

# **GSSCORE**

**An Institute for Civil Services**

## **IAS TOPPER'S**

**TEST COPY**

**REKHA YADAV**

**RANK - 509**

### **GS MAINS**



**www.iasscore.in**

## GEOGRAPHY, DISASTER MANAGEMENT AND AGRICULTURE

Time Allowed: 3 hrs.

Max. Marks: 250

Q.	Marks	Instructions to Candidate
1.		<ul style="list-style-type: none"><li>There are 20 questions.</li></ul>
2.		<ul style="list-style-type: none"><li>All questions are compulsory.</li></ul>
3.		<ul style="list-style-type: none"><li>The number of marks carried by a question is indicated against it.</li></ul>
4.		<ul style="list-style-type: none"><li>Answers to questions no. 1 to 10 should be in 150 words, whereas answers to questions no. 11 to 20 should be in 250 words.</li></ul>
5.		<ul style="list-style-type: none"><li>Keep the word limit indicated in the questions in mind.</li></ul>
6.		<ul style="list-style-type: none"><li>Answers must be written within the space provided.</li></ul>
7.		<ul style="list-style-type: none"><li>Any page or portion of the page left blank in the Question-cum-Answer Booklet must be clearly struck off.</li></ul>
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		

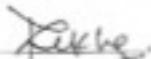
Name Rekha Yadav

Roll No. \_\_\_\_\_

Mobile No. \_\_\_\_\_

Date \_\_\_\_\_

Signature \_\_\_\_\_



1. Invigilator Signature \_\_\_\_\_

2. Invigilator Signature \_\_\_\_\_

**REMARKS**

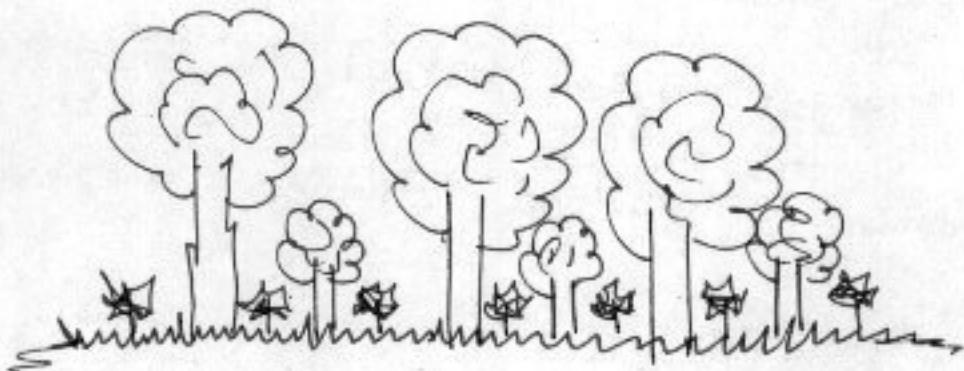
**Section - A**

- Q1. Discuss the major features of Tropical Rainforest Biomes. How Human activities are impacting these biomes? (10 Marks)

Tropical Rainforest Biomes are one of the productive regions of the world. They support huge ~~de~~ biodiversity in the region. ~~House,~~ They act as lungs of the Earth.

### Major Features

- ① Found between Tropic of Cancer to Tropic of Capricorn
- ② Rainfall is more than 250 cm & temp.  $> 25^{\circ}\text{C}$ .
- ③ Wettest Biomes of the world
- ④ Found in stratified layers

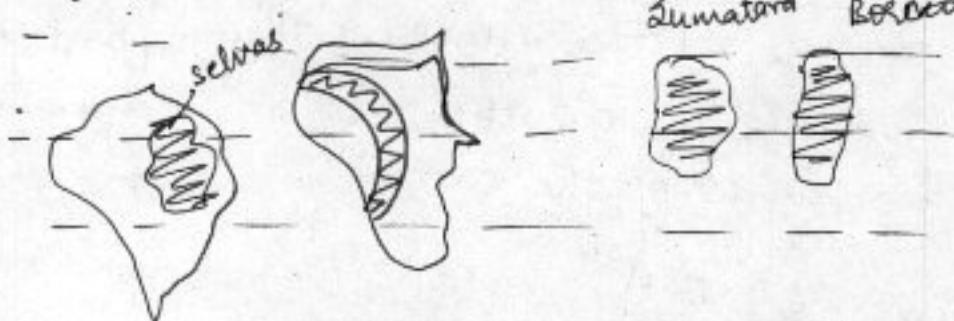


- ⑤ One of the densest vegetation of the world
- ⑥ Supports greatest biodiversity on the terrestrial biome
- ⑦ High Net primary productivity.

**Remarks** -

## ⑧ Wings of the Earth

Thus Tropical Rainforests are of great importance to us.



### Human Impact on these Biomes

- ① Human interference → exploitation of forest resources
- ② Destruction of forest land → conversion into agricultural land
- ③ cutting down for wood consumption
- ④ Destroying ecological balance
- ⑤ Increased industrial activities.

Thus we have seen <sup>that</sup> a large no. of Human activities are impacting the biome ecology severely. Hence need for their preservation & conservation

Remarks

- Q2. India is slowly cleaving into two countries- a richer, older South and a poorer, younger North. Critically analyze. (10 Marks)

India is known for its unity in diversity. Despite having diverse language, religion, food habits, dressing, cultural practices etc. we are united. This unity is seen in its formation as well. Thus, the idea of cleaved India is not viable.

#### Northern Indian States:-

- ① Perform agriculture & farming activities
- ② Illiterate or lack of education
- ③ Patriarchal society
- ④ Poor health care & sanitation facility
- ⑤ Huge population density
- ⑥ Asymmetrical development between various north Indian states
- ⑦ High MMR (maternal mortality rate), IMR (infant mortality rate)

#### South Indian States

- ① Mainly service sector jobs or skilled jobs

Remarks

- ② Sound education levels
- ③ Educated society irrespective of Patriarchy
- ④ Adequate health care & sanitation facilities
- ⑤ Low population density
- ⑥ Low MMR & IMR due to awareness about the diseases & health covers.

Thus the above factors highlight the fact that India is a cleaved society between the North India & South India.

