

# GEOGRAPHY, DISASTER MANAGEMENT & AGRICULTURE

Time Allowed: 3 hrs.

Max. Marks: 250

Q.	Marks	Instructions to Candidate
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		

95

95

1. Invigilator Signature

2. Invigilator Signature

Name K. Satya Dhama Pratap

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

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

Date \_\_\_\_\_

Signature Ashwini

# REMARKS

**GS SCORE**

GS MAINS TEST SERIES 2019

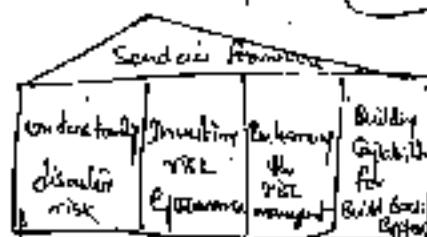
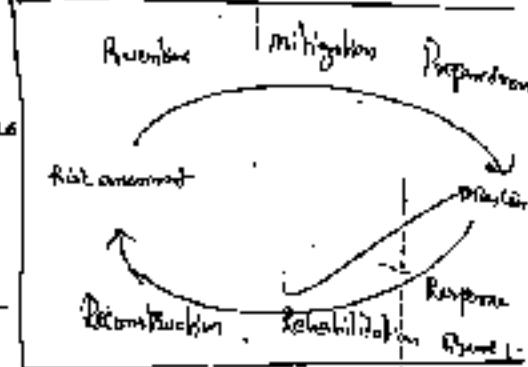
## Section - A

There is an urgent need to rethink disaster management in India. The responses to disasters must be proactive, not just reactive. Comment. (10 Marks)

Disaster management refers to managing mitigation the disaster before the striking of it. It has assumed importance significant because, according to IPCC, in last 20 years 1.2 trillion people lost lives, 4.4 trillion economic loss and 3.3 billion people affected throughout the world. India lost \$70 billion in last 20 years.

Disaster management has always been towards response after striking and mitigation and preparedness phase right now as shown in Figure 1. It was always reactive response to the disaster rather than understanding of it.

ISMS framework from 2000-2015 has focused more on disaster management. But Sendai Framework focused more on disaster risk management. It focused more proactive role via understanding disaster risk.



Remarks To support your argument, I have produced part 101 of river and prepper's from Basin f. Andhra Pradesh ① Basins f. Andhra Pradesh

The advantages of below practices :-

- i) Understanding the disaster risk and more planned approach.
- ii) Can reduced material + human loss from disaster
- iii) Improve resilience to disaster risk
- iv) Leads to sustainable development.

(3)

The disaster response should be more proactive.  
Should be seen in combination with Sustainable Development goals.

Hence, Primer minimalist 10 point agenda for tackling disaster

Should be more priority.

Widely mention some steps to proactive  
first & foremost  
approach :- , Development (including  
of early warning  
system, supply  
chain etc

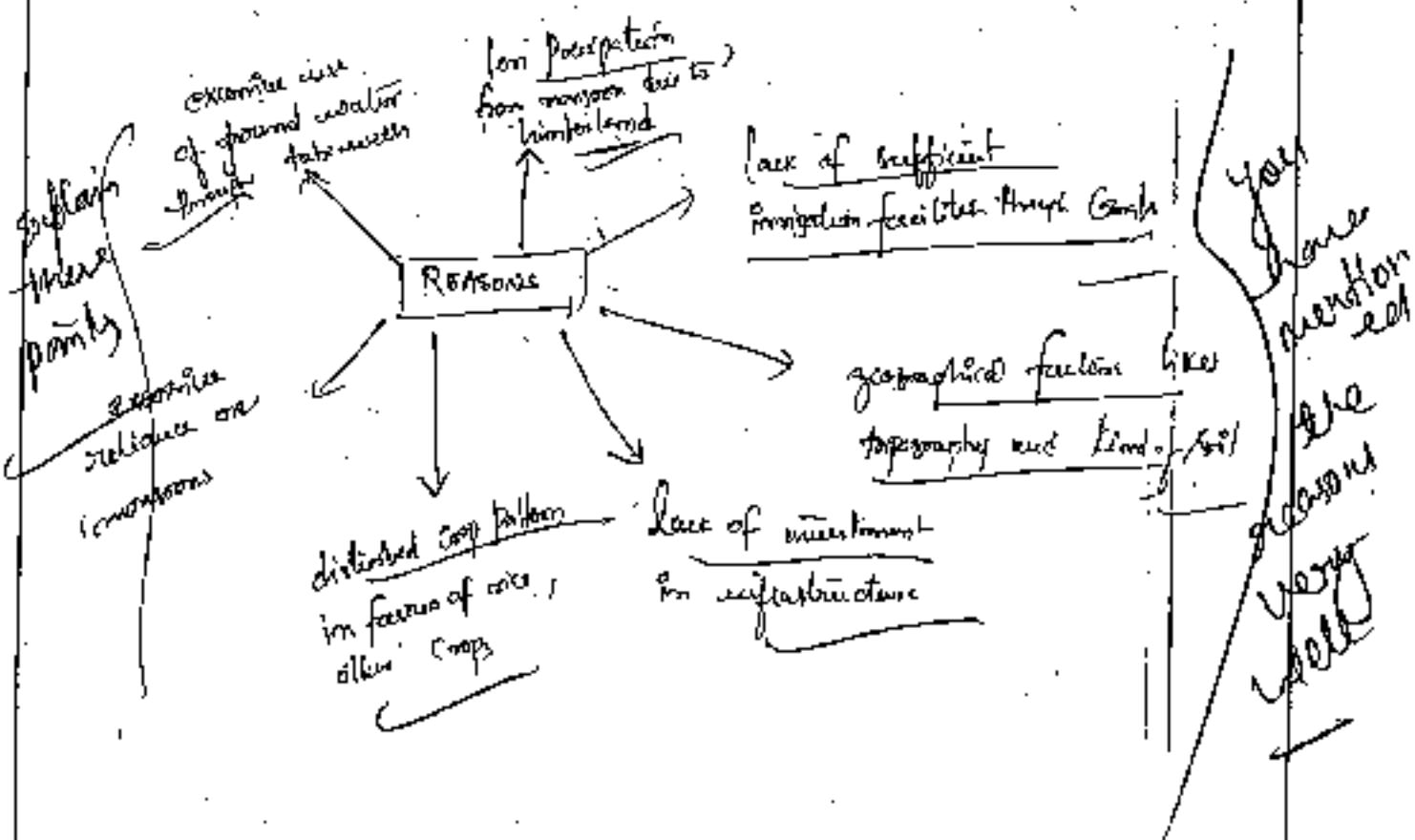
Remarks

Q2. It is not deficit monsoon, rather the lack of policies and mechanisms to drought-proof susceptible areas that turn the situation into a crisis. In the light of the above statement, discuss the causes of drought in drought-prone Bundelkhand region and suggest the way forward. (10 Marks)

India receives 45% rainfall during summer monsoon and 60-65% net sown area is sown. More than 50% population depends on agriculture and agriculture based industries for their livelihood.

