MONTHLY
CURRENT AFFAIRS
## OCTOBER 2022
for Competitive Exams

The Complete Coverage of All Important Events from September 2022

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- ONE NATION, ONE LAW, DEMAND FOR UNIFORM CIVIL CODE
- GOVERNMENT APPOINTS COMMISSION TO STUDY SCHEDULED CASTE STATUS OF DALITS POST CONVERSION
- LVM3-M2/ONE WEB INDIA-1, INDIA-1, INDIA'S HEAVIEST SPACE VEHICLE
- BLUE FLAG CERTIFICATION
- LAKSHMI-GANESH ON INDIAN CURRENCY

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UPSC CSE 2021 ACHIEVERS
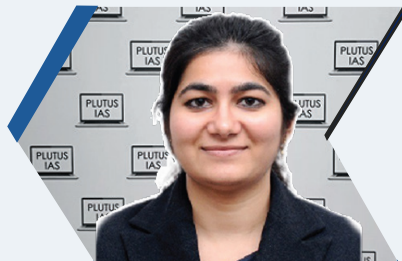
DIVYA MISHRA
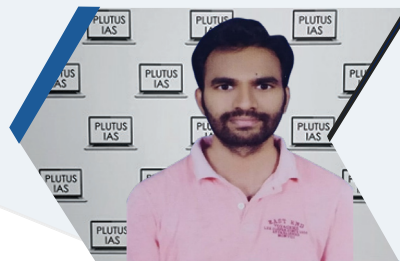**AIR 28**

DIVYANSHU CHOUDHARY
AIR 30

ANJALI SHROTRIYA
AIR 44

NIKHIL MAHAJAN
AIR 80
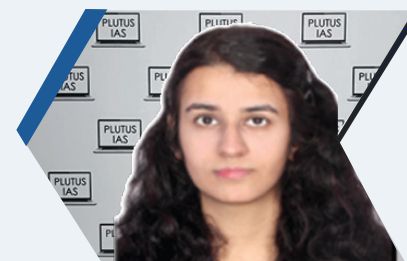
NITISH RAJORA
AIR 268

SURYABHAN ACHHELAL
AIR 488

NEERAJ KUMAR
AIR 550

MAHIMA MADAN
AIR 612

Many more...

Foreword

Dear Aspirants,

This magazine by **Plutus IAS team** is designed in such a fashion that it holistically covers all the relevant and important topics for civil services exam or IAS exam to make aspirants battle or exam ready. **Plutus IAS Current Affairs Magazine** is a secondary source of information, the newspaper will always remain the first source for preparation of current affairs.

Now, current affairs no longer remain the current, it is contemporary affairs. Questions asked in prelims as well as mains test the conceptual clarity of an aspirant.This magazine prepared with an aim to help you understand the interlinkage of both statics and current and internalize those concepts required to crack this examination.

Plutus IAS team wishes you all the best. Prepare for UPSC Civil Services Examination with calm , composed and serene mind with some patience to crack this examination in one go.

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Team
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Sources:

The Hindu | The Indian Express | The Economic Times | Press Information Bureau (keep checking the Features section for imp articles and our weekly PIB Gist) | PRS (only for recent Bills and articles related to them) | IDSA: Institute for Defense Studies and Analysis (keep checking every 2-3 days for in-depth IR articles) | Yojana and Kurukshetra (no need to read all articles – read selectively) | LokSabha and RajyaSabha Debates | NCERTs All standard reference books.

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(Ethics, Integrity & Aptitude)

General studies - 2

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THE FREEBIE CULTURE

CONTEXT

- The Election commission recently wrote a letter to all recognized national and state political parties asking them to spell out how they plan to raise resources to finance their poll promises.

- This is a U-turn in EC's earlier stance where though it condemned freebies, it duly noted that regulating policy-making on freebies would be an overreach of its powers.