But there are certain factors which contradicts this analysis as both the divisions of India exhibit the diversity due to its

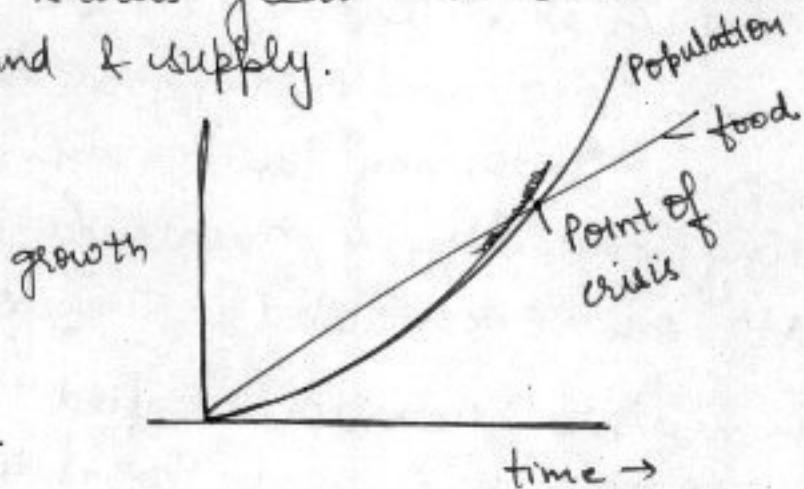
- topographical
- climatic
- economic
- social etc factors but in reality India is a mix blend of the two ~~halves~~ halves.

Therefore on one hand it shows cleavage whereas on the other hand it shows unity.

- Q3. Critically examine the Malthus theory of population growth and discuss its relevance in context of India? (10 Marks)

### Malthus Theory of population growth -

It describes the relationship between population growth & availability of food as a representation of exponential growth & arithmetic mean respectively. i.e. The population grows exponentially whereas the food supply grows in arithmetic fashion hence shows great mismatch between the demand & supply.



As per Malthusian theory, the deficiency of food supply will lead to death of people and this catastrophe is a natural & desired one. As nature tries to balance its components.

Further, one can control the population growth by adopting - family planning,

Remarks

Contraception techniques etc.

### Relevance of Malthusian theory in Indian context

Indian population is also growing at a very fast pace hence representing Malthusian exponential growth. Whereas the food supply is limited thus resembling arithmetic growth of food supply. Therefore it can be said that Malthusian theory finds relevance in Indian context also. But due to technological development the food supply can be increased many fold thus diverging from Malthusian law. And also by providing education & awareness population growth can be controlled. Therefore in the immediate scenario we find the relevance of Malthus theory of population growth valid with respect to India but in the long run it gets fade away. Since it finds no resemblance with Malthusian law.

Remarks

- Q4. Critics argue that organic farming is inefficient and requires more land than conventional agriculture to yield the same amount of food. Do you agree? Critically analyze the potential of organic farming in solving hunger problem and its economic viability for farmers. (10 Marks)

Organic farming refers to the technique of agricultural production where production is done with the help of organic manure, Compost etc. Thus organic farming is a environmentally sustainable technique of farming

#### Comparison with Conventional Agriculture practices

- Conventional agricultural practices utilises huge amount of chemical fertilizers whereas organic farming disregards it.
- Utilisation of high yielding variety seeds & GM seeds in conventional farming techniques whereas organic farming relies on organic ways of crop production through natural seeds and manures.
- Yield is comparatively low in organic farming with respect to conventional farming.
- All these factors indicates the inefficiency & unviability of organic farming techniques.

Remarks

But organic farming in longer run it saves our environment & ecology hence its usage cannot be misjudged.

Yes, it does require large landmass to grow equivalent amount of food production as produced through traditional method. But in future that will not be a viable option.

Therefore - organic farming can improve by adopting following steps

- ↳ Crop mixing & crop rotation
- ↳ developing alternatives along with farming
- ↳ use of natural

Advantage of organic farming -

- ① Nutrition rich    ② Healthy produce
- ③ less harm to environment    ④ less water utilization etc.

Potential of organic farming in solving hunger problem & its economic viability for farmers

- ① Implementation of best organic techniques can ensure better returns.
- ② use of mechanised tools to produce more without harming the environmental balance.
- ③ use of Pramparagat Keishi Vigyan techniques

Thus produce obtained through this can ensure hunger solution and selling of these produce would increase the income of the farmers as well.

**Remarks**

- Q5. 'Animal rearing is a key livelihood and risk mitigation strategy for tribals and small and marginal farmers, particularly across the rainfed regions of India'. Substantiate; also discuss some strategies to realize the potential of this sector? (10 Marks)

The process of animal rearing along with farming has been an old tradition. It signifies the importance of animals in the agricultural & farming processes.

### Animal rearing as livelihood

- Selling of milk products
- ↳ animal fur
- ↳ animal skin (if animal died due to natural reason)
- ↳ Poultry products - egg + meat

### Animal rearing as risk mitigation strategy

- If crop fails due to any reason then the income obtained through selling of animal products can ensure livelihood.
- ↳ In case of flood & drought - animals can be used as a transport medium.
- ⇒ Thus we see a great use of animal rearing in case of any calamity & environmental exigencies.

Remarks

## Realisation of potential of this sector

- ① Large scale animal rearing activities
- ② Diversification of animals in the large animal farmlands
- ③ Processing of obtained milk products, fur, meat etc → economic value of product will increase → more income to farmers.
- ④ Mechanisation of animal ranches → for better production & productivity.
- ⑤ Development of marketing network
- ⑥ Development of online platform for animal trading & animal produce trading on the lines of e-NAM, e-HAAT.

Thus, by adopting these steps huge ~~areas~~ <sup>returns</sup> can be earned through animal rearing.

Remarks

Q6. What is mass movement? Discuss its various types?

(10 Marks)

The sudden downward movement of rock fragments & weathered particles down the slope under the influence of gravity is known as Mass movement / Mass wasting. Mass movement may lead to disastrous effects.

### Various Types of Mass movements

- ① Landslide - Mass wasting - The downfall of huge mass of weather rock along a steep slope under gravity is termed as mass landslide.



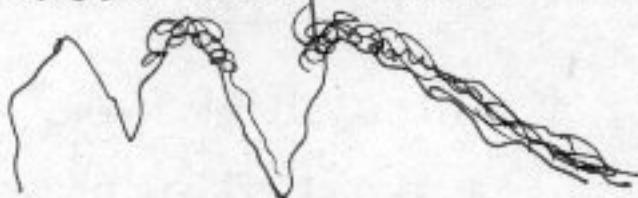
- ② Slumping - It refers to the downward movement of rock debris along a slope in a rotatory manner under the influence of gravity.