Bundelkhand which is enclosed by Malwa region on left and Yamuna <sup>doab</sup> on north and Sivalik on south is one of most drought prone areas of country.

Causes for Drought in Bundelkhand region:-



Remarks

way forward

→ Construction of sufficient irrigation facilities

→ ~~culminating and promoting water management through~~  
~~water table development~~

→ ~~complementing soil water harvesting practices to increase~~  
~~water table, aquifers~~

~~Agricultural~~ ~~comprehensive policy to deliver the agriculture to~~  
~~horticulture and other crops~~

~~agriculture~~ ~~temporary economic package and strict~~  
~~implementation of policies~~

~~economy~~ Hence, ~~the strong political will and strong economic~~  
~~policy combined with people participation will lead to drought~~

Prof. Bundel Scheme.



- Q3. "India's 60% of farmers depend upon rain-fed agriculture which is largely impacted by global phenomenon such as El-Nino effect." Critically evaluate overdependence of Indian farmers on monsoon. Examine the policy bias against rain-fed agriculture with reference to rain-fed agriculture atlas released by Revitalizing Rain-fed Agriculture (RRA) Network.

~~Water cycle~~ ~~India~~ ~~60%~~ is dependent on rainfed agriculture and 75% of rains received in summer monsoon within 3 months.

El-nino is phenomenon where low pressure is formed at Peruvian coast and High pressure at Darwin Australia

which can reversal of winds in El-nino figure 2

The effect of El-nino:-

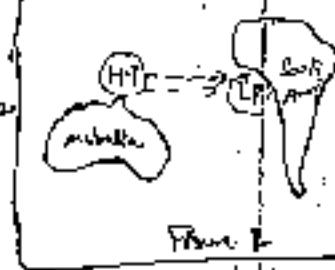


Figure 2

i, it reduces and affects monsoon winds

ii, it cause rainfall in Peru, Chile and drought in Australia, Indonesia, India

iii, It is temporary phenomenon which changes climatic conditions

The dependence of Indian farmers on monsoon due to

i, Over dependence on monsoon rains (Why) ~~Wind direction~~ ~~Desert like~~ ~~the state~~ ~~of India~~  
due to ~~overexploitation~~ ~~of agriculture~~

ii, Shift Crop pattern towards water intensive crops like rice, Sugarcane, cotton

iii, Government policies towards remunerative MSP towards some crops like rice, wheat etc

iv, Pesticide of pests due to ~~Climatic change~~ ~~it on regional basis~~

Remarks: Policy Bias also needs to be explained better.

~~talk about  
role of government  
IMF, policy etc~~

Rainfed agriculture must be revitalised

Curry Revitalised Rainfed Agriculture network by following methods

- identifying the most rainfed areas and dryland prone areas
- effective measures to tackle the situation through Crop diversification
- involving all stakeholders and bottom up approach to address the situation.

Hence, Comprehensive and holistic implementation of measures and adapting to climate change and sustainable agriculture should be way forward.

Remarks

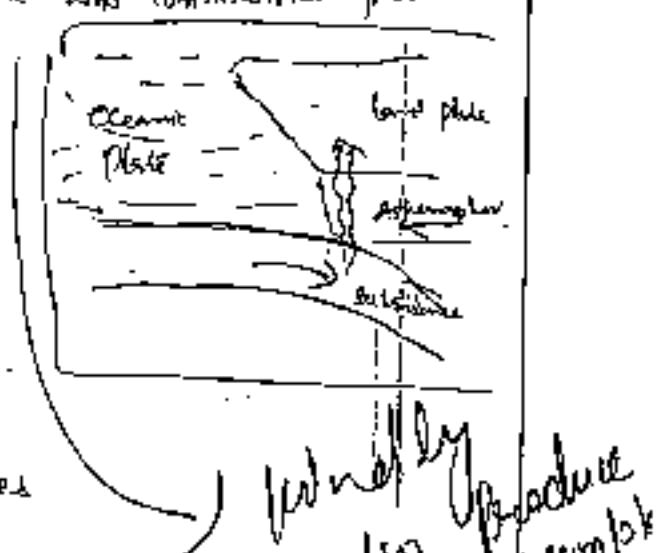
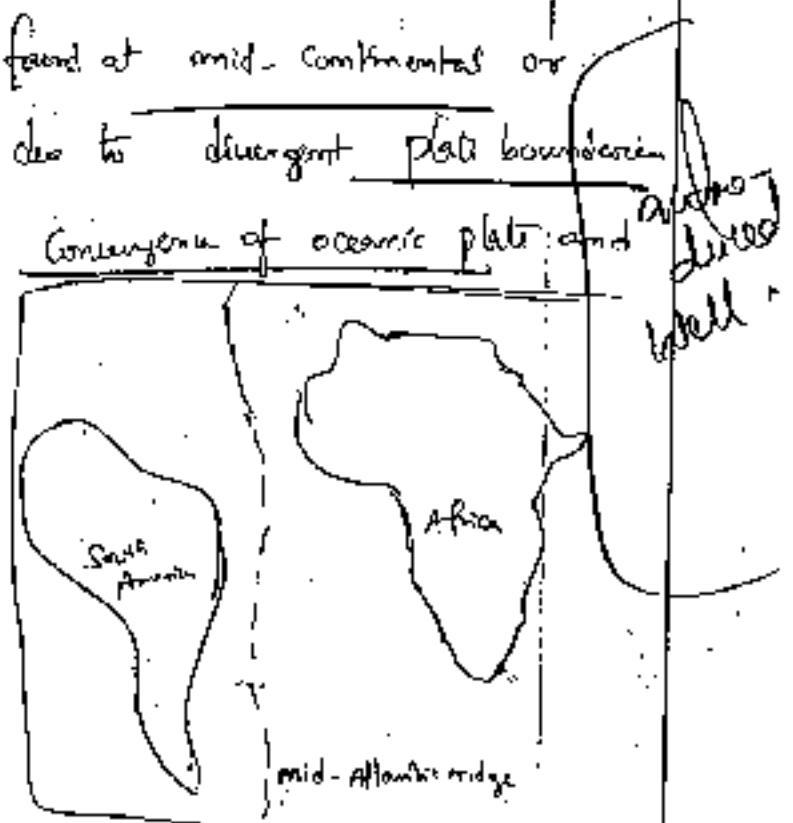
- Q4. "Most of the earthquake zones be it Mid-Continental Belt or Mid-Atlantic Belt are plate boundaries." Elucidate the role of plate-tectonics in identifying Earthquake prone zones. (10 Marks)

Earthquake zones are found at mid-Continental or mid-Atlantic plate boundaries due to divergent plate boundaries of two oceanic plates or Continental plates.

