

# NEXT IAS

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(To be filled by candidate)

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Roll No. : P T T P 2 2 0 4 8 7

Registration Number : ..... Date of Examination : 13/08/23

Exam Centre : Old Rajinder Nagar  Bhopal  Online

Test - 7

Code : TC077

## MTS IGP Batch 2023

### GENERAL INSTRUCTIONS

This Question-cum Answer (QCA) Booklet contains 56 pages. Immediately on receipt of the booklet, please check that this QCA booklet does not have any misprint or torn or missing pages or items, etc. If so, get it replaced by a fresh QCA booklet.

Candidates must read the instructions on this page and the following pages carefully before attempting the paper.

Candidates should attempt the questions strictly in accordance with the instructions specified in the question paper and in the space prescribed under each question in the booklet. Any answer written outside the space allotted may not be given credit.

Question paper will be provided separately and can be taken by the candidates after conclusion of the exam.

SUBJECT/PAPER  
GENERAL STUDIES

Invigilator's Sign. : .....

[To be filled by the STUDENT]

Student's Queries for the Evaluator (if any write them below)

Handwriting practice area for student queries, featuring a solid top line and four dashed midlines.

[To be filled by the EXAMINER]

Evaluator's response

Handwriting practice area for evaluator's response, featuring a solid top line and four dashed midlines. A large blue watermark with the text 'NIT NEXT IAS' is overlaid on the page.

(For filling by Examiners only)

Evaluator Code :

Q.No	Pg No.	Maximum Marks	Marks	Total
1	1			
2	3			
3	5			
4	7			
5	9			
6	11			
7	13			
8	15			
9	17			
10	19			
11	21			
12	24			
13	27			
14	30			
15	33			
16	36			
17	39			
18	42			
19	45			
20	48			
Grand Total				

Signature

MACRO COMMENTS





## IMPORTANT INSTRUCTIONS

CANDIDATES SHOULD READ THE UNDERMENTIONED INSTRUCTIONS CAREFULLY. VIOLATION OF ANY OF THE INSTRUCTIONS MAY LEAD TO PENALTY.

### DONT'S

1. Do not write your name or registration no. anywhere inside this Question-cum-Answer Booklet.
2. Do not write anything other than the actual answers to the questions anywhere inside your QCA Booklet.
3. Do not tear off any leaves from your QCA Booklet, if you find any page missing do not fail to notify the supervisor/invigilator.
4. Do not leave behind your QCA Booklet on your table unattended, it should be handed over to the invigilator after conclusion of the exam.

### DO'S

1. Read the Instructions on the cover page and strictly follow them.
2. Write your registration number and other particulars, in the space provided on the cover of QCA Booklet.
3. Write legibly and neatly. Do not write in bad/illegible handwritings.
4. For rough notes or calculation, the last two blank pages of this booklet should be used. The rough notes should be crossed through afterwards.
5. If you wish to cancel any work, draw your pen through it or write "Cancelled" across it, otherwise it may be evaluated.
6. Handover your QCA Booklet personally to the invigilator before leaving the examination hall.

1. भुगतान संतुलन (बीओपी) के घटकों के रूप में पूँजी खाते और चालू खाते के बीच अंतर का सविस्तर वर्णन कीजिए। भारत के बीओपी घाटे को संतुलित करने के लिए कुछ उपाय सुझाएँ। (150 शब्दों में उत्तर दीजिए) 10 अंक  
 Elaborate on the difference between Capital Account and Current Account as components of Balance of Payment (BOP). Suggest a few measures to balance the BOP deficit of India.  
 (Answer in 150 words) 10 Marks

BALANCE of PAYMENT refers to Balance of INWARD trade of IMPORTS with OUTWARD trade of EXPORTS which showcases direction of trade.

ex: INDIA has -ve BOP with HIGH IMPORTS.

**CAPITAL ACCOUNT**

- refers to FLOW of Funds for long term
- LESS VOLATILE & CURRENT ACCOUNT.
- help in enhancing GDP.
- ex: FDI is CAPITAL account.

**CURRENT ACCOUNT**

- it INCLUDES trade of goods & SERVICES, intangible
- ex: SOFTWARE export
- more VOLATILE.
- role in meeting Current needs and REVENUE expenditure.
- ex: short term FII in current account

INDIA has BOP deficit as it has HIGH Current account deficit  
 ex: INDIA-China BOP deficit is 100 billion \$.

1. ONE time rupee depreciation for EXPORT enhancement [Partho mukhopadhyay] Committee.

2. EXPORT driven model  
 ex: SEZ remodelled as DESH bill.

MEASURES for BOP deficit coverage

3. Technology exports  
 ex: INDIA 2nd in mobile MF6.

4. MAKE and ASSEMBLE in INDIA scheme. (ES 2019)

5. Reduce INVERTED duty STRUCTURE for Production

6. PLI scheme continuation & enhanced support ex: Foxconn closed Semiconductor deal.

7. SKILLING in Technology ex: AI models in schools.

8. FTA agreements with Countries

Hence, Multipronged approach is necessary, for \$ Trillion \$ Economy.



2. लॉजिस्टिक्स (रसद) क्षेत्र, विनिर्माण उद्योग के विकास के महत्वपूर्ण घटकों में से एक है। चर्चा कीजिए। साथ ही, हाल ही में घोषित राष्ट्रीय लॉजिस्टिक्स नीति, 2022 के विभिन्न घटकों का भी उल्लेख कीजिए।

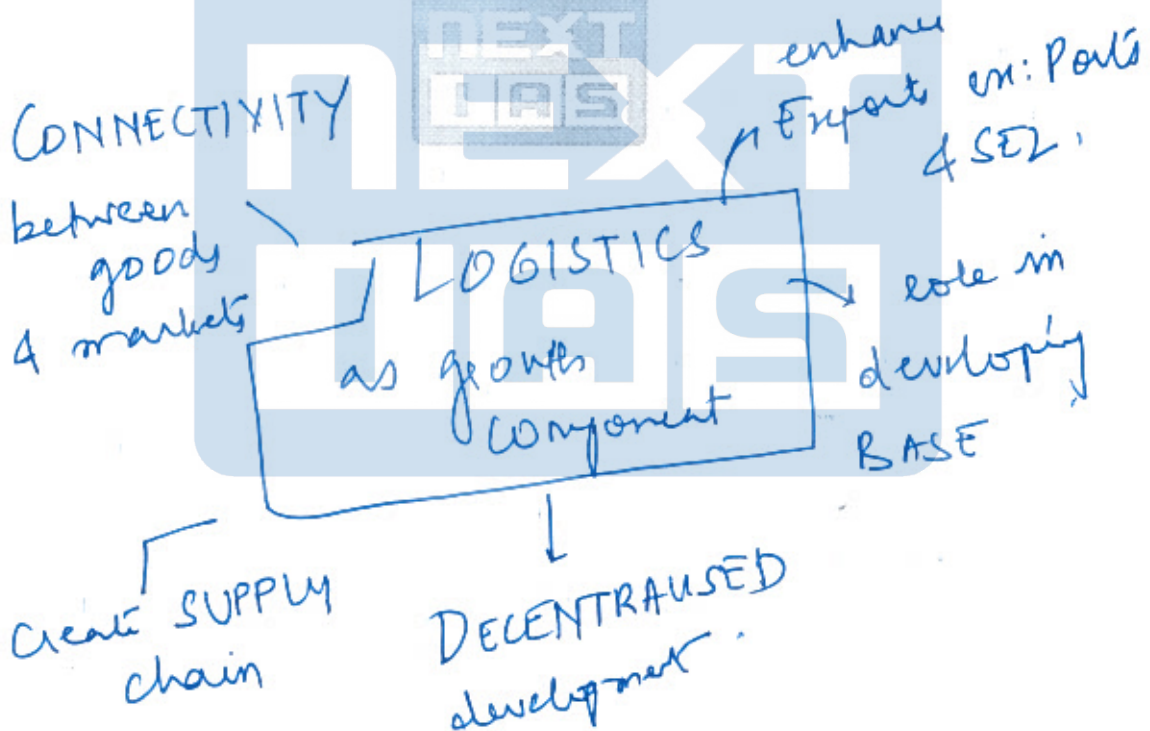
(150 शब्दों में उत्तर दीजिए) 10 अंक

The logistics sector is one of the important components of the growth of the manufacturing industry. Discuss. Also, mention various components of the recently announced National Logistics Policy 2022.

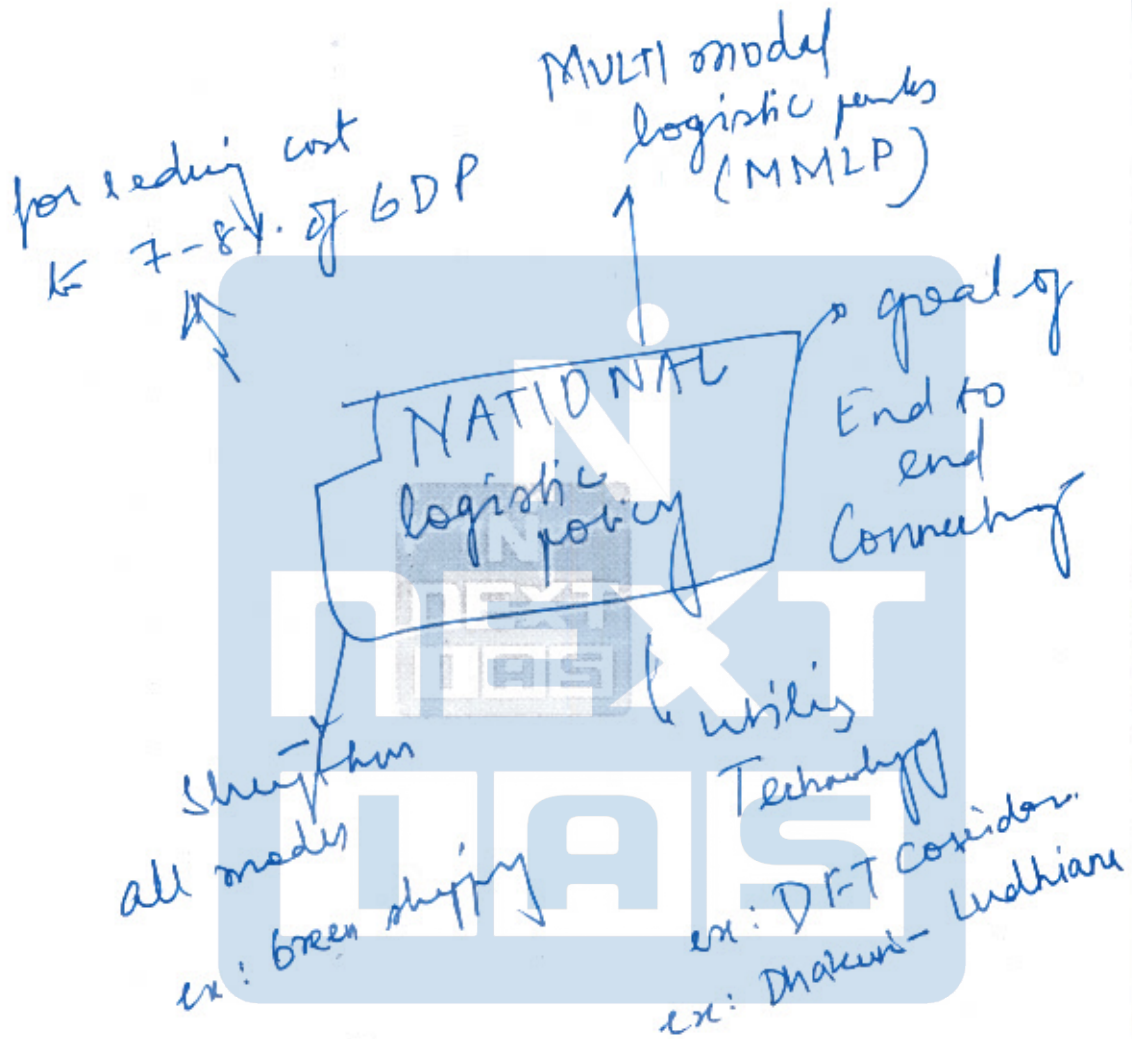
(Answer in 150 words) 10 Marks

LOGISTICS refer to transport, storage.  
value chain from end to end in  
production cycle

ex: 14-15% cost of GDP in  
LOGISTICS.







hence LOGISTICS as multiplicity force must be AUGMENTED for INDIA to rise as MANUFACTURING powerhouse.

3. डब्ल्यूटीओ के तहत मत्स्य पालन सब्सिडी पर नए समझौते पर भारत का क्या रुख है? भारत के लिए मत्स्यपालन क्षेत्र किस प्रकार महत्वपूर्ण है? इस क्षेत्र के विकास के लिए सरकार द्वारा उठाए गए कदमों का उल्लेख कीजिए।

(150 शब्दों में उत्तर दीजिए) 10 अंक

What is India's stand on the New Agreement on Fisheries Subsidies under WTO? How is the Fisheries sector significant for India? Enumerate the steps taken by the Government to develop this sector.

(Answer in 150 words) 10 Marks

New agreement on FISHERIES subsidies in WTO seeks to end SUBSIDY as a way to END 16 INTERNATIONAL unregulated IUU fishing<sup>2)</sup>

**INDIA'S STAND**

- Against DEVELOPING Country interest
- Creates WESTERN protectionism
- IMPACT livelihood of SIDS.

