Jim Corbett. Ooty hill station is also found here.

Anaimudi which is the highest peak in whole Peninsular region is present in Anaimalai Hills.

it is the region of one of the world's most smuggled wood that is Red Sandal wood.

Nilgiri me merge ho jata h

Plateaus of Peninsular Block: (10:06:47 AM):

- Deccan trap and deccan plateau.
- flood basalt province.
- The tectonic events of the peninsular plateau.
- The peninsular region is a great complex of ancient rocks that have existed as a single rigid block for millions of years.
- It was subjected to a few episodes of tectonic activity like the formation of rift valleys of Narmada, Tapi, and others due to faulting activities.
- Submergence of the western side of the western Ghats resulted in a steeper western side and a wider continental shelf along the western coast.
- The formation of Deccan traps;
- When the Indian plate was moving towards the Eurasian plate, a large scale of basaltic magma over the reunion hotspot resulted in the formation of flood Basalt called as Deccan traps.

some part of western ghats have submerged into ocean which resulted in steeper side of west part of western ghats, wider continental shelf and gradual slope in eastern side.

It is richest in minerals and it known as Ruhr of India (Ruhr valley is in Germany which is rich in minerals)

Located between Aravallis and Vindhayas.

Different-Different Plateaus in Peninsular Plateau:-

- **Malwa plateau;**
- **Bundelkhand Plateau**
- Kuno National Park.
- **Chotanagpur Plateau-** Entire Jharkhand state
- ~~Ruhr~~ Ruhr of India.
- **Meghalaya Plateau-** Garo, Khasi, and Jaintia hills are part of this plateau
- separated from the Mainland by the Garo-Rajmahal gap also called the Malda gap.
- **Deccan Plateau-** Between Western Ghat and Eastern Ghat- Maharashtra, Karnataka, and Northern part of Telangana are covered in Deccan traps
- Deccan trap- Sugarcane cultivation.
- **Karnataka plateau-** Towards western ghat, it is a hilly region called as **Malnad** and on the other side it is a plain region called Rolling Plain/ **Maidan**
- **Seemandhra and Rayalseema.**
- **Rayalseema Plateau-** Region within Andhra Pradesh. [* It is called Rayalseema because it was ruled by the Clan of Rayas]
- **Telangana plateau**
- **Dandakarnya plains- Chattisgarh plains.**

Located at the right of Malwa Plateau this is also known as Bad Land Plateau because there is not so much rain here and land is also infertile and mineral less. Chambal Ravine is also the part of this plateau. Kuno National park is here which is famous world wide because this is first time that inter continental trans location of wild animals have happened i.e. re-introduction of Cheetah happened here.

Meghalaya Plateau is separated from Peninsular Plateau by Garo Rajmahal Gap (Garo is the western hill of Meghalaya and Rajmahal is the N-E hill of Chota Nagpur Plateau) which is also known as Malda Gap (Malda is the border place in West Bengal).

Maharashtra Plateau is the northern part of Deccan Plateau and there is scarcity of ground water here. Eastern part of Maharashtra Plateau is Vidarbha.

Telangana Plateau is dry unlike Andhra Pradesh, this is also a reason of separation of Telangana and it contains some minerals also.

Northern part is filled with Deccan traps so Black soil is found here.

Seemandhra is the coastal part of AP which is fertile and other part is Rayalseema which is a dry region is part of Deccan Plateau.

Krishna River is the boundary between Rayalseema and Telangana.

⇒ Chattisgarh Plains are called as plains of Dandakaranya.

there are other plains also like-

Residual Plains: Formed from the erosion of mountains and plateaus.

Structural Plains: There is no land subsidence, upliftment or any kind of tectonic activity and there is plain itself from the beginning. EX: Great Plains of North America which are present between Rockies and Appalachian mountains.

Plains of India: (11:12:26 AM):

- Flat regions
- Two types- Northern Plains and Coastal Plains
- **Northern Plains**
- **How did it originate?**
- The Northern Plains are formed by the deposition of sediments brought by the Himalayan rivers into the remnant of the geosyncline between the Indian and Eurasian plates.
- Forms deposition from the quaternary period after the formation of the Himalayas.
- They are the youngest geological formations of India.
- It extends for a total of 3200 KMs of which the plains of India are for 2400 KMs.
- This is the largest alluvial plain in the world
- It is divided into the Rajasthan Plain, Punjab& Haryana Plains, Ganga Plains, and Brahmaputra Plains
- Widely believed hypotheses suggest the existence of rivers which later dried up, changed the direction of monsoon, and also reduced the precipitation resulting in the formation of deserts.
- The western part of Rajasthan plains refers to the desert proper, eastern part- semi an arid region known as Rajasthan Bagar.

A geosyncline is a large-scale, elongated depression in the Earth's crust that forms over a long period and is eventually filled with thick layers of sediments. These depressions typically occur at the margins of tectonic plates and are often the precursors to the formation of mountain ranges through processes of sedimentation, subsidence, and later folding or uplift.

formed from the sediments of river

(formed from sediments of Indus, Ganga and Brahmaputra.)