For Example: Divergent plate boundary of mid-Atlantic ridge.

The divergence of two oceanic plates at mid-ocean ridge give rise to Volcanoes and earthquakes at many places. These earthquakes are considered as deep focus earthquakes.

The convergence of oceanic plate and continental plate and high density oceanic plate subduct under continental plate. The Volcanoes and earthquakes occurred at this convergent subduction zone leads to formation of deep focus earthquakes.



Remarks

Plate tectonics is identification of Continental plates,  
Oceanic plates and Convergent, Divergence plate boundaries.  
The dynamic activity Causes Earthquakes, Volcanoes etc.

The Pacific ring of fire, mid-Atlantic

ridge and San Andreas transform boundaries are high-risk regions occupied with Earthquakes, Volcanoes. Hence,  
Plate Tectonics help in identifying these areas.

Through your notes,  
you have noted  
you have written  
you can give examples  
no specific

Mention  
Ring of Fire  
and  
with converging  
plate boundaries  
etc

Remarks

- Q5. Discuss the role of albedo of ice caps in maintaining heat budget of earth. Analyze the impact of deposition of black carbon on ice caps on their albedo. (10 Marks)

Albedo is defined as the reflection of incoming solar radiations towards atmosphere after striking the surface. Fresh ice caps and snow are considered as objects with high albedo.

The role of ice caps for maintaining heat budget:

- reflecting the incoming solar radiations to atmosphere through IR waves
- capture the heat from polar meltwater through air circulation
- maintaining the heat balance and pressure with Earth's atmosphere

Black carbon is the pollutant which is emitted in to atmosphere due to incomplete combustion of fuels and objects from the land. The black carbon is emitted and loaded on the snow, ice caps in Antarctica, Arctic and Himalayas.

The deposited black carbon causing many harmful effects as discussed below:

Remarks

• reduces the albedo effect of snow and ice  
more solar radiation

also the heated air from ice caps leads to melting of  
glaciers with snow ice caps

reduces the ice amount and affects the heat budget  
and snowmelt cycle

Hence, proper action should be taken to  
mitigate the effects of black carbon on environment

and prevent the emission of black carbon.

Firstly incorporate more  
incorporate suggestions  
get around emission of  
to check emission of  
black carbon as well

- Q6. Identify the major parameters of public health, where India has made a marked progress. Also, discuss major public health challenges for the next decade? (10 Marks)

Public health is most important parameter to identify the human resource development. The healthy ~~for~~ individual can contribute to work and economic growth of our country.

The various parameters like maternal mortality rate, infant mortality rate, life span, fetal mortality rate are ~~various~~ parameters help to identify the quality of health care.

The Infant mortality rate, childhood mortality rate has decreased gradually and moving towards specified targets. The total fertility rate has reduced to 2.1 around. Some southern states like Kerala, Tamil nadu achieved less than 2.1 (1.8). The life span of individual has increased gradually from Independence to 67 (in 2017).

However, there are some major challenges we face in the next few decades.

Remarks

about  
Contract  
polio  
other  
diseases

- demographic dividend with ten public health factors
- low expenditure on public health by state (1.6% of GNP) which out of total expenditure (20% of expenditure)

Health  
diseases  
prevalence  
in more  
depth  
↓  
about  
Health, holistic policy with right investment  
in public health must be very forward to achieve the goals

strength of National Health Policy.  
consideration despite  
Malaria, SMR, etc.  
reduction,  
disease like  
HIV, TB etc.

(A)

Widely  
suggest the  
play ahead  
better  
In fact  
about the  
need to  
increase the  
penetration of  
health services  
etc.

Remarks

- Q7. If we have to double the income of our farmers, we need to focus equally on animal rearing apart from traditional crop farming. Examine the steps taken by government in this regard in the last five years. (10 Marks)

Doubling farmer income is one of flagship programme for current government. Alok Dalmia Committee also suggested various methods to this programme.

Animal rearing forms important role in the farmer income increase due to following reasons:

- India is agricultural economy and dependent of rural life.
- India has 50% of Buffalo, 12% of cattle and high diversity of Pig, sheep, goat, poultry cultures.
- Climate change affecting the incomes of peasants and leading to suicide.
- They help in secondary income and act as contingency plans.
- food habits of people are changing towards protein rich and more vegetarianism.
- Traditional knowledge about animal rearing and help in reduced dependence on chemical fertilizers.
- Hence, the government focuses on animal rearing with traditional crop farming enhance farmer income.

Remarks

Sustainable additional income. With marginal best insurance against drought, flood etc.

Government initiatives:

National Gokul mission

Increase in funds for dairy development through

NDDB, (National Dairy Development Board)

Agro processing scheme (Samanya) for dairy facilities

Here, right implementation of scheme accompanied

with people, farmer participation would lead to doubling

of the farmer's income.

Also, talk about  
National Livestock  
mission

Separate  
Independent  
Ministry for  
fisheries

(B.S.)

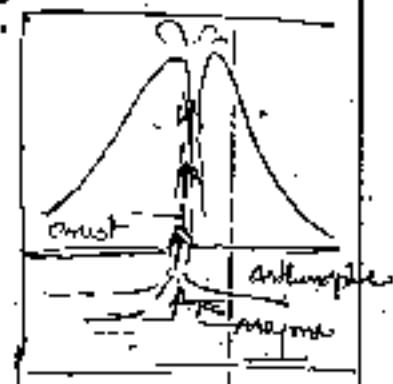
Remarks

- Q8. "On the one hand volcanoes cause harm to life and property, displacement of people and air and water pollution, but at the same time it provides benefits to people in different ways." Elucidate. (10 Marks)

Volcanoes are vents in the earth crust through which molten magma makes way on the surface.

