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GENERAL STUDIES (TEST CODE : 1244)

Name of Candidate	Shikhar	Registration Number	413063
Medium Eng./Hindi	Eng	Date	15-07-2019
Center	Pune		

INDEX TABLE		
Q. No.	Maximum Marks	Marks Obtained
1	10	
2	10	
3	10	
4	10	
5	10	
6	10	
7	10	
8	10	
9	10	
10	10	
11	15	
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14	15	
15	15	
16	15	
17	15	
18	15	
19	15	
20	15	

Total Marks Obtained:

Remarks:

INSTRUCTIONS

- Do furnish the appropriate details in the answer sheet (viz. Name, Registration Number and Test Code).
उत्तर पुस्तिका में सूचनाएं भरना आवश्यक है (नाम, प्रश्न-पत्र कोड, विद्यार्थी क्रमांक आदि)।
- There are **TWENTY** questions printed in **ENGLISH & HINDI** इसमें बीस प्रश्न हैं अंग्रेजी और हिन्दी में छपे हैं।
- All questions are compulsory.**
सभी प्रश्न अनिवार्य हैं।
- The number of marks carried by a question/part is indicated against it.
प्रत्येक प्रश्न/भाग के अंक उसके सामने दिए गए हैं।
- Answers must be written in the medium authorized in the Admission Certificate, which must be stated clearly on the cover of this Question-Cum-Answer (QCA) Booklet in the space provided. No marks will be given for answers written in medium other than the authorized one.
प्रश्नों के उत्तर उसी माध्यम में लिखे जाने चाहिए जिसका उल्लेख आपके प्रवेश पत्र में किया गया है और उस माध्यम का स्पष्ट उल्लेख प्रश्न-सह-उत्तर (क्यूसीए) पुस्तिका के मुख्य पृष्ठ पर अंकित निर्दिष्ट स्थान पर किया जाना चाहिए। उल्लिखित माध्यम के अतिरिक्त अन्य किसी माध्यम में लिए गए उत्तर पर कोई अंक नहीं मिलेंगे।
- Word limit in questions, if specified, should be adhered to.
प्रश्नों में शब्द सीमा, जहाँ विनिर्दिष्ट है, का अनुसरण किया जाना चाहिए।
- Any page or portion of the page left blank in the Question-Cum-Answer Booklet must be clearly struck off.
उत्तर पुस्तिका में खाली छोड़ा हुआ पृष्ठ या उसके अंश को स्पष्ट रूप से काटा जाना चाहिए।

16-B, 2nd Floor, Above National Trust Building, Bada Bazar Marg, Old Rajinder Nagar, Delhi-110060

Plot No. 857, 1st Floor, Banda Bahadur Marg (Opp Punjab & Sindh Bank), Dr. Mukherjee Nagar
Delhi- 110009

EVALUATION INDICATORS

1. Contextual Competence
2. Content Competence
3. Language Competence
4. Introduction Competence
5. Structure - Presentation Competence
6. Conclusion Competence

Overall Macro Comments / feedback / suggestions on Answer Booklet:

1.

2.

3.

4.

5.

6.

All the Best

1. Discuss the need of an Independent Fiscal Council (IFC) in bringing about transparency and accountability in fiscal processes in India. (150 words) 10
- भारत में राजकोषीय प्रक्रियाओं में पारदर्शिता और जवाबदेही का समावेश करने हेतु एक स्वतंत्र राजकोषीय परिषद (IFC) की आवश्यकता की चर्चा कीजिए।

15th Finance Commission NK Singh
proposed the need of IFC

Need

- ① Government is often accused of inflating fiscal figures like budget
- ② CAG report in 2017 also pointed out that tax department managed data to meet targets
- ③ Controversies over PLFS data, CSO black series data etc.

Bringing Accountability

- ① IFC will be bound by targets (target oriented approach)
- ② Regular reporting to Parliament
- ③ Responsible for not meeting target
- ④ Open to public scrutiny through RTI
- ⑤ Open to annual audits of CAG will bring accountability

Transparency

- ① Independent decision making, free from executive
- ② Regular report on targets, policies etc over the public domain
- ③ Improved functioning with minimum bureaucratic control
- ④ Check rising incidences of
 - Less and surcharge levied by Central Government
 - Rising State debts to over 24%
 - Non adherence to targets set under FRBM act
- ⑤ Single body instead of multiple regulators like RBI, Finance Ministry etc will increase both transparency and accountability

No need yet for IFC

- ① Additional cost of running the body
 - ② May lead to overlap of jurisdictions with RBI
 - ③ Difficult to manage varied structures
 - ④ Difficult Centre-State coordination
- IFC will go a long way in improving India's fiscal policy and controlling rising violation of fiscal targets.

2. Recognizing the potential of exports in generating employment, a number of steps need to be taken to address India's weakening export competitiveness. Analyze. (150 words) 10

रोजगार सृजन हेतु निर्यात क्षेत्र की क्षमताओं की पहचान करते हुए, भारत की कमजोर होती निर्यात प्रतिस्पर्धा को संबोधित करने हेतु कई कदम उठाए जाने की आवश्यकता है। विश्लेषण कीजिए।

Indian exports brings with it huge economic opportunity, one of them being employment.

Potential of exports in generating employment:

① Agricultural Exports

- Helps farmers
- Employment for landless
- Employment for women

② MSMEs

- Account for 40% of India's export
- Huge source of employment, especially in rural

③ services export

- Employment to IT sector

④ Manufacturing export

- Provide employment to majority of population as in China

Steps

- ① Increasing Awareness for related to customs and clearances, especially for MSMEs

- ② Export incentives in the form of tax exemption
- ③ Simplifying custom clearances
- ④ Address increasing export cost by developing efficient logistics
- ⑤ Improving agriculture exports through cold chain infrastructure, warehousing
- ⑥ Skilling the youth to generate high value exports

Logistics improvement
like Jal
Vikas Project

Steps taken

→ Agricultural
Export Policy

← MEIS
and IES

→ Foreign Trade
policy 2015-20

Challenges remain

- ① Cumbersome customs
- ② Legislative restriction like Minimum Export Price, stockholding limits
- ③ Competition from countries.
• Eg Vietnam in textile exports
- ④ Agriculture suffers due to Phytosanitary barriers
- ⑤ Rising Protectionism

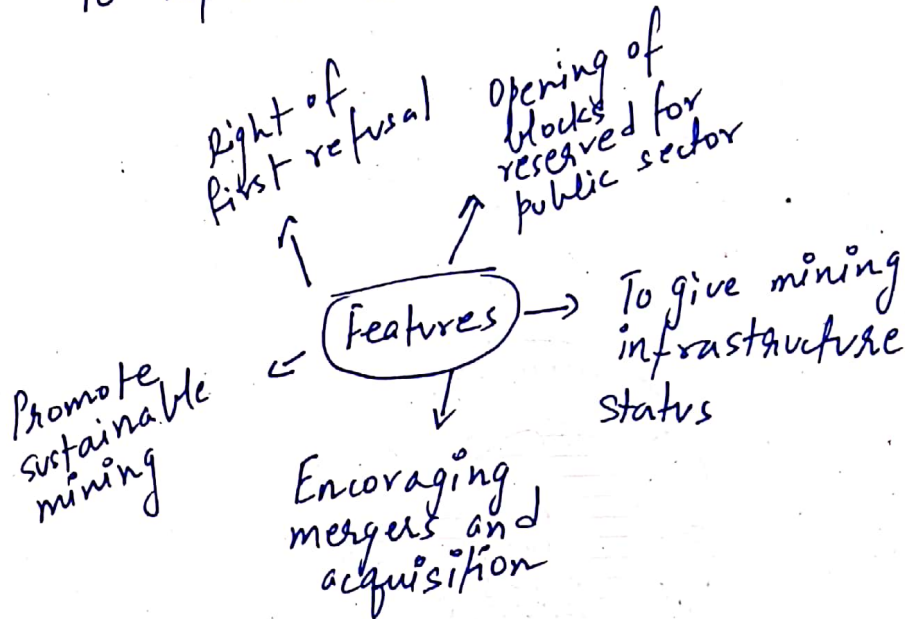
India must improve upon exports to
develop into \$5 trillion economy

3. Highlighting the main features of National Mineral Policy, 2019, discuss how it can help in ensuring sustainable and responsible mining.