Remarks



① Mudflow - It occurs when large amount of rainfall cuts out the side of

② Debris flow → It refers to the flow of rock debris along with water along a slope



③ Mud flow - When the amount of water in the sediments or debris is more than the debris flow then this type of mass movement is termed as mud flow. It occurs during cloud burst.

④ Earth flow - Here in this type of mass movement the debris flow like water since the debris has reached its saturation point. It flows like sudden debris river.

Hence, these are various types of mass movements seen frequently.

Remarks

- Q7. Recently, India's Prime Minister has appealed for a "three-pillared" approach to farming, which included crop farming, agro-forestry and animal husbandry. Discuss what needs to be done to successfully implement this approach to bring about farmer's welfare.

(10 Marks)

A Farmer is one of the significant pillar of our economy. Efforts have been made to increase the livelihood of the farmer, in this regard various steps has been taken by the govt, one such approach is the 3-pillared Approach to farming focusing on Crop farming, agro forestry & animal husbandry. The effective implementation of this approach may fulfill the dream of doubling of farmers income.

# Challenges faced in the implementation of this 3-pillared approach -

- ① Lack of financial resources
- ② small & fragmented land holdings
- ③ unavailability of required resources
- ④ Missing backward and forward linkages
- ⑤ unavailability of cold storage
- ⑥ Transportation and connectivity

Remarks

(7) Marketing network

The above discussed challenges needs to be addressed to enrich the goal of doubling farmers income.

Steps to be taken

- ① Proper policy framework
- ② fund allocation by the govt.
- ③ Infrastructure Strengthening < connecting marketing
- ④ establishment of ware houses and cold storage facilities - to minimise the risk due to perishability
- ⑤ strengthening of backward and forward linkages → for actual realisation of production & productivity.

Hence, by adopting these steps we can achieve our goal in a effective manner.

Remarks

- Q8. India need significant focus in agriculture research through projects like TIGR2ESS using multi-partner approach to deliver a second, more sustainable Green Revolution. In this context, discuss TIGR2ESS project funded by Global Challenges Research Fund (GCRF) by Research Councils UK in India. (10 Marks)

There is an increasing demand for implementation of Second Green Revolution for enhancing our food security, & economic security to our farmers, social & environmental security as well.

Steps taken under TIGR2ESS Project funded by Global Challenges Research fund by Research councils UK in India —

- ① Diversifying of domain
- ② use of GM seeds or high yield variety seeds.
- ③ better irrigation facilities - to ensure continuous moisture to the soil.
- ④ strengthening of infrastructure
- ⑤ Marketing techniques
- ⑥ use of adequate amount of fertilizers

Remarks

These steps will ensure a more sustainable & environment friendly second GR movement in India.

Remarks

- Q9. Why fishing industry is well developed on the western coast of India than eastern coast? Discuss the recent steps taken by the Indian government for the growth of this sector. Also discuss why commercial fishing is less developed in southern hemisphere? (10 Marks)

Fishing industry is one of the sunrise sector of the economy. It has huge potential to contribute to our GDP growth. Thus efforts should be made for its ~~more~~ effective mechanisation and sustainable production.

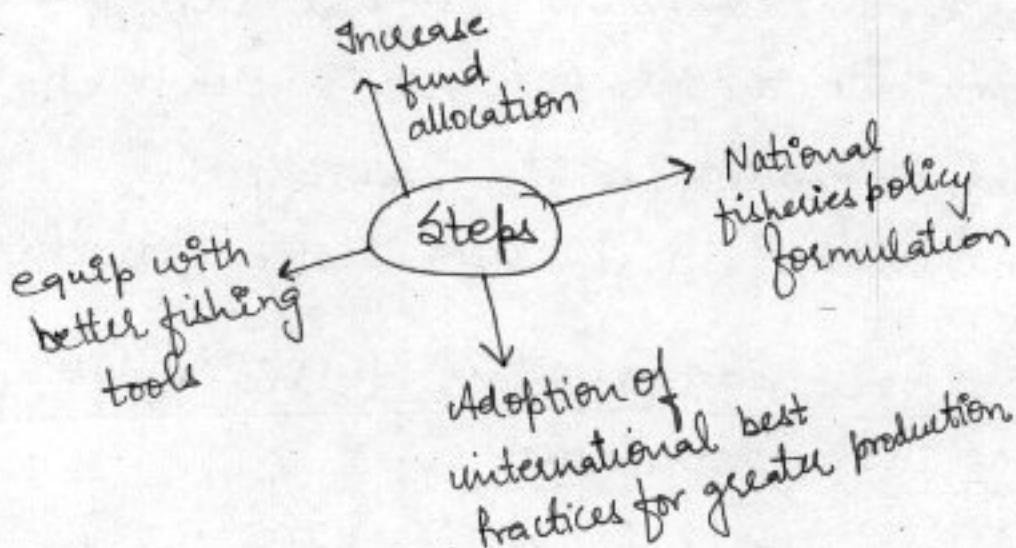
### Reasons for development of fishing industry along the western coast

- ① Western coast has wider continental shelf - has potential for fish production.
  - ② use of advanced tools & equipments for fish catch
  - ③ better storage facility.
  - ④ ~~Huge~~ ~~is available~~ Nearness to port hence easy to export → huge returns
  - ⑤ western coast is pollution free (less polluted than eastern coast).
- Thus, these features are absent on eastern coast hence fishing industry is not

Remarks

well developed over there.

### Steps taken by Indian Govt. for growth of this Sector



### Less development of fishing activity in Southern Hemisphere -

- ① Absence of meeting of warm & cold oceanic current  $\rightarrow$  best fishing places
- ② Lack of upwelling of resources
- ③ Dvoid of continental land mass
- ④ Southern Hemisphere mostly ice-covered & blowing of cold west wind drift throughout the globe.

