

# UPSC

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Answer Questions in NOT MORE THAN the Word Limit specified for each in the Parenthesis.  
( Specimen Answer Booklet - For Practice Purpose Only)

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Test - Cohort 14+ MGP [Text FL13GS3]

Roll no - 1910026966

Date - 2/8/23

**FORUM**



Q1) Investment in Infrastructure is a precursor to social & economic transformation, however the focus on economic gains must not marginalise the concerns for safety. Comment

Ans) Infrastructure development is one of the most important precursor to social & economic transformation as :-

1) For social Transformation

1) Need good schools, skilling centre to optimise demographic dividend ⇒ India has world's largest youth population

2) Setting up of hospitals, dispensaries, PHCs, medical colleges to have a healthy India  
to mother & baby

3) Proper nutrition through social Infrastructure of ANM, midwives ⇒ reduce maternal mortality + Infant mortality

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## II) For Economic Transformation

1) Ports, roads, railway expansion & modernisation to reduce logistic cost from present 14%

2) Urban Infrastructure: Smart cities can give boost to economy as cities hub of economic activities

3) Digitisation, Industry 4.0 ⇒ Need digital Infrastructure in place.

However, this rapid Infrastructure expansion should also take care of safety :-

1) Prevent loss of life → Train Accident in Balasore

2) Loss of property → collapse of bridge in mouzi Guyarat & Bhagalpur, Bihar

3) Poor Road Design leading to accidents  
Eg) Highest Road Deaths in India

Thus we need to ensure proper quality, design while undertaking Infrastructure expansion in schemes such as PM Gati Shakti [110 Lakh Crore]

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Q2) What do you understand from green growth? with special reference to Budget 23-24 discuss various government measures to propel green growth in the country?

Ans) Green growth refers to a method of calculation economic growth after which fosters sustainable use of environmental resources.

Measures Taken by Government for propel green growth

I) Budget 2023-24

1) Green Hydrogen Mission: Aims to generate green hydrogen as a source of clean energy

2) PM PRANAM → Initiative to boost use of alternative fertilisers

3) Crobaudhan Scheme: To setup waste to

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energy plants  $\Rightarrow$  Compressed biogas Plants to be setup

4) Green Credit Programme: Incentive eco-friendly measures taken by companies, individual & local bodies.

5) MISHTI  $\rightarrow$  Mangrove Plantation drive

6) Ameit Dharohar  $\rightarrow$  Conservation of wetlands

7) Bharatiya Prabeit Kheti - Bio Input Resource Centres

- $\rightarrow$  10,000 Bio Input Resource Centres to be setup
- $\rightarrow$  Facilitate 1 cr farmers to adopt natural farming.

II) Other Measures Taken by Government

8) Renewable Energy: India to have 500 GW of Renewable Energy by 2030 [PM Modi at COP 26 Summit]

9) Ethanol blending in petrol + E-vehicle Policy

Thus India by following green growth can become develop Nation by 2047 & also become Net zero emitter by 2070.

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Q3) Project cheetah marks a departure from India's effort for conservation of various critically endangered species. In this perspective do you think the reintroduction of major fauna that has gone extinct is justified?

Ans) cheetah got extinct in India due to excessive hunting / poaching during the British Raj. Project cheetah was introduced to ~~to~~ again revive the population of cheetahs in India.

Why Project cheetah marks departure?

- 1) Normally India doesn't allow introduction of alien species to revive population. In this case, cheetahs of Namibia introduced
- 2) Use of Technology such as collar for tracking cheetahs
- 3) Direct Introduction of alien species unto

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the wild life in Kuno National Park, M.P.

Is reintroduction of Extinct species  
justified ?

Yes

1) Helps to spread critically  
Endangered species  
across wider geography  
Reduces chances of mass  
extinction

2) Helps to restore balance  
of Ecosystem, disturbed  
due to extinction of  
species.

3) Helps to restore  
balance in food web

No

1) Can lead to spread  
of diseases with  
Introduction of alien  
species.

2) Alien species might  
not be able to adjust to  
new environment.  
Eg) Death of 8 cheetahs in  
Kuno National Park

3) Can rather disturb  
balance of local Ecosystem  
& food web.

Thus India has taken a bold step to  
reintroduce cheetahs, however steps needs to  
be taken that both they & local Ecosystem  
dont get adversely impacted.

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Q. In what ways can precision agriculture become a panacea for multipronged challenges plaguing the agriculture sector? Discuss. Also analyse various impediments in widespread adoption of precision farming in India?