(150 words) 10

राष्ट्रीय खनिज नीति, 2019 की मुख्य विशेषताओं पर प्रकाश डालते हुए, चर्चा कीजिए कि यह संधारणीय और उत्तरदायित्वपूर्ण खनन सुनिश्चित करने में कैसे सहायता कर सकती है।

National Mineral Policy makes it easier to tap into India's Mineral wealth



It will help in:

- ① Encourage private investments in mineral sector
- ② Infrastructure status would help access loans
- ③ Rationalized tariff policy will improve better returns

- ④ Will lead to exploration of new areas
- ⑤ Sustainable mining
- By ensuring proper utilization of District Mineral Funds (DMF)
 - Locals are not exploited or forcibly displaced
 - Checking pollution from mining

Challenges remain

- ① Public sector dominance
- ② Illegal mining,
eg. Rot Hole mining in Meghalaya
- ③ Lack of monitoring agency
 - As a result, DMF remain under utilized
 - Locals are forcibly displaced
 - No check as to whether Environmental norms are followed
- ④ Private sector is troubled
 - Lack of funds
 - Old machinery
 - Lack of expertise

Mining policy is a novel way to develop India into a "Mineral hub"

4. Highlighting the salient features of the PM JI-VAN Yojana, analyze how it can assist in achieving the vision and goals of the National Policy on Biofuels, 2018. (150 words) 10

“प्रधानमंत्री जी-वन योजना” की मुख्य विशेषताओं पर प्रकाश डालते हुए, विवेचन कीजिए कि यह जैव ईंधन राष्ट्रीय नीति, 2018 की दृष्टि और लक्ष्यों को प्राप्त करने में किस प्रकार सहायक हो सकती है।

PM Ji-VAN yojana is an initiative to tap into bioethanol sector.

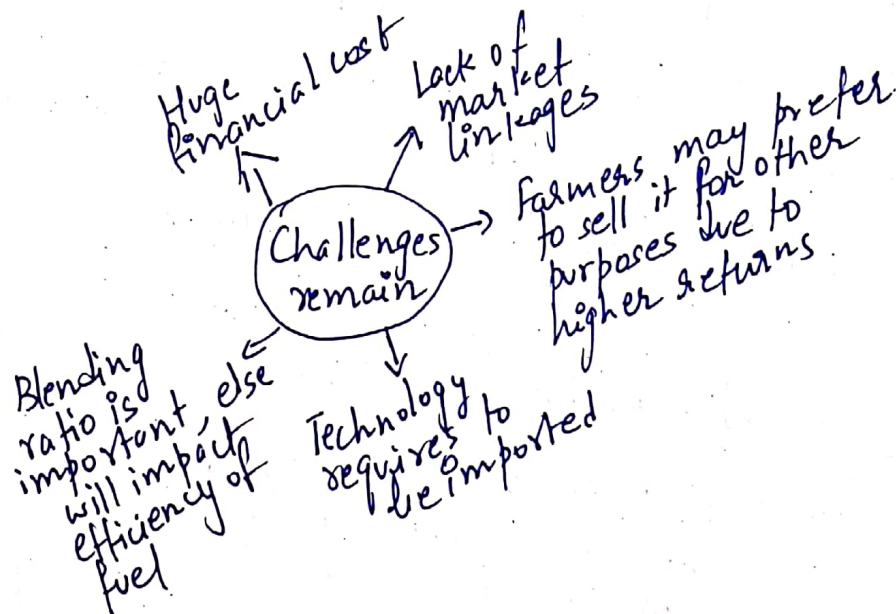
Salient features

- ① Viability Gap funding over ₹ 5000 crore for 26 bioethanol projects
- ② Mandatory purchase of fuel from producers by OMCs
- ③ Training farmers in bioethanol production

How it will assist in Biofuel policy.

- ① Increase availability of biofuel
• As non-availability has hampered its usage
- ② Help secure alternative income for farmers
- ③ Increased blending of bioethanol with fuels
- ④ Reduction in greenhouse gases

- (5) Curb import of fuels
• It has led to huge CAD
- (6) Decentralized fuel production
• As bioethanol plants will be set up in rural areas
- (7) No pressure on food security as it is produced through non foods



PM JI-VAN should be expanded as it will not only help improve farmer's income, play a role in doubling it by 2022 but also help India achieve emission reduction targets under INDC

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5. Zero Budget Natural Farming (ZBNF) provides an alternative to capital and chemical intensive agriculture currently being practiced in India. Analyze. (150 words) 10

जीरो बजट प्राकृतिक कृषि (ZBNF); भारत में वर्तमान समय में प्रचलित पूँजी और रसायन गहन कृषि का एक विकल्प प्रदान करती है। विश्लेषण कीजिए।

Zero Budget Natural farming is a farming method, wherein cost of farming is zero through use of traditional methods.

It is being practiced in Karnataka, Andhra.

An alternative

① Less Capital intensive

- Requires fewer machines and agricultural systems
- Reduces loan requirement for farmers
- Less labour required
- Less expenditure on developing infrastructure like irrigation system
- Will reduce government's fertilizer subsidy

② Less chemical intensive

- Requires zero pesticides/Herbicides
- Promotes organic way of farming, using cow dungs, straws

- Weed control through traditional means, reducing need for weedicides
- Maintain N:P:K ratio by organic manure like fish cake, ~~and~~ in place of urea

Still, not an alternative

- Not a time tested procedure
- Initial production may be low, impacting food security
- Lack of knowledge amongst farmers regarding organic production.
- Fail to adapt to tough conditions like drought and climate change
- Organic farming lacks market linkages
- May not be suitable for degraded and dryland areas which requires huge additional support in the form of inorganic fertilizer

Zero-Budget Natural Farming, as announced in 2019 Budget is a novel way to reduce farming costs. It should be promoted gradually. ~~Sikkim's~~ Sikkim's example should be followed in our way to becoming an organic nation. Also, ~~Karnataka's~~ Andhra's Zero Budget Farming model should be adopted

6. Marine life is facing 'irreparable damage' from the millions of tonnes of plastic waste which ends up in the oceans each year. In this context, examine the implications of plastic pollution on marine ecosystem and suggest some measures for addressing this problem. (150 words) 10

समुद्री जीवन, प्रति वर्ष समुद्र में पहुँचने वाले लाखों टन प्लास्टिक कचरे के कारण 'अपूरणीय क्षति' का सामना कर रहा है। इस संदर्भ में, समुद्री पारिस्थितिकी तंत्र पर प्लास्टिक प्रदूषण के प्रभाव का परीक्षण कीजिए और इस समस्या के समाधान हेतु कुछ उपाय सुझाइये।

Plastic pollution has major impact on marine biodiversity.



