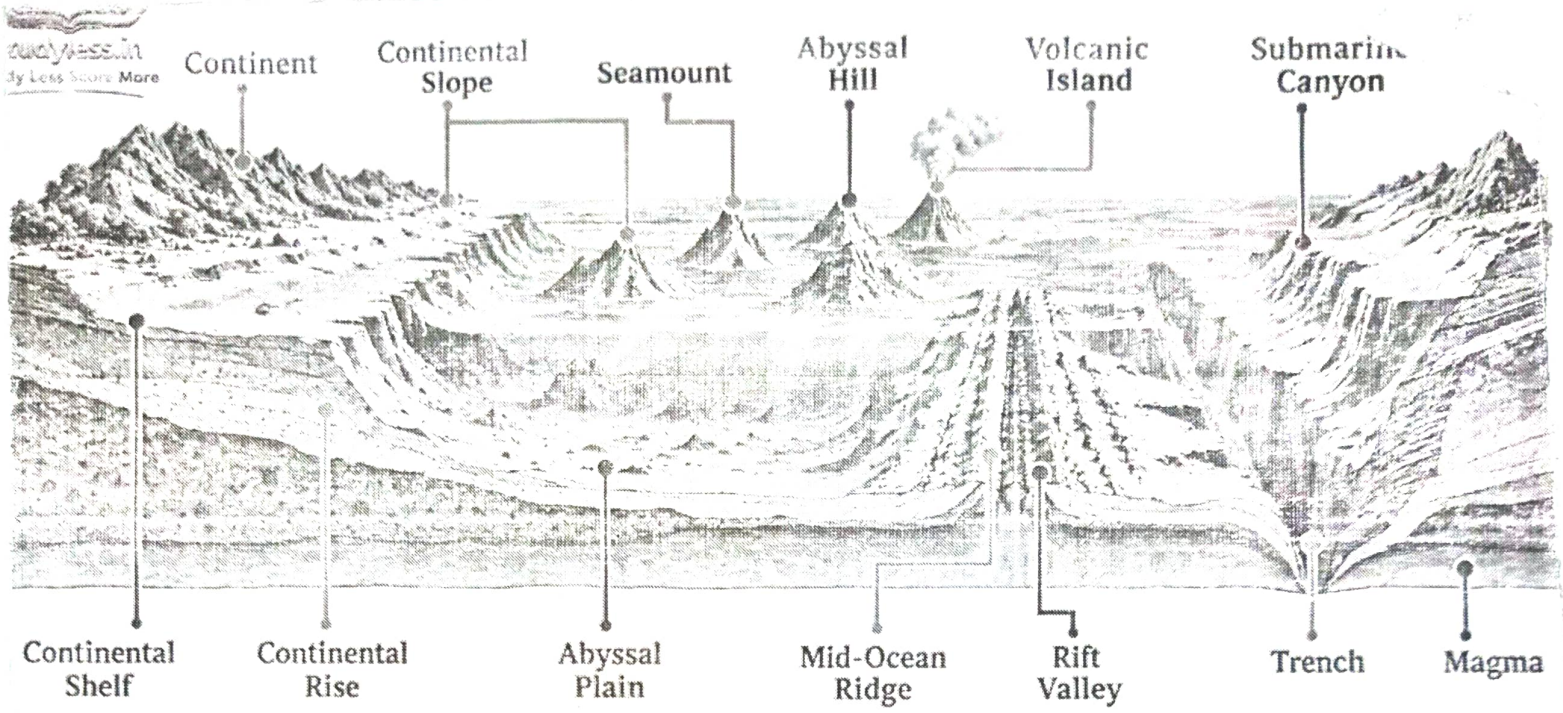
CH-1 Ocean & Life



Ocean floor landform.

• Mountains • Valleys • Plains • Trenches • Rigdes.
Collectively called submarine relief or Oceanic relief

★ Mariana Trench.
  ★ Pacific ocean.
  ★ Deepest place on Earth.

★ Mid ocean Ridge.
  ★ Hidden Beneath the Ocean.
  ★ World's longest Mountain Range.
    ➢ Mauna Kea.
      ★ Hawai
      ★ Underwater Mountain
      ★ Taller than Mount Everest.

Important Submarine Relief features.

(1) Continental shelf.
  • Submerged, shallow edge of continent
  • Extend under the ocean.
  • Rich in Marine life, Resources → Oil, Gas.

(2) Continental slope

* Beyond continental shelf * steep slope
* Marks the true edge of a continent.

Continent → shelf (shallow) → slope (steep) → deep ocean.

(3) Abyssal Plains

* Deep ocean floor * vast, flat, deep.
* Main flat expanse of the ocean floor

(4) Mid range Ocean Ridge

* Emmence mountain Range
* Formed by volcanic activity
* Volanic-origin ridge.