Largest AQUACULTURE end in INLAND aquaculture.

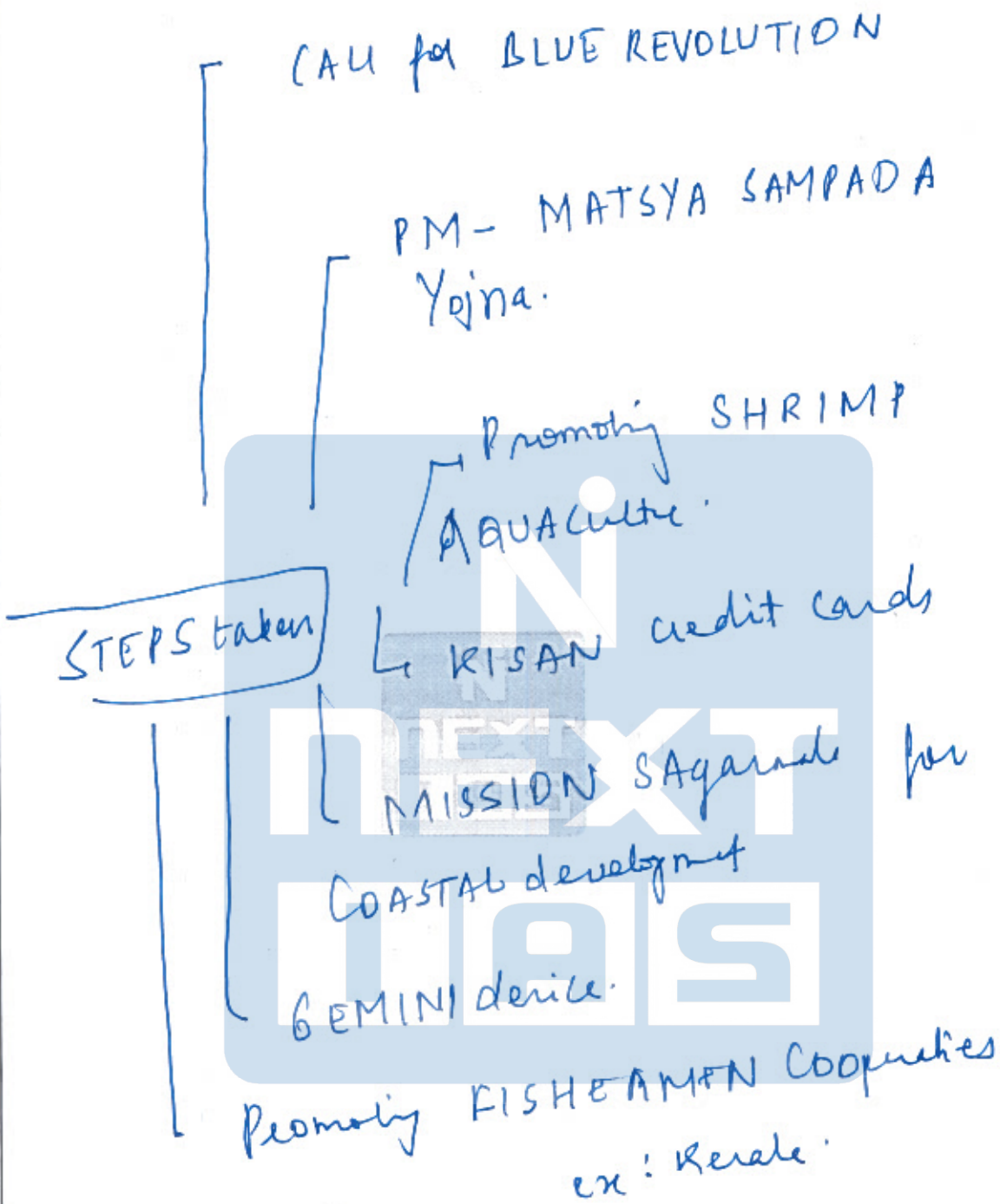
**FISHERIES SECTOR significance**

Livelihood for women fisherwomen

7500 km COAST & 30% COASTAL livelihood INCOME

Largest SHRIMP exports

PROTEIN diet



there is need for SKILLING, Mixed AQUACULTURE (kuttanad model) and Enhanced Budget for "NEEL kumbh"



4. उन प्रणालीगत और संस्थागत बाधाओं का विश्लेषण कीजिए जो भारत में भूमि सुधार प्रयासों में बाधा बनी हुई हैं और भूमि के न्यायसंगत वितरण को सुनिश्चित करने के लिए व्यावहारिक समाधान प्रस्तावित कीजिए।

(150 शब्दों में उत्तर दीजिए) 10 अंक

Analyze the systemic and institutional constraints that continue to hinder land reform efforts in India and propose pragmatic solutions to ensure equitable distribution of land.

(Answer in 150 words) 10 Marks

Land reforms are steps for changing LAND holding, titling, ceiling in line with 38(b) & (c) of CONSTITUTION  
ex: ZAMINDARI abolition

ISSUES

- └ PRESUMPTIVE titling
- └ Archaic Records
- └ Land as STATE subject
- └ LIMITED digitization
- └ Fragmentation of land - 86% < 1.05 ha
- └ lack of use of technology in CADASTRAL maps.
- └ LITIGATION 64% cases in Court.



SVAMITVA : right of Records

using REMOTE sensing for Adequate ZONATION,

Pragmatic STEPS

- VISIBILITY of Cadastral Maps with resolution PIXEL
- NITI Aayog on Land TRIBUNAL & (LKO) for CONCLUSIVE titles.
- pinistry DIGITAL India land record modernization
- BHOOMI samman awards
- LAND Bank of GOVERNMENT Land for Asset monetization.

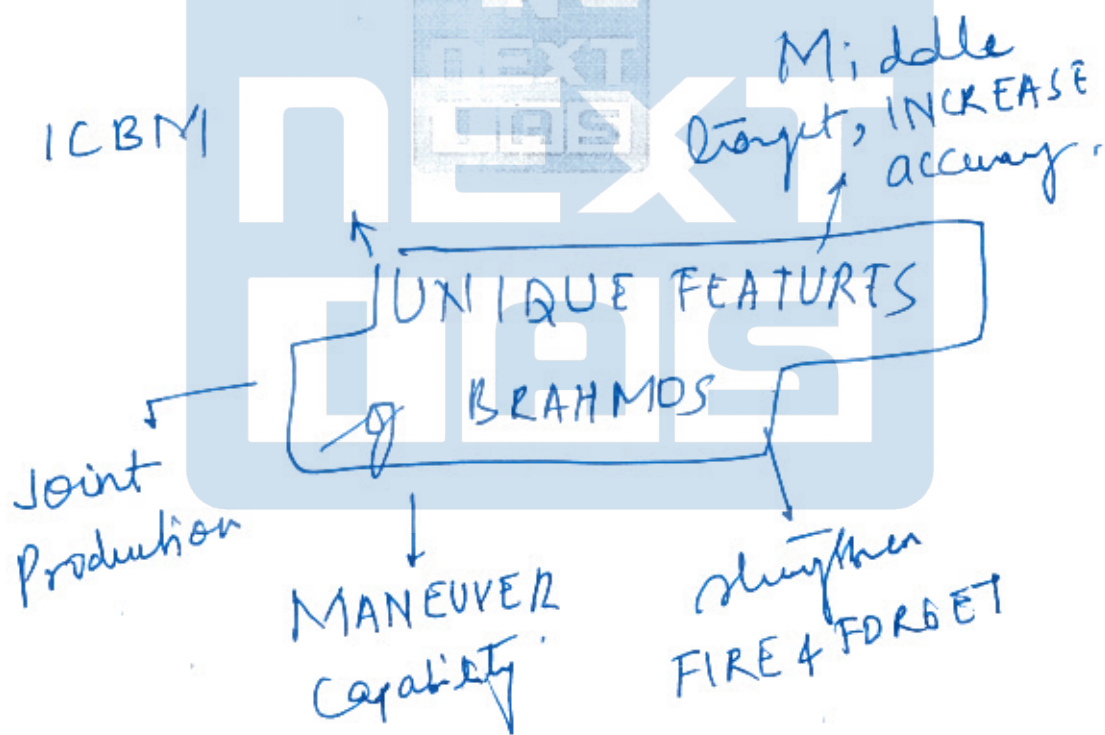
Hence LAND as Asset must be channelised as MULTIPLIER.

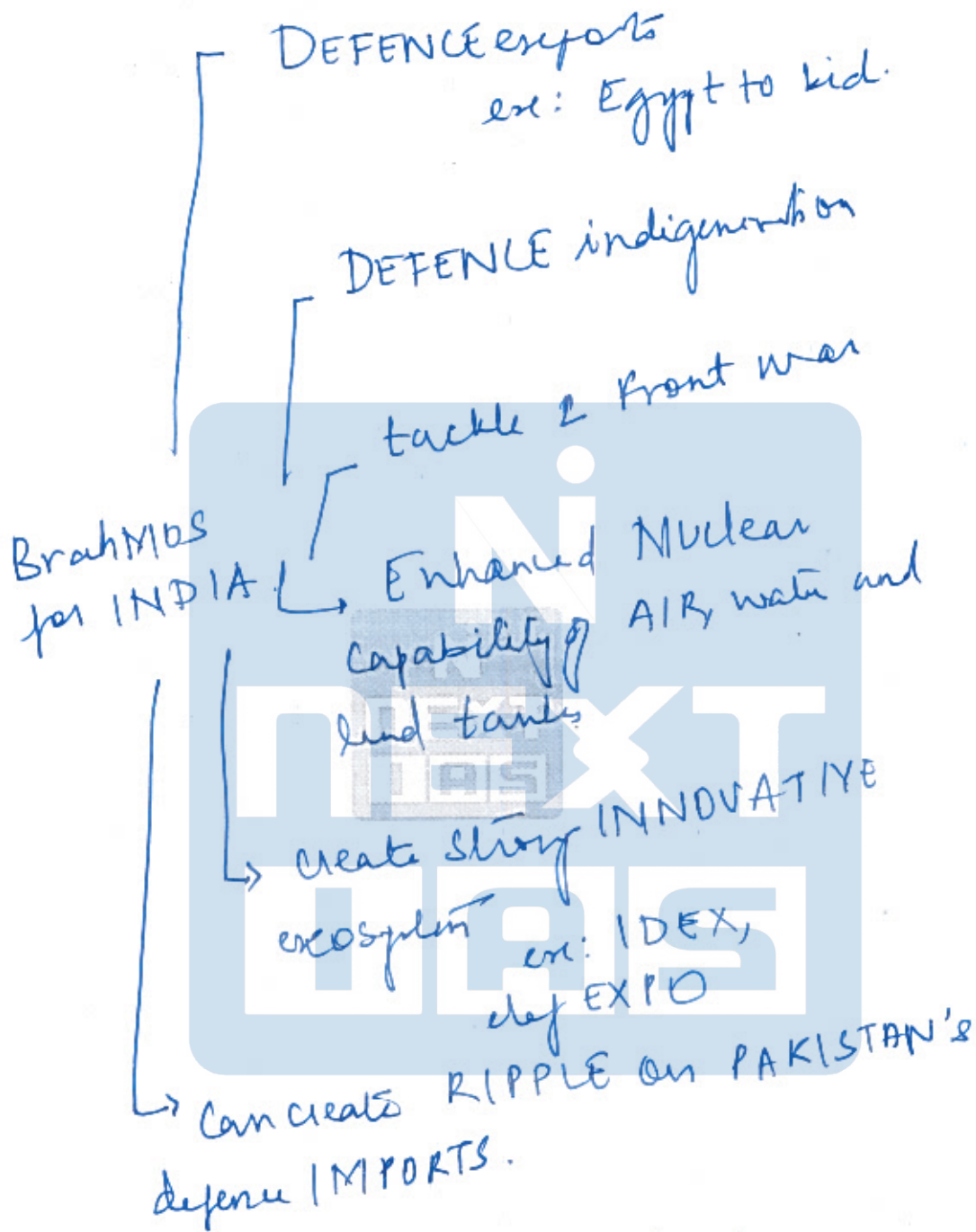
5. ब्रह्मोस सुपरसोनिक क्रूज मिसाइल की अद्वितीय विशेषताएँ और क्षमताएँ क्या हैं, और इसने भारत की रक्षा क्षमताओं और सामरिक स्थिति के क्षेत्र में किस प्रकार योगदान दिया है? (150 शब्दों में उत्तर दीजिए) 10 अंक  
 What are the unique features and capabilities of the BrahMos supersonic cruise missile, and how has it contributed to India's defence capabilities and strategic position in the region?  
 (Answer in 150 words) 10 Marks

Philippines purchased INDIA - RUSSIA

Jointly produced INTER Continental

Balistic Missile of Brahmos.





BrahMos must be preceded by  
 BrahMos 2.0 + Joint capability,  
 increased defence R&D to realise  
 STRONG internal security & 30,000 cr  
 exports by 2025.