Ans) Precision agriculture refers to use of technology which aims at maximising the agricultural productivity & by minimal use of agricultural inputs such as water, fertilisers etc by precise applications of such inputs or methodologies.

Precision Agriculture as Panacea to challenges faced by Agriculture

- 1) Water crisis: As per NITI Aayog's report by 2030, water demand will exceed water supply & Agriculture is highest user of water.
- 2) More Crop per Drop → Drop Irrigation can



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help to grow crops in semi arid & acid regions

3) High Input Cost → By precise use of fertiliser, farmers can grow more crops with lesser fertiliser quantity

→ reduce cost  
→ prevent fertiliser leaching

→ maintain soil health

4) Climate change → It can help farmers to combat climate change - Eg) Introducing precise gene to grow modified GM Crops

Challenges to adoption of Precision Agriculture

Solution

1) Lack of capital with farmers to invest in such technologies

→ PM Kishu Sanchayee Yojana

→ NABARD'S Agriculture development fund

2) Farmers using excess fertiliser

→ Nano fertiliser

→ Neem Coated Urea

3) Farmer using excessive water

→ Use of AI driven Irrigation system

→ Jal Shakti Abhyasan

Thus it can help to make Indian agriculture sustainable on line of National Mission for Sustainable Agriculture

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Q5) What are the reasons for increasing emphasis on the horticulture sector in recent years? Evaluate government measures for the development of horticulture sector.

Ans) Horticulture refers to growing of fruits, vegetables, spices, ornamental flowers, etc. ~~landscape~~

Reasons for Emphasis on Horticulture

1) Fetches better price than traditional crops for farmers  $\Rightarrow$  Help to double farmer's income

2) Diversification of Indian Agriculture  
 $\hookrightarrow$  Help to ~~diversify~~ diversify farmer income & hedge against failure of single crop.

3) Export  $\rightarrow$  Horticulture presents great export potential. Eg) Spices like pepper very popular in Europe

4) Agroclimate  $\rightarrow$  India's vast number of agroclimatic zones helps in growing

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various horticulture products. Thus Indian climate suitable Horticulture.

## 5) Rural Development

Horticulture products such as jute, cotton form backbone of rural economy, textile industry.



fig: Different climate supports different Horticulture crop.

## 6) Development of Hilly Areas

- 1) Bamboos in North East
- 2) Apples in Himachal, J&K
- 3) Tea & Coffee → Hilly areas of Karnataka, West Bengal

} Tool of Inclusive Development

### Steps Taken by Government

- 7) MIDH (Mission for Integrated Development of Horticulture)
- 8) National Bamboo Mission
- 9) Certification: To ensure quality of product. Helps to Increase Export.

Thus Investment in Agriculture can help to augment incomes of farmers.



Q6) Unplanned urbanization has made Indian cities vulnerable to fire safety hazards. Discuss and recommend measures for mitigating urban fires, with special reference to national building code 2016.

Ans) Recent events of fire outbreak such as that in Mukherjee Nagar, Delhi or Kamala Mills, Mumbai has again brought back public attention on fire hazard posed by unplanned urbanization.

How unplanned urbanization leads to fire Hazard

- 1) Unauthorised colonies, slums don't have fire are not fire compl <sup>compliant</sup> ~~compal~~ with fire safety standards.
- 2) No fire audits gets done by municipal bodies in illegal structure.

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- 3) Leads to lesser distance between buildings -  
So fire can spread quickly.
- 4) Use of ~~fire~~ cheap inflammable materials  
in buildings ~~is~~ such as flyash to reduce  
cost.
- 5) Makes it difficult for fire brigade  
department to augment their capacity.  
As no one knows true population of city -

## Measures to Mitigate fire hazard

- 1) Compliance with National Building Code 2016
    - ↳ Regular fire audits
    - ↳ Provision of fire exits / Emergency exit.
    - ↳ Installation of fire extinguishers, water spray, fire alarm in building
  - 2) Conduct mock drills in schools, colleges, offices.
  - 3) Teach public to use fire extinguishers.
  - 4) Augment Capacity of fire department.
- Further organised planned  
urbanisation helps to reduce fire hazard

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Q7) DPI (digital public Infrastructure) is indispensable for digitally enabling citizens & businesses, however the challenges of exclusion, exploitation & monopolisation can't be ignored. Examine.

Ans) DPI refers to use of digital medium for large public good, such as providing services to public digitally.