- The EC has given the political parties a proforma with the letter to declare quantification of the physical coverage of the promised schemes, their financial implications, and the number of financial resources available.

- Various political parties have called this step by the EC ultra vires and outside the powers of the EC.

WHAT ARE FREEBIES

- To win elections, political parties offer free electricity, water monthly allowances to the unemployed, free ration, free bus rides to women, free TVs and laptops, etc. These are called freebies and are distributed to garner votes from the public.

- They function as a bribe as people vote for the party that offers freebies

- Recently, the Supreme Court referred petitions seeking a ban on freebies distributed by political parties before elections to a three-judge bench. The bench will look if there is a need to reconsider the Apex court's 2013 judgment in the S Subramaniam Balaji vs State case of Tamil Nadu.

- The court while referring the matter to the three-judge bench did agree that freebies create an "uneven playing field". It asked the Election Commission of India to consult political parties and issue guidelines on the election manifesto and make it a part of the Model Code of Conduct. It further held that the political parties who form the government riding the wave of freebies are bleeding the State finances dry by actually trying to fulfill their outlandish promises using public money.

Subramaniam Balaji v. State of Tamil Nadu, 2013

- In this case, the Supreme Court division bench held that making promises in election manifestos does not amount to 'corrupt practice' under Section 123 of the Representation of People Act (RPA)

- The petitioner argued that promises of free distribution of non-essential commodities in an elec-

tion manifesto amounted to electoral bribes under Section 123 of the RP Act. He further said that money could be taken out of the Consolidated fund of India only for "public purpose" and that distribution of freebies to certain sections of society was violative of Article 14 of the Constitution.

- The court however held that freebies do not amount to corrupt practices and bribes

ROLE OF THE ELECTION COMMISSION

- **Article 324** of the Constitution vests the superintendence, direction, and control of the preparation of the electoral rolls for, and the conduct of, all elections to Parliament and the Legislature of every State with the Election

- The Supreme Court had also in an earlier case relating to the criminalization of politics held that the ECI has plenary powers to supervise and conduct free and fair elections. However, the said powers also have limitations. The ECI has to act in conformity with the law made by Parliament and cannot transgress it.

- The ECI in an affidavit filed to the Supreme Court said that there is no "precise definition" of the term 'freebies' in the existing law and it is difficult to define them, are subjective, and open to interpretation. It also stated that freebies can have a different impact on society, economy and equity depending on the situation and time period

- The ECI's recent move is being seen as institutional overreach. The commission is seen as a guardian of public value and democracy. Going outside its mandate raises questions about its credibility.

BENEFITS OF FREEBIES

- **Helps the poor and downtrodden**: Promises of free ration or subsidized grain and electricity may be populist but are a boon for the poor.

- **Helps in growth**: Freebies facilitate growth and development. Public Distribution System, employment guarantee schemes, and schemes aimed at benefits for health and education lead to growth and development

ISSUES WITH FREEBIES

- **Leads to macroeconomic instability**: The subsidies affect the fiscal health of the State. Often states breach the FRBM Act limit to finance freebies.

- **Against free and fair election**: Not all political parties are equally situated. Some may have more resources than others and can give more freebies and thus secure more votes. There may be parties who are better than the resourceful parties but cannot compete with their budget. This goes against the spirit of free and fair elections.

- **Vicious cycle:** It will lead to a long-term drain on finance as in every election the number of freebies will increase with the increasing competition among political parties. The one that comes to power will then spend the state funds to fulfill the promises. Hence a vicious cycle is formed.

WAY AHEAD

The freebies are ultimately financed from the hard-earned money of the taxpayers. It needs to be rationalized. Only those freebies should be allowed which fulfill the goals of Directive Principles of State

Policy or lead to some betterment in conditions of the poor and are productive. Loan waivers and free electricity do not help the country. Spending on education and food adding to social and human capital can be permitted. People must be made aware of the freebie culture and where the taxpayer's money is going.