Remarks

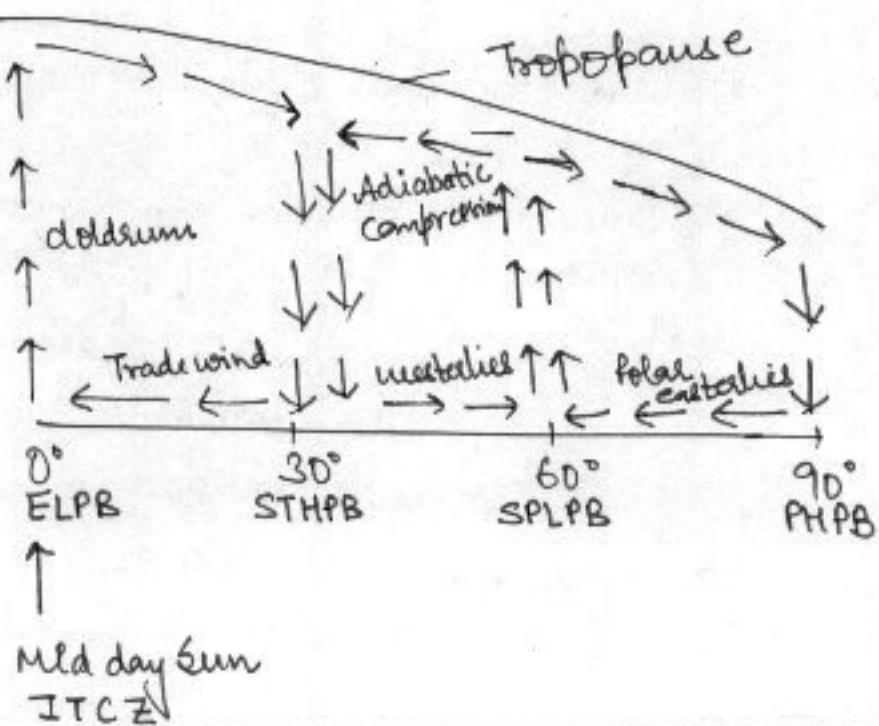
Q10. While discussing the causes of formation of planetary winds elaborate on their major characteristics. (10 Marks)

Planetary winds - These are the permanent circulatory systems.

↪ Also known as Permanent winds

### Causes of formation

- ① Differential heating of Earth surface
- ② Adiabatic expansion & compression
- ③ Inter Tropical Convergence Zone
- ④ Coriolis force & wind drag force



Remarks

## Types of Planetary winds

- ① Trade winds
  - Northeasterly Trade winds
  - Southerly trade winds
- ② westerlies
- ③ Polar easterlies

## Characteristics of Planetary winds

- ① Trade winds - flow from Sub tropical high pressure belts towards equitorial low pressure system
  - remains throughout the year
  - shifts with the change in position of ITCZ
- ② Westerlies - flow from Sub tropical high pressure belt towards sub polar low pressure system
  - bring rainfall along the west coast of continents
  - cause for bringing of extratropical cyclone to Indian North Western Region
- ③ Polar Easterlies - flow from Polar high pressure belt towards sub polar low pressure system.
  - extremely cold winds
  - formed due to thermal process.

Remarks

## Section - B

Q11. Gulf Dust storm is considered as one of the contributing factor (apart from stubble burning) behind the smog that had smothered Delhi and its neighborhood, as per Scientific Assessment of Delhi Winter Air Quality Crisis Report by SAFAR. Elaborate on the factors that increase dust storm and analyze its impact on Indian weather? (15 Marks)

As per the assessment report published by SAFAR it has been said that, the increased incidents of smog in delhi & nearby region was caused due to the dust storm developed in the middle east region. It can be analysed in the following manner-

### Causes of Dust Storm in the West Asia

- ① Arid & desert like condition
- ② Sandy soil comes into effect of winds & form dust storms which blow under the influence of winds towards Eastward.
- ③ water scarcity in the region also led to the intensification of dust storms.

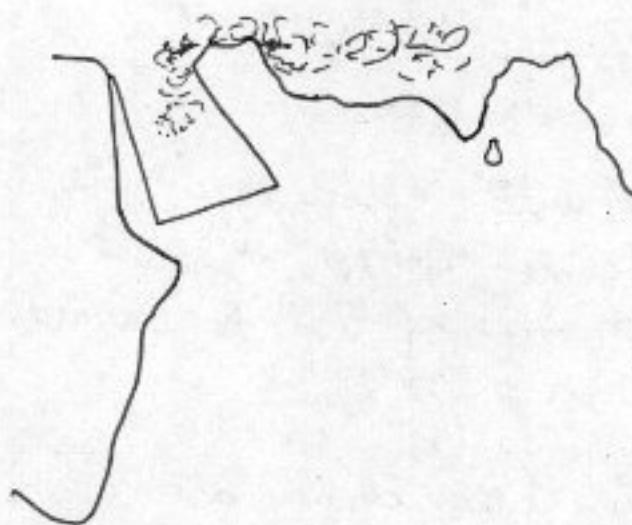
All these factors along with other local factors are responsible for the increasing phenomenon of dust storm in the west Asian region. These dust storm travel towards

Remarks

eastward under the influence of wind circulation and amalgamate with local conditions of Delhi & nearby regions and produce intensify the pollution the region with formation of smog.

### Impact on Indian Weather -

The impact of Gulf Dust storm on the Indian weather is as follows -



- ① It effects our weather pattern
- ② It causes outbreak of diseases
- ③ It led to increased amount of particles in the atmosphere → causing pollution in the air.

Remarks

- ④ Impacts human footprint
- ⑤ It affects our agriculture & vegetation patterns
- ⑥ It ultimately cause decrement to our <sup>economic</sup> growth & development.

Thus Gulf Dust storm impacts Indian weather heavily and causes huge losses to Indian economy.