Implications

- ① Breaks into microbeats which are highly potent (stays for long)
- ② Concentrates wastes into a single area, eg. Great Pacific Gyre
- ③ Releases toxins which are harmful
- ④ Marine animals ingest it which damages their health
- ⑤ Aid in ocean acidification, coral bleaching.
- ⑥ Impedes ocean circulation
- ⑦ Affects blue economy potential

Steps to address

- International collaboration on managing transboundary plastic wastes.
- National steps
 - Strict adherence to Plastic waste management rules
 - Tracking point and non point sources of waste
 - Involving Civil society to generate awareness.
Eg. Poonawala initiative to check marine wastes
- Innovative solutions to remove plastics from oceans.
Eg. Wilson tube to collect Pacific garbage
- Promoting non plastics like jute bags

Steps taken

- UNEP H Cleanseas Campaign
- Blue Flag Certification
• Chandrabhaga beach, Odisha

Checking plastic pollution is a necessity to develop into a 'sustainable marine ecosystem'

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7. Write a short note on the evolution of Bharat Stage norms in India. Also discuss the significance and challenges posed by the planned introduction of BS-VI norms in India from the year 2020. (150 words) 10

भारत में भारत स्टेज मानकों के विकास पर एक संक्षिप्त टिप्पणी लिखिए। साथ ही, वर्ष 2020 से भारत में BS-VI मानकों को योजनाबद्ध रूप से लागू किए जाने के महत्व और उसमें आने वाली चुनौतियों की भी चर्चा कीजिए।

Bharat Stage Norms refer to vehicular emission norms adopted from European system.

Evolution

- BS IV introduced in India by making India specific changes over European system
- Directly, we are moving to BS VI instead of BS V to check rising pollution
- Delhi become first to adopt BS VI
- Mandatory in rest of India from 2020

Significance

- Pollution reduction
 - Reduces sulphure emission
 - Particulate matter reduced by 80%
- Requires minimum engine modification
- Reduce fuel usage as fuels become more efficient.
 - Will help curb CAD due to fuel imports

- Help India reduce pollution levels in cities like Delhi (Most polluted capital - WHO)
- Help India honour it to international commitments under Paris deal

Challenges remain

- Adopting EU norms in India might not be suitable as conditions in Europe differ
- Will not be sufficient as no. of vehicles are very high in India
- Studies have concluded that household pollution is a major contributor to air pollution, rather than vehicular
- Difficult compliance for the automobile sector

India should promote steps like

- Fastracking e-vehicles
eg. FAME India scheme
- Curbing number of vehicles
 - Through better public transport
 - Congestion tax
 - Parking tax
 - Odd even formula

Reducing ~~vehicular~~ vehicular pollution is the need of the hour to check rising health cost due to air pollution and protect our human as well as natural capital

8. What are black holes? Highlight the challenges in imaging a black hole? How were these challenges overcome by the Event Horizon Telescope project? (150 words) 10

ब्लैक होल क्या हैं? ब्लैक होल के चित्रण (इमेजिंग) में आने वाली चुनौतियों पर प्रकाश डालिए। इवेंट होराइजन टेलीस्कोप प्रोजेक्ट द्वारा इन चुनौतियों को कैसे दूर किया गया?

Black holes refers to a regions in space where the gravitational forces are so strong that even light cannot escape. A Black hole is an invisible region which traps any object entering it.

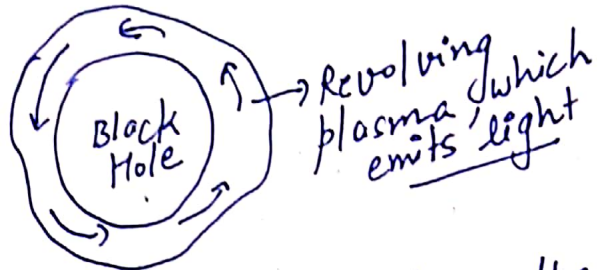
As per Einstein's 'Theory of relativity', time slows down in a black hole.

Challenges in black hole imaging

- Since light cannot escape, no telescope could image a black hole
- Also, no interstellar mission could image a black hole as
 - None could get near it as it would be trapped by the gravity
 - It is difficult to observe or locate black holes in space

However, first images of black hole we captured by Event Horizon Telescope in Messier Galaxy

Overcoming the challenge



Instead of imaging the black hole, the telescope imaged the gas rotating around the black hole. The gases which rotated rubbed due to friction and emitted plasma/light which was captured as the boundary of Black Hole.

The telescope was placed in different places on Earth and the combined image generated the complete black hole. Heavy computing was involved and it took several months to get the final image.

Black hole discovery opens up new discussion on life beyond earth, astrophysics. More research should be undertaken, as it will help us gain insight on the "evolution of universe".

9. While mentioning the objectives of the Arms Trade Treaty (ATT), discuss the challenges which are hindering the utilization of the ATT to its full potential. (150 words) 10

शस्त्र व्यापार संधि (ATT) के उद्देश्यों का उल्लेख करते हुए, उन चुनौतियों की चर्चा कीजिए, जो ATT को इसकी पूर्ण क्षमता से उपयोगित किये जाने में बाधक हैं।

Arms Trade Treaty is to control the trade in conventional weapons.

Objectives

- To control the multilateral trade in weapons like guns
- To ensure that weapons are not getting into wrong hands like terrorists
- To check proliferation of weapons which might threaten peace
- To check its use by civilians.
Eg. conventional weapons used in lone wolf attacks
- To help nations develop its arms policy.

Challenges

- Loose policies of states like USA which has increased access to conventional weapons to citizens.
- Resulting in violence
- Breakdown of treaty
 - USA threatening to pull out

- No monitoring mechanism to check whether the rules are followed
- Lack of control over rogue of nations like North Korea, where weapons are made freely
- Black marketing of weapons
- No enforcement of treaty, leaving nations to their will

Steps which can be taken

- Independent verification agency like OPCW in case of chemical weapons or IAEA in case of atomic energy
- Penalty for non-compliant nation by banning them from arms trade
- International coordination that weapons don't get into wrong hands

Strengthening ATT is a step towards world peace and security.

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10. Threats to internal security of India may be posed both through the communication networks and also to the networks. Discuss. Also, highlight the steps taken by the government in making the networks more secure.

(150 words) 10

भारत की आंतरिक सुरक्षा को खतरा संचार नेटवर्कों के माध्यम से एवं स्वयं संचार नेटवर्कों को खतरा होने, दोनों ही प्रकार से हो सकता है। चर्चा कीजिए। साथ ही, नेटवर्कों को अधिक सुरक्षित बनाने हेतु सरकार द्वारा उठाए गए कदमों पर प्रकाश डालिए।

Threats to internal security has manifested in various forms

- Noxalism
- Cross border terrorism like aided by Pakistan
- Separatists

Threat to communication network

- Jamming of communication lines which will make communication within intelligence agencies difficult
- Interception of communication channel will reveal critical information to terrorists
- Damaging communication will hamper contact with the affected population, reducing their rescue prospects

Threats through communication network

- Visible during Mumbai attacks where terrorists coordinated ~~thru~~ through Voice over Protocol (VoIP)

• Media communications during attacks like Mumbai revealed security locations to the terrorists

• Other challenges as well

- Failure of intelligence to intercept communications
- Lack of cyber specialists
- Poor coordination / communication between different security agencies
 - visible during Mumbai attack