(5) Ocean Trenches

* Location → ocean floor * Deepest parts of ocean.

Abyssal Plain → Flat, Mid-OceanRedge → Raised, Ocean Trench → Sunken.

Seamount

(1) Underwater Mountain
(2) Volcanic origin
(3) Rises from oceanfloor

Guyot

Formed from seamount
Flat-topped mountain.
Summit eroded, then submerged.

Volcanic activity → seamount → wave action → summit flattened → later submerged → guyot.

Movement of Ocean Water

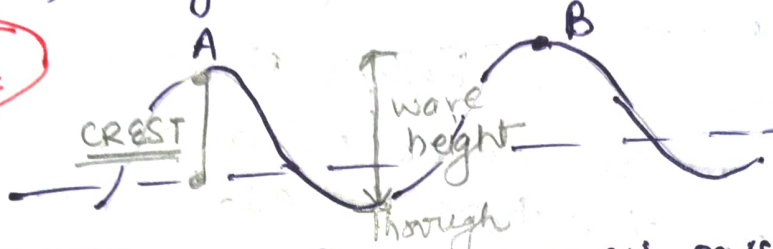
Ocean water is constantly in motion. Three movement-

1. Ware
2. Tides
3. Current

Role of Movements

* Shape Earth's Surface
* Aid fishing & Travelling
* Support Marine life
* Influence climate.

WAVES



Ware frequency → No. of wares crest passing point A each second.

Ware Period → Time req. for ware crest at point A to B.

① Wafe - Surface of ocean rises & falls alternately.

② Cause - winds blowing across water.
* carry energy across ocean.
* over long distances.

③ Parts - crest → High Peak
Through → lower valley.

④ Coastal Architect ## ware Shape shoreline by - Erosion, Sediment transport.

Erosional features
• Sea Crack • Caves • Arches • Seastacks • Stumps.

Headland → Sea cracks → Caves → arches → Sea Stacks → stumps.

Sea crack → large cracks opened up by hydraulik action.

Sea Cave → Hydraulic action & abrassion turn the crack into a cave, which gets larger,

Sea stack → The top of arch collapsed due to gravity - leaving a tall stack of rock,

Stump → over the time the stack gets eroded & weathered forming a stump.

Sea Arch The back of the cave is eroded through to form a sea arch.

Storm Waves
- Storm → Strong winds → Huge Waves
- Coastal Damage.

Tsunami
- → Giant waves
- → Mainly caused by underwater earthquake,

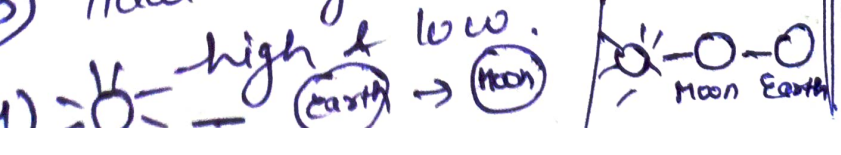
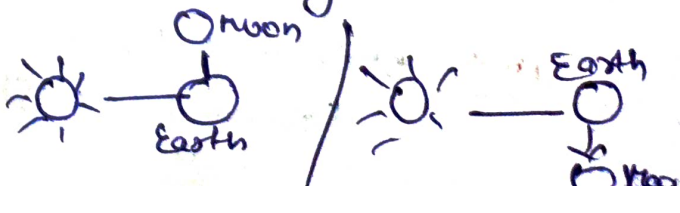
Features ⇒ Extremely Distructive
- ⇒ Run-up heigh
  - # Max. vertical height above sea level
  - # Up to 30 meter or more.
- ⇒ Most destructive type waves.

TIDES
- Rythmic rise & fall of ocean water.
- occur twice a day.

(i) High tide → also called flood tide → High water level, much of ore,
(ii) Low tide - also called Ebb tide → low water level away from ore.

SPRING TIDE
- ★ Sun - Earth - Moon in a Straight line.
- ★ On full moon & New moon day.
- ★ combine gravitational pull of sun & Moon.
- ★ Sometime very high / Sometime very low tides.
- ★ Water Bulges on opposite side of Earth.

Neap Tide
- ★ Moon in first Quater & third Quarted Phas
- ★ Sun & Moon pull in different directions.
- ★ Smaller difference between high & low tides.
- ★ weaker tidal Range.

SPRING tide	NEAP tide
1) Straight line Alignment	1) Different Direction Align.
2) Full / New moon phase.	2) First / third Qtr. Phase.
3) Tidal range usually high & low.	3) Tidal Range is smaller
4) 	4) 

Importance of Tides.

★ Navigation

★ **High Tide**
(1) Rises water near shore.
(2) Ship enter harbour easily.

★ Tidal range in some ports = 4-5 meters.

★ Before Berthing, ship checks -
• water depth & • Tidal range.