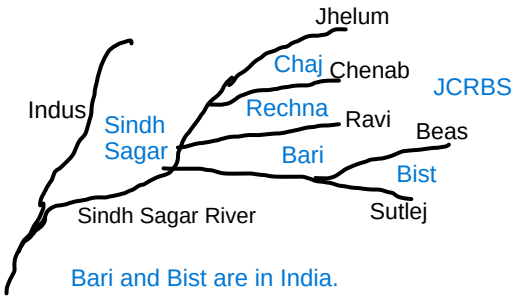
is known as Marusthali

Rajasthan Plains was also the part of alluvial plains but gradually it got converted into desert and according to a hypothesis there was a river flowing here which was known as Saraswati river which dried later.

West to the Aravallis is the Rajasthan Plateau and to the east of Rajasthan the part is of Malwa Plateau.

Punjab and Haryana Plains:-

⇒ Punjab and Haryana plains are part of Indus plains in India. Indus plains were formed by Indus river and its tributaries. There are total five tributaries to the main Indus river. Five rivers form a single river then merges to Indus. These five rivers are-



Bari and Bist are in India.

Region between two rivers is known as Doab. Doab is a very fertile land because sediments from two rivers get mixed continuously. Punjab is the most fertile land in the world, western Punjab is in Pakistan which is more fertile than eastern Punjab which is in India.

This is not exactly mentioned that on what basis a river will be names if it is formed due to merger of two rivers whether it will be according to largest river or longest river. So, among Jhelum, Chenab and Ravi, Chenab is the largest one and among Beas and Sutlej, Sutlej is the longest one but according to UPSC finally after merging all the five the river will be named Sutlej but it should be Sindh Sagar river.

- **5 tributaries to the main Indus River:**
- Doab is a region between two rivers
- BIST doab- between Beas and Sutlej rivers. It is only in India.
- BARI doab- Between Beas and Ravi rivers
- RECHNA doab- Between Ravi and Chenab
- CHAJ doab- Between Chenab and Jhelum
- Sind Sagar Doab- Between Sind and Chenab

Ganga

~~anga~~ plains: (11:45:39 AM):

- It covers UP, Bihar, and West Bengal
- It extends from Delhi to Kolkata
- **Parts of Ganga plains**
- Doab- Ganga- Yamuna Doab
- Rohilkhand plains
- Awadh plains
- Lower Ganga plains
- Delhi ridge. ← Elevated part between Indus and Ganga plains.
- **Brahmaputra Plains:** ← plains of Brahmaputra river in India, it is the northern part of Assam. Brahmaputra is also called Dehang in some part of India.
- It is also called Assam plains
- Extent- From Sadiya in the east to Dhubri in the west

Western part of UP is divided into two parts among them one is known as Doab which is present in between Yamuna and Ganga and Doab is fertile as well as it is strategically very important since it is in between two rivers so to conquer this land was not so easy and other part is Rohilkhand plain. Central and Eastern UP is known as Avadh Plains (Avadh is now known as Lucknow). Part of Bihar and WB is lower Ganga plains.

- **Types of Northern Plains:**
- **Bhabhar-** (In Haridwar)
- It is a region of Porous gravel and boulders deposited by rivers entering the plains from the Mountains
- In this region the smaller rivers disappear and start flowing underground
- **Terai-** These plains are porous in nature and smaller rivers get disappear and that underground flowing river comes out after sometime that creates water logged condition which is known as Terai plains for example land of Saharanpur.
- It is a marshy region after Bhabhar where rivers start to re-appear. It is very fertile and widely used for the agriculture of rice and sugarcane
- They are waterlogged regions and are prone to **water-borne diseases/ Mosquito-borne diseases**
- Northern parts of UP, Bihar border, Nepal, Muzaffarnagar area.
- **Khadar**
- It is the alluvial plain just next to River Valley.
- It is made up of fresh alluvial soil which gets replenished every year
- It is more fertile

- **Bangar**
- It is the older alluvial plain located away from the river valley and made up of older alluvium.
- It is less fertile than Khadar
- **Duars formation:** (it is like mix of Terai and Bhabhar.)
- These are unconsolidated sediments deposited by rivers from mountains along the foothills of the North-east region i.e. West Bengal and Assam
- They are best suited for tea cultivation.

Doon is the plain between two mountains. For EX: Har ki Doon, Dehradun

Karewa forms from lake sediments and it is in Kashmir and famous for safforn cultivation.

- **Coastal Plains:** (formed from the river deposits when it is about to enter into sea)
- They are formed by the sediments deposited by the rivers coming from the peninsular region
- There are two coastal plains- The eastern coastal plains and The western coastal Plains
-

Western coastal plain	Eastern Coastal Plain
From Kutch to Kanyakumari	From Sundarbans to Kanyakumari
Narrow, less fertile.	Wider, more fertile.
The maximum extent is 65 Km (becomes narrower in middle)	Maximum extent is 150-200 Km
Dominated by Estuaries	Dominated by Deltas (rivers flows from western to eastern ghats)
The western coast is called a submerged coast. (except Malabar coast)	The entire Eastern coast is an emergent coast
The erosion process is more active	The deposition process is active- So more beaches, sandbars
The western coast is a broken coast or an Indented coast	The eastern coast is smooth coast. The coastline is smooth
Natural harbors and ports because of the broken coast and erosion.	Few of them are Natural harbor but most are artificial/ man-made port
Wider continental shelves around the - western coast	Narrow continental shelves around the eastern coast
Kathiawad coast, Konkan coast, Malabar coast	Utkal plain, Northern circar, Coromanadal coast

Coral reefs are found here.