Steps taken

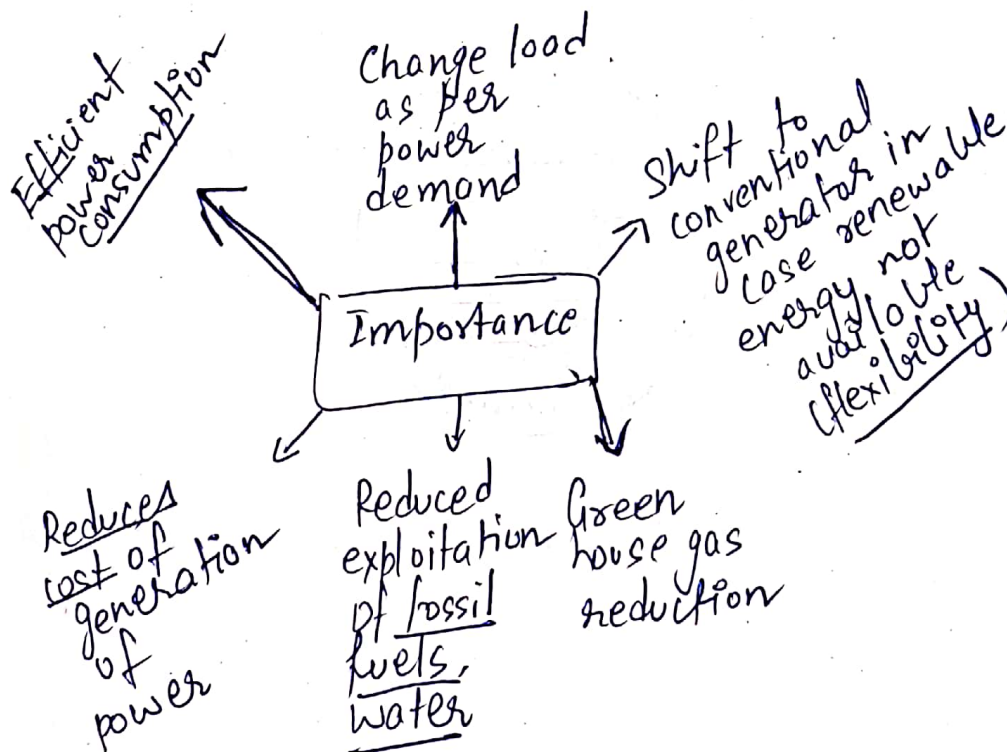
- CCTN network
- NATGRID to integrate communication system into a national grid
- US of (Universal Service Obligation Fund) to provide communication to remote areas.
- Military satellites and IRNSS to improve communications.

Internal security has to be strengthened to maintain our peace and prosperity especially in the light of ~~the~~ heightened threats from China and Pakistan

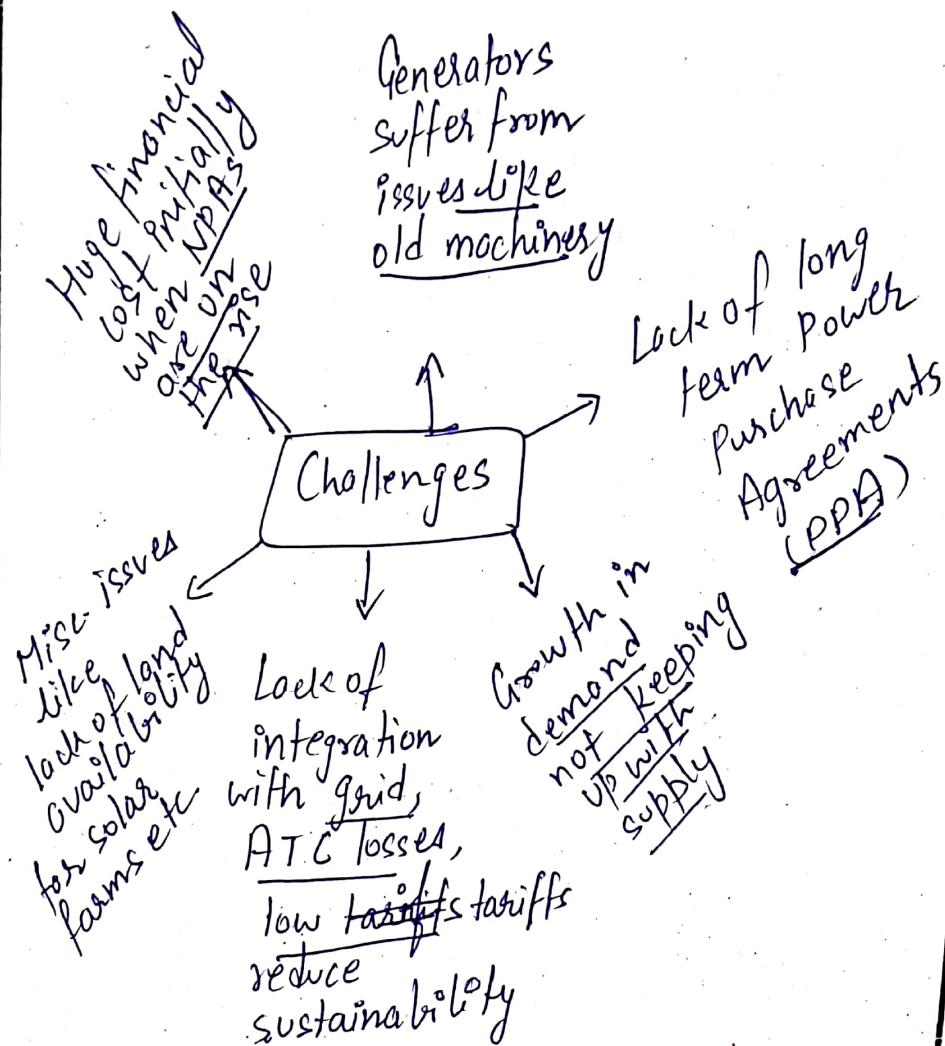
11. Highlight the importance and challenges related to integration of Variable Renewable Energy (VRE) in India. Mention some steps that can be taken for its smooth integration with the synchronized Indian grid. (250 words) 15

भारत में परिवर्तनीय नवीकरणीय ऊर्जा (VRE) के एकीकरण के महत्व और इसमें संबंधित चुनौतियों पर प्रकाश डालिए। ऐसे कुछ कदमों का उल्लेख कीजिए जो समक्रमिक (सिंक्रनाइज्ड) भारतीय ग्रिड के साथ इसके सहज एकीकरण के लिए उठाए जा सकते हैं।

Indian aims to increase Renewable sector to 175 GW by 2022



However, some challenges remain



Steps taken

- National Solar-Wind Hybrid energy policy.

Further
steps

↓
Long term
power
purchase
agreements
(PPA)

↓
Replacing
old
generators
with new
ones,
VGF for
new ones

↓
Tax incentives
for setting
up plants,
state should
provide for
land
acquisition

←
Rationalizing
Tariff structure.
Draft Electricity
Act also
suggest so

←
Tackling NPAs
through UDAY
scheme

←
Technology like
Smart meter,
smart grid

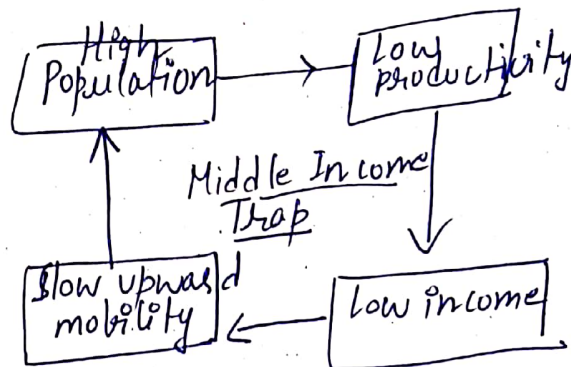
Reviving & Integrating VRE, will help us
achieve energy security

12. There have been arguments that India could fall into a 'middle income trap'. Explaining the phenomenon, highlight the reasons behind such arguments. How can India avoid it? (250 words) 15

ऐसे तर्क दिए गए हैं कि भारत 'मध्यम आय पाश' में फँस सकता है। इस परिघटना की व्याख्या करते हुए, ऐसे तर्कों के लिए उत्तरदायी कारणों पर प्रकाश डालिए। भारत इससे किस प्रकार बच सकता है?