The harmful effects of Volcanoes are

discharge of molten lava, pyroclastic material



- discharge of harmful gases and air pollution like PM, black carbon

- loss of material and human due to sudden outburst

- loss of valuable crops and production, productivity

- temporary inconvenience to communication & transport

(Ex: flights are canceled)

loss of trees at  
forest  
area

- loss of biodiversity in lakes, ponds and oceans and threat to fish

- heating of oceans and lakes leading to weather change and accentuates the climate change

However, the positive benefits to people are

due to Volcanism are:-

2nd point

Remarks

Need further elaboration:

- It helps in heat transfer from layers of earth
- formation of new concrete roads and new soil on Earth crust
- leads to improvement of soil fertility

Magma released gases reduce the heat with allude and  
thus keep the place cool.

Volcanoes part of geological cycle and part of nature.

Hence, Volcanism has both positive and  
of negative effects depending upon the effects it has caused.

You need to  
mention more  
benefits such as

• Source of stones, thermal  
minerals, geothermal energy etc.  
• Hot springs

Remarks

- Q9. After more than half century, India is yet to achieve goals set by its population policy. Critically analyze. (10 Marks)

Population has become one of burden for country and at the same time provided opportunity in the form of demographic dividend from modest 30 crore during independence, it has increased to current 130 crore with various challenges and opportunities.

#### Salient features of Population policy :

- The reduction of TFR to 2.1
- reduction of MMR (30 out 100) and MMR (100 out 1000)
- awareness on population control measures.
- Skilling the human resource.

However, despite of salient goals and new policies to achieve some of the targets due to various reasons like lack of effective dissemination among the people, lack of sufficient resources with state, inadequate machinery and human resources.

- lack of effective dissemination among the people
- lack of sufficient resources with state
- inadequate machinery and human resources
- growth of new challenges for state.

#### Remarks

Part D  
Explain our Battu  
pop policy till

Government has taken many new policies like

Also Education policy, Health ~~policy~~ and Skill policy to complement  
highlight Population policy. Paranirmanist urged people to make  
~~the~~ population control as management  
~~success~~

~~of National  
population  
pol. up to 2006.~~  
Hence, Government should utilize resources  
and people participation is correct for achieving the targeted  
Population policy.

Through family planning  
is also essential.  
Still you need to  
emphasize upon proper  
family planning

(25)

Remarks

- Q10. Meghalaya Mining Disaster is a shocking reminder that in a fast-growing economy such as India, life of people matters the least. Critically examine. (10 Marks)

Meghalaya rat hole mining involving poor labour, child labour had caused loss of many lives in past years. Would it be wrong? What is rat hole?

The reasons for you desire what is rat mining?

- availability of coal to improve economic growth
- employment to local people
- cheap process to avail the coal with help of child labour
- Schedule VI areas and governed with local laws.

Concerns of rat hole mining

- Causes human loss
- Involve child labour against law
- Pollution of various soil around the Jaintia Hills are good though they
- Corruption among the officials and mix with some local political leaders need to stop the state
- Lack of alternative employment opportunities
- Schedule VI areas to have more freedom compared to other regions.

Remarks

Not saving  
towards lives  
people  
injuries

However, Government should regulate and monitor mining activity. Meghalaya mining Policy. The miners should be checked to stop illegal mining. The availability of alternate employment opportunities reduces the incentive to mine and about rules and regulations.

Hence, comprehensive policy involving science, technology, economics and disaster management shall should be in place to prevent future disasters.

25

Remarks

## Section - B

**Q11.** "Deforestation of tropical rainforests for different reasons has caused serious concern for the global community as they are called 'Lungs of the World'." Discuss in context with deforestation of Amazon rainforest and rainforests of South-East Asia.

(15 Marks)

Tropical rainforests which occur in tropical areas between tropics are considered as 'Lungs of World' (figure 1).

The 'Lungs of World' are due to:

- \* They have rainfall in equatorial regions.
- \* They absorb Carbon dioxide and provide Oxygen for respiration.
- \* They act as a source of biodiversity.
- \* They act as Carbon sinks and keep the weather, climate in control.