Coral reefs are not found because of higher sediments.

he topic for the next class is the Drainage system.

from Kachh to Daman

from Daman to north Karnataka coast.

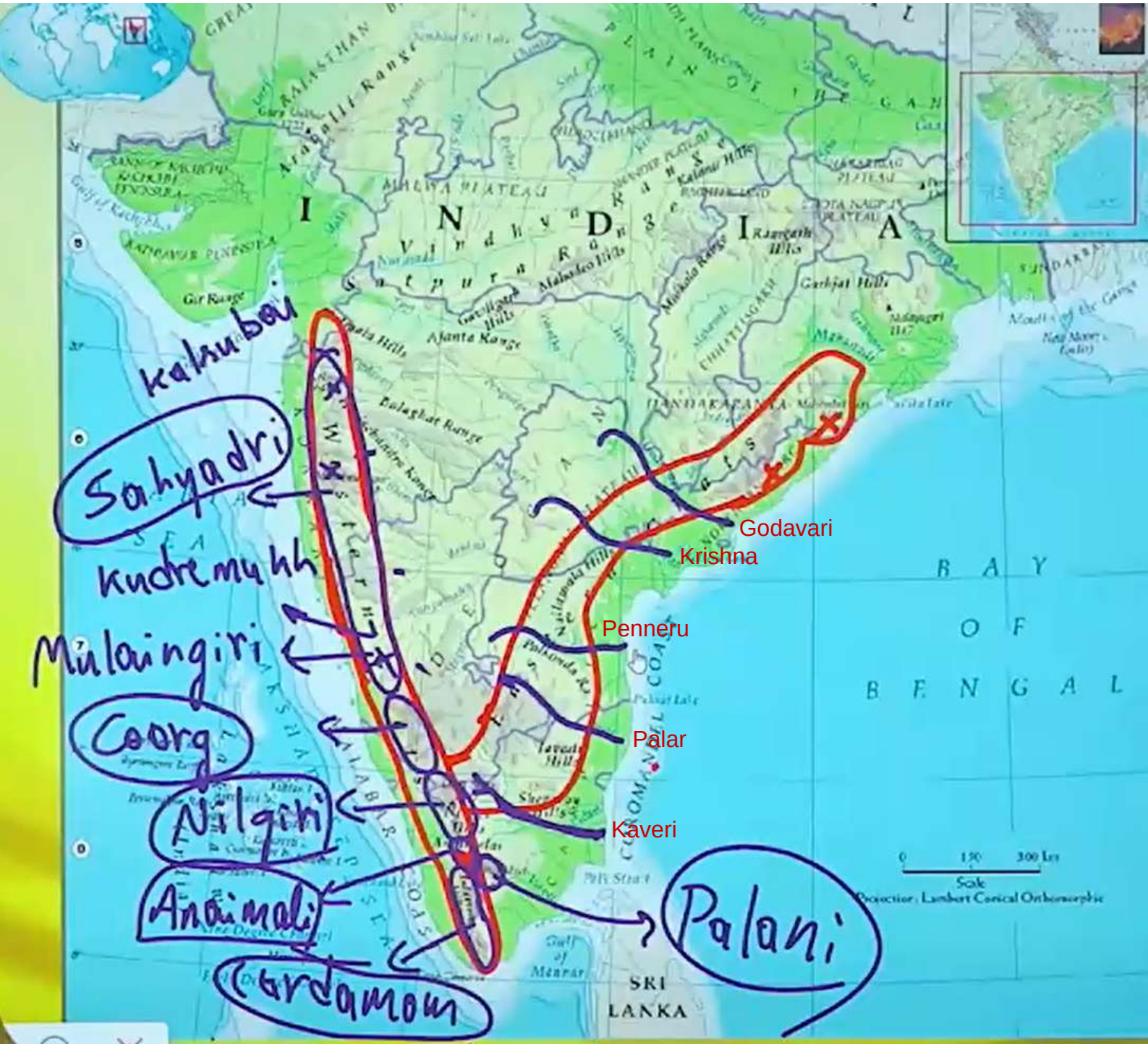
north Karnataka coast to Malabar coast.