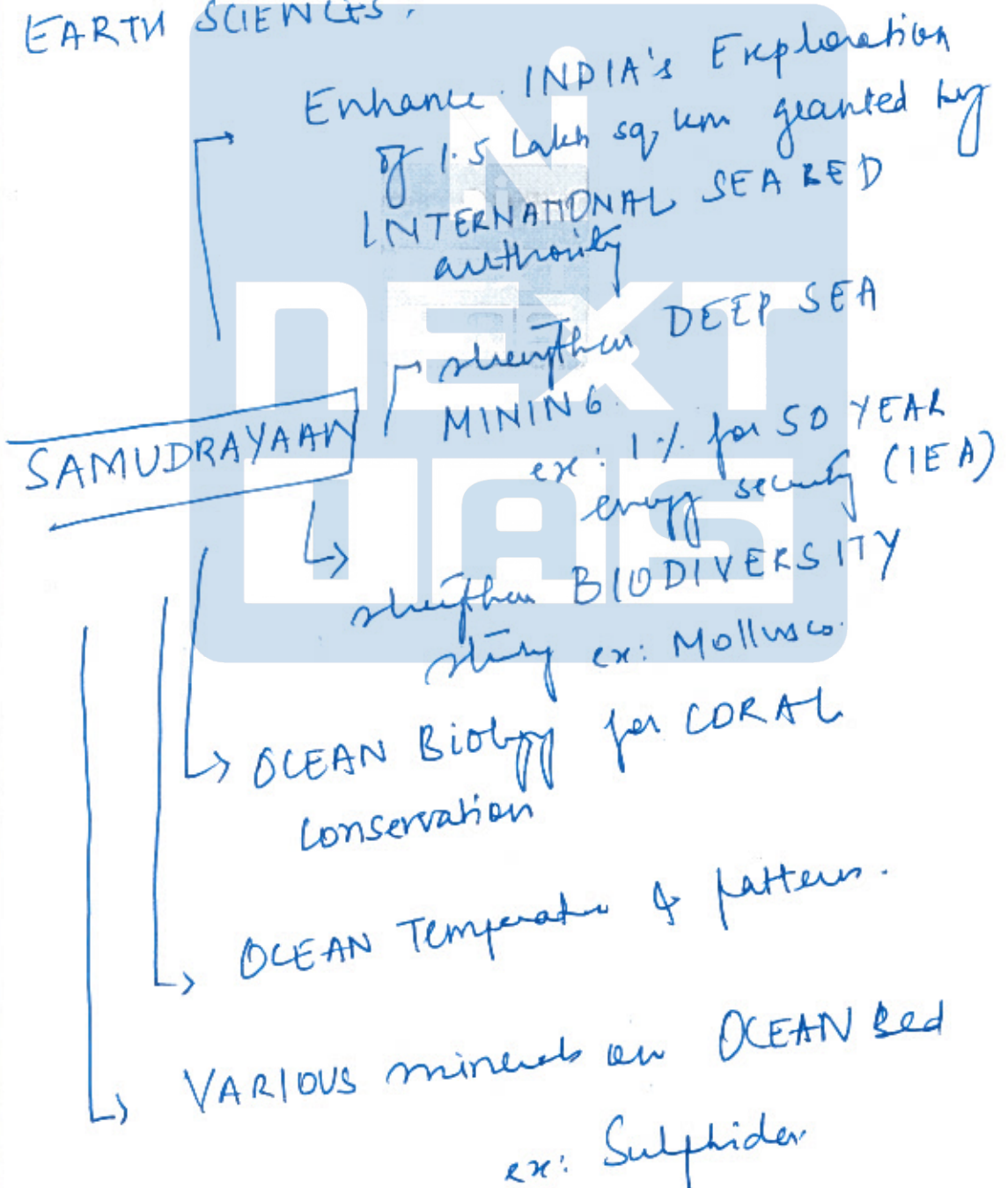


6. समुद्र की गहराई का पता लगाने और उसमें मौजूद संसाधनों का दोहन करने के देश के प्रयासों के अनुरूप, भारत सरकार ने गहरे समुद्र में अन्वेषण मिशन 'समुद्रयान' का प्रस्ताव रखा है। यह मिशन देश में समुद्र विज्ञान और प्रौद्योगिकी की प्रगति में किस प्रकार योगदान दे सकता है? (150 शब्दों में उत्तर दीजिए) 10 अंक

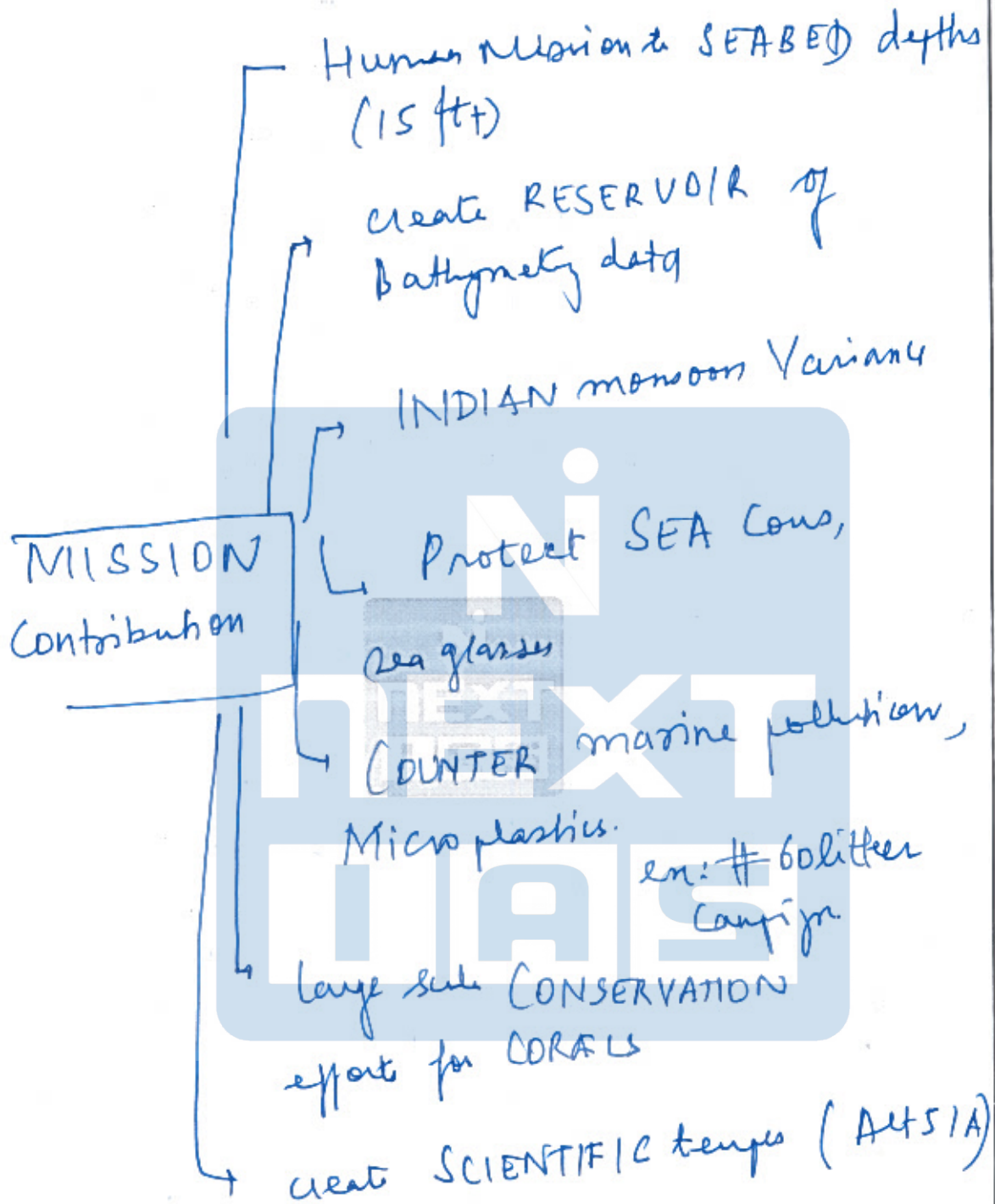
In line with the country's efforts to explore the depths of the ocean and harness the resources it holds, the Indian government has proposed a deep-sea exploration mission Samudrayaan. How can this mission contribute to the advancement of ocean science and technology in the country?

(Answer in 150 words) 10 Marks

SAMUDRAYAAN is step towards DEEP OCEAN exploration under MINISTRY of EARTH SCIENCES.







Hence Budget, R&D, & long term mission must be prioritized for SDG 14 - life under sea.

7. वैश्विक मीथेन प्रतिज्ञा क्या है? क्या आपको लगता है कि वैश्विक मीथेन प्रतिज्ञा मीथेन उत्सर्जन को कम करने की दिशा में एक सकारात्मक कदम है? इस मुद्दे पर भारत का रुख स्पष्ट कीजिए।

(150 शब्दों में उत्तर दीजिए) 10 अंक

What is Global Methane Pledge? Do you think the Global Methane Pledge is a positive step toward mitigating methane emissions? Explain India's stance on this issue. (Answer in 150 words) 10 Marks

GLOBAL METHANE Pledge is INITIATIVE  
 of reducing Methane as GREEN HOUSE  
 Gas emissions.

ex: AUSTRALIA, Pledged for reduction.  
 NEW ZEALAND.

METHANE concentration  
 has risen to 280ppm (180%  
 over pre-industrial)

METHANE  
 PLEDGE  
 as POSITIVE  
 step

it is 50 times more potent  
 than CO<sub>2</sub> as greenhouse gas

it helps in REDUCING  
 Waterlogged CROPPING

ex: methane from Rice  
 fields.

DAIRY & poultry are MAJOR  
 sector for METHANE  
 ex: Ruminantion of COWS  
 release methane.

Creates Targets for SUSTAINABLE  
 reduction.

AGRICULTURE & DAIRY have 46% of People Livelihoods.  
 Methane PLEDGE can lead to Loss of orgi GDP and unemployemnt  
 METHANE per CAPITA consumption is of WEST ex: Rice as VIRTUAL water & methane export  
 it also impacts COOPERATIVE sector  
 LACK of principle of "CBDR-RC" with COMMON benefits  
 NO Technology or fund transfer from developed world ex: need 1 trillion \$ by 2030  
 innovation in agriculture -> **STEPS needed** -> Methane SEQUESTRATION  
 using Methane for BIOFuels. -> Biogas compost.

**INDIA'S STAND**

Despite the non participation in Pledg, INDIA must "de-carbonise" with Alternative & SUSTAINABLE methods



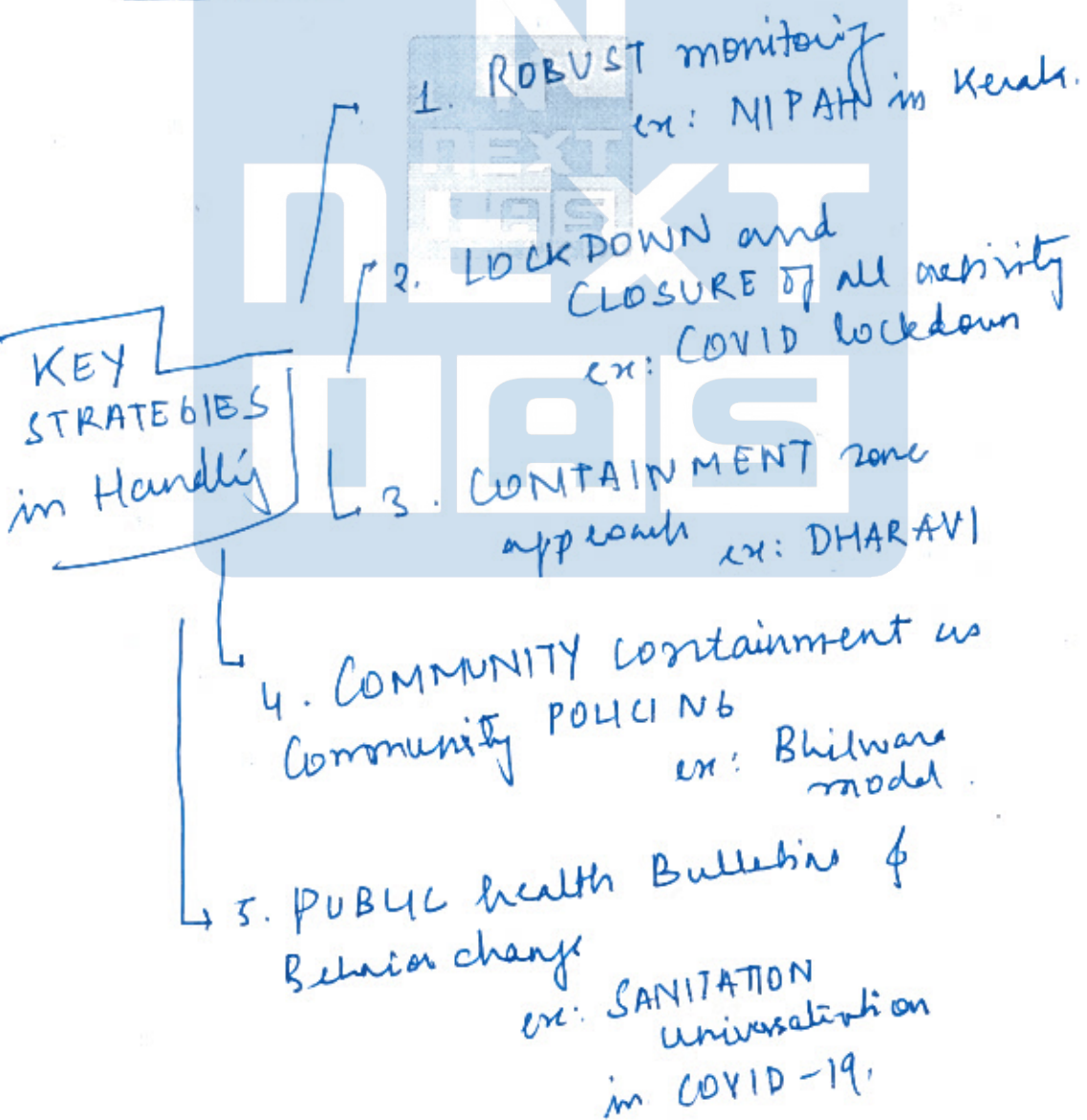
8. कोविड-19 महामारी ने सार्वजनिक स्वास्थ्य में आपदा प्रबंधन के महत्त्व पर प्रकाश डाला है। महामारी और अन्य संक्रामक रोग के प्रकोप के प्रबंधन के लिए प्रमुख रणनीतियों और चुनौतियों पर चर्चा कीजिए।

(150 शब्दों में उत्तर दीजिए) 10 अंक

The COVID-19 pandemic has highlighted the importance of disaster management in public health. Discuss the key strategies and challenges for managing pandemics and other infectious disease outbreaks.