Middle Income Trap is a scenario where the country is unable to transition into higher income slab.
Eg. it has been happening in Brazil and South Africa.

Reason



Reasons

- Increasing population
 - Burdens limited resources, reduces income per capita
- Stagnant agriculture growth
 - As a result, 50% population is deprived

- India's peculiar growth
 - Direct transition to service sector, instead of manufacturing sector which is a major source of employment
- Job-skill mismatch
 - Lack of high paying jobs
- Lack of skills
 - As per Tech Mahindra, CEO, 90% IT graduates unemployable
- High informal economy
 - 84% workers are informal. Hence, they fail to demand higher wages
- Slow ~~lower~~ upward social mobility
 - Lower strata lacks health, education etc., which slows their upward mobility.
- High inequality
 - As per Oxfam, 1% Indians own 60% wealth
- MSME trouble
 - MSME's, which are major source of employment face credit issues, old machinery etc.

Steps

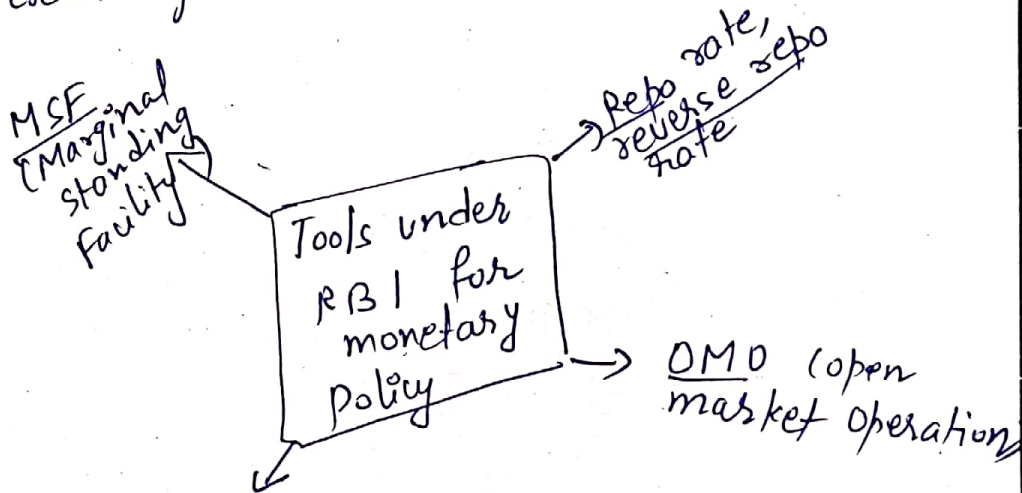
- Improving agriculture productivity
 - APMC reforms
 - Training of farmers
 - Creating non-farm jobs to reduce pressure on land
- Improving manufacturing sector
- Capacity building of lower strata in terms of health, education etc.
- Skill development through
 - PMKVY
 - Skill India mission
- Educational reforms, industry-academia partnerships through MoUs
- Formalization of economy
 - Eg. PM Rozgar protection Yojana

India must opt to grow into a higher middle income nation to ensure inclusive growth.

13. Highlighting its importance, discuss the major issues that plague effective monetary policy transmission in India. Also, mention the steps taken by RBI to improve it. (250 words) 15

भारत में मौद्रिक नीति संचरण के महत्व पर प्रकाश डालते हुए, उन प्रमुख मुद्दों पर चर्चा कीजिए जो इसकी प्रभाविता को बाधित करते हैं। साथ ही, इसमें सुधार के लिए RBI द्वारा उठाए गए कदमों का उल्लेख कीजिए।

Monetary policy refers to steps to increase credit growth in an economy.



Challenges in Policy transmission

① Huge informal economy

- They do not depend on banking channels for credit support

- Block market

- Bank's inaction

- Banks fail to transmit policy cuts due to loss in revenue
- Banks do not depend much on borrowings from RBI
- Bank's source of income is public money, which does not depend on RBI policy
- High NPAs also make bank reluctant

- RBI's limits

- RBI lacks authority to force action by banks

- Bond market

- Bond market in India remain underdeveloped

- Government policies

- Populist policies like loan waiver impacts RBI's policy

- Public apathy

- Public fail to pressurize banks to transfer rate cuts due to lack of awareness

Steps taken by RBI

- Increasing instances of Moral Suasion and penalty by RBI
- Application of new norms
 - Linking policy rates to External Benchmark.
 - Dollar swap to inject money as a new tool
 - Credit control through incremental CRR, CBL Capital Conservation Buffer
- RBI to reduce Repo rates by 25 basis points
- MCLR based lending to make it more reflective of RBI's monetary policy
- MPC to manage monetary policy

Effective
Monetary Policy transmission will help
in credit growth and maintaining
fiscal stability

14. Highlight the constraints faced by rainfed agriculture in India. Discuss some agronomic practices that can be adopted for stabilizing agricultural production in rainfed areas. (250 words) 15

भारत में वर्षा सिंचित कृषि में आने वाली बाधाओं पर प्रकाश डालिए। वर्षा सिंचित क्षेत्रों में कृषि उत्पादन को स्थायित्व प्रदान करने हेतु अपनाई जा सकने वाली कुछ कृषि-वैज्ञानिक पद्धतियों की चर्चा कीजिए।

More than 50% of agriculture is rainfed.

Contribution of rainfed agriculture

- 60% of agricultural GDP
- More than 50% of farm output, livestock GDP

Constraints

- Policy bias towards irrigated agriculture
 - Most of government schemes like GM crops, HYV, etc. require a heavy water and are not feasible in rainfed areas.
 - Irrigated agriculture gets majority of credit
 - Even MSPs favour rice and wheat which are mainly irrigated crops.

- Lack of investment
 - Most of investment related to dams, barrages are for irrigated areas.
- Monsoon variability
 - It impacts food security of rainfed areas.
- Low farmers income
 - High income crops like sugarcane, rice cannot be grown in rainfed areas, which increases vulnerability of farmers
 - Most farmer suicides related to rainfed areas
- Increased vulnerabilities
 - To pest, diseases etc.