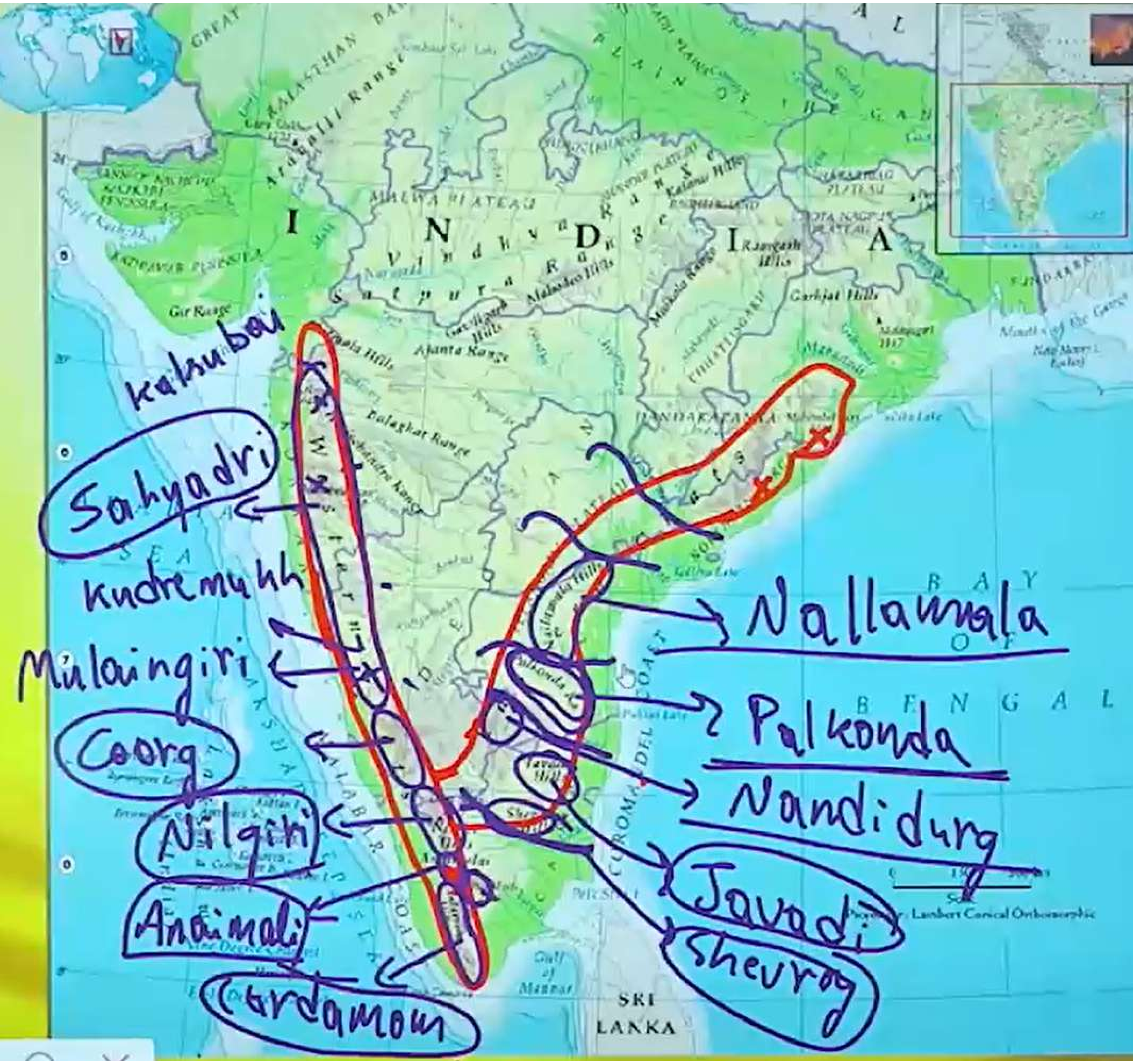
from Mahanadi to Odisha border or Odisha coast

from Odisha border to KG delta.