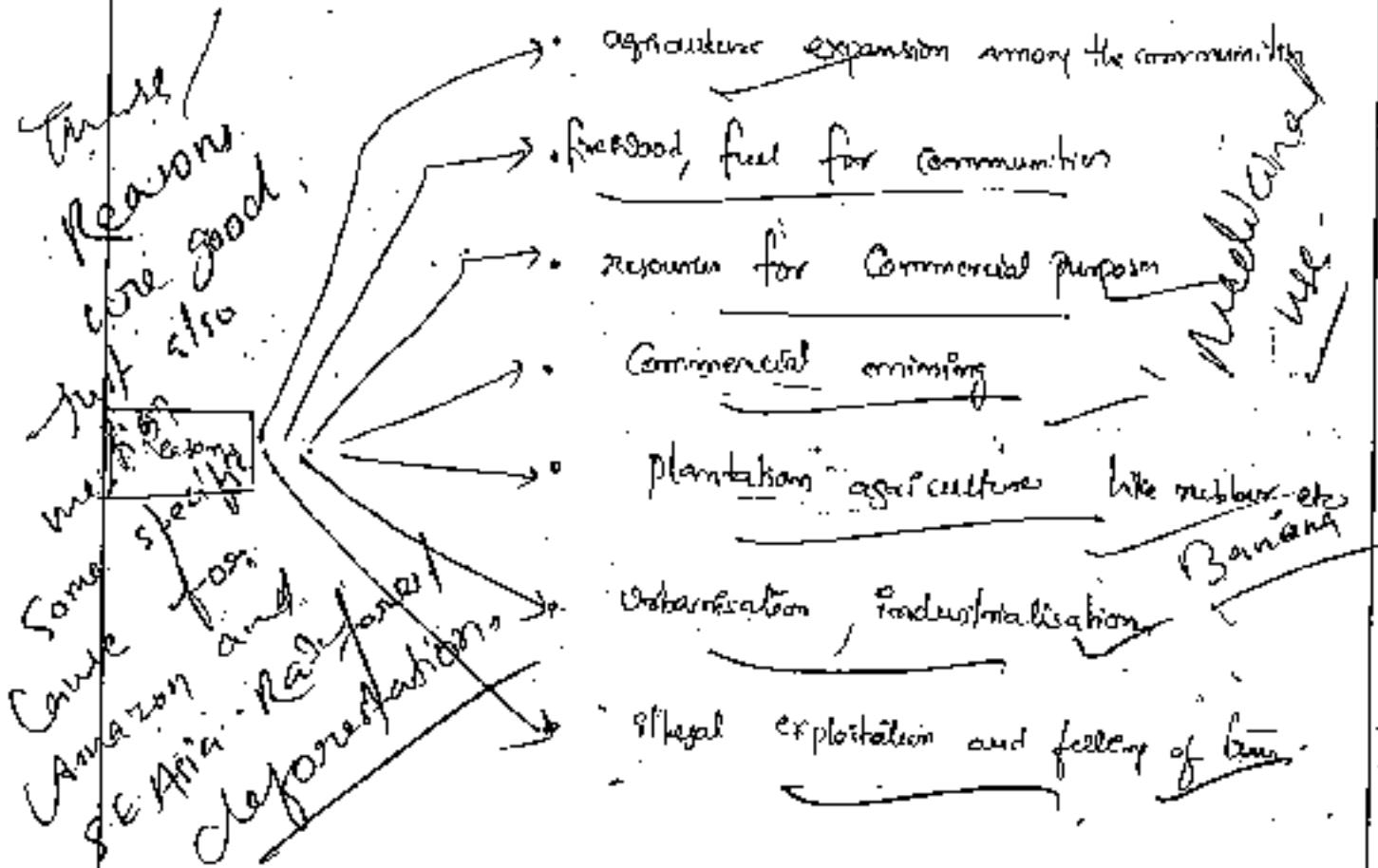


However, there are various threats to equatorial rain forest &雨林 in causing for deforestation. For every day, every second there are loss of many acres of equatorial rain forests.

Can mention about recent burning of Amazon forest

Remarks

The causes for Deforestation are -



Effects of deforestation of rainforests are -

- Loss of Global Warming
- Loss of Biodiversity in the form of flora, fauna, etc.
- Loss of Vegetable resources like medicinal plants etc.
- Threat to Local communities living in Amazon rain forests

Remarks

a) Accelerated Climate Change

Here, proper action should be taken to arrest further exploitation and deforestation of tropical rainforest and help in increasing the area of tropical rain forest to save valuable resources.

(6)

Remarks

Q12. Agriculture is not only sensitive to climate change, but also one of the major drivers of climate change. Critically evaluate. (15 Marks)

Agriculture and Climate Change are interrelated and affecting each other. Agriculture is affected due to Climate Change and agriculture is also causing Climate Change.

Agriculture is effected due to climate change in following ways:

The reduction of rainfall and extreme weather conditions

In unlike excess rainfall and drought conditions

With reduction of ground water, water table due to

sustainability in rainfall

soil reduction in productivity & production

destruction of vegetation events and climatic events

increase of pests, diseases and increase in the effectiveness of attacks

increase in input cost of farmer

Remarks

- reduction of ~~farmers income~~ and exposure to new challenges.

However, the other way agriculture affecting the climate change in following ways:

- ~~excess with increased of ground water~~ and reduce evaporation for precipitation.
- flood irrigation leading to wastage of resources.
- formation of use of fertilizer and causing of pollution of water.
- eutrophication of lakes and loss of biodiversity.
- changing the ~~land use and cropping pattern~~ put extra pressure on weather.
- dams and irrigation also leading to climate change.
- ~~Livestock and animal rearing produce methane in atmosphere~~
- Stubble burning also causing air pollution.

Remarks

Need to add  
in next  
decade  
to meet  
international  
missions on  
Organic  
farming  
for sustainable  
agricultural development.

Rearing of  
Crop variety suited  
better to new  
conditions such as  
and draught.

Remarks

Q13. Considering India's agro-climatic zones and the extent of smaller farms, analyze how far agricultural diversification can help in achieving food security, improving human nutrition and increasing rural employment. (15 Marks)

India is a diverse country with different weather and climate, leading to many agro-climatic zones based on temperature, rainfall and soil types. India also accounts for 85% of farmers who are small and marginal farmers.

Due to skewed governmental policies and overlen irrigation practices and unsatisfactory agricultural practices lead to stagnation of farmer income with little job creation. This leads to rural poverty and migration to cities.

Agricultural diversification is process of cultivation of multiple crops, mixed cropping and mixed agriculture with live stock rearing. This helps in multiple ways.

### Food Security

• Diversification of crops from rice, wheat to others

• Cereals, pulses and millets

• Horticulture with fruits, vegetables

• Reduces import of various other crops

• Self reliance in food crops

Remarks

- local procurement for ~~public~~ distributions

### human nutrition

- shifting away from rice and wheat to other coarse cereals
- more nutritious healthy like millet, jowar, ragi etc.
- reduce the non-communicable diseases like diabetes.
- improve immunity } explain
- more food choices for people.

### rural employment

- diversification, mixed cropping and intercropping helps in expansion of resources including human resources
- live stock rearing and dairy development supplements income and employment
- investment in rural infrastructure
- creation of mass assets for communes, milk collection
- improvement of mechanization and utilization of technology.

Remarks

With which  
more important  
of diversification  
① reduced  
② creation of  
jobs

Hence, recent initiatives like Organic Farming, GOKUL mission for Livestock management, KUSUM for solar energy generation are steps in right direction. Government should further help in agricultural division for doubling farmer income.

*Concluded well*

6.

Q14. The phrase "digital divide" refers to the unequal and disproportionate pace of development in societies in having access to digital infrastructure and services. Analyze the extent of incidence and prevalence of digital divide in India. List in measures taken to bridge this divide. (15 Marks)

~~defined~~

Digital divide is unequal distribution of digital

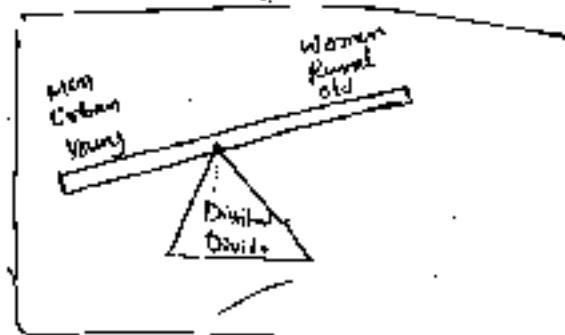
~~well~~  
~~disseminate~~

among the various factors like ~~dissemination~~,  
young-old, male-female etc as shown in ~~given~~ below

1. Digitalisation has become widespread in recent times where

World has become digital village

and data has become new oil



The advantages of digitisation:

- availability of various goods reduces the time
- reduces corruption and factor, paperless transactions
- improves quality of service
- accountability among the states to people's scrutiny
- new avenues of opportunities

Remarks

There are huge differences and variations in availability. These services are available to the young people (70%) of population but the number of digital, Internet users are less than certain people.