Steps to be taken

- Focus on traditional water harvesting methods like
 - Eris and Ogris of Tamil Nadu
 - Ahar Pyne of Bihar
 - Johads of Rajasthan

- Expanding Irrigation coverage
- Increase MSPs for dryland farming
- Collateral free loans for rained farmer.
 - Extending loan repayment tenure to account for monsoon variability
 - Crop insurance through PM Fasal Bima
 - Scientific risk management of crops
- Adapting new methods like drip irrigation, sprinkler irrigation
- Focus on non farm activities to provide additional support
- Capacity building of rained area farmers in crops like pulses, millets etc which can resist monsoon variations
 - Krishi Vigyan Kendras can be utilized

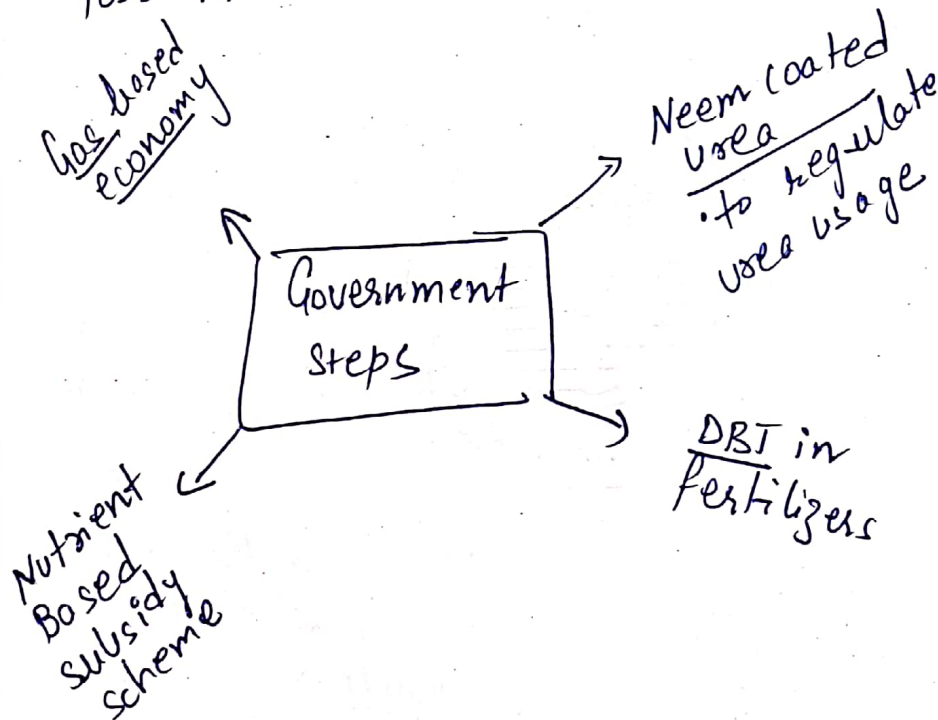
Supporting rained farmers is the need of the hour to not only double farmers income but also ensure food security

15. Despite the steps taken by the government in recent years, a number of problems continue to persist in the urea sector in India. Discuss. What reforms should be taken to address the persisting problems?

(250 words) 15

हाल के वर्षों में सरकार द्वारा उठाए गए कदमों के बावजूद, भारत में यूरिया क्षेत्र में कई समस्याएं निरंतर बनी हुई हैं। चर्चा कीजिए। मौजूदा समस्याओं के समाधान हेतु क्या सुधार किए जाने चाहिए?

Urea sector is necessary for the supporting agriculture, which accounts for 17% GDP.



Problems

- Overuse
- It has led to skewed N:P:K ratio

- Block Marketing
 - Excess urea availability due to cheaper rates leads to block-marketing
- Failure of DBT
 - Insufficient financial inclusion, last mile reach
- Fertilizer company
 - Lack access to natural gas required for production of ammonia
 - Highly polluting industry
 - Old machinery, rising lead loans

Steps to be taken

- Rationalizing subsidy on urea
- Increasing access to nutrients like phosphorus and sulphur.
- Promote organic farming
- Develop sustainable farming by increasing awareness regarding urea overuse
 - Soil Health cards could be used

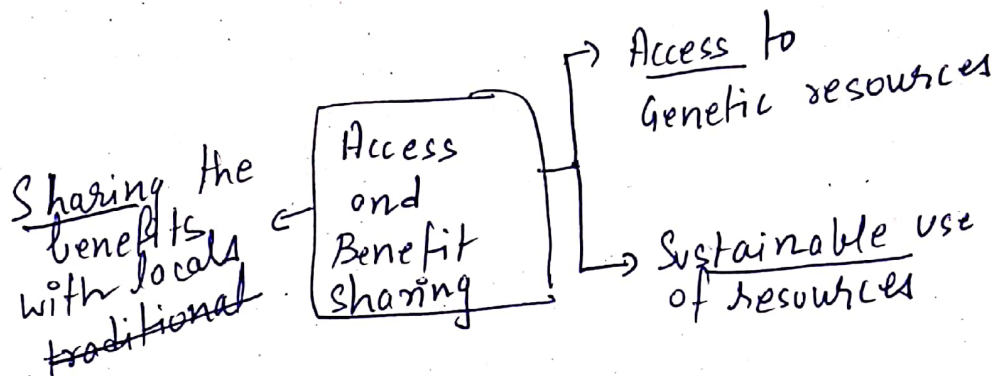
- Promoting gas based economy
Eg. City Gas Distribution (CGD)
PM Ujjala Ganga.
- This will reduce cost for
fertilizer companies, thus
helping the government phase
out subsidies
- Marketing chains for organic
manure like fishcake, animal
bones to increase its availability
- It will reduce urea subsidy
burden

While urea sector problems need to be
solved, steps must be taken to ensure
that urea is used sustainably while
promoting alternative organic means.

16. What is Access and Benefit Sharing? Explain how it aids in sustainable use of biodiversity. Also, mention the different global and national level mechanisms for ensuring Access and Benefit Sharing. (250 words) 15

पहुँच और लाभ साझाकरण (एक्सेस एंड बेनिफिट शेयरिंग) क्या है? यह जैव विविधता के संधारणीय उपयोग में किस प्रकार सहायक है, स्पष्ट कीजिए। साथ ही, पहुँच और लाभ साझाकरण सुनिश्चित करने हेतु वैश्विक और राष्ट्रीय स्तर की विभिन्न प्रणालियों का उल्लेख कीजिए।

ABS = To support access to genetic resources

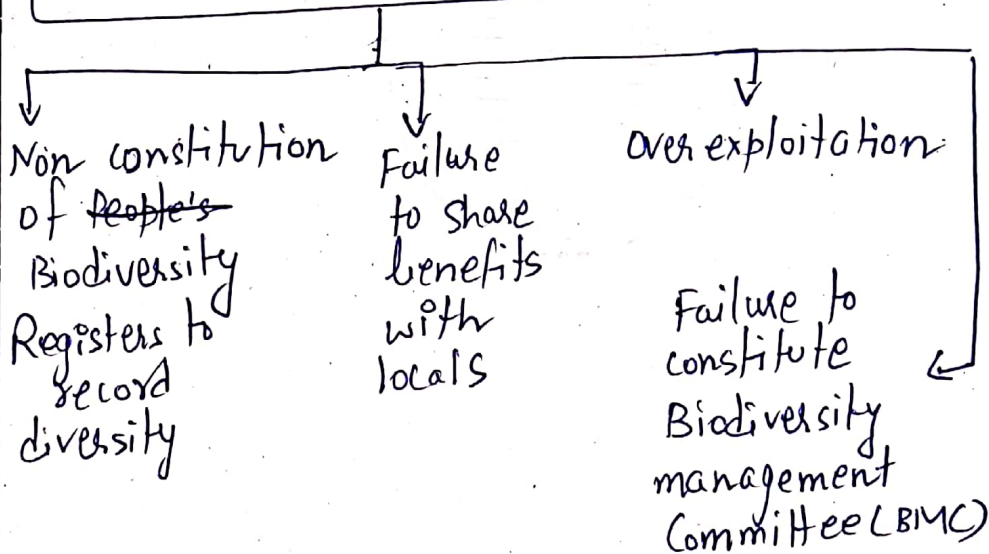


Importance in sustainable use of biodiversity

- Protects exploitation of local peoples as well as biodiversity by ensuring sustainable use.
- Protects genetic resources
 - By ensuring wise use
- Empowers the local communities
 - Local community gain benefit in the form of finance.
 - These local communities in turn protect biodiversity