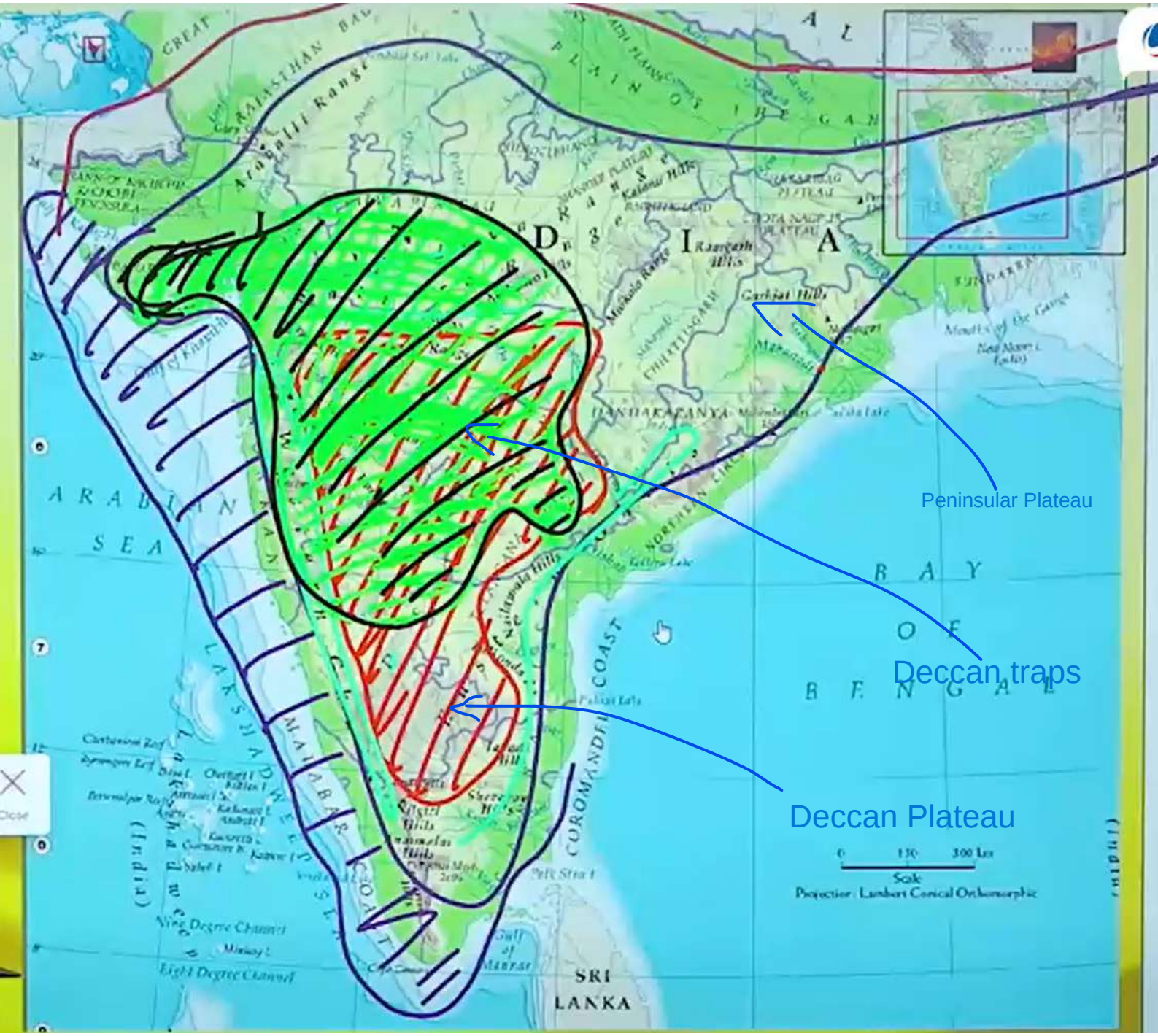
from KG delta to Kaveri delta. Ruled by Cholas and were earlier known as Cholmandalam coast.