★ Gulf of Khambhat

★ Coastal Area ★ Tidal Range about 12m (Extreme)

★ singapore strait

★ sea channel ★ shallow area ★ VLCCs (very large crude carriers) wait for hours ★ Transit only at high tide.

Tidal Currents Strong current generated by tidal change → lower water flow in & out of coast.

★ 5 to 6 Knots or about 9 to 11 km/h.

Fishing Hightide → fish more closer to shore.
Better catch for fishing communities.

Energy → Rise & fall of tidal water → Electricity.

Major Tidal energy site in India

- Gulf of Kutch
- Gulf of Khambhat - 12m tidal Range.
- Sundarbans - Potential for tidal range.

CORIOLIS FORCE

1. Force caused by Earth's Rotation
2. Deflects Any free-moving Object from its Straight Path
3. Direction of deflection
   → Northern Hemisphere - right
   → Southern Hemisphere - Left.
4. Coriolis force bend the path of ocean currents.

OCEAN CURRENTS.

Continous steam of water • flows across the ocean surface in definite direction. **Causes of ocean current**

1. wind 2. Earth's Rotation (coriolis force).
3. Difference in temp. 4. Diff. in salinity
5. Shape of continents 6. shape of ocean basin.

Type of ocean current

Warm current

1) ocean current that more water away from equatorial region to polar region.
2) Normally warm current is formed in the equatorial region.
3) Generally flows along the east coast of the continent
4) It increase the temp. of the area & cause heavy rain
5) Flows from warmer reg.
6) Shown red on map.
7) eg:- Gulf of stream, Brazil, ocean current

Cold current

ocean current that more water away from polar region to equatorial region.

Normally cold current current form in the polar region.

Generally flow along the west coast of the continent.

It reduce the temp of the area & cause low rainfall.

Flows from cold region.

Shows Blue on map.

Eg:- North atlantic drift, Labrador.

Note — Origin of water decide whether a current is warm or cold.

Gulf Stream

- warm current
- originate in Gulf of Maxico, Atlantic ocean.

Features

1. Keep Norwegian water relatively warm
2. This prevent sea ice formation

shows how a warm current offset high-latitude cold.

Labrador

- cold current
- Flows along east coast of canada.

Feature

1. Carries freezing water
2. Support sea ice formation
3. Support ice bergs.
4. Even at lower latitude = High temp.

Cyclone & Tsunami - Early warning system.

cyclone & tsunami are sudden natural hazard in Ocean & Sea.

Detection A N/W of seismic station detects undersea earthquake in real time.

confirmation Ocean Bottom pressure Recorder place on the seafloor detect the passage of tsunami waves confirming the threat.

Tracking coastal tide gauges & rdars monitor changes in sea level to track the arrival & movement of tsunami wares.

Warning Dissemination Alerts are transmitted via satellite to govt agencies & are also sent directly to official & public through SMS & other communication channels.

EARLY WARNING SYSTEM

- Giant alarm system for coastal areas.
  - ★ Detect → predict → warning → evacuation → lives saved.

Government Initiative

- National cyclone Risk Management Project (NCRMP)
  1. Launched by govt of India
  2. Focus - cyclone-prone area & UT.
  3. Features ★ Build cyclone shelters.
     ★ Strengthen warning system.
     ★ Improve emergency response.
     ★ Include decision support system (DSS) for disaster Management Authorities.

- Storm Surge Early warning System (SSEWS)
  ★ Location - Indian coasts.
  ★ Setup by INCOIS with IMD.
  ★ Features - 1. Forecast cyclone-induced storm.
  2. Forecast extent of coastal inundation.

Focus on cyclone

Atmospheric disturbance over warm ocean water cause cyclones.

Naming the cyclone

1) North Indian Ocean
2) Named sequentially from a list.
   169 names.
3) Submitted by 13 member countries.
4) This ensure clear communication & Public awareness

Biparjoy → 2023
Remal → 2024.

Shared names keep warning clear & Quick to recognize.

Marine Resources & Their Significance.

Marine Resources

Ocean - vast storehouse of resources.
Marine Resources - Material & features in ocean.
* Have intrinsic or economic value.

- Sand & gravel
- Biodiversity
- Minerals
- Unique ecosystem (coral reefs)
- Fish & Seafood
- Oil & Natural gas.
- Renewable energy < Tidal, wave.
- Tourism.

Significance of Marine Resources.

- Vital for - food security, Economic activity, Healthy environment.
- ocean support bio diversity → sustain Plant & animals.

Maritime Zones.

different areas of ocean.
Defined by International Law.

▶ Territorial water → contiguous zone → EEZ → High Sea.

Territorial (1)

(1) Sea area closest to country
- Near - Complete control of country.
- Foreign ship may pass peacefully if they obey rules.