(Answer in 150 words) 10 Marks

COVID-19 was notified as Emergency under Colonial era law of EPIDEMIC Act to showcase need for STRONG Co-ordination in PUBLIC health management





Key challenges

1. LIMITED coordination between states
2. HEALTH as STATE subject
3. need DMA 2005 to be amended for HEALTH disaster

4. LIMITED Bed & personnel shortage
5. OXYGEN crisis in 2nd wave.
6. lack of Proactive policy

Way forward

- ↳ Genomic Surveillance (IMSALOG)
- ↳ Strengthen PUBLIC awareness
- ↳ NANDURBAR model - Proactive oxygen plants
- ↳ Create CAPACITY at PHC as Wellbeing centre
- ↳ ONE health approach

here long term steps are needed to SAVE LIVES and COVID-19 like disasters

9. "पूर्वी और मध्य भारत का संसाधन अभिशाप वामपंथी उग्रवाद का एक महत्वपूर्ण चालक रहा है"। इन क्षेत्रों के सतत और समावेशी विकास के लिए उपायों को विस्तार से बताइए और सुझाव दीजिए।

(150 शब्दों में उत्तर दीजिए) 10 अंक

"The resource curse of Eastern and Central India has been a crucial driver of LWE". Elaborate and suggest measures for sustainable and inclusive development of the region.

(Answer in 150 words) 10 Marks

"RESOURCE CURSE" refers to ABUNDANCE of MINERALS but inability to channelise it for LOCAL & Human development due to VESTED interests

ex: Chhattisgarh Bijapur as land of COAL & LWE existence

RESOURCE CURSE & LWE

1) GADCHIROU in Maharashtra

2) DANAKARANYA AS resource rich CLUSTER

of FORESTS, IRON ore.

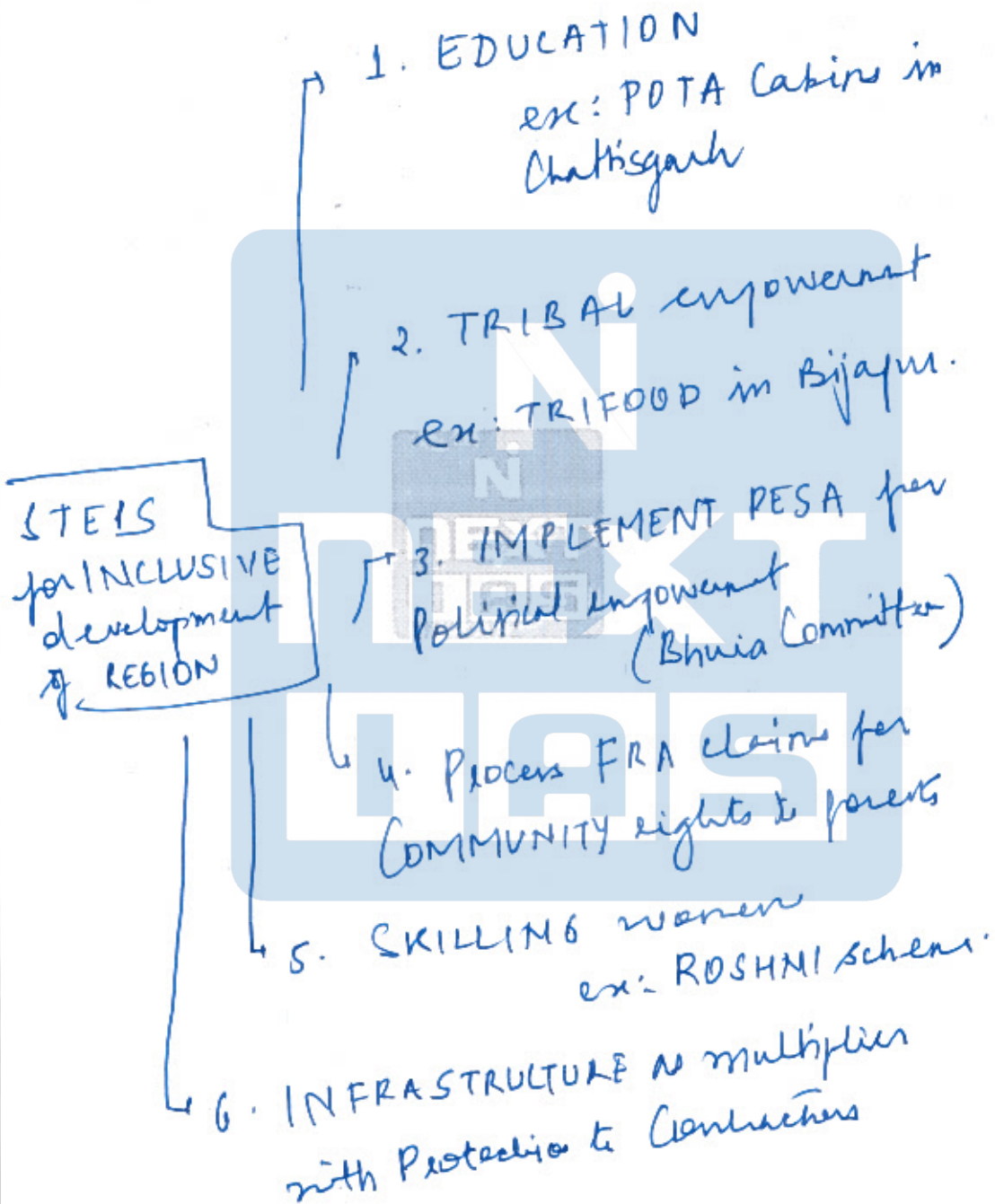
3) use of Public agitation

4) MISUSE of Resource to fund terror and left wing propaganda  
ex: Shrikhand TEAR mafia.



45 DISTRICTS are under BONDWANA rich belt.

Resource CURSE has been Channelized to People as STATE'S ANTI DEVELOPMENT strategy



SAMADHAN strategy with SMART Policy can end LKIE and RED corridor threat by 2025 -



10. उत्तर पूर्व और जम्मू-कश्मीर क्षेत्र में हिंसा की घटती प्रवृत्ति के आलोक में क्या आपको लगता है कि एफएसपीए (अफ़सपा) अपनी उपयोगिता बरकरार रख पाया है? टिप्पणी कीजिए (150 शब्दों में उत्तर दीजिए) 10 अंक  
 In light of the declining trend of violence in the North East and J&K region do you think that AFSPA has lived its utility? Comment. (Answer in 150 words) 10 Marks

Armed Forces Special Protection Act (AFSPA) was enacted to counter TERRORISM, INSURGENCY in 1950-1960 with Protection of Armed Forces for conduct of SURVEILLANCE, Counter operations.

Recent trend shows reduction in Violence by 75% in J&K.  
 ex: Stone pelting reduced to 75 incidents from 690 in 2019.

AFSPA  
 Outlived  
 UTILITY

- 1. PUBLIC Protest  
 ex: IROM shavila FAST
- 2. has led to LOSS of lives ex: NAGA killings
- 3. PUBLIC-MILITARY distrust
- 4. has led to MISUSE  
 ex: HUMAN shield by Major Gogoi
- 5. led to LACK of ACCOUNTABILITY

same has been outlined in

JEEVAN Reddy Committee, Helge Committee, ARC I to remove AFSPA

Recent MANIPUR clashes.

CONTINUATION of Porous border with Myanmar  
ex: FMR.

ISSUES

gradual PHASE down over REPEAL [as per HEAD of Army]

Geographical Terrain Presence of STATE & non state actors ex: ISI in J&K terrorism.

Based on constraints, AFSPA must be RATIONALISED in piecemeal mode & gradually phased out by strengthen LOCAL law & order functions as per ARC II

11. अंतर्राष्ट्रीय व्यापार प्रमुख मुद्रा प्रतिमान (डीसीएम) पर केंद्रित है। अंतर्राष्ट्रीय व्यापार में हार्ड करेंसी (दुर्लभ मुद्रा) के महत्त्व का आलोचनात्मक विश्लेषण कीजिए और डॉलर साम्राज्यवाद के विकल्प के रूप में वैश्विक व्यापार में रुपये की स्वीकार्यता की संभावना पर चर्चा कीजिए।  
 250 शब्दों में उत्तर दीजिए। 15 अंक
- International trade is centred on the dominant currency paradigm (DCM). Critically Analyze the importance of Hard currency in International trade and Discuss the potential of rupee acceptance in global trade as an alternative to dollar imperialism.  
 (Answer in 250 words) 15 Marks

**DOMINANT CURRENCY Paradigm** refers to relevance of most STRONG and FINANCIALLY viable currency that LEADS direction of INTERNATIONAL trade

ex: DOLLAR in 21<sup>ST</sup> CENTURY as HARD Currency.

**IMPORTANCE of HARD Currency**

1. IT SUSTAINS the payment Mechanism for TRADE SETTLEMENT.

2. it helps in MULTI Country payments

ex: INDIA-UAE dollar settlement.

3. FOCUS on EFFICIENCY of markets

ex: Reduce dependence on EXTERNAL currency

4. LIMIT shocks

ex: IMPACT of SUDAN crisis on INDIA is nil as DOLLAR hater.