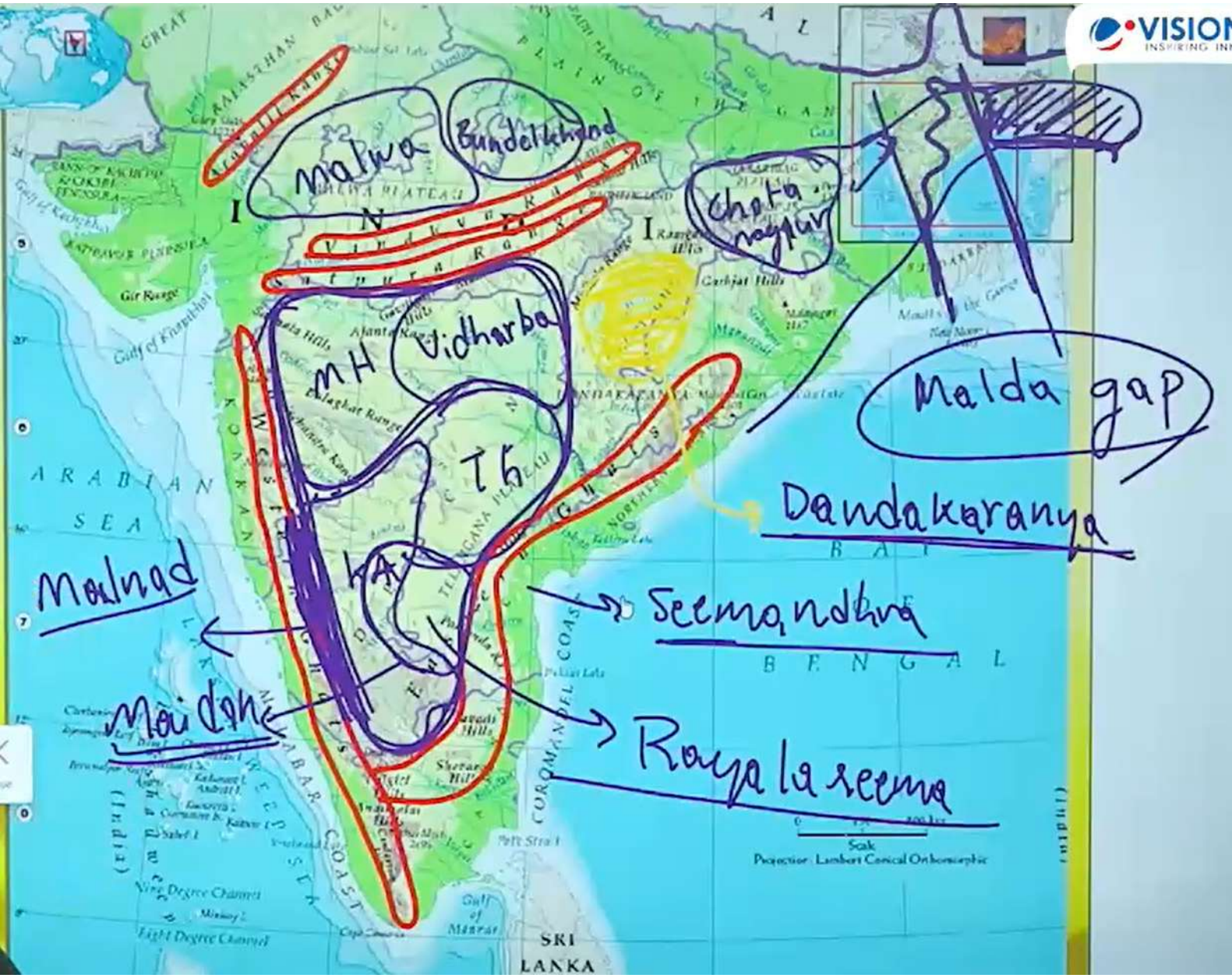

INDIA
Aravalli Range
Vindhyan Range
Satpura Range
Western Ghats
Eastern Ghats
Nilgiri Hills
Cardamom Hills
Gir Range
Ajanta Range
Balaghat Range
Garhjat Hills
Mahadeo Hills
Mahadeo Range
Ramgarh Hills
Malwa Plateau
Deccan Plateau
Chhotanagpur Plateau
Kathiawar Peninsula
Gulf of Khambhat
Gulf of Kachchh
Arabian Sea
Bay of Bengal
Laccadive Sea
Malabar Coast
Coromandel Coast
Palk Strait
Gulf of Mannar
Sri Lanka
Nine Degree Channel
Eight Degree Channel
Scale
Projection: Lambert Conical Orthomorphic

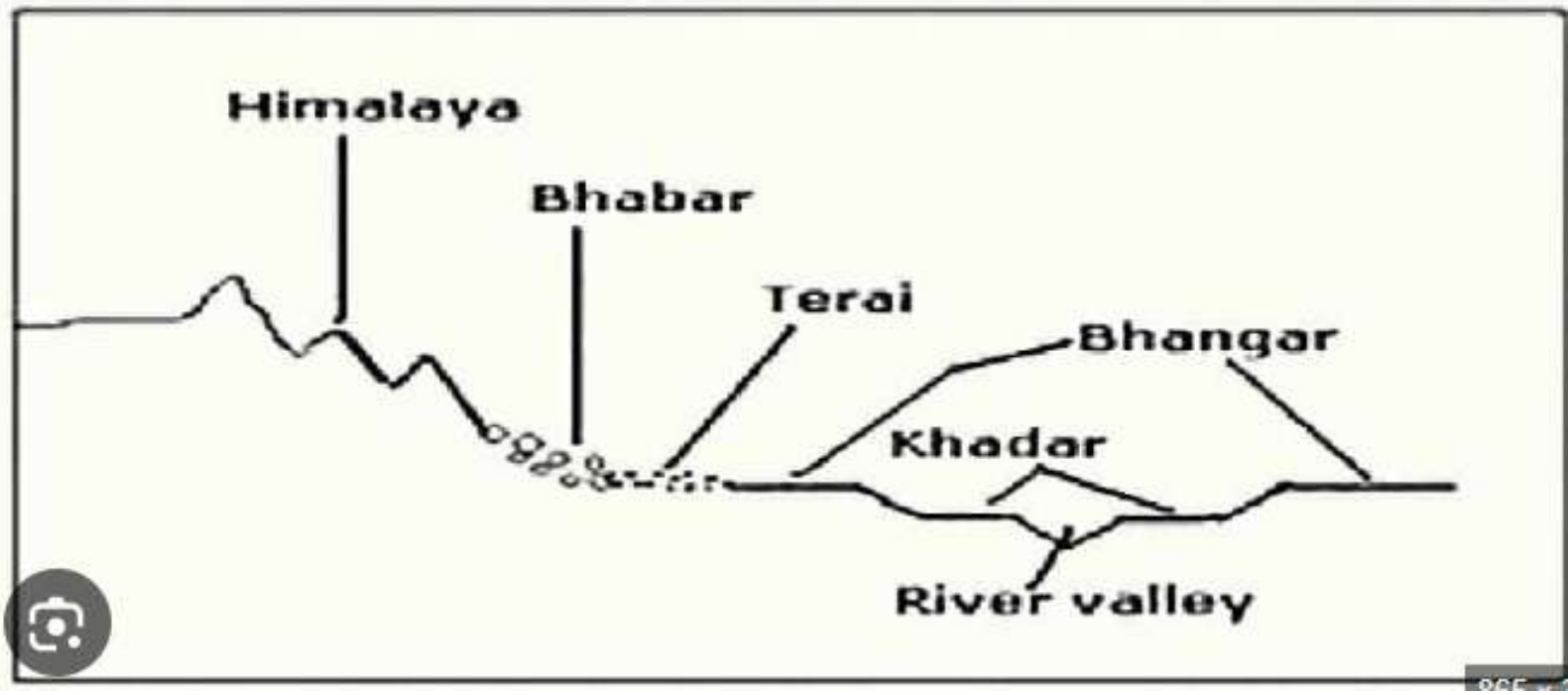

Kalsubai
Sahyadri
Kudremukh
Mulaingiri
Coorg
Nilgiri
Anaimali
Cardamom
Palani
Godavari
Krishna
Penneru
Palar
Kaveri
BAY OF BENGAL
INDIA
SRI LANKA