(2) Government can make laws on
- custom
- Immigration
- Pollution control.

contiguous (2)

(1) Beyond territorial water
(2) from baseline up to 24 nautical miles.
(3) Limited control over
- custom & Fiscal matter
- Immigration.

EEZ (Exclusive Economic Zone) (3)

(1) Beyond contiguous zone
(2) upto 200 nautical miles from the coast.
(3) Defined under UNCLOS by global agreement.
(United Nation convention on the law of sea)
(4) special Rights to use sea resources.
- Fish - oil - Gas
(5) other's country's ships pass peacefully
(6) Country does not fully own / control EEZ waters.

Challenges of EEZ

overfishing # illegal fishing # Conflict over resources # Navigation & safety harder to ensure
No clear enforcement mechanism.
→ Law that applies - flag state
• country in which a ship is registered.

High Sea (4)

(1) Beyond EEZ, (2) Also called International water
(3) 64 % of world's ocean.

Features

Belongs to no single country
Part of global common.
Equal Rights for all countries :-
- Navigation - Fishing - Flying over
- Laying under water cable - Building floating Structure - Exploring for minerals.

International Maritime Rules & Regulations

(Maritime law/ Regulations)

International Rules & Agreements for keeping seaways safe, fair & peaceful.

Maritime law regulates :—

- Piracy
- Terrorism
- Natural disasters
- Accidents
- Trade Route safety
- Disputes between country.

Important Rule & Regulations

① COLREGs / Avoid accident at sea

convention on the international Regulation for Prevent collision of ship at sea.

- Set Rules for the Road at Sea.
- Features → (a) lookout, (b) Decide which ship to pass on, (c) Give-way & Stand-on vessels, safe speed (d) Light, sound, signal, shapes. (Shape mark vessel type.) eg. fishing boat. (e) Prevent collision, (f) International signal & Radio comm.

② MARPOL | Reduce ship pollution

International convention for the prevention of pollution from ships.

- Ship meet safety standards.
- Ships prohibited from poulluting sea.

Why Maring Rules Important ?

- Safe ocean
- fair + sustainable use of resource
- use marine resource without conflict.
- PROTECTS → Marinelife, ships, sailor, Coastal communities, Common standard for all ships.

CH-2. Life on Earth Part-2

Geography Geography Studies :- climate, Landform & water

To Know → (1) How these shape life on earth.
(2) How human adapt to them.
(3) How human influence natural system.

BIOMES → Large natural Region.

* Similar climatic conditions.
* certain type of Plant & animals.
* Biomes support diverse plant & animal life.
* eg - Icy Tundra (Cold), Hot desert (Hot), Forest (Green), Grassland (Open)
* Each Biome is unique, together they form living world.
* Ecosystem is a smaller unit inside a biome.
* Member of Ecosystem → Plant, Animal & Non-living things.

Type of Biomes

- **Terristrial** — Land Based Biome
  - Forest
  - Grassland
  - Desert
  - Tundra
- **Aquatic** — Water Based Biome
  - Freshwater
  - Marine

Factor that determine which Plant & Animal survive & thrive :-

Temperature # Percipitation Patterns
Dominant plant species # Growth form of vegetation.

① Forest Biome. — Nature's Giant Green Umbrella.

Characteristics → warm, wet, life at every level, tallest trees - damp the forest floor.

(A) Tropical Rainforest

- Near the Equator
- Between Tropic of Cancer & Tropic of Capricon.
- 23.5° N to 23.5° S

Features — Hot & wet all year.
Support dense forests.

Significance → world's richest storehouse of biodiversity
Rich genetic resources.

Major Location of Tropical Rainforest

★ Largest
1. Amazon Basin → South America.
2. Congo Basin → Africa.
3. Parts of Southeast Asia → Indonesia, Malaysia.

★ Smaller:
1. Central America.
2. India:
   - Andaman & Nicobar Island
   - Northeastern States.

Gene Bank
1. Preserve unique genetic material
2. Support conservation
3. Support scientist research. Hence called gene Bank.
4. Maintain oxygen level
5. Balance earth's climate.



2. Grassland Biome.

Found in the region with moderate rainfall. (2)

Feature
- # very large open area.
- # Mainly grass
- # very few trees.

Significance
1. support grazing animals.
2. Important for agriculture.
3. Important for livestock rearing

Example	Temperate	Tropical (savanna)
Trees	very few	~~Africa~~ Scattered trees
Key trait	Fertile soil	scattered trees. large animals.
use/life	Farming	Lion, elephant, giraffes.
Example	Prairies (North America), Steppes (Asia)	Africa.

3 Desert Biome.

1. Driest Biome
2. very little Rainfall
3. soil - sandy
4. vegetation - sparse.

Type of desert Biome.

Type	Example	Location
Hot	Sahara	Africa
cold	Gobi	Asia.
salt	Rann of Kutch.	Gujarat, India.