DEPENDENT on External Foreign Policy

ex: US Fed rate on CAPITAL flight

ISSUES in HARD CURRENCY

IMPACT INDIAN Sovereignty and Autonomy for decision

ex: Dollar held in RESERVE

IMPACT exchange rate for PEGGED currency

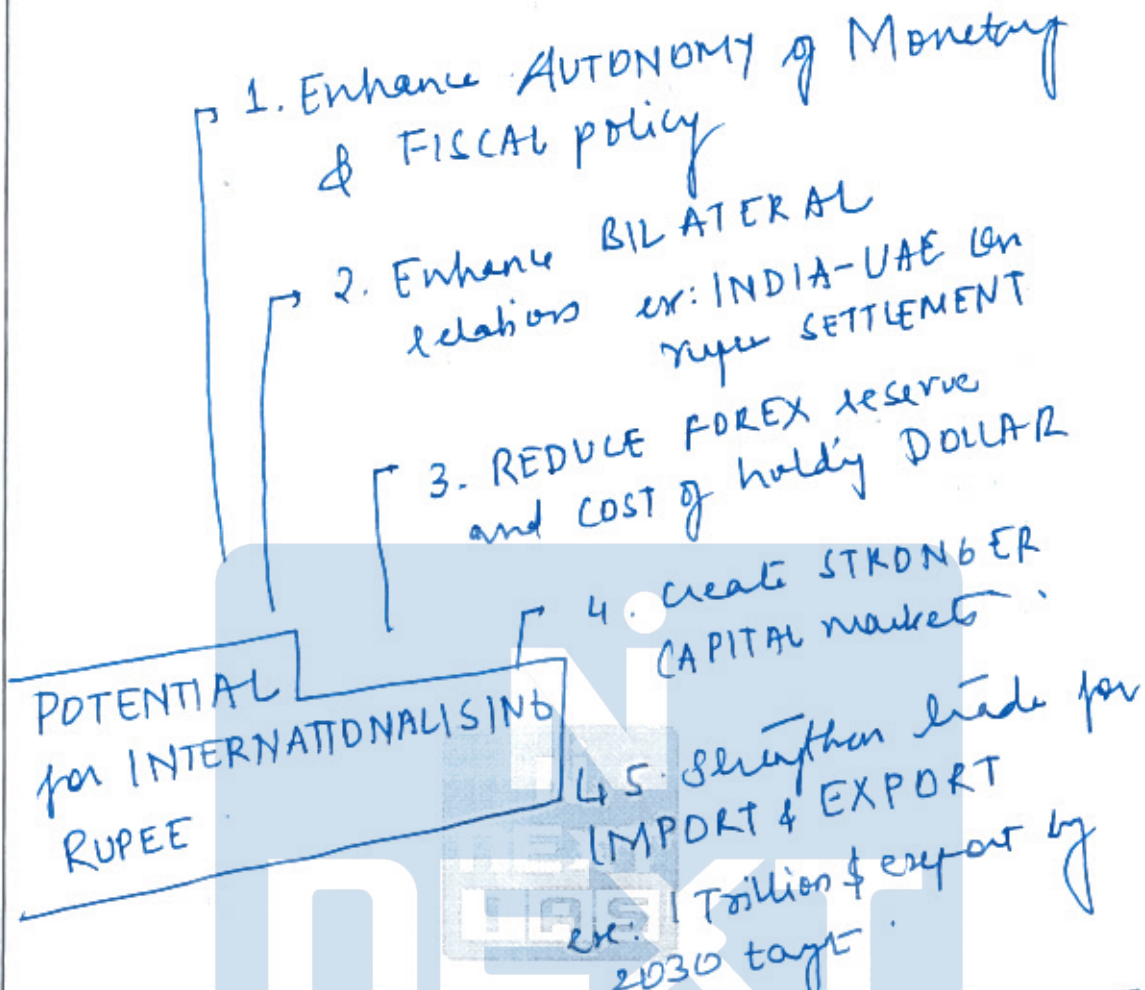
ex: Rupee Volatility

POTENTIAL of EXCLUSION

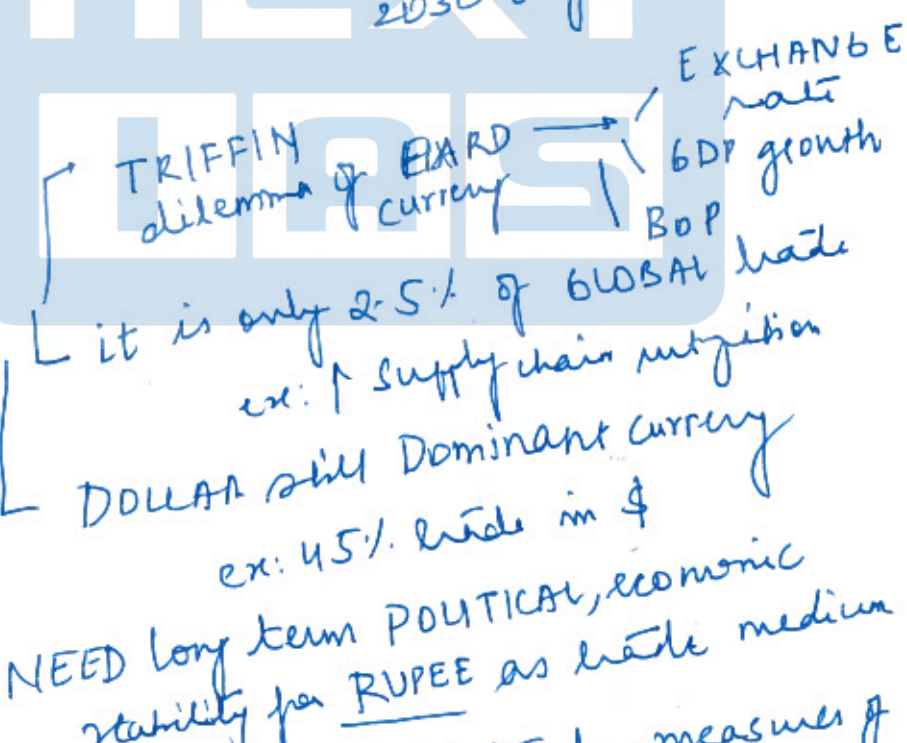
ex: RUSSIAN dollar locked post WAR on Ukraine

① in this CONTEXT, BRICS are considering COMMON Currency trade to DEDOLLARISE INTERNATIONAL trade.

② ALTERNATIVE mechanism like RUPEE - RUBBLE agreements have also been tested.



ISSUES



Hence persistent BILATERAL trade, measures of counter currency are alternatives for LONG TERM strengthening Rupee as alternative.

12. जनसांख्यिकीय लाभांश संवृद्धि सुनिश्चित नहीं करता है; यह केवल सामर्थ्य उत्पन्न करता है। जनसांख्यिकीय परिवर्तन से उत्पन्न अवसरों का लाभ उठाने के लिए सरकार द्वारा उठाए गए कदमों पर चर्चा कीजिए।

(250 शब्दों में उत्तर दीजिए) 15 अंक

A demographic Dividend does not ensure growth; it only generates potential. Discuss the steps made by the government to take advantage of the opportunities presented by the demographic transition.

(Answer in 250 words) 15 Marks

Demographic Dividend refers to the Youth and WORKING age professionals [15-64 years] who can reap benefits through PRODUCTIVE WORKFORCE, GDP (GVA) and TAX PAYMENTS

ex: 38 year ~~tax~~ window upto 2055

To ensure COMPLETE UTILIZATION

DEMOGRAPHIC DIVIDEND is

only "POTENTIAL"

1) need INVESTMENT in HEALTH reducing IMR.

2) need EDUCATION ex: NEP ~ 6% of GDP.

3) Progressive SKILLING ex: NIEF called for "RECKILL REVOLUTION"

only then WORKFORCE will be SUITABLE, EMPLOYABLE and a "DIVIDEND" to reap.



1. NATIONAL EDUCATION  
POLICY (NEP 2020) for  
~~UNIVERSATIONAL~~ VOCATIONALISING  
education  
ex: midday meal scheme /  
P.M POSHAN 2.0

2. NATIONAL SKILLING MISSION,  
SECTOR specific councils.  
ex: SHARDA Prasad  
Committee.

3. PM-JAY and strengthening  
HEALTH insurance for 66% of  
INDIAN population

STEPS taken  
by GOVERNMENT

↳ 4. Measure for GENDER  
Budgeting + KIRAN for girl child.

↳ 5. Schemes of "SEEK aur Kamoo",  
Madrasa modernization, NAI Rozgar for  
orphanages.

↳ 6. PM PVTG MISSION, Ashram  
and Ekalavya schools for tribal  
development

↳ 7. creation of e-SHRAM portal, UDYAM  
SAKHI for women entrepreneurs.

ISSUES

UNEMPLOYMENT rate (PLFS) at 4.1%.

women FLFPM at 25% while men is 77% (gender wage gap)

CONTINUATION of caste discrimination  
ex: 97% sanitation worker from SC community.

minority literacy rate at 54%

RISING inequality and digital divide

OXFAM: top 10% own 77% wealth in INDIA.

OPERATIONALISE Budget Target (2.5% in health)

STEPS needed.

CSR as proxy for INVESTMENT

enhance CSO capacity in skilling

achieve MONITORING.

ES 2018 recommended PHASED UBI

UNIVERSALISATION of Social Security ex: strengthen SURARSHA BHIMA.

AMRIT keedi is to be nurtured as Demographic DIVIDEND and fulfilling INDIA @ 2047 goal.

13. 'जीनोम एडिटिंग (जीनोम संपादन) में फसल सुधार की अपार संभावनाएँ हैं, लेकिन यह नैतिक और सुरक्षा संबंधी चिंताओं को भी जन्म देती है।' भारत में जीनोम-संपादित पादपों के सुरक्षा मूल्यांकन के लिए नए दिशानिर्देश आनुवंशिक रूप से संशोधित फसलों की सुरक्षा को कितना सुनिश्चित करते हैं? (250 शब्दों में उत्तर दीजिए) 15 अंक  
 'Genome editing holds immense potential for crop improvement, but it also raises ethical and safety concerns'. How far do the new guidelines for the safety assessment of genome-edited plants in India, ensure the safety of genetically modified crops? (Answer in 250 words) 15 Marks

GENOME EDITING refers to changes in genome of seed for ENHANCING YIELD, Productivity and Farmer INCOME

ex: HT-BT COTTON.

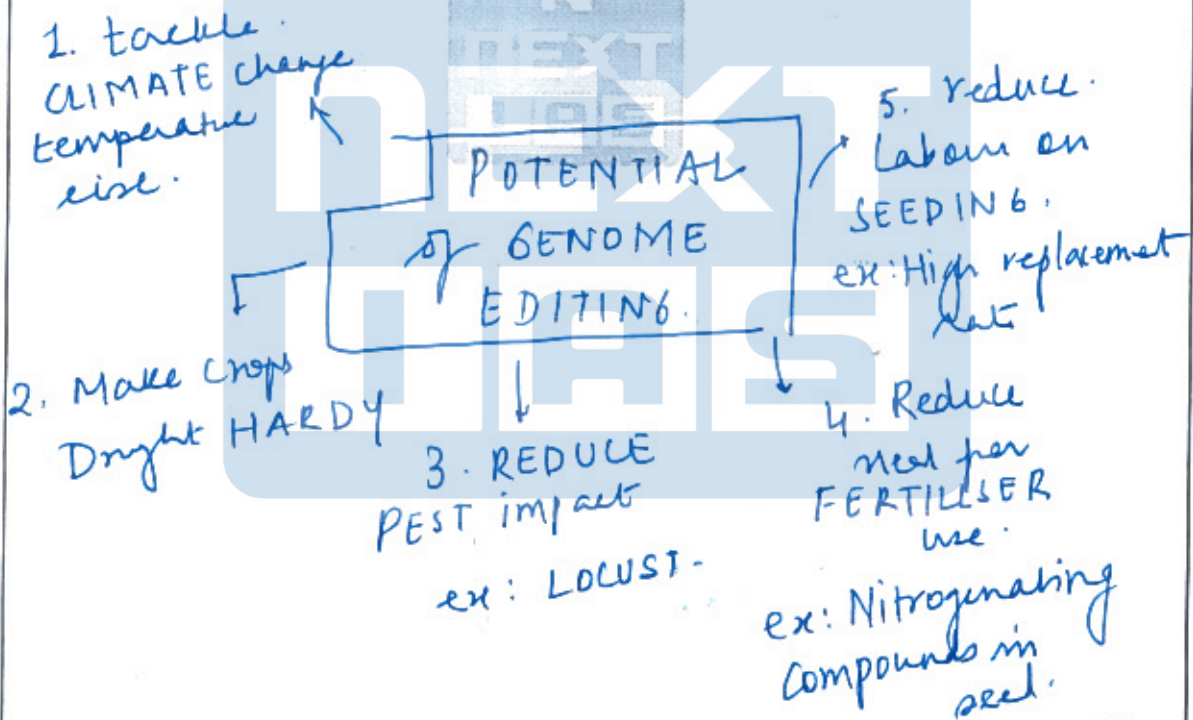


Fig: GENOME EDITING.

This has led to recent approval for GM-MUSTARD (edible crop) FIELD TRIALS.



1. take into ACCOUNT SAFETY  
by providing role for GEAC  
or GENETIC Engineered Accreditation  
Committee under MOEFCC

2. Promote R & D in GM  
Crops with reduced Permits

ex: ICAR Labs to be linked  
to UNIVERSITIES

NEW guidelines  
for SAFETY  
Assessment of  
GM Crops.

3. "SAFETY declaration"  
for IMPORTED GM seeds

4. TESTING mechanism  
for seeds at SEED LAB  
facilities on EFFICACY

5. strengthened protection of  
varieties of GM edited crops  
by combining PVPFR Act

Overall, SAFETY assessment is to be  
STRENGTHENED, CENTRALISED &  
INNOVATION oriented.

1. NEED long term monitoring of CROPS

2. EDIBLE crop GM can impact Human Genomes as per Experts

3. Ht-Bt Brinjal is being planted without SAFETY assessment

### CHALLENGES in GUIDELINES

4. Lack of CAPACITY for Farmers to report ISSUES in Yields

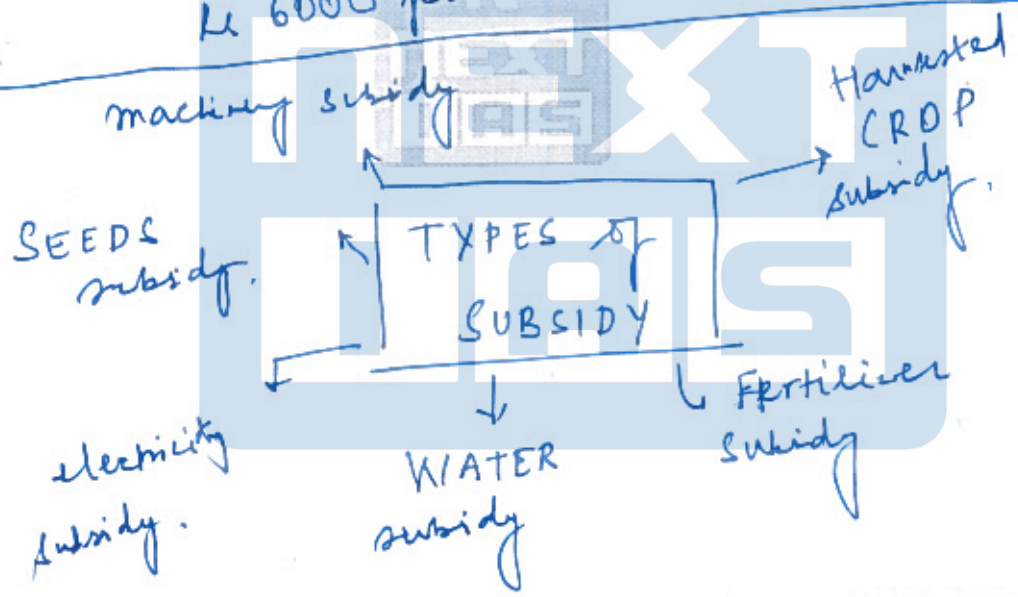
5. Can lead to MONOPOLIZATION by Big companies like Syngenta, Monsanto

6. NEED decentralized safety assessment of crops.

hence, GM crop safety assessment must be augmented to CAPTURE ethical & safety concerns for RESILIENT & SUSTAINABLE AGRICULTURAL Backbone of INDIAN economy.