I N D I A
Aravalli Range
MALWA PLATEAU
Vindhya Range
Satpura Range
Mahadeo Hills
Ajanta Range
Gir Range
Balaghat Range
Garhjat Hills
DANDAKARANYA
Kalsubai
Sahyadri
Kudremukh
Mulaingiri
Coorg
Nilgri
Anaimali
Cardamom
Nallamala
Palkonda
Nandidurg
Javadi
Shevroy
BAY OF BENGAL
Gulf of Mannar
SRI LANKA
Projection: Lambert Conical Orthomorphic

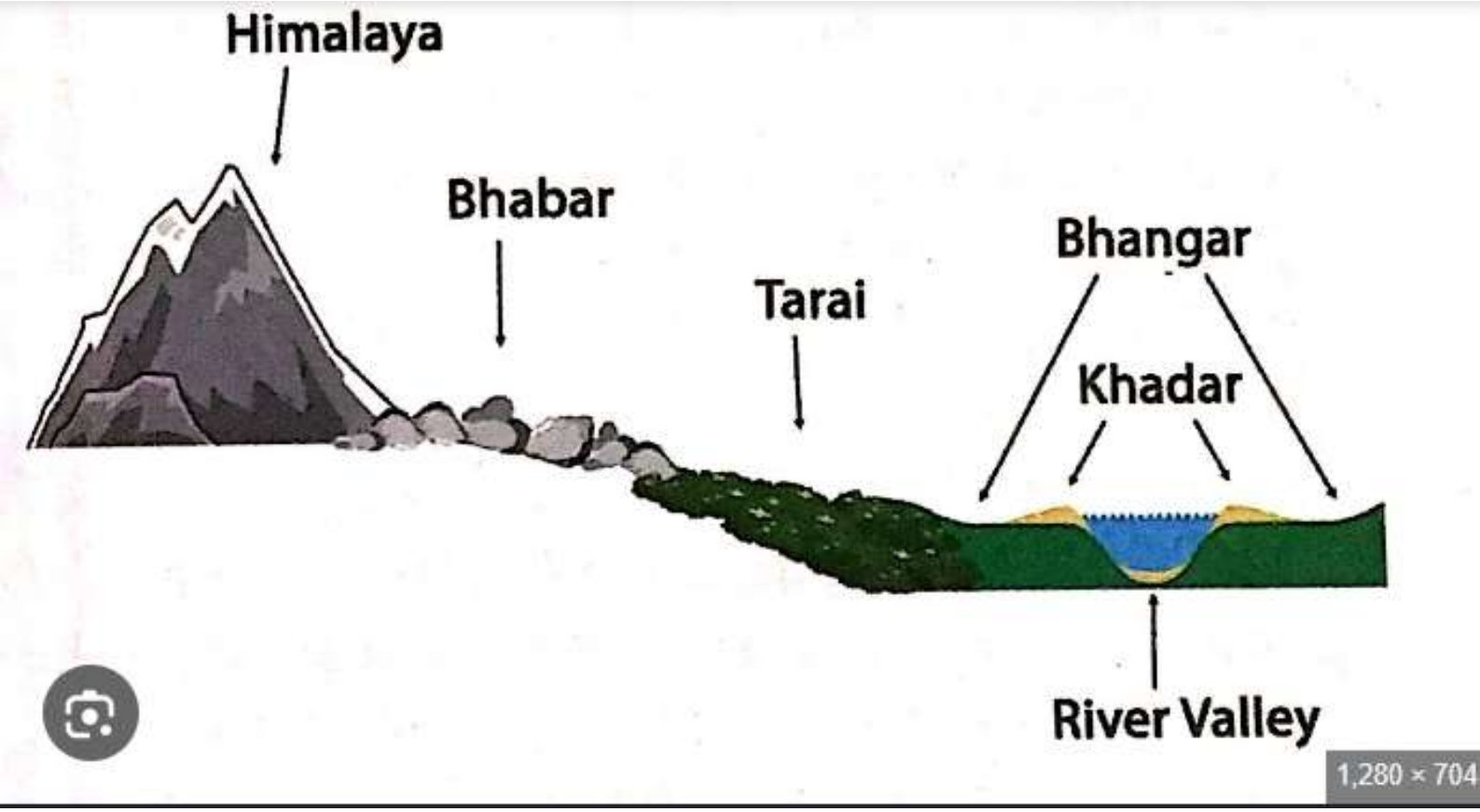

Peninsular Plateau
Deccan traps
Deccan Plateau
ARABIAN SEA
BAY OF BENGAL
SRI LANKA
Aravalli Range
Malabar Coast
Coromandel Coast
Scale
Projection : Lambert Conical Orthomorphic


malwa
Bundelkhand
Chota nagpur
MH
Vidharba
TS
KA
Malda gap
Dandakaranya
Malnad
Seemandhra
Maidan
Rayalaseema
ARABIAN SEA
BAY OF BENGAL
SRI LANKA
Gulf of Mannar
Gir Range
Malabar Coast
Coromandel Coast
Scale
Projection : Lambert Conical Orthomorphic