Rann of kutch Gujarat, India
- One of the world's largest salt desert
- Monsoon - Marshy wetland
- Dry season - Vast white salt desert
- shows one region can shift, betn wetland & desert.

Life in Desert

Extreme condition → survival difficult.
Adapted life - Plant - cactus, Animal - Camels, Lizards, Snakes.
Adaptation ① Store water
② withstand Heat
③ withstand dryness.
Resources in desert ← Mineral
Oil.

4. Tundra Biome — frozen ground with moss & a Polar Bear

① coldest of all Biomes.
② Near Arctic & Antarctic regions.
Features → ① climate is very cold, harsh winter, short summer.
② fragile ecosystem :- small temperature change affect it.
③ Permafrost → soil frozen year-round
Trees struggle to grow.
④ vegetation → Mosses, lichens, small shrubs.
Animal → Reindeer, Arctic foxes, Polar Bears.

AQUATIC BIOMES

- 3/4th of Earth's surface (3)
- Two types – freshwater / Marine

Freshwater

Type – River, lake, Pond, wetland

Species – Fish, frogs, Insects.

Significance – Agriculture, Drinking water.

River, lakes, ponds, wetland → water access → Agriculture + Drinking water → Human survival.

Marine water

Ocean, seas, coral reef (Rich in Biodiversity)

whale, Dolphins, fish, plankton.

Influence Earth's climate:
- store heat
- Distribute heat
- food for livelihood for millions.

Ocean store heat → Distribute heat, climate regulated → life supported.

BIOME PYRAMID → Graphical representation shows relationship Between organism in a biome.

- Measured in term of energy, Number, Biomass.

LEVEL OF BIOME

4. Top predators → Top tertiary consumer.
3. Carnivores → Carnivores.
2. Herbivores → Primary consumer
1. Producer – Plant, algae, capture solar energy through Photosynthesis, from Base.

Interconnection Between Biomes & Living Beings

Two way link

1. Biomes → natural Env.
   - Plant
   - Animal
   - Humans

2. Living beings → influence biome
   - Animal → pollination, seed dispersal
   - Human → Modify landscape for farming or cities etc
   - Microorganism – Recycle Nutrient

Maintain Ecological Balance & Biodiversity

Biodiversity variety of life on earth or Richness of life forms + natural beauty.
⊙ Plants ⊙ Animal ⊙ Microorganism ⊙ Ecosystem they inhabit. Also includes:—
1. Genetic difference within species
2. Ecological processes that sustain life.

Essential for (A) Healthy ecosystem
(B) Human survival.

Geography of Biodiversity ~~Conversio~~ Conservation

How geography influence protection & management of organism
- Location
- Climate
- Landform
- Ecosystem.

Biodiversity is unevenly distributed. Ways of geographical conversation

① Hotspot of Biodiversity

Regions :– Himalya, western ghats, North-East India & Andaman & Nicobar Islands.
Identifying & protecting them as unique species they have.

2. Ecosystem-Based Conversation
Forest, Wetland, Desert, Coasts & Mountains.
Each supports distinct life forms.
eg:- Mangrove protection → Coasts
Afforestation → Mountains.

3. Protected Areas
National Park,
Wildlife Sanctuaries.
Biosphere Reserve
World Heritage Sites.
} ★ Protect Critical Habitat
★ Prevent habitat fragmentation.

4. Geographical Barrier & corridor
Natural feature → River, Mountain, valleys.
★ They act as barrier & corridor
★ Influence animal movement
★ Influence gene flow.
★ Planning Wildlife corridors.

5. Human environment Interaction
How local communities use → Land, water, forest.
★ Terrace farming → hills,
★ Agroforestry → plains

FOREST ECOTOURISM

Responsible travel to forested area :—
① Tourist
→ Enjoy Nature
↳ contribute to conversation.
② Attraction Plants, Animals, Rivers, waterfalls.
★ Draw people seeking
★ Natural Beauty & Wildlife.

ECOTOURISM

- Minimal environmental Impact
- Respect for local communities
- Learning about ecosystem.
- eg visiting National park, Wildlife sanctuaries.
- Trakking through rainforest.

Benefits

1. Observe Biodiversity
2. support conservation programme
3. Generate income for local People.

Forest & livelihoods:

who depends → Rural community, Tribal Comm, Reliance - heavy.

Essential Resource → Food, fuel, fodder, Medicine, shelter, Timber, Bamboo, Firewood.

Non-Timber forest → Honey, fruits, Nuts Resins, Medical Plants.

Uses → Meet daily need & earn Income.

Gronds & BHILS

forest communities.