It is ~~indispensable~~ indispensable in enabling:-

I) Citizens

- 1) UPI: helps in quicker transfer of money.
- 2) Digilocker: Helps citizen to retrieve document immediately.
- 3) Co-WIN portal: Help Helped to delivered 2 Billion plus Covid vaccines
- 4) DIKSHA portal: To enable e-education
- 5) UMANG App: Provide more than 135 services to citizens online.
- 6) Ayushman Bharat Digital Mission

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## II) Businesses

- 7) ONCO : Online e-commerce portal on lines of UPI
- 8) Facilitate Taxation Regime : To ease tax filing
- 9) Aadhar ~~Base~~ Database -

## Challenges in adoption of DPI

- 1) Exclusion
    - ↳ Digital Divide
    - ↳ Digital Illiteracy
    - ↳ English as de facto language of Apps
  - 2) Exploitation
    - ↳ 1) UPI frauds
    - ↳ 2) Co-ommission from ABPS [Aadhar Based Payment System]
    - ↳ 3) Touts exploiting poor by telling them that a particular service can't be accessed online.
  - 3) Monopolisation
    - ↳ 1) Big Tech companies monopolising data.
    - ↳ 2) Duopoly in space of Internet Service Providers.
- Thus government has taken steps such as Bharatnet, PM-WANI, Digital Literacy mission to go for Inclusive DPIs



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Q8) Assess the relevance of the NISAR mission in observing & managing climate change & natural hazards.

NISAR mission is a combined mission by ISRO & NASA. It is as an <sup>radar</sup> ~~observatory~~ which will observe earth & ~~its climate~~

Relevance in observing & managing climate change :-

- 1) Observing
  - 1) Measure sea level rise
  - 2) Measure melting of glaciers & ice sheets
  - 3) Observe emissions from Industries
- 2) manage
  - 4) It can tell extent of oil spill which helps to manage it
  - 5) Manage strategy according to rise of sea level.
  - 6) Look into impact of climate change on agriculture



## Q II) ~~observing & measuring~~ <sup>managing</sup> Natural Hazard

observing

- 1) observe extent of forest fire
- 2) Track movement of cyclones
- 3) Help to track Typhoons & Tsunamis in the sea.

Manage

- 1) Post Earthquake, can tell where more debris exist. More chances of people being disapped
- 2) Maps urban areas, helps in better urban planning which is disaster resistent reselient.

thus NISAR will be the newest addition to the already existing constellation of satellite in space to track climate change & natural hazard.



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Q9) Defense Indigenization remains the Achilles Heel of India's security architecture. Examine the importance of startups in defense sector to make India secure & self-reliant.

Ans) PM has given a clarion call for Atmanirbhar Bharat & defense indigenization lies at the very heart of it. However, it remains achilles heels of India's security architecture as:-

- 1) Dependent on other countries: India imports 70% of its military equipments from Russia.
- 2) Global Geopolitics → USA imposing CARTSA sanction on Russia → Threatened S-400 deal with Russia.
- 3) War between Russia & Ukraine has led to delay delivery of equipments.

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- 3) other countries can ~~use~~ have kill switches in weapons exported to India -
- 4) Denial of weapons / Tech : USA denied India access to GPS for during Kargil war
- 5) India largest arms importer → More More than \$ 60 Billion
- 6) Lack of Integration : As India buys different equipment from different countries which might ~~not~~ often not be compatible.
- 7) Leads to poor reserves of ammunition

## Role of startups

- 1) Startups help to develop new age weapons such as Drone
- 2) Inhouse development of transport vehicles by Bharatforge
- 3) Cheer weapons will be cheaper
- 4) Less chances of corruption & Scandal
- 5) Saves foreign currency of India -

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Q10) Edge in modern warfare lies not so much in the capacity to overwhelm the adversary as much in the ability to nip the threat in the bud. In this context, discuss the role of Intelligence in maintaining national security and also cite challenges associated.

Ans) Intelligence in today's modern warfare forms to basis of any fight.

## Role of Intelligence in National Security

- 1) Prevent Terrorist attack → NIA conducted raids in Mumbai, Pune to bust terrorist cells.
- 2) Provides Information to preempt movement of Enemy → Eg) Intelligence agencies provided information about Pakistan soldiers climbing peaks in Kargil
- 3) Counter-Insurgency Ops → Can assist

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in counter attack ops. Eg) NITRO, providing  
Information of terrorist hideout to  
attack during Balakot Surgical strike

4) Eps Espionage Mission → Helps to collect  
Intelligence about Adversary. Eg) R&AW  
operates in other countries to collect info  
Intelligence.