- Recognition worldwide
 - Local genetic resources gain international recognition
 - More and more NGOs and civil society get involved in conservation
- Private investment
 - Those extracting genetic resources invest in its protection
- Data collection and record of genetic material

Some challenges remain

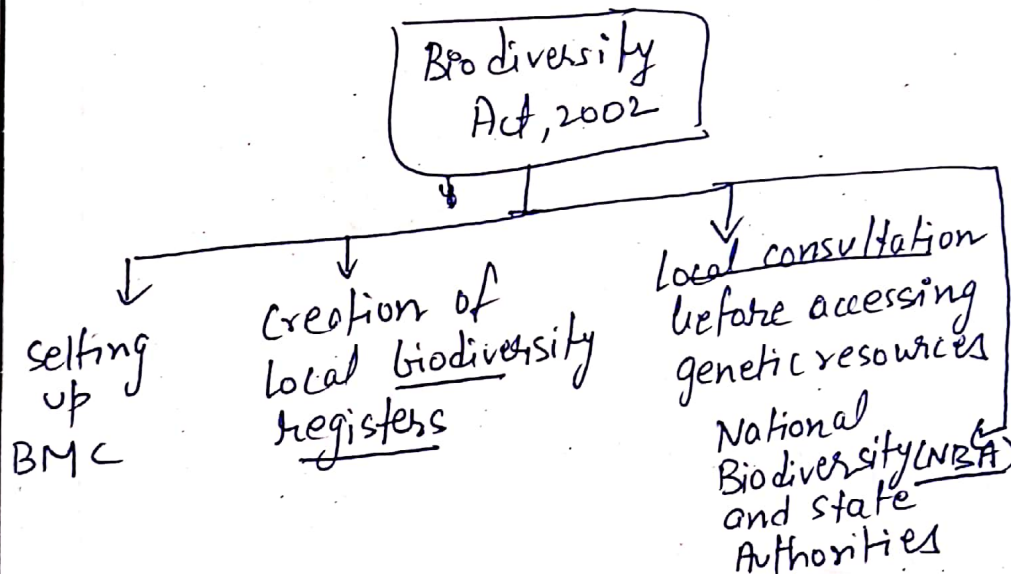


- Recently, Uttarakhand HC ordered Divya Pharmacy to Share benefits with locals. Shows the role of ABS in empowering locals

International Mechanism

- Nagoya Protocol
 - Access to genetic resources
 - Sustainable use
 - Sharing
- CBD (Convention on Biodiversity)
 - Sustainable use of biodiversity

National Mechanism

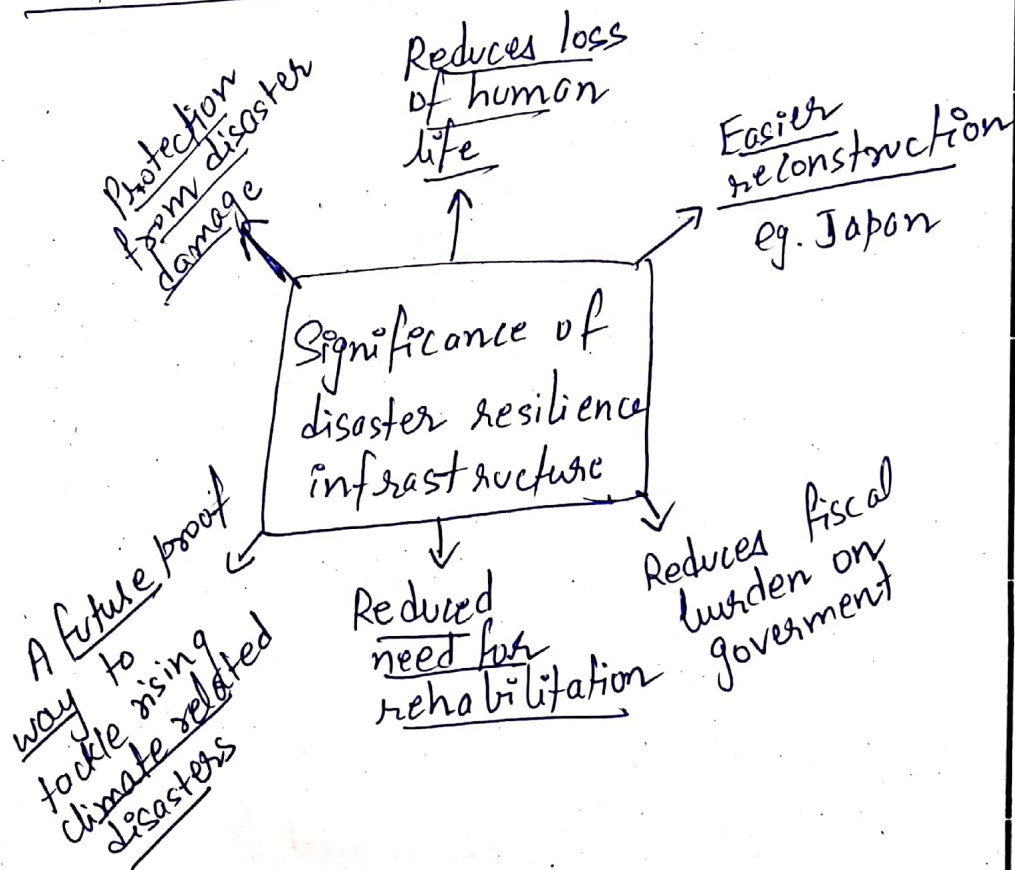


Access and Benefit Sharing is a step to empower the tribals and tribals, the tribe heroes of environment.

17. Stating the significance, discuss the challenges in achieving disaster resilience of infrastructure. Suggest some ways for mainstreaming it in the development paradigm. (250 words) 15

अनसंरचनाओं का आपदाओं के प्रति मुनम्प (रेजिलिएंट) होने के महत्व को स्पष्ट करते हुए, इसमें संबंधित चुनौतियों की चर्चा कीजिए। इसे विकास प्रतिमान की मुख्यधारा में लाने हेतु कुछ उपाय सुझाइये।

India loses \$80 bn in lost year 20 years
as per UN report



Challenges

- Huge financing requirement

- Lack of environmental engineers
- Encroachment of land
 - Makes it difficult to engage in new construction due to difficulty in land acquisition
- Lack of technology expertise
 - Technology has to be imposed.
- Variety of challenges
 - India suffers from variety of disasters like floods, tsunamis, earthquakes, etc
 - Hence, "one size fits all" approach won't suffice
- Poverty and apathy
 - Poor vulnerable communities are often poor, hence may not be able to afford costly disaster proof infrastructure
 - Lack of public awareness on the need for such infrastructure.
- Law implementation
 - Failure to adhere to

Construction norms.