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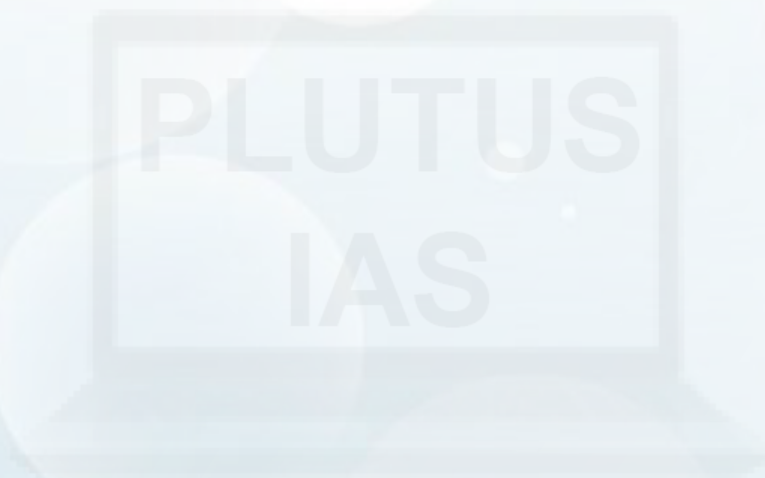
WHO put a ban on Indian Cough Syrup

Prelims: national and international current affairs

Mains: GS II: Important International institutions, agencies and fora- their structure, mandate

Story behind

- The World Health Organization (WHO) has raised an alert over an Indian company that made four fevers, cold and cough syrup after 66 children died in the Gambia, an African Country, urging people to not use them.

What did the WHO say?

- "The four medicines are cough and cold syrups produced by Maiden Pharmaceuticals Limited, in India. They failed the test as they have unacceptable amounts of diethylene glycol and ethylene glycol as contaminants", the global health agency stated. According to the tentative results received by the WHO, four out of the 23 samples tested have been found to contain either Diethylene Glycol/Ethylene Glycol.

- All four syrups — Promethazine Oral Solution, Kofexmalin Baby Cough Syrup, Makoff Baby Cough Syrup and Magrip N Cold Syrup – are made by Haryana-based Maiden Pharmaceuticals.

About World Health Organization (WHO)

- It is a particularized agency of the United Nations responsible for international public health

- The Headquartered Of WHO is in Geneva, Switzerland, it has six regional offices and 150 field offices worldwide

- It was established on 7 April 1948

- The WHO Constitution states its main objective as "the attainment by all peoples of the highest possible level of health"

- Laboratory analysis of samples of each of the four products confirms that they contain unacceptable amounts of diethylene glycol and ethylene glycol as contaminants.

The objectives of the WHO are

- To operate as the directing and coordinating authority on international health work

- To setup and support effective collaboration with the United Nations, specialized agencies, governmental health administrations, professional groups and such other organizations as may be deemed appropriate

- To facilitate Governments, upon request, in strengthening health services

- To furnish appropriate technical assistance and, in emergencies, necessary aid upon the request or acceptance of Governments

- To supply or assist in providing, upon the request of the United Nations, health services and facilities to special groups, such as the peoples of trust territories

- To establish and maintain such administrative and technical services as may be required, including epidemiological and statistical services

- To boost and advance work to eradicate epidemic, endemic and other diseases

- To encourage, in cooperation with other specialized agencies where necessary, the prevention of accidental injuries

- To encourage, in cooperation with other specialized agencies where necessary, the improvement of nutrition, housing, sanitation, recreation, economic or working conditions and other aspects of environmental hygiene

- To help in cooperation among scientific and professional groups which contribute to the advancement of health

- To develop conventions, agreements and regulations, make recommendations with respect to international health matters and perform

WHO and India

- India became a party of WHO on 12 January 1948.

- The regional office for South East Asia is located in New Delhi.