14. भारत में कृषि क्षेत्र पर प्रत्यक्ष और अप्रत्यक्ष कृषि सब्सिडी के प्रभाव की चर्चा कीजिए। न्यूनतम समर्थन मूल्य (एमएसपी) ने कृषि अर्थव्यवस्था को किस प्रकार प्रभावित किया है? (250 शब्दों में उत्तर दीजिए) 15 अंक  
 Discuss the impact of direct and indirect farm subsidies on the agriculture sector in India. How have Minimum Support Prices (MSP) affected the agricultural economy? (Answer in 250 words) 15 Marks

BUDGET 2023 announced Central GOVERNMENT share of 3.5% more to AGRICULTURE. SUBSIDIES which are direct or indirect reduction in PRICES to help FARMER Operations.  
 ex: PM KISAN is indirect SUBSIDY as Additional INCOME of ₹ 6000 per LAND held farmer.



IMPACT of SUBSIDY - DIRECT

1. DIRECT subsidy to Farmer in form of

⊙ WATER ex: FREE water have led to GROUND water Exploitation in PUNJAB.



⊙ DIRECT subsidy on ELECTRICITY has enhanced USAGE and green house gas emissions. ex: PUNJAB's Bachao + Kamas scheme.

⊙ DIRECT subsidy on HARVEST CROP in form of MSP for Rice-wheat has created MONOCULTURE cropping

ex: Agroclimate impact as per AR-6.

⊙ SUBSIDY in form of SEEDS has led to limited SEED INNOVATION & conservation

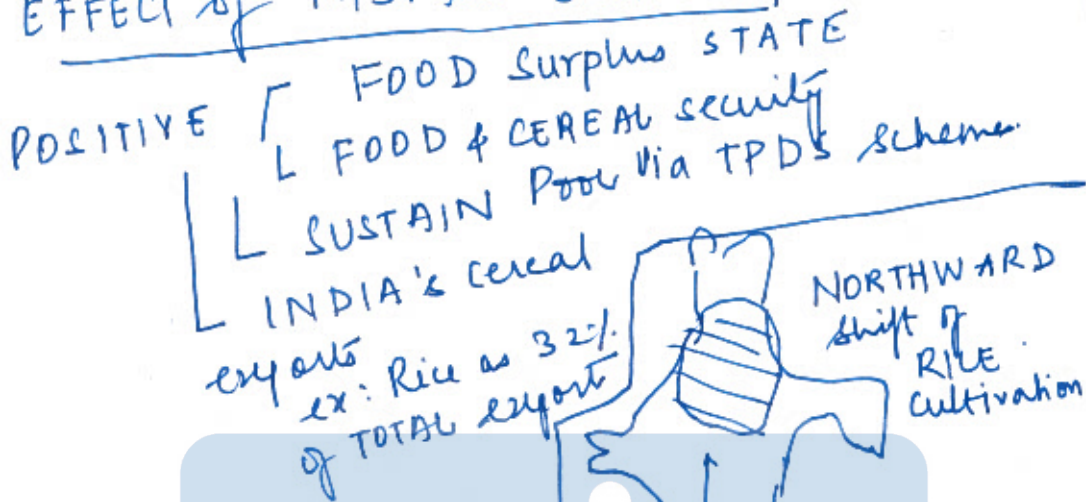
INDIRECT SUBSIDY

by FERTILISER prices where FERTILISER company are subsidised to sell at LOWER costs for farmer.

↳ RAMPANT misuse of FERTILISERS leads to ALKALINIZATION & SALINIZATION of soils

ex: 4 : 2 : 1 of NITROGEN : PHOSPHORUS : POTASSIUM  
has reach 7.4 : 3.2 : 1 with AMMONIA overuse.

EFFECT of MSP on ECONOMY



NEGATIVE

- ① Created trend of MONOCULTURE
- ② cereal based diet over NUTRITION and diversity ex: MILLET promotion. Fig: MONOCULTURE cropping.
- ③ GREEN revolution areas OVER intensified Procurement ex: WB: only 1-2% crop produced on MSP
- ④ INEFFICIENCY in FCI operations.
- ⑤ IMPACTING monsoon patterns as per ARB report / Waterlogged Paddy fields
- ⑥ Reason for Delhi Pollution [STUBBLE burning]

SHANTA Kumar Committee outlined need for DECENTRALISED procurement, strengthen price deficiency payment & DIVERSIFICATION of MSP regime for bringing changes & sustainability



15. रोगाणुरोधी प्रतिरोध (एएमआर) एक तेजी से बढ़ता संकट है जो दुनिया भर में सार्वजनिक स्वास्थ्य के लिए एक गंभीर खतरा है। रोगाणुरोधी प्रतिरोध की बढ़ती समस्या में योगदान देने वाले प्रमुख कारक क्या हैं, और इस वैश्विक स्वास्थ्य खतरे से निपटने के लिए कौन से कदम उठाए जा सकते हैं? (250 शब्दों में उत्तर दीजिए) 15 अंक

Antimicrobial resistance (AMR) is a rapidly escalating crisis that poses a grave threat to public health worldwide. What are the major contributing factors to the growing problem of antimicrobial resistance, and what steps can be taken to address this global health threat? (Answer in 250 words) 15 Marks

ANTIMICROBIAL RESISTANCE (AMR) has been outlined by WHO as most significant HEALTH RISK & WEF in "GLOBAL RISKS Report 2023"

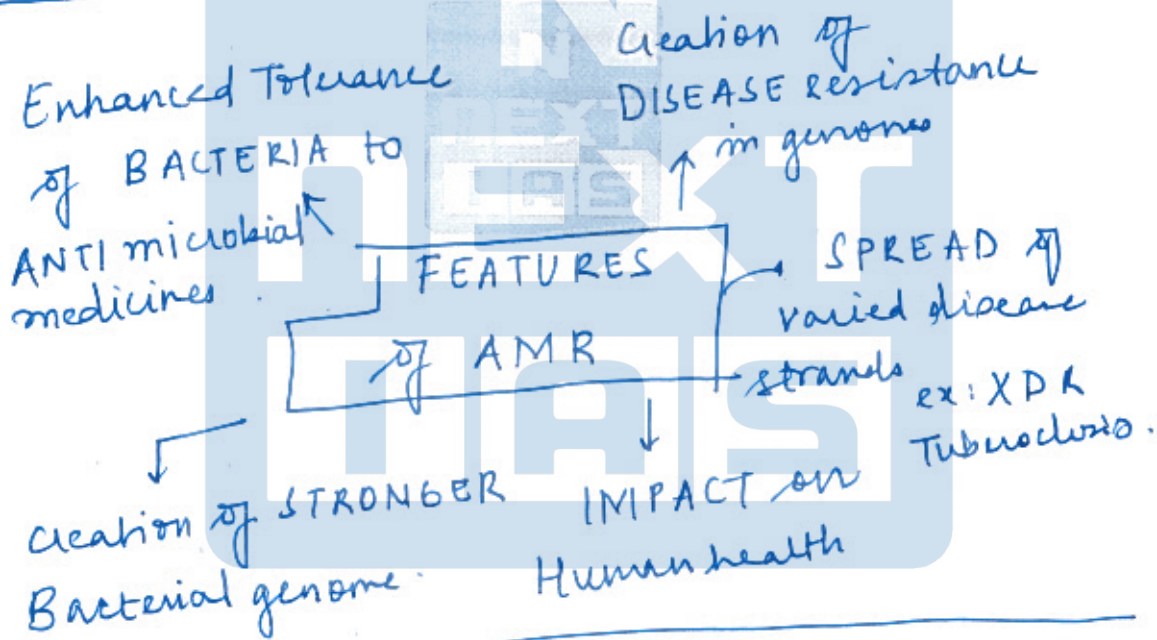


Fig: Threat of AMR.

CONTRIBUTION FACTORS

1. NATURAL evolution of Bacterial genome to threat  
ex: SPIKE protein in COVID.



② ANTI microbial medicines  
PROLIFERATION

ex: 6 medicine for DENGUE  
(Viral disease)

③ Using RAMPANT medicines without  
PRESCRIPTIONS

ex: OVER the counter drugs as  
major Reason for AMR as per KDRATE  
Committee.

④ not completing the cycle of medicine  
till FULL course completing

ex: Bacteria survival & spread.

⑤ HEALTH and lifestyle are also leading  
to BACTERIAL disease spread

ex: TUBERCULOSIS.

⑥ limited R&D on Bacterial  
diseases in WEST (orphan diseases)

⑦ DIGITAL revolution has also led  
to problem of SELF prescriptions,  
creating CHAIN of strong bacterial  
resistance.

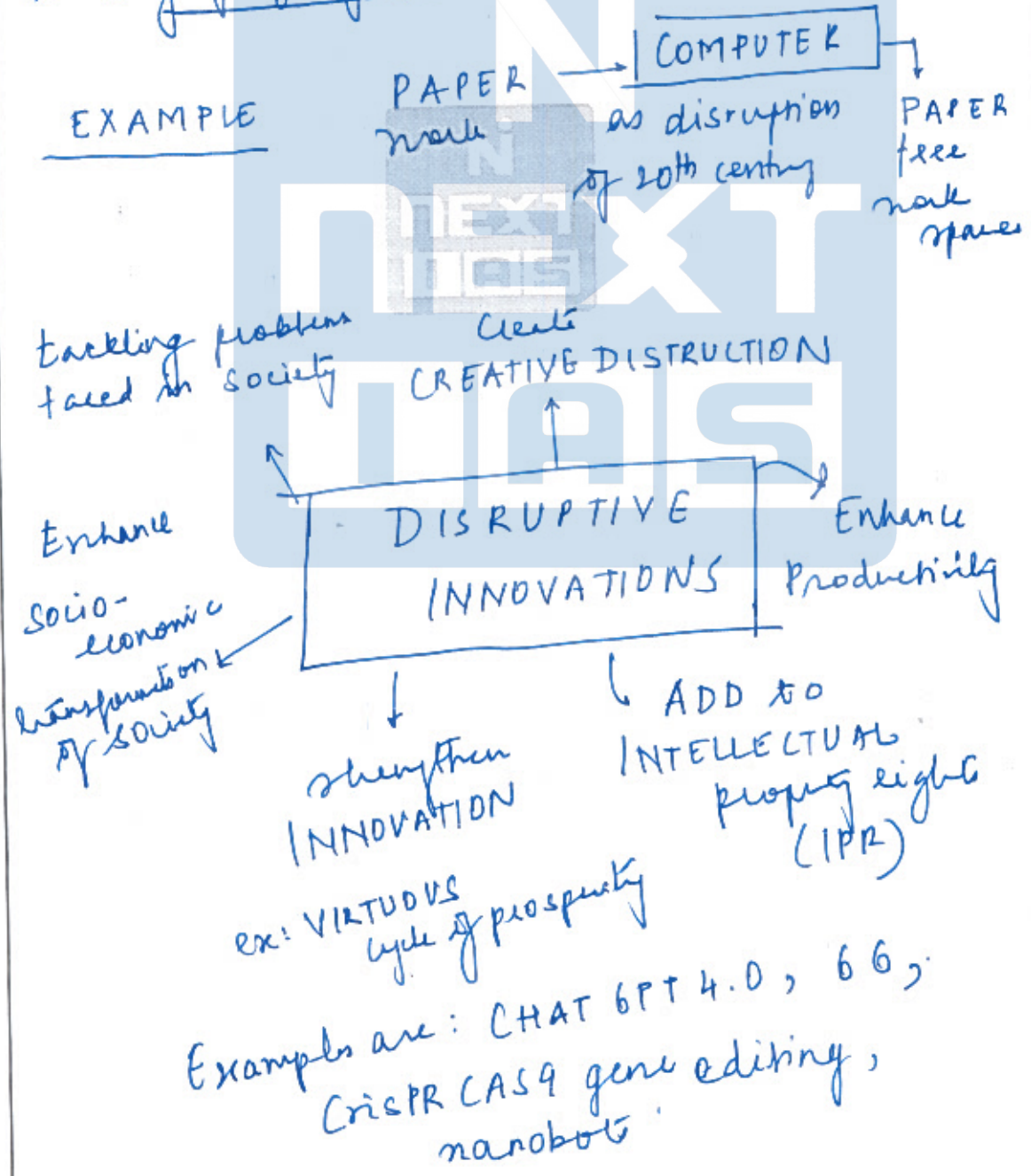
Hence, rise of "SUPERBUGS" remain  
a WIDE threat -

- STEPS  
needed.
1. GSAID led partnership for  
genome SEQUENCING & study  
BACTERIA [INSACOB LAB]
  2. Reduce OTC drug with Regulation  
under DRUGS act
  3. Enhance PUBLIC awareness on  
AMR to avoid SELF medication
  4. Strengthen PREVENTIVE  
healthcare ex: AYUSH collocation.
  5. GLOBAL level Summits on AMR  
and superbugs.
  6. INCREASE R & D and tips waiver  
on AMR research (INDIA-south africa  
resolution)  
ex: Bacteriophage tech
- SUSTAINED steps can help build INDIA'S  
RESILIENCE to counter Bacterial infections  
of future

16. विघटनकारी नवाचारों से आप क्या समझते हैं? हाल के दिनों में विघटनकारी नवाचार के कुछ उदाहरण बताइए और यह भी बताइए कि इन नवाचारों ने उद्योगों के संचालन के तरीके को किस प्रकार परिवर्तित किया है?  
(250 शब्दों में उत्तर दीजिए) 15 अंक

What do you understand by Disruptive innovations? What are some examples of disruptive innovation in recent times, and how have they changed the way industries operate?  
(Answer in 250 words) 15 Marks

Disruptive INNOVATIONS refer to technology that bring PARADIGM INNOVATION in usage and INDUSTRY landscape without a "way of going back"





CHAT GPT 4.0 and GENERATIVE AI  
Can lead to

1. CUSTOMIZATION & PRECISION marketing
2. 24\*7 CUSTOMER SERVICE.
3. end CUSTOMER / BPM support staff jobs.

MACHINE LEARNING and  
LARGE language models (LLMs)

EXAMPLES  
OF DISRUPTIVE  
tech & change  
OPERATIONS

Law

1. enhance INSURANCE Premium determination
2. PRECISION agriculture.  
ex: AI sowing app.
3. DIGITAL EDUCATION  
assistant for CUSTOMISED learning.