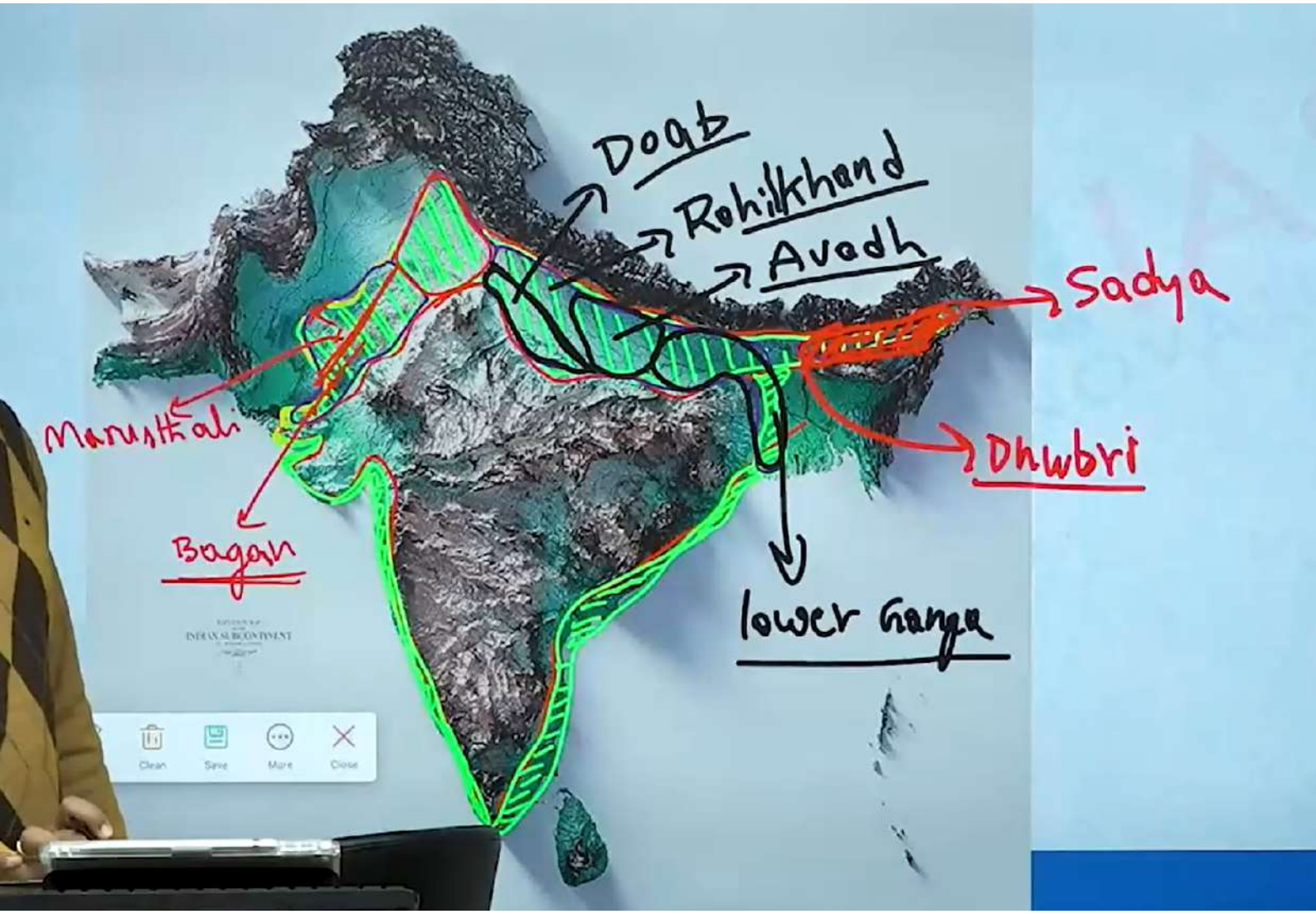

Himalaya
Bhabar
Terai
Bhangar
Khadar
River valley

- Northern Plains is divided into following parts:
- **1.Bhabhar**
- **2. Tarai**
- **3. Khadar**
- **4.Bhangar**

- **1. Bhabhar**: They are south of Himalayas.
- The rivers coming from Himalayas deposit all material consisting of gravel, sand ,clay. Due to absorbing capabilities of these materials , water percolates in the lower layers.
- It extends upto 8-11 kms
- **2. Tarai**: Tarai means full of water. It lies in south of Bhabar plains. In this rivers/streams reemerge after they are being absorbed by the material like sand, silt, clay etc. and thus develop swampy conditions etc.
- Its length is 10-12 kms


Himalaya
Bhabar
Tarai
Bhangar
Khadar
River Valley


JAGRAN
Josh
भाबर और तराई क्षेत्र में अंतर


Doab
Rohilkhand
Avadh
Sadya
Dhubri
lower Ganga
Bagar
Clean
Save
More
Close


kathiawad
konkan
Malabar
utkal
Northern
Circar
Coromandal