1. Perform ritual to honour forest deities
2. Before collecting ressources.
3. This reflect sustainable cultural practice
4. Deep respect for nature.
5. **other forest support**
   - (i) Livestock grazing.
   - (ii) Small forest based industry
   - (iii) Ecotourism
   - (iv) Employment

FOREST DWELLERS

(1) Livelihood & Income.
- (a) Collect & process non-timber forest products (NTFPs)
- (b) Example - tendu leave, mahua flower, honey, lac, bamboo
- (c) Provide income for households

(2) Household needs
- (a) Collect firewood & fodder,
- (b) food - fruit, roots, timber, Medicine plants.
- (c) Support family survival.

(3) Knowledge Holder.
- (a) Traditional Knowledge of herbs, Plant & forest Resource
- (b) Used for food, medicine & culture practice.
- (c) Passed down through generations.

(4) Forest Protection
- (a) Lead forest protection movement
- (b) Example - Bishnoi movement in Rajasthan led by Amrita Devi. CHIPKO movement in Uttrakhand.
- (c) Prevent deforestation & support eco-restoration.

(5) Culture & Social Role
- (a) Forests linked to ritual and festivals.
- (b) Beliefs protect forest.
- (c) Guardian of ecological & cultural traditions.

(6) Role of women
- (a) collecting + Managing forest resource for household
- (b) sustain traditional knowledge & practice
- (c) contribute to livelihood.

Geographical Indication - GI

GI tag = intellectual property right that Identify from a specific place. Quality, reputation & uniqueness of that place.

Benefits of GI

(a) Protect region-specific products
(b) Promotes cultural heritage
(c) Generates economic benefits - By exclusive market recognition.

GI - tagged forest Product in India.

State	Product
J & K.	Ramban Sulai Honey, Distinct flower aroma, Antioxidants, Immuno-modulatory
Assam	Tezpur litchi, Bright color, High pulp.
Karnataka	Channapatna Toys, Made from wrightia tinctoria (Tree), Local name "Aale mara"
Odisha	Kandhamal Haldi, High curcumin = medicine.
Tamil Nadu	Erode Manjal, cooking + Medicine.
Tamil Nadu, Kerala,	Nilgiri Tea.
Tripura	Tripura Queen Pineapple, sweetness + Aroma.
Meghalaya	Khasi Mandarin.

challenges faced by people living in forest

1. Access & Health → Healthcare, Education, clean water, women affected by → fuelwood fumes, Health issues.

2. Resource access & conflicts → Heavy dependence on forest product firewood, Honey etc.
   (1) Access limited by → Restriction on forest use → Deforestation, commercial exploitation of forest.
   (2) Result → Conflict between conservation laws & survival needs → lead to economic insecurity.

(3) Natural Hazards → Forest Hilly regions prone to flood, Landslide, forest fire. (Human care & preventive measure can stop many fires).

(4) Human-wildlife conflict → Animal → damage crop, Direct attack on humans.. so Economic losses & fear & insecurity.

5. Neglect & low Income face discrimination & neglec
   # sell forest product at low cost # Need - processing & marketing opportunity to raise incom

6. What Communities Need
   # Help accessing government schemes & prog.
   # Awareness - legal Rights.

GOVT. EFFORT TO SUPPOR FOREST DWELLER

1. FRA (Forest Right Act) schedule Tribe & other Traditional Dwellers Recognise FRA-2006.
   Rego Recognize Right over - Forest land, Resource, product, ownership of land by cultivate.

2. Tribal welfare schemes

Education scholarship, Healthcare programmes, skill development initiatives.

3. Joint forest Managment

Participate in forest protection, Benefit from forest products.

4. Others

PESA – Panchayat · Extension to Schedule Area Act.

DAJGUA – Dharti Aaba Janjatiya Gram Utkarsh Abhiyaan.

PM JANMAN Pradhan Mantri Janjatiya Adivasi Nyaya Maha Abhiyan.

CH-3 Resistance & Resilience 1000 CE 1700CE

In India there are political, social & cultural changes between the period of 1000CE to 1700CE. In that time there were invasions, wars, religious discrimination, & social problems. Many Indian Ruler fought to protect their land, people, culture & tradition.

Resilience ① Ability to face problems, survive difficult situation & adap change while keeping the culture & value alive.

② eg:- People rebuilt tample, lived peacefully with different community & adjusted the same customs.

Resistance Means opposing or fighting against the threat to protect one's land, power, culture or religion.

Resilience & Resistance are both connected

① Resilience give strength to continue, while Resistence help them to protect what is important.

② Because of both, the Indian civilization survived & Remained strong during this period.

③ this period is not only about war, but also about time of cooperation, adaption & culture continuity.

Safeguarding Sovereignty : Resistance, Alliance & confederacies

From 7th century, many invaders attacked India to capture land & spread their religion. India's fertile plains & rich agriculture also attracted invaders.

From mid 7th century Arab forces attacked India by land & sea. Indian rullers of Malwa, Deccan, Rajasthan, & Kashmir defeated them.

In 1001, Mahmud of Ghazni attacked Jayapala of the Hindu Shahi dynasty. The Hindu Shahi, Chandellas, Solankis, & Chauhan fought against Turkish invaders.