QUANTUM COMPUTING and Edge  
Computing models

1. Can enhance PRODUCTION Capacity based on REAL time demand
2. used for ADDITIVE MANUFACTURING

Challenges of DISRUPTIVE INNOVATION

- 1. LACK of GLOBAL level policy  
ex: demand for AI Framework
- 2. Lag on STATE capacity to adopt technology  
ex: PAPER over digital tools in government.

3. IMPACT of digital divide on PUBLIC.  
ex: rural women lack literacy

4. Monopolization of Technology  
ex: IPR monopoly of WEST

→ MONSANTO on Gene edited seeds

4. MISUSE for terrorism from Ungoverned spaces  
ex: DEEP web & DARK web.

skilling ex: GOAB with Facebook.

STEPS needed

Enhance GLOBAL coordination

↳ Proactive LAWS

AI module in NEP 2020.

hence staying AHEAD of DISRUPTION<sup>22</sup> can help INDIAN skilling of FIRST mover advantage  
ex: 6G Alliance

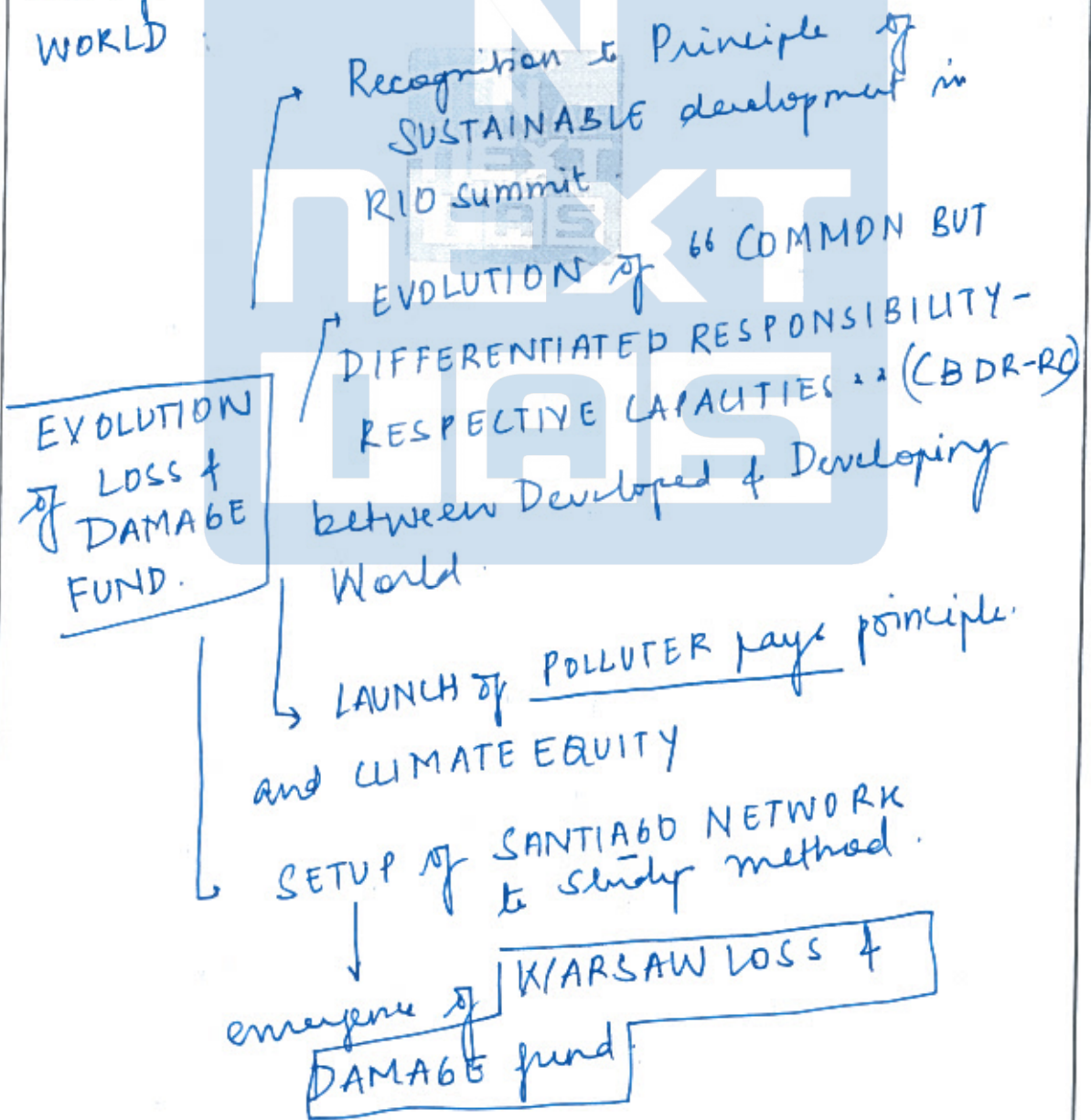
17. हानि और क्षति (L&D) कोष के क्रमिक विकास को चिह्नित कीजिए। COP27 में हानि और क्षति कोष से संबंधित कौन-से प्रमुख घटनाक्रम हुए हैं? इस सम्मेलन में भारत ने क्या प्रतिबद्धताएँ व्यक्त की हैं?

(250 शब्दों में उत्तर दीजिए) 15 अंक

Trace the evolution of the Loss and Damage fund. What are the major development related to loss and damage funds in COP 27?, What are the commitments made by India in this conference?

(Answer in 250 words) 15 Marks

"LOSS & DAMAGE FUND" refers to mechanism of funding irreversible damages of least developing countries CAUSED by CLIMATE change and contributions of developed WORLD.





WARSAW LOSS & DAMAGE fund to be OPERATIONALISED from SHARM EL SHEIKH Plan.

Setup of TRANSITION COMMITTEE for Loss & Damage Fund operationalisation.

MAJOR developments of LOSS & DAMAGE FUND.

500 BN \$ pledged by developed world for IRREPARABLE damages  
ex. AMAZON forest LOSSES.

strengthening target of 1 trillion to LDCs & developing world LOSS compensation by 2030.

HOWEVER major ISSUES of

1. DEVELOPED world NOT Cooperating and Coordinating
2. Lack of QUOTA mechanism on verifying PRIORITY in global south.
3. decade delay in Fund.
4. Ambiguity on link to GEF.

INDIA'S  
COMMITMENT  
in COP27

1. Sharm el Sheikh PLAN for keeping temperature below  $1.5^{\circ}\text{C}$  of Pre-INDUSTRIAL level.
2. INDIA has revisited and strengthened INDC as per PARIS agreement  
ex: 45% decreasing in Carbon intensity over 2005 level.
3. INDIA part of 66 MANGROVE for CLIMATE change - MAC  
ex: launched MISHTI scheme (budget 2023)
4. in INTERNATIONAL DROUGHT Resilience Alliance (IDRA), India to partner.
5. Promoting CLIMATE smart agriculture, like MILLETS/ Khajana.

Hence, INDIA'S Climate proactive approach & leadership must be SUSTAINED with LIFE MOVEMENT, channelised Technology and Fund transfer from developed world.

18. आपदा प्रबंधन सिर्फ आपात स्थिति से निपटने के बारे में नहीं है, बल्कि लचीले समुदायों के निर्माण के बारे में भी है। उन प्रमुख रणनीतियों पर चर्चा कीजिए जिनका उपयोग सामुदायिक लचीलापन बनाने और आपदाओं के प्रभाव को कम करने के लिए किया जा सकता है। (250 शब्दों में उत्तर दीजिए) 15 अंक
- Disaster management is not just about responding to emergencies but also about building resilient communities. Discuss the key strategies that can be used to build community resilience and reduce the impact of disasters. (Answer in 250 words) 15 Marks

DISASTER management refers to HOUSTIC planning, managing, responding and recovering from HAZARDS and VULNERABILITY posed by DISASTERS

ex: iFLOWS predictive tool for MUMBAI FLOODS.

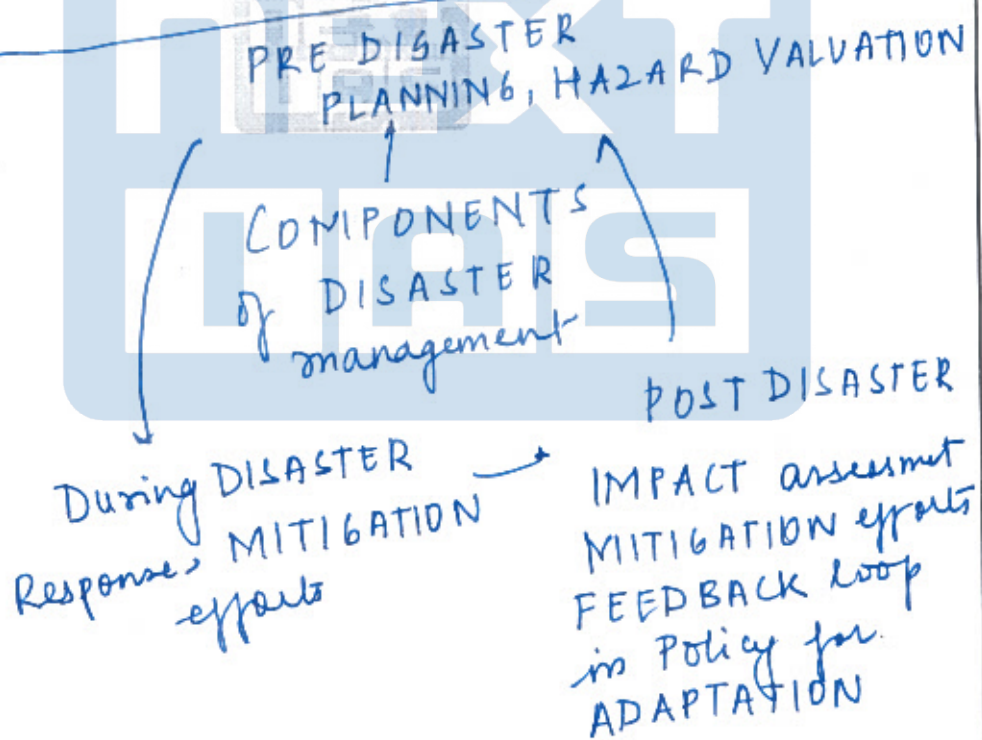


Fig: HOUSTIC disaster mgmt.



hence DISASTER management goes beyond

• RECOVERY

ie: one time FLOOD  
movement of coast community

↓  
but BUILDING  
COMMUNITY  
resilience

↓  
Building RAISED Platform  
FLOOD proof houses.

KEY  
STRATEGIES  
for  
COMMUNITY  
resilience

1. POLICY of INCLUSION of  
PRI and ULB for BOTTOM UP  
Approach

ex: Meenagadi Village (Kerala)  
Pen on Landslide.

2. Scheme of training  
VOLUNTEER or AAPDA MITRAS

in areas  
ex: Aapda Mitra in  
Amarath Yatra tour guides.

3. Create sharing of BEST  
Practices

ex: NATIONAL Platform  
for DISASTER risk reduction.

4. Strengthen TECHNICAL measures for  
disaster avoidance

ex: GEO TEXTILE used for  
REINFORCEMENT in SEISMIC zones.

5. Climate change adaptation in Agriculture.

ex: KUTTANAD Below sea level farming.

Key strategies for IMPACT REDUCTION

1. Enhance GEOSPATIAL HAZARD zone map.
2. Use Proactive POLICIES  
ex: JOSHIMATH Subsidence for HILL state project revaluation
3. Decentralised INFRASTRUCTURE retrofitting with NATIONAL Building Code 2016.

4. enhance R & D with Budget > 0.6 %.

5. Strengthen GLOBAL data on CDRI or disaster resilient infrastructure.

hence. AAPDA VIMUKT Bharat as per PM's 10 Point agenda must prioritize CITIZEN and disaster risk reduction as outlined in SENDAI FRAMEWORK.