Way forward

- Private participation
 - Tax incentives
 - Viability gap funding
 - Central financing
 - A central fund under NDRF to support such infrastructure
 - International collaboration with countries like Japan
 - State support
 - States should provide for land acquisition
 - Affordable housing
 - PM Awas Yojana can be extended to disaster resilient infrastructure
 - National Housing and Habitat Policy's recommendation of 15% housing of vulnerable in residential projects.
 - Disaster prone areas mapping and risk wise infrastructure development.
- Disaster Resilient infrastructure is needed in the light of rising disasters to protect vulnerable

18. Highlighting the significance of data localization for India, discuss various challenges associated with data localization. (250 words) 15

भारत के लिए डेटा के स्थानीयकरण के महत्व पर प्रकाश डालते हुए, डेटा के स्थानीयकरण से जुड़ी विभिन्न चुनौतियों की चर्चा कीजिए।

Data localization refers to storing data within national boundaries.

Significance

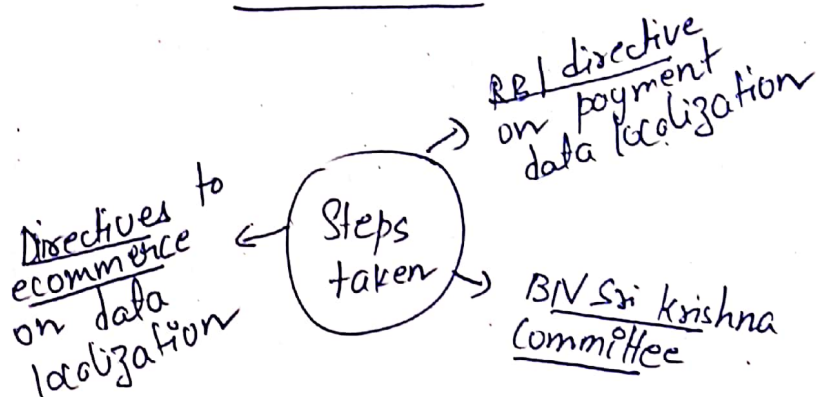
- Data privacy
 - So that data is not misused.
- Data is the new oil
 - Data is required in new technology like AI, Machine learning etc.
 - Access to data will support new initiatives like Smart city
 - ~~It~~ Local data access to Indian startups will help in their expansion
- Security
 - Data localization will help security agencies monitor the some
 - No need to depend on foreign countries for data access.
Eg. Germany refused data due to absence of Mutual Legal Assistance Treaty (MLAT)

- A national property
 - Nation should have the right to its citizen's data
 - It will help better manage health, education policies
- Vested Foreign interests
 - In the absence of data localization, foreign ~~companies~~ nations could damage India's political scenario
 - Eg. Cambridge Analytica case
- To check monopolistic attitude
 - So that foreign multinationals do not have the sole privilege over Indian data.
 - Data localization will make access to it equitable

Challenges

- Lack of data storage infrastructure
- Lack of comprehensive IT law on privacy, so what is data is misused?
 - State surveillance
 - Data leaks as in UIDAI

- Lack of skilled cyber security forces
 - Even police officials lack expertise to deal with data related issues
- Will affect investments in digital economy
- May go against liberalism and globalization.
 - May invite backlash from other countries on Indian companies.
- Also affect Indian startups who might see increased costs



Data localization norms should focus on GDPR of EU could be a guideline towards data localization.

19. Money Laundering as a socio economic offence is a menace especially for developing countries like India. Comment. What measures have been taken at the domestic and international levels to deal with this menace?

(250 words) 15

एक सामाजिक आर्थिक अपराध के रूप में धन शोधन विशेषकर भारत जैसे विकासशील देशों के लिए एक खतरा है। दिप्यणी कीजिए। इस खतरा से निपटने हेतु घरेलू और अंतरराष्ट्रीय स्तर पर क्या उपाय किए गए हैं?

Money Laundering means misappropriating financial income, evading taxes to avoid financial scrutiny

Social menace

- Tax lost results in low expenditure on social sectors like health, education
- Money laundering companies indulge in practices like low wage, child labour etc to reduce costs and taxes.
- Exploitation of workforce by neglecting social security schemes like EPF
- Funding illegal activities like terrorism, which impacts social development

Economic Menonance

- Taxes lost creates budget deficit
- Reduces government income to run the schemes
- Tax avoidance affects national GDP
- Fraud on banks creates NPA crisis
eg Nirav Modi scam

International measures

- FATF
It list countries in grey or black lists to check money laundering.
- FSB
G20's financial stability board develops policies to tackle it
- ~~WTO~~ DTAA
Double Taxation Avoidance agreement to check money laundering.

National Measures

- FEO
Fugitive Economic Offenders Act
to try Money Laundering cases
- PMLA
ED enforces Prevention of
Money Laundering Act.
- ULPA (Unlawful Activities
Prevention Act)
- Benami Properties Transaction
Act

It ensures that those holding
unaccounted property are tracked
and tried

Checking Money Laundering will help
raise revenue for the government
which in turn will help increase
investment in nation welfare.

20. The primary motive of terrorism differs from that of organised crime but there exists a symbiotic relationship between the two. Discuss.

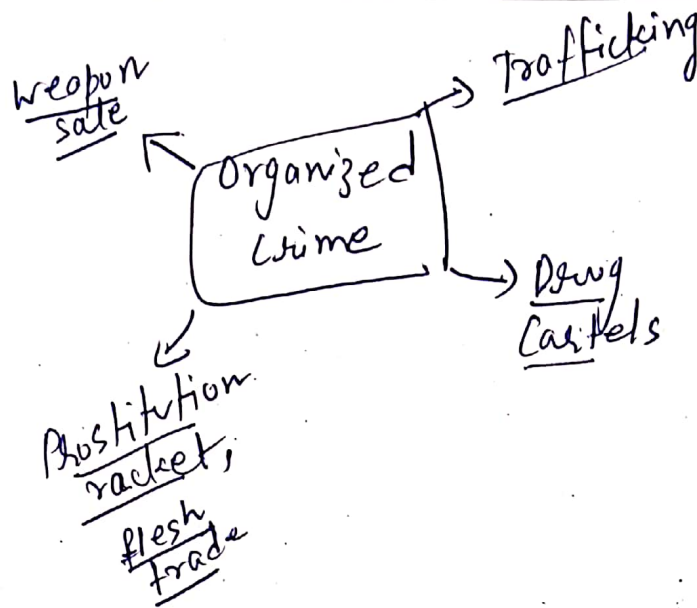
(250 words) 15

आतंकवाद का प्राथमिक उद्देश्य संगठित अपराध के उद्देश्य से भिन्न होता है, किन्तु दोनों के मध्य एक सहजीवी संबंध पाया जाता है। चर्चा कीजिए।

Terrorism means inflicting damage on a nation to achieve selfish goals.

Terrorism motive

- To cause damage to a nation
- To pursue self interests.
- Religious fanaticism, eg ISIS
- To take revenge,
eg 26/11 attack
- For achieving foreign policy
 - Pakistan's state sponsored terrorism in Kashmir
- Geopolitical ambitions
 - Taliban's goal of gaining control over Afghanistan.
- Regional instability, creating fear, etc are some other primary motives



Motives of organized crime

- Mainly involves a group of people who pursue monetary goals.
Eg. drug cartels. to gain money
- Some organized crimes also threaten the state security.
Eg. those funding separatists, naxals.

Mentality
remains
the same,
to inflict
damage

Organized crime
proceeds are
used to fund
terrorism
activities

Symbiotic
relation
between
two

Organized crime
~~traffick~~ supports
terrorists like
recruiting youth

Organized
crime
serves
terrorism,
eg. human
trafficking
to ISIS

Cases

- Organized crime proceeds are involved in funding terrorist from Pakistan, separatists and Naxalism
- Weapon are being supplied to naxals, eg IEDs

Hence, an integrated approach to both organized crime and terrorism is needed.