## Challenges

1) Lack of precise Information → Regular  
intelligence update leads to callousness  
in agencies Eg) Intelligence about 26/11 type  
attack provided by Intelligence agency  
but not acted upon

2) Lack of trained manpower in tech,  
linguistics, culture with Intelligence  
agency

3) ~~Root~~ Lack of coordination amongst  
different agencies such as IB, R&AW, ~~to~~ Military  
Intelligence

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Q11) Labour & Export Intensive Industries are key to problems of jobless growth. In this perspective, analyse the opportunities & challenges associated with the textile sector.

Ans) India is suffering from the problem of jobless growth especially after Covid-19 Pandemic.

In this regard, labour & Export Intensive Industries such as textile are important they as they help in employment generation as well as higher leads to higher economic growth due to increased exports. In this regard:-

Opportunities with Textile Sector

- 1) 2<sup>nd</sup> largest employer after agriculture
- 2) India is already one of the largest

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Textile exporters.

3) India has abundance of raw material :-

→ 1) Largest Jute producer

→ 2) 2<sup>nd</sup> Largest Cotton producer

→ 3) Has all types of silk {

Muga

Eri

Mulberry

Tussar

→ 4) India has already famous high quality

export garments like → 1) Pashmina shawl of J&K

→ 2) Muslin of Bengal

→ 3) Banarasi Sarees

## Challenges

5) India mainly produces natural fibers  
garment, whereas in global market  
polyester / synthetic garments more popular

6) Present policy doesn't focus much on  
men made fibres

7) Excess strong competition from other  
countries such as Vietnam, Bangladesh

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- 8) Indian Textile subjected to higher Import tariffs from developed countries of EU as compared to Bangladesh as it doesn't have Least Developed status.
- 9) Lack of capital & access to latest technology by local garment manufacturers.
- 10) Good quality raw material such as cotton gets exported & only inferior or average quality left behind to manufacture Textile.

## Steps Taken by the Government

- ii) National Technical Textile Mission.
- 12) Power Tex → To provide powerloom to weavers
- 13) Skillig missions for weavers under Skill India mission.
- 14) PLI for Textile sector.

Thus textile sector can help to achieve dual objective of employment generation & economic growth.



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Q12  
Q12

In an era of <sup>Inter connected</sup> ~~interconnected~~ <sup>challenges,</sup> ~~polycrisis~~, the emerging global polycrisis poses significant implications for India's macro-economic stability. Examine & suggest measures to make the Indian economy more resilient to global shakes & challenges.

Global Polycrisis refers to the creation of a bigger crisis because of combination of multiple smaller crisis coming together.

Global Polycrisis poses challenge to India's macro-economic stability as :-

- 1) Interconnected world : Due to globalisation India is part of a single geo-economic unit
- 2) Russia - Ukraine war → Has impacted



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the entire world & India is no different.  
It has led to increase in price of wheat  
especially after end of Black Sea Grain Deal

3) Covid 19: what began in wuhan, china  
spread to the entire world. leading to  
global lockdowns, recession & negative growth

4) Disruption in global supply chain especially  
in semi-conductors post pandemic impacting  
automobile sector in India

5) Adversarial china: Weaponisation of  
supply chain. Eg) china restricting export  
of germanium to Netherlands.

6) Weaponisation of finance → USA banning  
Russia from SWIFT. So few countries

can sanction any country as per will.  
Eg) Impacting Indo-Russia Trade

7) Recession: In germany & other countries

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reduces exports of India.

8) US FED raising Interest rate leading to flight of FPI capital from India. Thus leading to weakening of Rupee & reduction in foreign Investment

## Measures

- 9) Internationalisation of Rupees
- 10) Creation of Alternative of SWIFT, such as a BRICS led finance system
- 11) India came up with list of critical minerals, signing of MOUs with Lithium Triangle countries
- 12) Deepening of bond market & finance sector to absorb shocks such as GFC of 2008
- 13) Resilient Supply chain Initiative

Further, becoming Atmanirbhar in critical & strategic sectors can help India to mitigate shock arising out of global polycrisis.