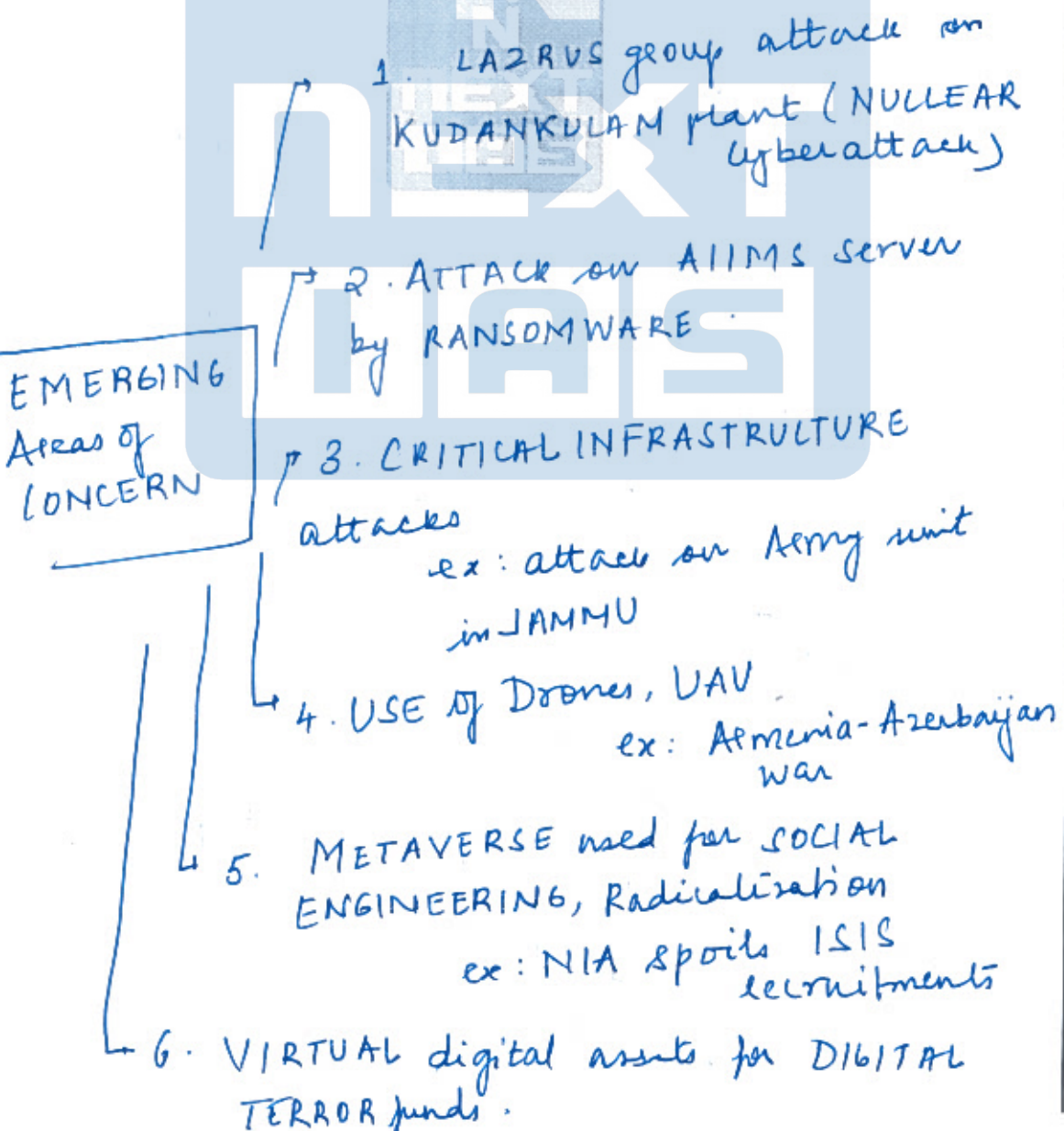
19. मेटावर्स और वर्चुअल एसेट्स जैसी नई और उभरती प्रौद्योगिकियों के उपयोग के माध्यम से आतंकवाद का परिवर्तन चिंता का विषय है। हम आतंकवादी उद्देश्यों के लिए नई और उभरती प्रौद्योगिकियों के उपयोग का मुकाबला किस प्रकार कर सकते हैं? इस संबंध में "दिल्ली घोषणा पत्र" के महत्व को स्पष्ट कीजिए।

(250 शब्दों में उत्तर दीजिए) 15 अंक

The transformation of terrorism through the use of new and emerging technologies like metaverse and virtual assets is a matter of concern. How can we counter the Use of New and Emerging Technologies for Terrorist Purposes and Elucidate the importance of the "Delhi declaration" in this regard?

(Answer in 250 words) 15 Marks

HYBRID TERRORISM refers to rise in usage of EMERGING technologies for ATTACK ON STATE along with other Conventional sources.





1. Enhance CYBER Security
- with • NATIONAL Cyber security Policy, implementing NCCC
  - Ethical hackers.
  - role of cyber swachta kendra in foiling attacks
  - NCIIPC to protect Critical INFRASTRUCTURE
  - State level measures like CYBERDOME.

COUNTERING  
RISING threats

INTERNATIONAL  
Cooperation

ex: FRANCE's  
"NO Fund for Terror"  
Conference

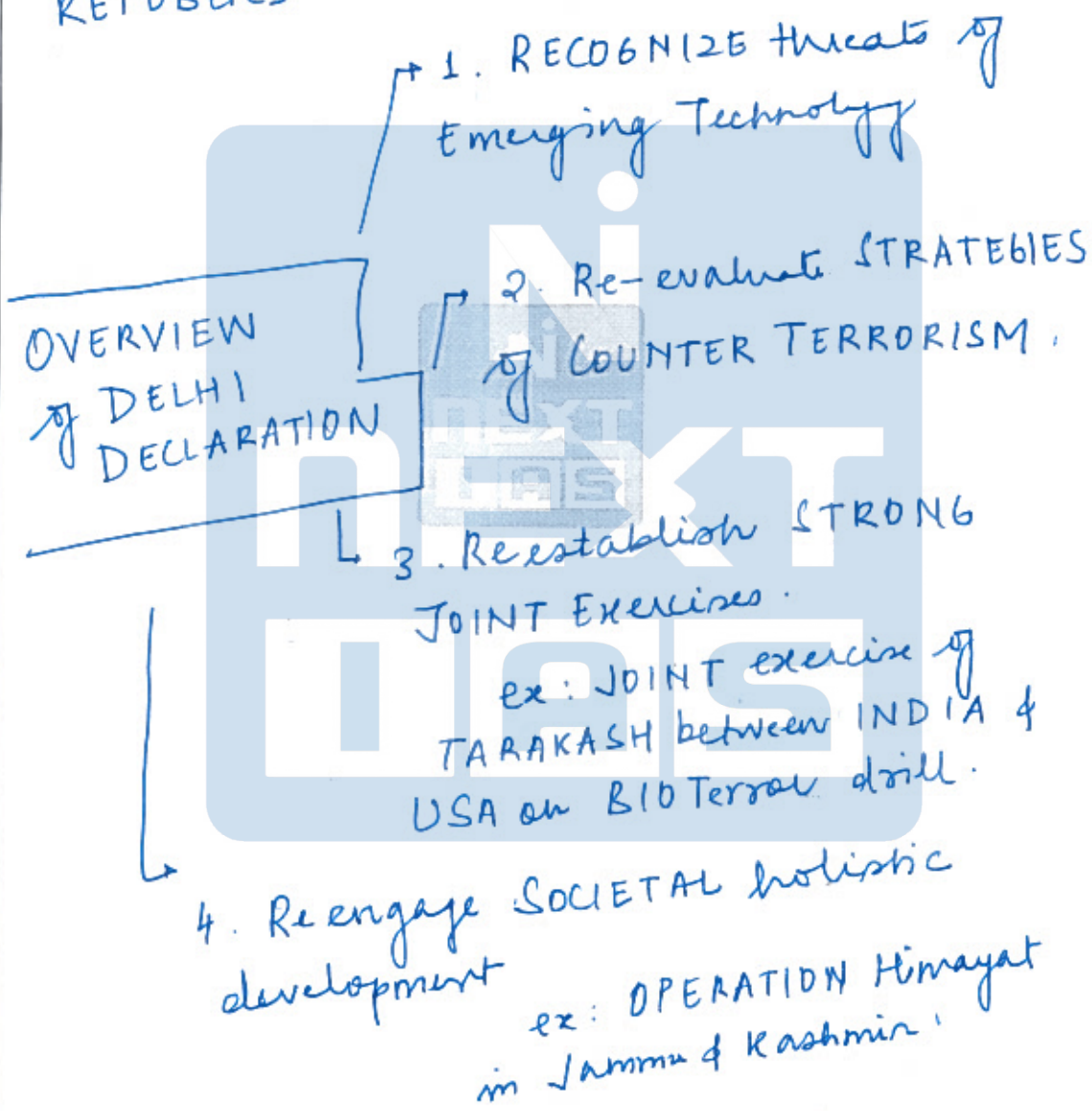
Bringing GLOBAL regulation on  
Technology like AI, VDA.  
ex: AI for All strategy

DERADICALIZATION with measures  
like OPERATION MAA, Operation  
Sadbhavana

COMMUNITY Capacity Building to  
detect threats & proactive management

ex: • INTELLIGENCE cooperation  
with NATGRID  
- CYBER SAFETY campaigns.

in this context, DELHI declaration  
was signed by SECURITY ADVISORS (NSA)  
of INDIA and CENTRAL ASIAN  
REPUBLICS



Hence delhi declaration → "4Rs" can  
enhance countering rapidly evolving terrorism  
threats at a COORDINATION level of VARIOUS  
Countries [ FATF, UNSC, RATS of SCO ]

20. "अग्निपथ योजना हमारे सशस्त्र बलों के लचीलेपन और प्रभावकारिता के लिए आवश्यक एक कड़वी गोली है।" प्रासंगिक तर्कों के साथ कथन का आलोचनात्मक विश्लेषण कीजिए। (250 शब्दों में उत्तर दीजिए) 15 अंक  
 "The Agnipath scheme is a bitter pill needed for the resilience and efficacy of our armed forces." Critically Analyze the statement with relevant arguments. (Answer in 250 words) 15 Marks

AGNIPATH scheme is the PARADIGM shift in Armed forces recruitment of young officers for short tenures and Overhaul PENSION HEAVY defence expenditure for ABILE forces.

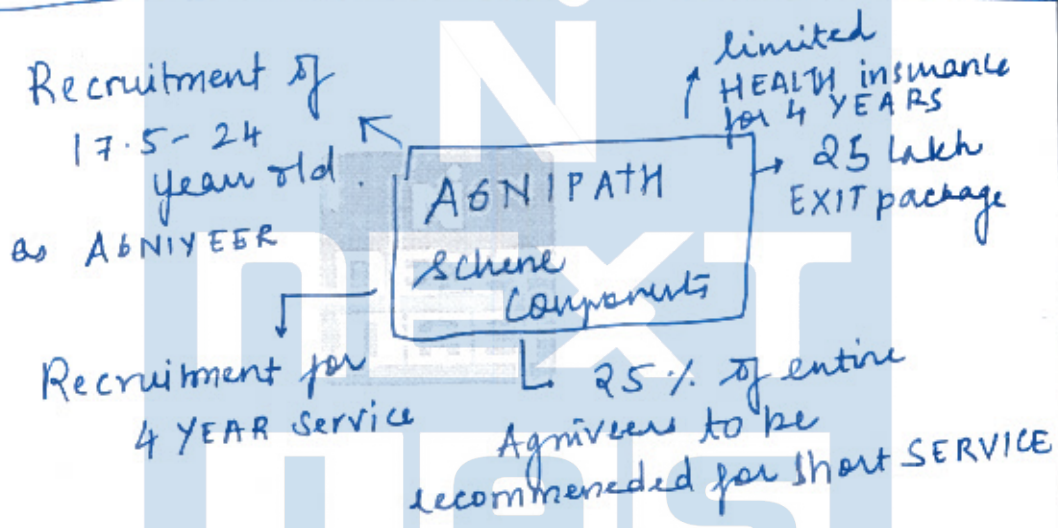


Fig: Agnipath scheme.

- AGNIPATH needed for RESILIENCE & EFFICACY
- needed for YOUTH & ABILE Forces of INDIA.  
 ex: ISRAEL's Compulsory enlistment program.
  - ENHANCE Capacity of Armed forces  
 ex: High vacancies in Army.



3. Commit HIGH PENSION, salary payout

ex: DEFENSE → 50% of PENSION expenditure & Salary in 2023

4. HELPS move expenditure for CAPITAL DEFENSE procurement

ex: SQUADRON of Air force is 32/46 capacity

5. Enhance our strength for 2.5 front War

ex: CHINESE provocation along TAIWAN

6. Enhance COMPETITIVE, 66 Survival of FITTEST → style of recruitment.

7. Create Stronger Cohesiveness of Forces with COMMON Agniveer scheme [INTEROPERABILITY]

Hence it is much needed reform.

BUT it is  
A BITTER  
PILL

→ 1. Leads to LOSS of PERMANENT and SAFETY of EMPLOYMENT opportunity

↳ 2. It can lead to MILITARIZATION of SOCIETY where youth who are unemployed post AGNIVEER.

3. limited scope for PERFORMANCE in 4 YEAR tenure.
4. NO opportunity for ALTERNATIVE employment. ex: 15% Quota in CAPF. is inadequate.
5. 25 Lakh EXIT package & limited LIFE INSURANCE are issues.
6. IMPACTS Cadre of all three forces  
ex: MOTIVATION of service impacted as lack of SECURITY

STEPS needed

1. INCREASE Skilling CERTIFICATIONS
2. encourage Private Sector to enroll ex: Mahindra announced interest
3. enhance RETENTION ratio to 33%.
4. INCREASE life long benefits to HEALTH, army anteen
5. Constantly monitor Agriweer grievances.

hence YOUTHFUL, ABILE armed force and CAPITAL EXPENDITURE focused Defence also needs to balance the socio-economic impact for INDIA@100

Space for Rough Work