In 1178 Queen Naiki Devi defeated Mahammud Ghauri at Kasahrada. Gujarat, Malwa, & Bundelkhand resisted Turkish attack about 100 years

Turkish Invader failer to conquer Odisha & Part of Assam.

Rajput Dynasities: Confederacies & Resistance (1200 to 1500)

Delhi Sultanate was eastablished in 1206. Its rulers expanded their territories & introduced a new iqta system to collect Land revenue.

(1) The Yadavs, Kakatiya, Hoysala & Rajput rulers fought to protect their land, culture & tradition

(2) Mewar, Gwalior, Malwa, Ajmer & other region also oppose the Sultanate

(3) Maharana Kumbha of Mewar strengthened resistance by building forts.

Rajput - Mughal Relation (1500-1700)

(A) In 1526, Babur defeated Ibrahim Lodhi in the first battle of Panipat.

(2) Rana Sanga of Mewar united many Rajput ruler & fought against Babur in Battle of Khanua (1527)

③ Some Rajput Kingdom resisted the Mughals, while other cooperate with them & recived Mansab. (Rank of offices).

MEWAR'S RESISTANCE AGAINST MUGHAL.

In 1568, Akbar attacked Chittor fort & the Rajput fought brarely for more than 5 Months.
Later, Rana Uday Singh, mored to Araralli hills to continue Resistence.
In 1576, Maharana Pratap S/o Rana Uday Singh, fought the Mughal at Battle of Haldighati.
Maharana Pratap used Guerilla warfare (surprise attack) against mughalsarmy & regained many territories after the Battle of Dewair in 1582.
The Bhils community helped Maharana Pratap, in guerilla warfare using Archery & local Knowledge.
Maharana Amar Singh S/o Maharana Pratap continue fighting against Mughals.
Finally Mughals signed a treaty with Mewar.
Mewar kept its independence & social status

BHILS

(1) Know the Aravalli forest & hills very well
(2) Act as guide & warrior.
(3) Support Mewar's Resistance stronger.

AHOMS KINGDOM

Ahom Kingdom ruled Assam for 1228 to 1826.

(1) Remained independent for almost 600 years.
(2) Successfully resisted several invasions, including attacks by Mughals.
(3) They used their knowledge of rivers, forest & rainy seasons in war.
(4) They avoid the direct Battle & used smart military strategy.
(8) They also used Guirilla warfare.

1615 → first battle between Ahom & the Mughal at Samdhara. Mughal took some places but later Ahom get back.

1662 → Mughal Commander Mir Jumla captured the Ahom capital Garhgoon. The King Jayadhvaj Singh accepted a treaty, but later reject it & continuing resisting Mughals.

1671 → Ahom commander Lachit Borphukan defeated the Mughal Army in Battle of Saraighat. Ahom won the battle & protect Assam from Mughal control.

VIJAYANAGARA EMPIRE :- Resilience againt Expansion.

The Delhi Sultrate expanded into southern India & attacked kingdoms & temples. Malik Kafur attacked Warangal, Belur & Madurai.

The Vijayanagar was founded in 1336 by Harihara & Bukka. Capital of Vijayanagar was Hampi (Karnataka)

It was established to stop the southern expansion of Delhi sultnate. It was strong because it protected by Hills, River & Rocky land.

The empire expanded to south of the Krisha & Tungabhadra Rivers & become richest & most powerful Kingdom in South India. Language — Kannada, Telugu, Tamil & Sanskrit developed during this period.

STRUGGLE AGAINST MADURAI SULTNATE

(1) During Bukka Reign, Vijayanagar defeated Madurai sultnate.

(2) Kumara Kampana, S/o Bukka led the campaign against Madurai. He killed & defeated Sultan & restore the temples —
- # Rajasimheshwaha Temple (Kanchipuram)
- # Sri Rangnathswamy. (SRirangam)

(3) In 1565, Vijayanagar army lost the Battle of Talikota against an alliance of Deccan sultanate. The capital was destroyed. & empire broke into smaller Nayaka kingdoms.

Marathas - The Quest of Swarajya.

The Maratha became a powerful force in the Deccan during 17th century & 18th. The chattarpati Shivaji Maharaj established Independ State of Maratha in 1674.

Swarajya → self-Rule.

1. Ruling one's own land without control of outside.
2. Maratha used their knowledge of hills & valley to fight effectively against Mughals.
3. The fort like Raigad, Singhagad helped to defeat defend their territories.
4. Guerrilla warfare to resist powerful enemies.
5. Maratha fought many battles against the Mughals. Mughals emperor Aurangzeb spent more than 20 years in Deccan trying to defeat them.

Reasons of Maratha success

- Strong leadership of Chhatarpati Shivaji
- Idea of swaraj.
- Brave soldiers.
- Effective use of forts.
- Knowledge of local geography.
- Guirilla warface tactics.