- The first session of the WHO regional committee was held in 1948, and was inaugurated by Pandit Jawaharlal Nehru, Prime Minister of India and was addressed by the WHO Director-General

Di-ethylene Glycol and Ethylene Glycol

- Di-ethylene Glycol and Ethylene Glycol are considered venomous for the human body. They can be the cause of kidney and neurological toxicity when consumed. This toxicity has been found a cause in several cases of mass poisoning when consumed via drugs.

- They are Hygroscopic sweetish liquid which has no colour, and no particular smell. They can make a homogenous mixture of water, alcohol, ether, acetone, and ethylene glycol.

- The poisonous effects of Diethylene Glycol and Ethylene Glycol can result in abdominal pain, vomiting, diarrhoea, inability to pass urine, headache, altered mental state, and acute kidney injury.

- As per a paper in the National Library of Medicine, 10 DEG mass poisonings have occurred over the past 70 years. These mass poisonings were all caused by DEG-contaminated liquid or ointment medications. DEG contamination happens when it is used in medicinal products instead of safer—but more expensive—diluents such as pharmaceutical-grade glycerin.

Difference between Di-ethylene Glycol and Ethylene Glycol

- Ethylene glycol is commonly used in the manufacturing of polyester fibres, paints and polyethene terephthalate (PET)

- On the other hand, DEG is used to break fluid in cigarette and paper treatment and also in some dyes, due to its hygroscopic property,

How these contaminants enter the drug-supply chain

- Complexities in the distribution of glycerin and other pharmaceutical raw materials that may involve many import and export handlers cause these contaminants to creep into such glycerin-based medical products.

- DEG has also been used illegally as a cheap substitute solvent in drug manufacturing.

- As a result of it, it contributes to the risk of such adulteration is inadequate international regulations and the lack of analytical methods, according to scientists.

Symptoms

- The adulterant can result in renal and neurological toxicity if ingested, which, in common language, they can affect the brain and kidney functions.

- Acute kidney injury is commonly the main cause of death, which occurs anywhere between 8 and 24 hours after exposure if the dose is high.

Central Drugs Standard Control Organization CDSCO

- The CDSCO stands for Central Drugs Standard Control Organization (CDSCO)

- It is the national regulatory body of India, regulated the following :

1. Cosmetics

2. Pharmaceuticals

3. Medical devices

4. It also executes an alike job to the:

5. European Union's European Medicines Agency

6. Japan's PMDA

7. The United States Food and Drug Administration (FDA)

8. The United Kingdom's Medicines and Healthcare Products Regulatory Agency

9. China's National Medical Products Administration (NMPA)

- The Government of India has announced a proposal to have the CDSCO assess all medical devices, including implants and contraception.

- The Drug Controller General of India (DCGI) regulates pharmaceuticals and medical devices under the CDSCO.

- The body works under the Ministry of Health and Family Welfare.

- The Drug Technical Advisory Board (DTAB) and the Drug Consultative Committee (DCC) advise the DCGI.

Some of the roles of CDSCO are as follows

- Specify the standards and measures for ensuring the safety, efficacy and quality of drugs, cosmetics, diagnostics and devices in the country.

- Supervises the market authorization of new drugs and clinical trial standards.

- Govern the drug imports and approves licenses to manufacture the above-mentioned products.

- It also controls the export of drugs in India, any manufacturer with certification from CDSCO can export drugs outside India.

The Related Regulations in India

- The Drugs and Cosmetics Act:

- The Drugs and Cosmetics Act, of 1940 and Rules 1945 have assigned various responsibilities to central and state regulators for the regulation of drugs and cosmetics.

- It stipulates the administrative guidelines for issuing licenses to manufacture Ayurvedic, Siddha, and Unani medicines.

- It is compulsory for the manufacturers to practice according to the prescribed requirements for licensing of manufacturing units & medicines along with proof of safety & effectiveness, and compliance with the Good Manufacturing Practices (GMP).