Gender, Female who belong to 50% population also show the adoption of technology due to low education and Traditional Practices in some regions.

Old age people and senior citizens are not coping with pace of development are lagging behind in the adoption of digital technology. India's aging population will soon increase. If elderly population and hence they must be educated digitally.

The digitally disadvantaged people must be educated and empowered to use digital services for economic growth. The digital India programme is a step in the right direction for entering in to new digital era.

Remarks

Other than weight of  
literacy and service  
affordability of  
digital service  
also an issue

Recent Initiatives

- Digital Saksharata Abhiyan to educate 6 crore people
- Swayam portal for tele-education online education
- Improvement infrastructure like BHARATNET for connecting rural Panchayati NPMN.
- National Knowledge Network (NKN) for connecting universities etc.
- Digital Scheme. Hence, digital divide must be filled to reap the benefits and make digital growth more inclusive.

(61)  
(62)

Remarks

Q15. Can India modernize its manufacturing economy and supply electricity to its growing population without relying heavily on coal and other related fossil fuel basket? Examine. (15 Marks)

Developing economies like India, Brazil depend much on manufacturing sector for economic growth and electricity supply is most. 65% of energy supply is from Coal power (Thermal power). 8% of energy is from oil and natural gas.

Thermal energy and oil/natural gas become necessary for rapid economic growth and providing electricity to its population.

#### Necessity of Thermal power / Fossil fuel

- availability of huge coal reserves for industry
- Cheap technology to generate thermal power
- growth of demand is increasing compared to supply
- long way of distribution
- less risk compared to nuclear energy
- assured power supply compared to Solar energy, Wind energy
- availability of technology and human resources

Remarks

Reported to the briefly discuss  
the problem due to over  
dependence on coal.

Challenges for non-conventional energy

- High production cost for Solar, wind energy
- less assured supply of Solar, wind power
- Productivity is less compared to thermal power

However, present changes has shown an

decreasing of production cost of wind, Solar energy.

The technology is also available with many countries.

For e.g. Denmark, Norway) regarding non-conventional energy.

Government also adopted many initiatives

International Solar Alliance; the reduction of

oil import by 10% in 10 years, National Mission on

Solar Energy to promote 20 GW of Solar energy, electronic

vehicle promotion (FAME).

Nevertheless, above initiatives also

implemented and continued; it may not replace the

therm. energy dependence in near future. Hence,

Remarks

for the short term dependence of thermal energy is  
temperature for economic growth and should be  
linked to other fuels gradually.

With  
INPC and  
IPCC and  
suggest the way  
ahead.



Remarks

Q16. About 85 percent operational holdings are small and marginal lacking access to capital, technology and market for growth. Also, there is a lack of mutually supportive agriculture-industry symbiotic linkages. In this context, examine prospects and challenges of Agro-Industrial sector. (15 Marks)

→ 85% of India's farmers are small, marginal farmers holding less than 1 hectare of land.

### Disadvantages of Small Holdings

- less productivity
- less adoption of technology and modern practices
- less access to Capital due to lack of collateral
- less incomes

→ prone to extreme weather events like droughts, floods

→ mechanisation adoption is slow

→ less chance of innovation and creative agricultural practices

→ less investment in improvement

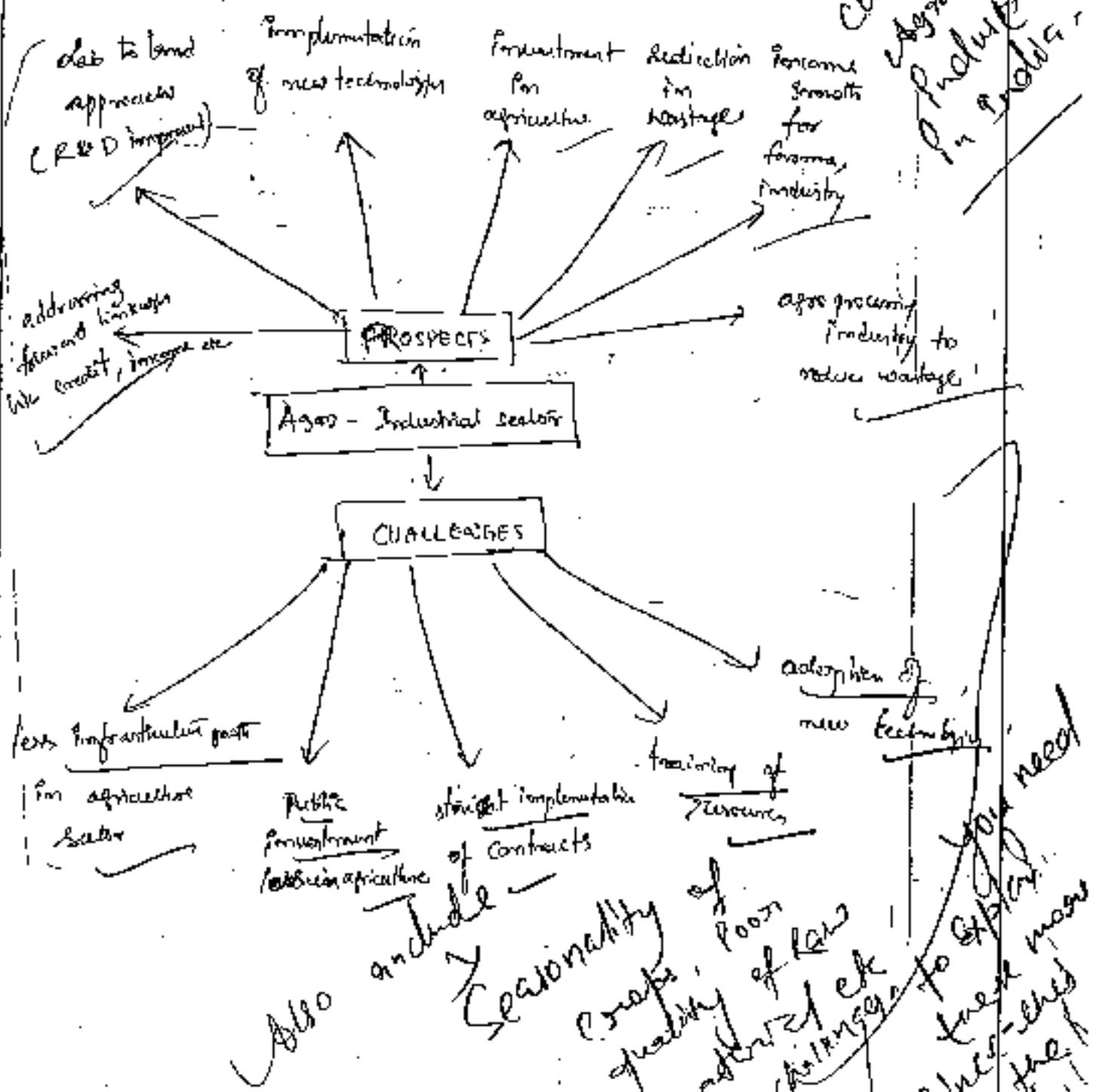
∴ Hence, Cooperative farming must be option for adopting new creative practices to increase in

Credit and Productivity

Remarks

Ago - Industrial sector is combination and interaction between agriculture and industrial sector to promote each other's development symbiotically.