SIKHS → A story of spiritual & Political Resilience.

Guru Nanak founded Sikhism in late 15th century. He believed in one god, equality & Rejection of unnecessary rituals.

The Sikh community grew quickly in Punjab & nearby regions. Mughal opposed sikh gurus.

Guru Arjan Dev was th 5th Guru, He was executed by Mughal Emperor Jahangir. His martydom was a turning point in Sikh history.

Guru Hargobind Established the Akal Takht & promoted Miri - Piri (Spiritual & worldly Authority)

1699, Guru Gobind Singh founded Khalsa.

The Sikh formed Misals (armed group) to protect themselves from Mughal attacks.

The courage & sacrifies of the sikh Gurus became an important part of sikh Identity.

Jat Resistance

Jats were a farming community living in the Ganga - Yamuna Doab region. they suffered from heavy taxes & unfair treatement under the Mughals.

1669 → Gokul Jat led rebellion against Mughal.

Jats continued fighting even after the rebellion was suppressed.

1686 - they rebelled under leader of Sinsani & Sogar.

Although Mughals gained control by 1691, the Jat Continued Resistance.

BHAKTI TRADITION

Affirmation of the spirit of Resilience.

The Bhakti movement was based on love & devotion to god. It promotes equality, simplicity & inclusion.

1. The Bhakti saints composed songs & hymn in local language, making their teaching very easy for people to understand.
2. The movement spread across India between the 11th & 17th centuries. It had two main forms.
3. Nirgun Bhakti – worship of a formless God.
4. Sagun Bhakti – worship of a God with form & Qualities.
5. Chaitanya Mahaprabhu, Ramananda, Guru Nanak, Eknath, & Sankardev were important Bhakti saints.
6. Community Singing (Sankirtan) helped unite people & spread devotion.
7. Many women saints, such as Akka Mahadevi, Lal Ded & Bahinabai also contributed in that movement.
8. The Bhakti Movement helped India preserve spiritual & cultural tradition.

Temples : The Resilience of Sacred Sites

The temple were not only for worship but also Centers of education, culture & economy. They provide jobs to artisans, musicians, priests, & workers. Many rulers supported the temple to strengthen their political power. The temple received money, land, & donation which helped local development & irrigation. Some important temples were Town :- Thanjavur, Kanchipuram, Puri.

1. On the 11th century the temple was damaged during invasions.
2. Local rulers & merchants work hard to repair & rebuild temples.
3. Kashi vishwanath temple, Govind Devji temple & Kesher dev temple are restored or newly built.
4. To protect temples from destruction, some built like ordinary house - Haveli Temple.
5. The temple helped preserve Indian religion, culture art & tradition.

INDIAN ECONOMY

AGRICUETURE

★ Agriculture expanded during the early second Millennium CE.
★ The land revenue was the main source of state income.
★ Taxes become stricter & more exploitative over time.
★ During Allauddin Khilji & Mohammand Bin Tughlaq, land taxes could reach 50% of Agriculture Products.

IRRIGATION

★ Technologies such as rope pulleys, spinning wheel, & Persian wheel improved.
★ Vijayaranga Empire invested heavily in small-scale irrigation.
★ The irrigation system included canals as well as rain fed agriculture.

TradeNetworks

★ Inland trade route connected Central Asia.
★ The good & skills were transported by trader group called caravans.
★ Growing town & cities encouraged the expansion of trade.

Merchant Communities

* The Banjara were important trading community
* They helped connect rural area with urban market
* Revenue Officials also played a role in trade N/w.

Maritime trade

* From 13th century, sea route increased significantly
* western India was linked to the persian Gulf & Arabian sea.
* India became a major center of the Indian Ocean trade n/w until the arrival of Europeans.

The world of the Indian Ocean : Continuity & change

* Arrival of Europeans & Mughals.
* In 16th Century, European arrived for trade, Mughal conquered North India
* They entered an already eastablished economic system.
* The Portegese tried to control ocean trade, while Mughals centralised land & revenue.

European Trading Companies

* Pourtaguese were followed by the Dutch, English, Danes & french.
* their interaction with Indian Merchant made India a major center of global trade & culture exchange.

New Merchant Communities

* New Merchant Communities emerged in coastal & island region. The
* key control wealth, Production, supply chain & finance. Indian Merchant worked as trader, banker, broker, diplomat, translators Bureaucrats.

Textile Production

* Peasant Produce raw material.
* weavers, dyers, bleachers & other worker perepared cotton textile for trade.

Economic strength & Resiliance.

India's economy remained stong despite invasio & political changes.

Key factors

1. Agriculture innovation.
2. Irrigation system.
3. Markets
4. Merchant group
5. Hundi (financial Instrument)
6. Indian ocean trade.