Farhin

Government appoints commission to study Scheduled Caste status of Dalits post conversion

CONTEXT

The Central Government has constituted a three-member commission of Inquiry headed by ex-CJI Justice K.G. Balakrishnan to examine the issue of extending Scheduled Caste status to Dalits who have converted to religions other than Buddhism or Sikhism. The Commission will submit the report within 2 years.

THE CURRENT STATUS

- As of now, the benefits of reservation are available only to Dalit Hindus, Buddhists, and Sikhs. They are not available to Dalit Muslims or Christians

- There have been demands and various petitions pending before the Supreme Court to extend Scheduled Caste reservation to Dalits who converted to Christianity or Islam.

- The demand for the reservation has been on account of historic injustice in the form of discrimination and untouchability.

'COMPLEX, CONSTITUTIONAL QUESTION'

➤ The Constitution (Scheduled Castes) Order, 1950, states **SC status can only be accorded to Hindus, Sikhs and Buddhists**

➤ While BJP has been opposed to giving SC status to Dalit converts to Islam and Christianity, forming a panel suggests the **party is exercising caution against any legal pitfall**

➤ Calling it 'a seminal & historically complex sociological and

Constitutional question given its sensitivity and potential impact', govt's gazette notification says change in definition of SCs can only be done on the basis of a detailed study

➤ **Panel to also study changes Dalits go through on converting** to other religions in terms of their customs, traditions, social and other status, as well as discrimination and deprivation

Ex-CJI KG Balakrishnan will head the 3-member panel

(pic credit: Times of India)

CONSTITUTIONAL PROVISIONS

- According to **Article 341(1)** of the Constitution, The President may concerning any State or Union territory, and where it is a State after consultation with the Governor thereof, by public notification, specify the castes, races, or tribes or parts of or groups within castes, races or tribes which shall for the purpose of this Constitution be deemed to be Scheduled Castes in relation to that State or Union territory, as the case may be.

- According to **Article 341(2)**, Parliament can then by law include in or exclude from the list of Scheduled Castes such communities which have been specified under the Presidential notification under Article 341(1)

PRIOR EFFORTS

- This is not the first time that efforts are being made to bring Dalit Christians and Muslims under the ambit of Scheduled Cates.

- The UPA Government under the then Prime Minister Manmohan Singh had set up two important

commissions to examine the issue – Ranganath Misra Commission and Rajinder Sachar Commission.

- **Ranganath Misra Commission,(2004)** recommended giving SC status to Dalits belonging to all religions. It recommended 10% reservation for Muslims and 5% reservation for other minorities in government jobs

- It found the caste system to be "an all-pervading social phenomenon in India shared by almost all Indian communities". It emphasized the constitutional need to eliminate the religion-based discrimination underlying the present policy of limiting SC status to Hindus, Sikhs, and Buddhists.

- In furtherance of this, it recommended abrogating the Scheduled Caste Order of 1950 which excluded Muslims, Christians, Jains, and Parsis from the purview of SC reservation.

- The report, however, was not implemented on the ground of lack of sufficient data.

- **Rajinder Sachar Commission (2005),** was headed by former Chief Justice of Delhi High Court Rajinder Sachar.

- The commission set up an Equal Opportunity Commission to look into grievances of deprived groups like minorities.

- It also recommended creating a nomination procedure to increase the participation of minorities in public bodies

- In addition to these panels, the National Commission for Scheduled Castes and the National Commission for Minorities had also recommended providing SC status to Dalit Muslims and Dalit Christians in affidavits filed before the Supreme Court in 2011.

BALAKRISHNAN COMMISSION (2022)

- While Justice K.G Balakrishnan will chair the commission, other members include Professor Sushma Yadav, UGC, and retired IAS officer Ravinder Kumar Jain.

- The commission will study and submit its recommendation if SC status can be accorded to religions other than Hindus, Sikhs, and Buddhists.