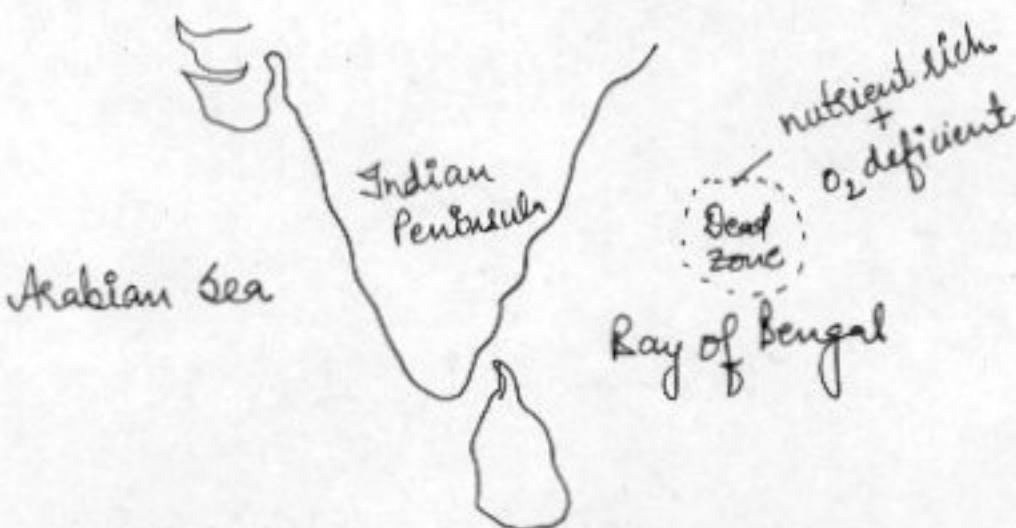
- Q42. Oceans are suffocating, as dead zones have quadrupled in size since 1950s. In this context, discuss the causes and effects of Ocean Dead Zones on marine ecosystem.

(15 Marks)

Dead zones :- Large patch of ocean waters which is deficient in oxygen is termed as dead zone. It causes harm to marine life and degrades marine ecosystem.

It is caused because of the increased incidents of pollution in the ocean waters. It may be caused due to natural and man-made factors.

In Indian ocean, dead zones are found ~~in along~~ the Bay of Bengal waters.



Remarks

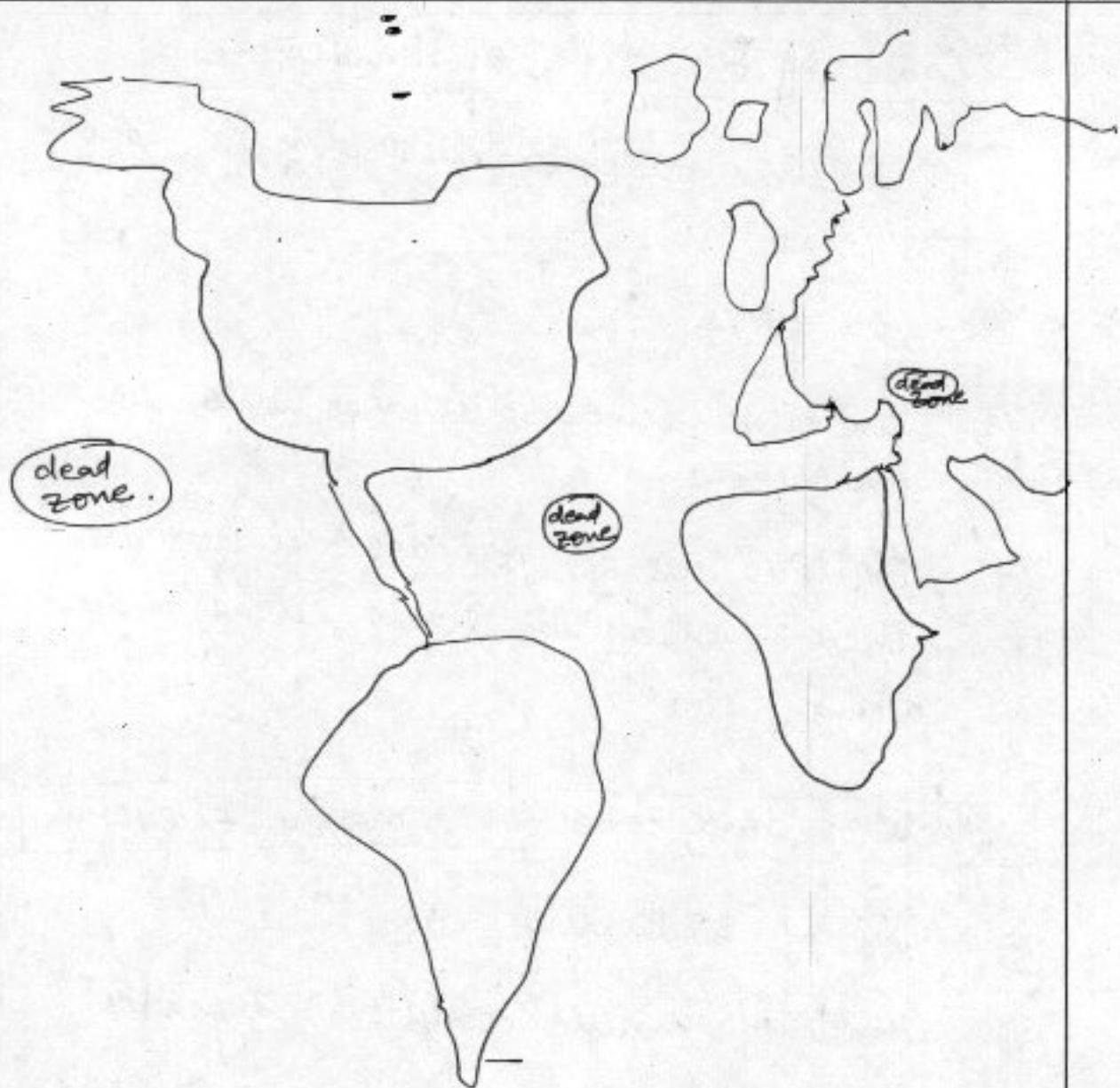
## Causes of formation of Dead Zones

- ① Excessive nutrient discharge in Seas & Oceans.
- ② oil spills
- ③ Untreated sewage discharge into Sea and oceans.
- ④ Excessive use of pesticides & insecticides & their run off in rivers, seas and oceans.

## Effects of dead zones on marine ecosystem

- ① Loss of biodiversity
- ② Health of marine ecosystem degrades
- ③ Global warming & climate change - leading to destruction & degradation of marine habitats.
- ④ Killing & death of marine creatures like fishes, prawns, whales, octopus etc.
- ⑤ Reduced availability of seafood

Remarks



Dead zones are ~~area~~ unsustainable for marine ecology. Since they are ~~the~~ caused due to excessive nutrient discharge which led to decrease in <sup>dissolved</sup> oxygen in the water. It can be treated if proper measures are taken for effective utilization of fertilizers & pesticides.