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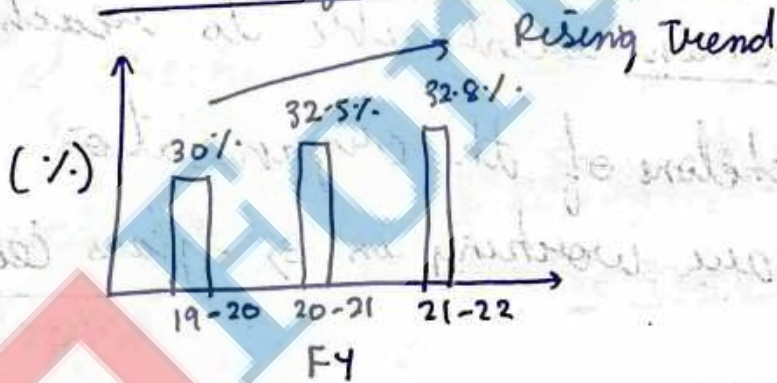
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Q13) Do you think the low female labour force participation rate presents a correct picture about the "working women" in India's economy? Give reasons in support of your answers?

Ans) As per the latest PLFS (Periodic Labour Force Survey) by MOSPI female labour force participation (FLFPR) stands at 32.8%.

Trend of Female LFPR



However, still ~~at~~ at 32.8% labour force participation remains low for female.

This is mainly because of:-

1) Domestication of women → women are

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confined to households

2) Education → Women have lower enrollment ratio <sup>in</sup> higher education than men

3) Early age of marriage for women compared to men.

4) Lack of employable skill

5) Women voluntarily stay unemployed & wait for better job

However, low FLFPR doesn't show the correct picture of working women:-

1) Working women aren't able to reach the top echelons of the organisation that they are working in ⇒ glass ceiling

2) Gender wage gap → Women as per ILO's report earn 34% less wage than their male counterparts.

3) Disproportionate representation



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in informal sector & as agricultural labourer.

4) Women hired by many businesses as they aren't as demanding as their male counterparts for better salary, working conditions ⇒ This work is poor working condition.

5) Inadequate compliance with laws mandated for women at workplace such as presence of crèche, maternity leave.

6) Sexual Harassment at workplace as also exposed by # me too movement.

This female labour force participation provide quantitative picture but not the qualitative picture of working women in India.

Q16) Across sectors & regions, the most marginalised sections are also the most affected by the impacts of climate change, explain. Also, present a case for a climate resilient model of development that integrates mitigation & adaptation measures.

Ans) Climate change refers to change of functioning of climatic patterns at a global scale. It disproportionately impacts the most marginalised :-

I) Impact of climate change on Marginalised across sectors :-

I) Agriculture

↳ i) Marginalised & small farmers are disproportionately impacted from climate change as no access to irrigation facility, low surplus or other sources of income

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↳ 2) More prone to vagaries of nature like  
Drought, flooding

II) Manufacturing

↳ Daily wage labourers will work in tougher  
working condition such as in heat waves in  
Summer or blizzards in winter

Impact across Region on Marginalised due to  
climate change

4) Small Island Developing states most  
vulnerable. Eg) Tuvalu, Marshall Islands  
will submerge due to rise in sea levels

5) People living in hilly areas more susceptible  
Eg) Flooding impacted Himachal Pradesh the most

6) Poor & underdeveloped countries don't  
have resources, technology & capital to  
mitigate & adapt to climate change



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## Climate Resilient Model of Development

It can help to mitigate & adapt to climate change by :-

- 7) Developing disaster resilient Infrastructure through initiative such as Coalition for Disaster Resilient Infrastructure (CDRI)
- 8) Renewable Energy : To make Earth net zero emitter along with adapt to for use of non fossil fuel sources of energy.
- 9) E-vehicles : Schemes such as FAME-II to reduce vehicular pollution
- 10) Afforestation & Green cities will help to minimise flooding & also keep earth cooler

Thus we need to make have a climate resilient development model paired with principle of Reuse, Recycle & Reduce to combat climate change.

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Q15) Despite the potential to check the triple whammy of nutritional deficiency, environmental degradation, and decreasing farm incomes, the adoption of millets has been abysmally low. Analyze.

Ans) Millets have been given title of Shree-Anno in Budget of 2023-24 & ~~the~~ UN has also declared 2023 as "International Year of Millets".

It can solve triple whammy of :-

- 1) Nutritional Deficiency : As it is rich in micro nutrients, are easy to digest, can also grow in arid & semi arid areas where other sources of nutrition do not exist.
- 2) Environmental Degradation → They use less water and can be used to stop desertification of arid areas.

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3) Receding farmer's Income: By making crops more resilient to droughts & climate change

However, still adoption of millets has been poor because:-

- 1) Lack of Awareness amongst farmers about its benefit
- 2) Low consumer demand, as people prefer wheat or millets such as  bajra, maize etc.
- 3) Lack of focus of government on millets
- 4) Higher MSP for other crops, have led to farmers shifting from millets to other crops.