Better linkage  
1st talk  
about  
current state  
of agri  
products  
in India



Remarks

a

W<sup>h</sup>at is I<sup>nt</sup>egrated C<sup>old</sup> chain?  
It is a system of production, processing, distribution and sale of food products.  
It is a system of integrated food chain.

Now, ~~poor~~ farmers, government and

industry will work collaboratively to increase

the productivity of small, marginal farmers.



Remarks

- Q17. Analyze the role of rural tourism in facilitating community development, poverty alleviation, boosting cultural heritage, and conservation. Also explain the steps taken by the government to augment this sector. (15 Marks)

Rural tourism is defined enhancing the tourism potential of rural areas where 70% of population live. India being land of several populations and villages with diverse cultures, language and topographies get suitable basis to rural tourism.

Rural tourism helps in Community development

- harmony among the people for tourism
- Interdependence on various communities for services like Kedarnath, Amarnath Yatra
- further helps in integration

Cultural heritage

- Show Case of diverse culture via food, language, dress, dance etc. (Dandiya in Gujarat, Melam in Kerala)
- Souvenirs for mementos and development of crafts
- Promotion of hospitality and
- Conservation and promotion of cultural heritage

Remarks

(Briefly illustrate)

Generation of new employment opportunities

Tourism, guides etc

Also about  
Tourism

Conservation  
Revival of  
Tradition

alternatives income to agriculture and help in  
redistribution of distress

arts, crafts  
and art However, there are some challenges

but lack of education and different language speaking like  
etc English etc

Lack of Infrastructure and Communication (links to  
North East India and tribal areas)

Lack of Quality of services

Concern, attack from some tourists and misbehaving with  
campers, tourists

lack of basic infrastructure like toilets in some areas etc  
Human resource

Remarks

Government Initiatives like Incredible India to promote tourism, AMROT for development ~~spiritual sites~~ <sup>infrastructure</sup>

~~One Day~~ <sup>One</sup> ~~Day~~ for spiritual sites, Heritage Circuits like Buddhist circuit, Ramayan circuit, Swach Bharat for Cleaning Cleanliness, Skill India for improving skills are steps

specifically about the right direction to realize the potential.

scheme, kindly elaborate this.

Elaborate further,

I have suggested the way ahead as well to cover it comprehensively.

— Swadhar Darshan, Prasad



51



52

Q18. Though China's one-child policy has been criticized as against human dignity and rights, it has improved and controlled the nation's population by a possible 400 million people. Can we also adopt a similar approach, although not so drastic and punitive? What are various options to control population in India at present? (15 Marks)

China's one child policy is a policy for

controlling the population growth and limit in the certain curable quantity. It is the official policy for one-child Communist China.

The advantages of similar policy in our country is

limit the population growth in certain limits

Benefit ten percent on resources which are limited

reduces the burden on government for service

Delivery like education health, infrastructure

leads to better planning of resources and resources

efficiency of resources

helps in communal harmony by reducing the prejudices about another community

This leads to less unemployment and more growth.

Remarks

### Challenges for this policy

- India is democratic and ~~and~~ liberty and freedom to individual is paramount
- India is enjoying demographic dividend
- Multi cultural, multi religious communities with diversity of customs, traditions
- It is only short term measure  
(China done away with one child policy)
- effects in long term in population growth  
(many European countries welcoming immigrants)
- Integration, ~~immigration~~ reduces in a diverse country like India.  
Hence, India cannot go with one child policy with practice measure. However, it can convince people, persuade to ~~with~~ small families. The new Prime minister address to make population control is welcome step.

Remarks

~~Can talk about successful implementation of family planning policy in India~~

## The options to Control population:

→ Incentives small families like alarm bell  
securities with more than 2 children to hold public office

→ well informed, conscious about disadvantages of large families  
will also advantage of small families

→ encourage the small family parents at least  
need about level books

→ high economic growth for poor people and  
long-term planning for population control.

∴ multi-pronged approach is needed to

Control Population.

61  
62

Remarks

- Q19. "Social capital can be described as a resource which focuses on social relations that have productive benefits". Discuss the role of social capital in determining the human development of a region. (15 Marks)

~~Direct~~ Social Capital is defined as the capital used

to harmonious social relations among the community

to provide peace, law and development among the people.

Social Capital is

The advantages of human development of region:-

- It leads to law and order, peace, harmony among the people
  - It improves trust among the people and helps in different situation like disasters.
  - Vigilant Citizenship and Community for Social audit among the Public Programmes and policies
  - accountability, transparency increases among the public officials to deliver services.
  - availability of public services like education, health, related skills for self and social development.
  - Environment, Economic development, Culture
- Remark: Contribution of Economic development etc

## Challenges to enhance Social Capital

Govt  
Wise  
Xmas  
Problems

weak relation, weak Cultural system in our country

Technology is forming the existing cleavages like

Casteism, Communalism, regionalism

Limited State Capacity ~~to serve the public domain~~

With  
negative  
Impact of  
Capital

ways of improving social capital

Social  
Issue

Improving the basic infrastructure facilities and

Public services like education, health, skill etc

Co.

Promoting harmony among the people during different

groups & festivals like Hindu temple in Muslim in Norway

to weaker sections through food distribution etc

Teaching of Great leaders like Gandhi, Ambedkar

Should be integrated with Value based education

Remarks

Hence, States should take all possible measures to enhance Social Capital to reap the benefit of demographic dividend.

Suggestions  
are good!