Remarks

- Q13. The United Nations Convention on the Law of the Sea (UNCLOS) not only protect the jurisdiction and economic rights of its member states overseas, but also the marine life and environment. Examine. (15 Marks)

United Nations Convention on the law of the sea (UNCLOS) is the premium law governing the global waters. It <sup>not</sup> only protects the rights of the member countries but also protect & preserve marine ecology to ensure sustainability of the mother earth.

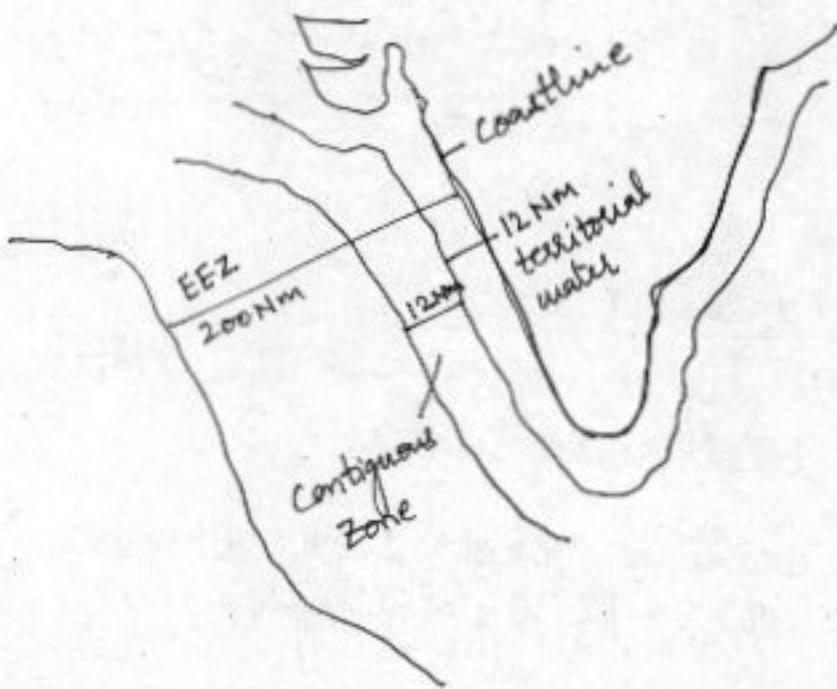
#### Protection to member states

- ① Exclusive rights of the member states in the territorial waters.
- ② Foreign countries vessel seek Innocent passage for passing through it.
- ③ The region upto 200 Nautical miles is known as exclusive economic zone. In this zone member country has exclusive economic exploitation rights along with navigation rights to other countries.
- ④ Other country's vessels can cross through EEZ but ~~can~~ they cannot exploit the

Remarks

minerals & resource available in that water.

- ⑤ After 200 Nautical miles, it's the international waters. Here, every country has the right to exploit, navigate etc..



UNCLOS's protection to marine life and environment -

- ① Member Nations should protect & preserve the marine biodiversity.
- ② No excessive exploitation of marine resources so that it can harm Marine ecology.

Remarks

② Punishments for oil spills - as they cause harm to marine ecosystem and led to death of marine organisms.

Thus, we <sup>have</sup> seen that UNCLOS successfully protects both member nation's economic rights so that they can progress & develop plus marine ecology & health is also protected for the judicious & sustainable living for all.

---

Remarks

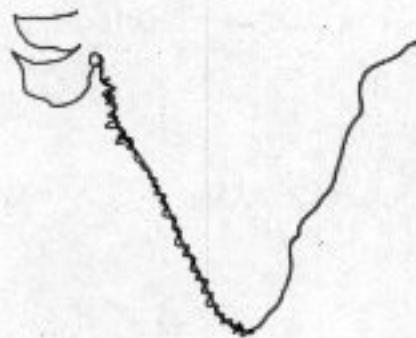
- Q14. Why are the west coast beaches receive more tourists and are more famous than east coast beaches in India? Also shed some light on India's Port led development initiatives.

(15 Marks)

Indian landmass has huge coastline expanding along its 9 states and UTs. (union territories). This coastline holds great significance as it has contributes to India's economic development.

### West Coast Beaches

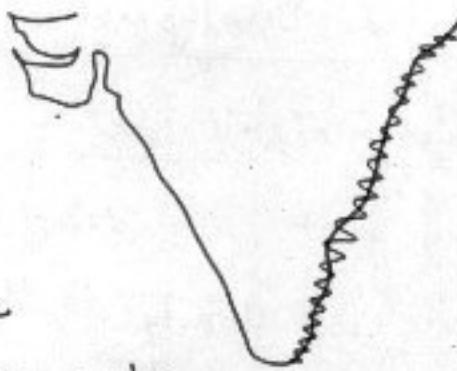
- ① The western continental shelf is wider, hence it supports huge fish production and tourist activities in the region.
- ② The western ghats are nearer/closer to the west coastline, hence gives insularity effect, therefore attracts a large number of people across the globe.
- ③ less pollution is seen near western coastline, therefore it attracts more people.
- ④ many coastal features are attracting here.  
For eg. Palayars/Backwaters, coastal lakes, Beaches etc.



Remarks

### East Coast Beaches

- ④ The continental shelf of eastern side of the Indian peninsula is narrow hence, less fishing activities, therefore less number of people comes to this place.
- ⑤ Eastern coastline is dominated by city development thus seeking less human resource for tourism.
- ⑥ Climate of this side of the coastal landmass shows variation with the seasons thus people coming accordingly.
- ⑦ More pollution is seen near eastern beaches as more habitation is there in this side due to huge city developments.
- ⑧ Less developed beaches due to delta formation by the rivers.



Therefore by analysing above facts and illustrations we can say that west coast

Remarks

receive more tourist than the east coast.

### Port-led Development Initiatives -

- ① Sagarmala project - one of the biggest project of the govt to develop ports and increasing their accessibility to the hinterlands through road & rail links
- ② Kaladan multimodal project - kolkata port to myanmar port.

Remarks

- Q15. Migration is a physical and social transformation and is also an instrument of cultural diffusion and social integration. Elaborate. Also, explain the nature of gendered mobility in India. (15 Marks)

Migration - Displacement of people from one place to another in search of livelihood etc. is known as migration.