5) Millets fetch less price in market than other crops especially cash crops. Eg)

A water guzzling crop [Sugarcane] is grown in Maharashtra (a drought prone area) of Maharashtra instead of millets.

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- 6) Lesser Export potential of millets.
- 7) Shifting dietary pattern of public: Millets forming lesser percentage of diet especially in urban areas.
- 8) Introduction of food from other countries such as Pizza & Pasta from Italy, Thai food etc doesn't use millets.

steps Taken by Government to Encourage Millets

- 1) Hosting multiple Millet festivals across country
- 2) Giving Incentive to farmers to grow millet
- 3) Millets included in POSHAN Abhayan
- 4) Millets part of National food security Mission
- 5) Increased MSP for millets.

Thus by uncreasing adoption of millets we can benefit from these superfood & nutri cereal & stake the people whammy.

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Q16) A link between unorganized farming community & formal industrial sector, food processing industry can play a key role in advancing rural economy. Evaluate.

Ans)

46% of India's workforce is involved in agriculture, however it contributes 17% to India's GDP. This is due to its unorganised nature.

Here linkage between unorganised farming community & industrial & food processing sector can play a key role for advancement of rural economy :-

1) Indus 1) generation of farm to fork supply chain :- It will remove middle men and reduce logistic cost

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- 2) Assured Govt Customer for farmers: By entering into contract with FPI & Industries, farmers assured of customer. Eg) Farmers growing Potatoes for Lays.
- 3) Employment Generation → Can give rise to a robust transportation & logistics sector in rural areas to transport agri produce.
- 4) Organisation of Agriculture: FPOC farmer producer organisation, cooperatives can help to formalise the agriculture sector.
- 5) Value Addition: FPI can add value to the agricultural produce, thereby giving a fillip to rural economy. Eg) Selling lemon pickle instead of lemon, etc.

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6) Break Monopoly of APMCs, by providing farmers alternatives for selling their produce.  
↳ Help to break Cartelisation happening at APMCs

7) Introduction of Technology : Industries will introduce latest technologies such as AI based irrigation system or drone based pesticide spray. Will help to increase efficiency -

Steps taken by Government

→ 1) Setting up of Mega food Parks

+ 2) PM SAMPADA Yojana

→ 3) Model Contract Act by NITI Aayog

This <sup>farm</sup> law introduced by government earlier should be reintroduced after wide stakeholder discussion to setup linkages between Industry, FPI & the farmers.

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Q17) A multi sectoral & multi-tiered process, Disaster Risk Reduction is beset with a plethora of constraints. Identifying these constraints, recommend measures for building a robust DRR strategy.

Disaster Risk Reduction is a strategy which aims at reducing the impact on life & property caused by a disaster.

It is a multisectoral process:-

- 1) Building of Disaster Resilient Infrastructure
- 2) Proper risk mapping of an area to find the vulnerability of an area to disasters.
- 3) ~~Use~~ Making agriculture disaster resilient by use of technology <sup>such</sup> as drrip irrigation, growing sturdy crops, which are less dependent on vagaries of nature.