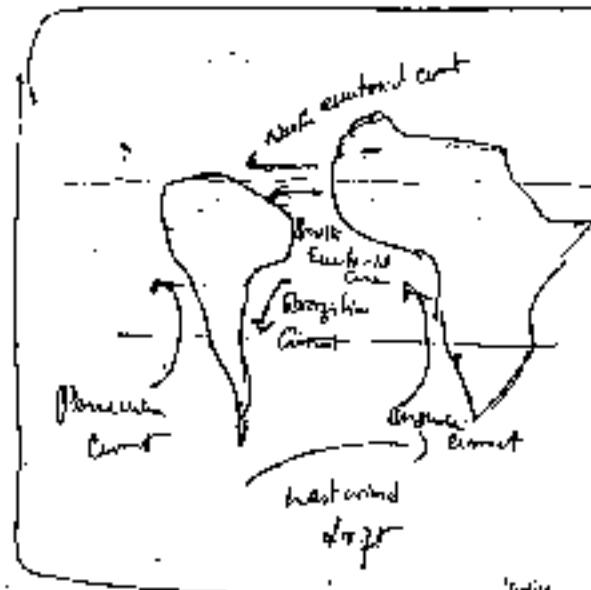
Q20. Oceanic currents play significant role in determining climate of a place. Elucidate with certain examples. How has global warming impacted Antarctic Circumpolar Current and how can it impact Antarctic icecaps? (15 Marks)

Oceanic currents are fast moving oceanic water that flow in definite direction with large volume of water and have definite character (cold, hot) salinity

Ex: North Equatorial current (warm)  
 Gulf stream (warm)  
 North Atlantic drift (warm) West wind drift (cold)

The effects of oceanic currents are

- Oceanic currents effect the temperature of place with warmer air (cold currents)
- It also affects the rainfall of region with cold current (less rainfall), warm current (high rainfall and clouds)
- Ocean currents promote desert like conditions in western parts of continents with cold currents.



Remarks

Ex: Premier current with Alabama drift,  
Benguela Current with Horns drift

→ They also help in ~~cross~~ change in climate  
condition like warming the front of western Europe  
in winters and help in navigation

→ Help in formation of fishery grounds with  
mixing of warm, cold currents  
Ex: Newfoundland and Japan East coast  
also global warming help in weather patterns like  
leading to heatwaves, cyclonic airfaul in tropics etc  
of the ocean

global warming is increase in earth's  
atmospheric temperature due to climate change.

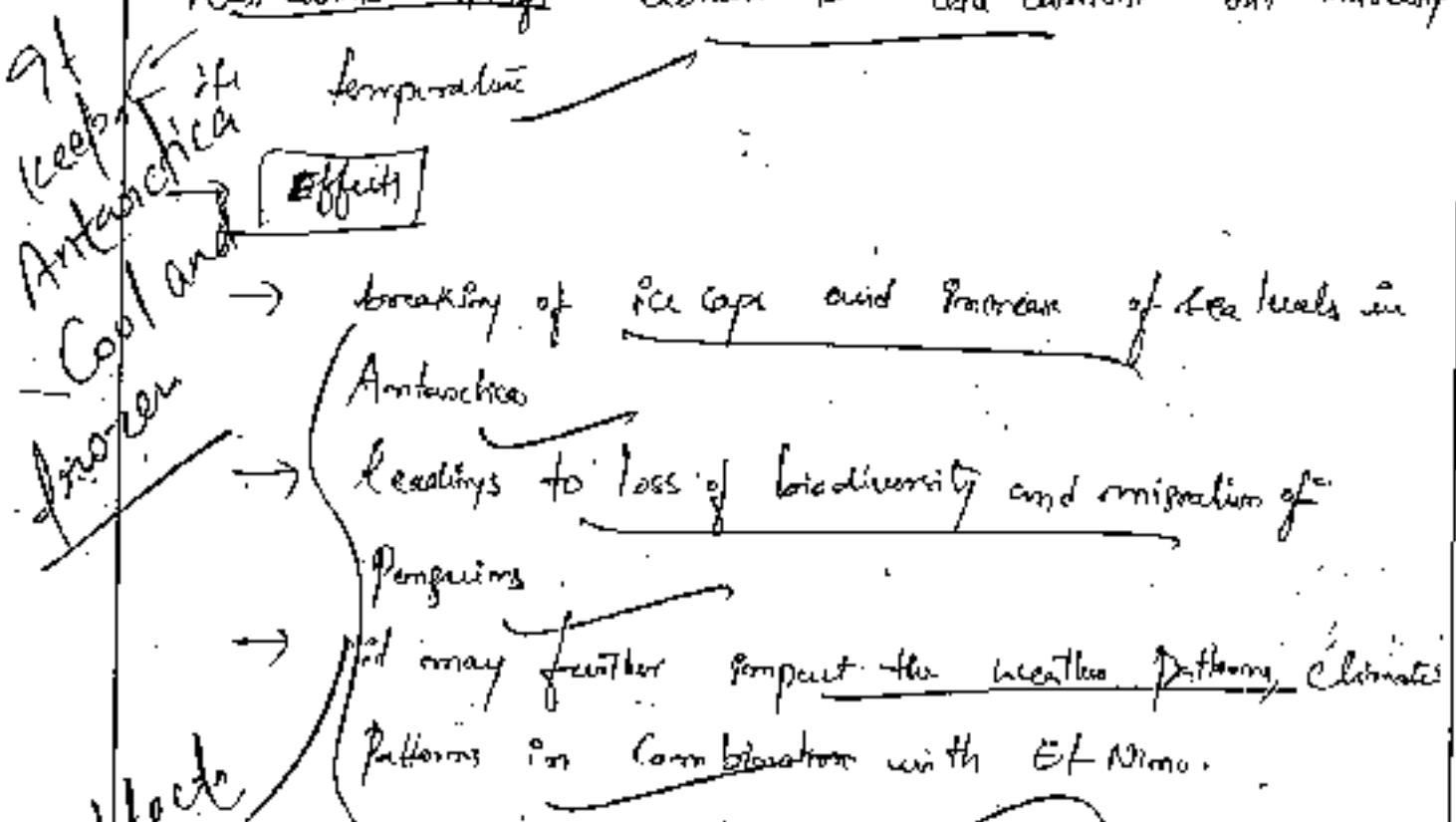
It is also impacting the ocean currents by changing  
the thermal character of current (warm, cold currents)

Remarks

fall about wind  
well drift  
dry desert  
+ impact

for example Global warming is affecting the

West wind drift which is Cold current but increasing



When you are  
by you good  
enough. Part of  
iso. fixation of  
acidification etc  
water.

Remarks