Migration happens because of 2 reasons

- ↳ Push factors → family needs, food
- ↳ Pull factors → better facilities & opportunities

Migration as physical transformation

- ↳ This represents exchange of people along physical boundaries

Migration as social transformation

- ↳ It leads to change of social fabric

Migration as an instrument of cultural diffusion

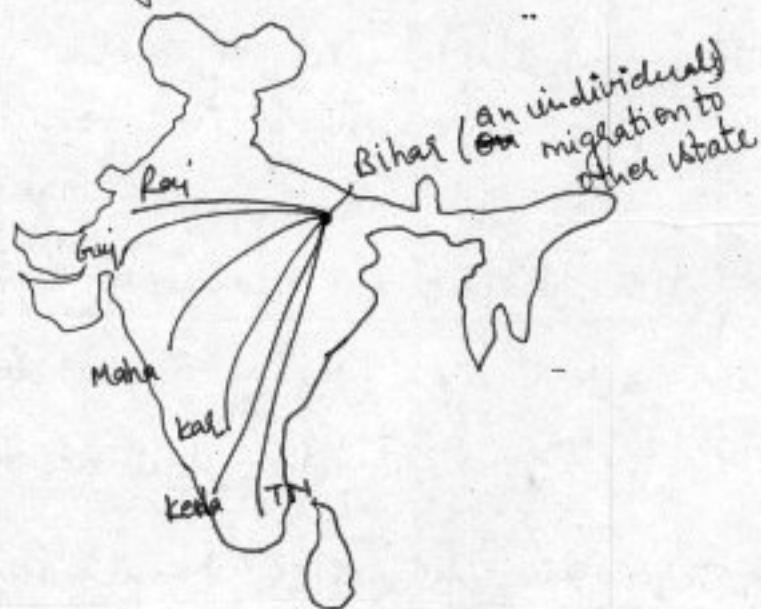
- ↳ It refers to the adoption of other culture's practices into one's living/life.

Migration as social Integration

- ↳ At one place, people belonging to different

Remarks

race, caste, sex, ethnicity lives, it depicts the social integration within a society.



### Nature of Gender Mobility in India

- ① In India, the mobilisation of women occur the most, due to the institution of marriage.
- ② Patriarchal nature of society promote female migration
- ③ Employment also favours gender mobilisation, in the sense, that certain sectors of economy demands

Remarks

## Specific work force

- ④ Basic needs - in search of , food, cloth & shelter , an individual migrates from his place of origin hence it is mainly skewed in favour of men; thus a pillar of gender mobility.
- ⑤ Female helpers / domestic help - It demands mobilisation of female force towards the demand side , hence led to gender specific mobilisation.

Thus, gender mobility is seen across each & every sphere of economic activity. Everybody mobilises in order to earn his/her livelihood.

Remarks

Q16. Population growth and urbanization rates will have dramatic impact on food security across the world by 2050. In light of this, discuss the role of Big-data and upcoming start-ups in bringing next green revolution in the Indian agriculture? Examine. (15 Marks)

India is one of the fastest growing economies in the world. For its increasing population India needs huge amount of food production; so that it may not face ~~see~~ scarcity of food for its population.

Due to increasing population & <sup>growth of</sup> urbanisation there has been stress on food security as India's agriculture is mostly rain-fed and the share of agricultural GDP is decreasing year on year.

Thus, there is a need to streamline the whole situation so that future hazards can be escaped.

### Role of Big Data in bringing next Green Revolution(GR)

- ① Analysis of data in a sequential manner for better results
- ② Big Data analysis helps in formulation of specific schemes and projects

Remarks

- ③ Target approach can be made to tackle in incident of adversary.
- ④ helps in land utilisation pattern
- ⑤ Surveillance of crop, production, water resources, pest attack etc.
- ⑥ Maintaining steady flow of information for better implementation of Agricultural Projects.

### Role of upcoming Startups:-

- ① produce good quality seeds, techniques, equipments.
  - ② Can come out with specific project based approach based on industry model.
  - ③ digitisation of agricultural - processes, practices, tools & techniques etc.
  - ④ Processing of agricultural products - for better outputs
  - ⑤ marketing platforms availability
  - ⑥ managing backward & forward linkages
- Thus, the latest tools of Big Data Analytics

Remarks

and upcoming start ups can help in bringing about next green revolution in our country in a more sustainable and productive manner.

*Remarks*

- Q17. Every hazard is unique in terms of local socio-environment factors that control it, social response it generates and the way each social group deals with it. Citing specific examples, examine the importance of the role of local government and community in dealing with disasters. (15 Marks)

Hazard + vulnerability = Disaster

Hazard = effect + steps to curb  
beyond coping capacity.

Thus, hazards are the sudden disruptions in the normal functioning of the social living causing harm to man and material.

The first sort of contact to curb it comes from the community living in the nearby areas. Thus community play a vital role in tackling the menace of disaster or hazard.

- Every hazard is unique in the sense that hazards are influenced by the topography of the area, availability of resources in that area, amount of disruptions humans have created in the path of nature etc. Thus only the community living close to the that place knows about that area very well. Hence,

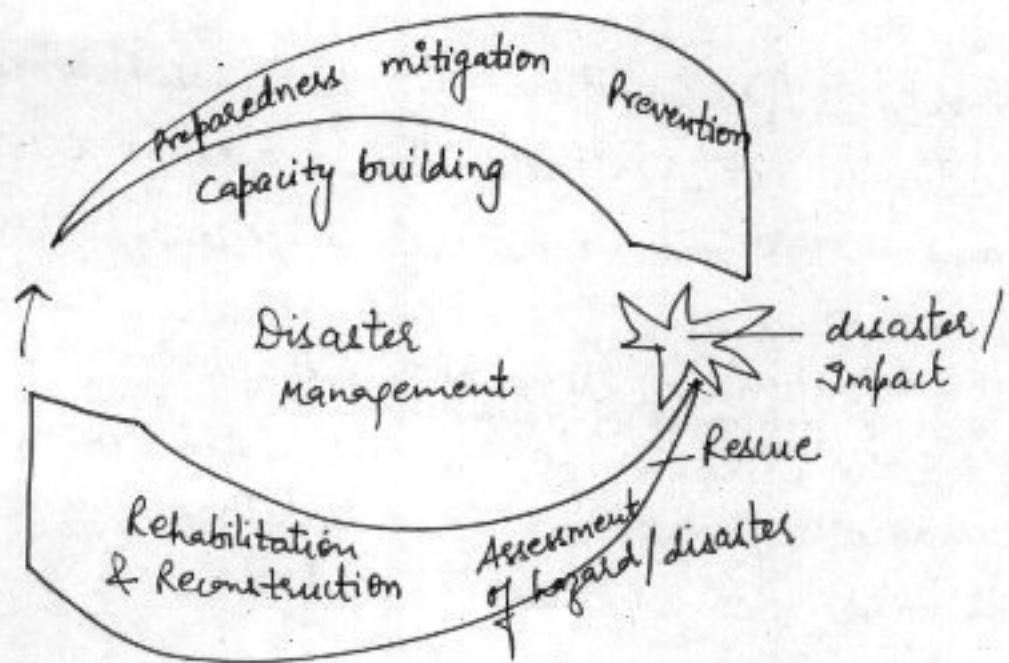
Remarks

first incidence of relief will come out from there. People know about the safe places, dangerous/weak spots, alternative links, etc. of that area. Hence their assistance is of great importance at that time.