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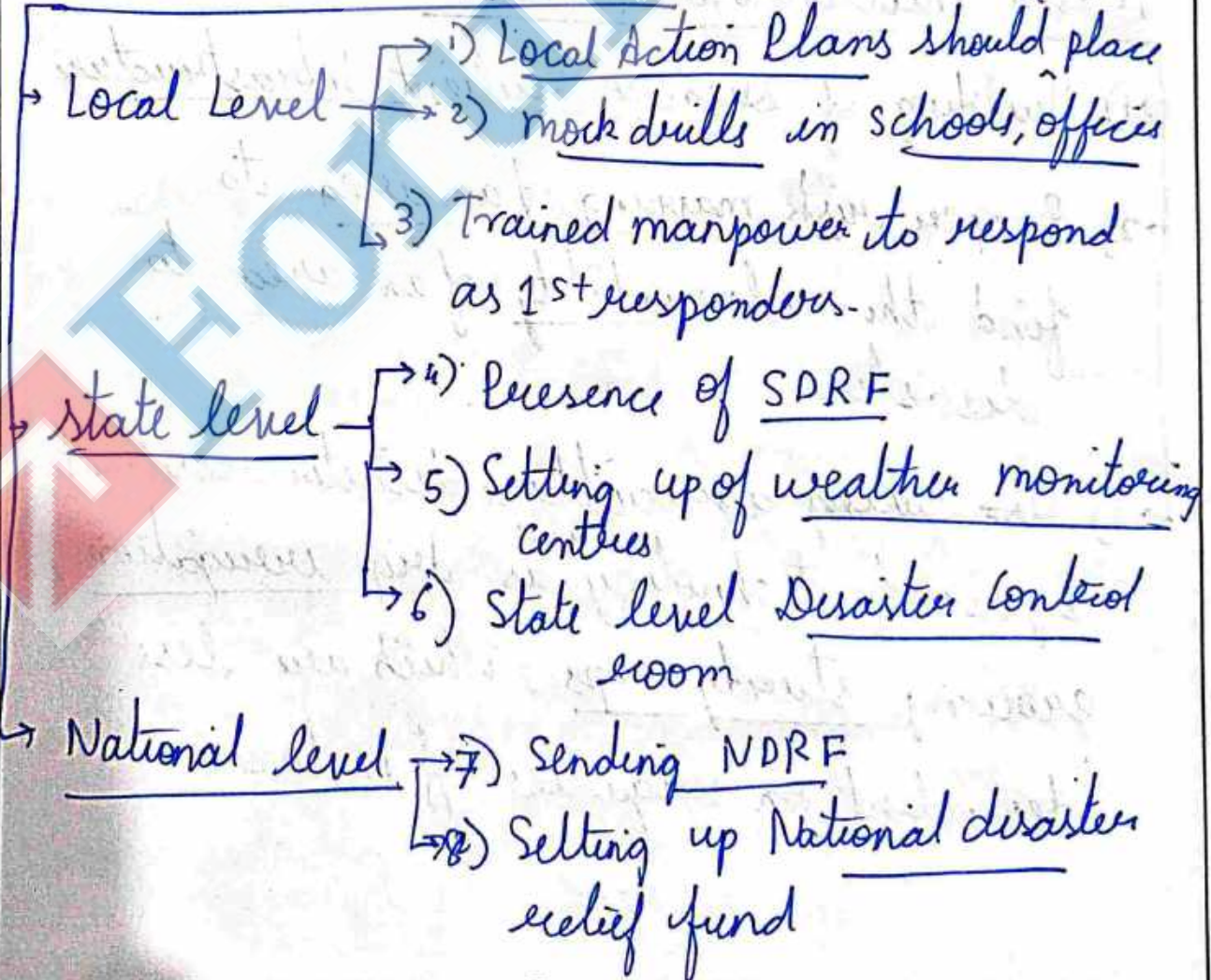
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- 4) Disaster proofing of critical Infrastructures such as powerlines, gaslines, waterpipe lines, hospitals etc.
- 5) Better forecasting of disasters & extreme weather conditions. Eg) Satellite Tracking of cyclone Biparjy prevented many deaths.

DRR is a multi tier process



- ↳ International level →
- 9) Coalition for disaster Resilient Infrastructure
  - 10) Build Back better Initiative
  - 11) India's 1<sup>st</sup> responder when Earthquake hit Turkey  
[Operation Dost]

~~Consts~~

### Constraints In DRR

- 1) Lack of funds
- 2) Poor awareness in public
- 3) Lack of government Initiative
- 4) Climate change making disasters more extreme & frequent
- 5) Rise of Human Induced disasters. Eg) Blast in Beirut due to mishandling of Ammonium Nitrate

### Measures

- 1) Increasing funding with help of International bodies.
- 2) Updation of Sendai framework. Since it was drafted in 2015
- 3) Use of Doppler radars, AI, machine learning, satellite imagery [NISAR Radar] to better track climate change induced disaster.

Thus a strong DRR strategy can save & protect both loss of life & property.

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Q18)

What do you understand by generative AI? How can policymakers & regulatory bodies effectively address the concerns & challenges posed by generative AI?

Generative AI refers to AI system that generates images, videos, audio, text etc. Eg) ChatGPT, Google's Bard.

Here input by user is generated by ~~us~~ using advance machine learning tools & deep neural networks by the AI system.

Concerns & challenges posed by generative AI

- 1) Unemployment: Can lead to job loss especially in white collar category.  
Eg) ChatGPT can write articles for magazines & newspapers

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2) Cheating: Students can cheat their exams & plagiarise their homeworks using ~~genero~~ generative AI.

3) Fake / Misinformation: AI can generate false information based on the data it has been fed.

4) AI Bias: AI can have bias based on the basis of data. Eg) when asked to generate photo of criminals, AI generating photos of Blacks ⇒ Racial Discrimination in AI

Ways Policymakers & Regulatory body can address concerns of posed by generative AI

1) Use of large amount of data to train AI model

2) Training AI engineers to remove inbuilt bias in their algorithms

3) Training & skilling youth to make

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- them relevant in job market -
- 4) Regulatory body at global level needed to regulate development of AI.
  - 5) Coordination with Bigtech to ensure AI doesn't go out of hand. To avoid risk of AI takeover Doomsday scenario.
  - 6) Using watermark to identify whether any article generated by AI. Help to differentiate human & AI generated text.
  - 7) Use of technology to identify deep fakes & generated using AI.

Further ~~make~~ collaboration between Industry, Academia, Government & public at large to make regulatory framework for AI.

Q. 19) Though ethnic fault lines are a major threat, security challenges in North East are not confined to the same. Discuss the statement with special reference to Manipur.

Ans) Recent clash between Kukis & Meteis in Manipur has brought forth the issues of ethnic fault lines as <sup>one of the</sup> security challenge in the North East along with other issues.

Ethnic fault line as an issue

- 1) clash between Assam & Mizos over state boundary dispute [ In Manipur Police divided along Ethnic lines. ]
- 2) Unrest in Assam, due to influx of Bangladesh illegal Bengali immigrants from Bengal.  
Gave birth to many Insurgent groups.
- 3) Ethnic clash between Nagas & Assamese & multiple Naga subgroups.

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However, there are other reasons as well which pose security challenge in the North East :-

- 4) Porous Immigration → Meiteis accuse kukis of sheltering large number of their immigrants from Myanmar ⇒ change in Demographics
- 5) Porous Border between India & Myanmar and misuse of free movement regime leads to cross border movement of insurgent groups.
- 6) Topography of North East → In Manipur, Meitei inhabit Imphal Valley (suitable for agriculture) & kukis & Nagas (inhabit hilly areas). Thus fight over scarce land, suitable for agriculturists.

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- 7) China factor : Ex - Army chief General Naravane said recently, that China is involved in providing ammunition in Manipur.
- 8) Arms Culture : North East in general has arms culture which leads to security issues.
- 9) Cross border Insurgent groups such as ULFA, NSCN (K) operate from Myanmar.
- 10) Lack of Development & scarce developmental opportunities lead to higher contention between different ethnic groups.
- 11) Narco terrorism : North East close to golden triangle. Hence flush with drugs.

Thus we need a holistic approach to look after the multifaceted security challenges present in North East.



Q20) Critically examine the role of development Initiatives in addressing the root causes of militancy / terrorism in Jammu & Kashmir.

Jammu & Kashmir is suffering from militancy & terrorism from 1989 due to crossborder state sponsored terrorist activities by Pakistan.

Role of Development to address militancy

- 1) Employment: It will divert energy of youth in right direction. Eg) Youth pelting stones for money, as no job so no source of income.
- 2) Terrorism: Helps in employment generation in Jammu & Kashmir
- 3) Industries: Setting up of Industries can

lead to employment generation.

- 4) Will to fulfill aspiration of people, thereby reducing any resentment.
- 5) Pakistan exploits <sup>feeling of</sup> underdevelopment to tell public that India ~~does~~ wants Kashmir but not Kashmiri  $\Rightarrow$  Development will help to fight Pakistan's propaganda.
- 6) Cinema Hall: Inox Cinema opened ~~be~~ after 30 years will create source of entertainment for public.

However, lack of development isn't the root cause of militancy as:-

- 1) Jammu & Kashmir is more developed + richer than many Indian states such as UP, Bihar where there is no insurgency.
- 2) Less Poverty in Kashmir
- 3) Pakistan's propaganda & sponsorship

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to terrorist activities in Kashmir.

Eg) Pulwama Bomb Blast on CRPF Convoy

4) Radicalisation of Jammu & Kashmir's  
society ⇒ Spread of <sup>Radical</sup> Islamist Ideology

5) Glorification of Gun Culture pushes  
youth to take up guns.

6) Local Politicians & Hurriyat misguiding  
youth for personal gains.

7) Communal Unrest in rest of country,  
also leads to Insecurity in the minds  
of Kashmiris.

8) His corruption in local & state government

Thus with abrogation of Article 370,  
along with Inclusive development &  
Elimination of terrorist, India can maintain  
peace in Jammu & Kashmir.