Importance of role of local govt. & community in dealing with disasters

- ① Preparedness :- ↳ Basic utility kit  
 ↳ Awareness to masses  
 ↳ Dry food items storage in case of emergency.  
 ↳ Basic disaster management skilling is given
- ② Response - ↳ 1<sup>st</sup> contact of support  
 ↳ arranging of relief camps  
 ↳ rescue and evacuation to safe places.
- ③ Rehabilitation & Reconstruction - Help in the rehabilitation of distress masses  
 → helps in ~~and~~ better construction works so that future incidents can be avoided.

Remarks



Remarks

- Q18. Drought is a broader concept than just deficiency of rainfall. Discuss, how drought is more of a man-made disaster than a mere deficiency of rainfall. Elaborate on the consequences of desertification that drought prone regions face. Also, bring out the preventive steps need to be taken in light of targets to curb desertification as mentioned under the SDGs. (15 Marks)

Drought:- The condition of farm land when water is not available for growing crop ~~and~~ or soil is moisture deficient, it is termed as drought. IMD, recently has changed the definition of drought. Thus, it just not remained a mere deficiency of rainfall. There were various factors associated with the occurrence of drought events. They can be man made or natural or both.

Factors responsible for drought event :-

- ① Reckless use of water or unsustainable use of water resource
- ② Infertility of the soil
- ③ Global warming and related climate change
- ④ Heat wave conditions
- ⑤ Deforestation
- ⑥ Rapid and unplanned city development and related consumption of resources.
- ⑦ Monsoon breaks

Remarks

Thus, along with natural factors, man-made factors aggravate the situation leading to severe drought conditions. Therefore, it is said that drought is more of a man made disaster than a mere deficiency of rainfall.

Consequences of desertification faced by drought prone region -

- ① Increased surrounding temperature
- ② Depletion of water reserves
- ③ Degradation of soil fertility.
- ④ Food security is at stake.
- ⑤ Disease outbreak etc.

Preventive steps taken to curb desertification

SDG-15 talks about combating desertification & related impacts. Hence effective steps are suggested for this as under-

- ① Afforestation
- ② Water shed management or water harvesting techniques

Remarks

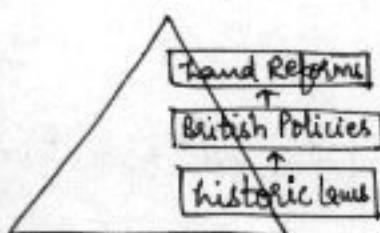
- (3) Soil Solarization to reduce water loss
- (4) use of international best practices like Tal Ya technique of Israel  
Qanat System of agriculture
- (5) small check dams construction - irrespective of large dams.
- (6) Reduced emission of GHGs. etc.

Hence, by adopting following steps, we can curb desertification and can spread agricultural cover to ensure food security to its masses.

Remarks

- Q19. Cooperativization was seen as an important element in the agenda for institutional changes sought to be achieved through land reforms. Discuss. Also explain why the progress made by the cooperative movement in India largely fell far short of the goals set by its early proponents. (15 Marks)

After independence, there arose a need for reforming land laws. Since our land laws were influenced by historic events, British policies etc., hence a demand for their reform held significance at that time.



Fragmented land pieces were largely available with the masses. Thus, in order to secure food security, agricultural

activities on large farm lands were the need of the hour. This need resulted in the concept of Cooperativization of Agricultural Activities through Community Participation.

#### Importance:-

- ① Coming together of small land blocks to form a big farmland where sustainable and productive crop can be grown.
- ② Mechanisation was possible because of this
- ③ Institutional funding was also easily available for big farm land.

Remarks

Challenges -

- ① Issues related to the sharing of outputs or profits.
- ② Issues related to management of cooperative agriculture
- ③ Huge mechanisation - reduced labour force
- ④ Unavailability of capital for enhancement of farm equipment.
- ⑤ State interference - led to delayed operation

Thus, the step sought was a big step but its implementation has eroded its relevance. If implemented in an effective manner it may prove to be an effective tool for agricultural development.

Remarks

---

**Remarks**

Q20. What are the various types of rural tourism? What will be the impact of promoting rural tourism in India? Elaborate the steps taken by the government so far? (15 Marks)

Rural Tourism refers to the tourist activities performed with respect to the rural culture, rural infrastructure, in order to boost rural income. It increases livelihood of the people living in rural areas.

It has huge prospects for development as it requires less resources to expand this tourism sector.

Impact :-

The development of rural tourism has multifold impacts on the rural social fabric and economy. It has some positives and some negatives influences which are as under-

Positive Impacts :-

- ① Increased rural livelihood
- ② Strengthening of rural infrastructure
- ③ Acts as an alternative means of income for rural households.
- ④ Requires less input cost

Remarks

Negative fallout:-

- ① Rural ecology may get disturbed
- ② Increase in pollution and destruction of rural fabric
- ③ Stress on rural resources - due to increase in population

Thus, rural tourism has both favourable & unfavourable effects.

Steps taken by government to boost rural tourism

This tourism industry may prove a unique sector in the growth of the country. Hence govt has come out with following steps to give impetus for the development of this unharvested & rural tourism industry-

- ① Increased fund allocation for rural development
- ② Swadeshi Saarthan Scheme
- ③ Circuit development Scheme
- ④ Pradhan Mantri Kaushal Vikas Yojana

Remarks

⑤ Some components of Prasad & Holiday Schemes also work under village structure.

Hence, significant steps have been taken by the govt to boost the untapped potentials of rural tourism sector.