- The Constitution (Scheduled Castes) Order, 1950, originally provided SC reservation only to Hindus. It was amended in 1956 to include Sikh communities. Thereafter, it was amended again in 1990 to include Buddhist communities as SCs.

- The commission will also look into the changes Scheduled Caste persons go through on converting to other religions in terms of their customs, traditions, social and another status

CENTER's STAND

- The Union government is yet to state its stand on the matter in court.

- However, an affidavit filed by the Union Government in 2019, it had stated that Dalit Buddhists cannot be compared to Dalits who had converted to Christianity or Islam. Giving reasons for it, the government said that this was because in the case of Dalit Buddhists, the conversions were voluntary while in the latter case, it was not so and conversions were on account of other factors.

- It also stated that untouchability is a feature of the Hindu religion and its branches alone, it cannot be given to Dalits who converted to Christianity or Islam, and hence they cannot claim to be back-

ward.

WAY AHEAD

The commission will examine the issue and make then report its recommendations. Only then can a logical step be taken in that direction. If the community indeed faces the discrimination it claims then the policy of reservation should also be extended to them to make India truly inclusive

Saumya khedwal
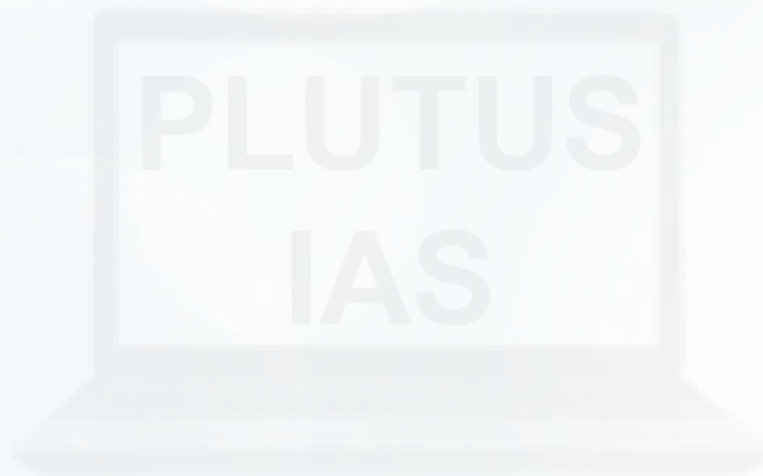
Panchayati Raj Institution

Panchayati Raj Institution: Grass without roots

CONTEXT

It has been 30 years since the passage of the 73rd Constitutional Amendment Act, 1992. Though the act envisaged various reforms to strengthen grassroot democracy, yet very little progress has been seen and Panchayati Raj institutions still lack the power to function as democratic decentralized institutions.

for the people: Villagers stand in queue as they wait to cast their vote for Odisha's panchayat elections in Khordha district.

(Picture credit: The Hindu)

THE 73rd CONSTITUTIONAL AMENDMENT ACT

- The system of Panchayati Raj existed even before the passage of the 73rd Constitutional Amendment Act. However, it was not uniform in all states and had several drawbacks.

- The Balwant Rai Mehta Committee was the first to recommend the establishment of a three-tier Panchayati raj system consisting of gram panchayat at the village level, panchayat Samiti at the block level, and Zila Parishad at the district level.

- The L.M Singhvi committee and Thungon Committee later recommended granting constitutional status to the Panchayati Raj Institution.

- The 73rd Constitutional Amendment act was passed on these recommendations. It added a new Part-IX to the Constitution of India, 'The Panchayats', and consists of provisions from Articles 243 to 243 O. It has also added a new Eleventh Schedule to the Constitution that contains 29 functional items of the panchayats.

- The act provided for a three-tier system of Panchayati raj in every state, i.e, panchayats at the village, intermediate, and district levels.

- The act brought about a much-needed uniformity in the structure of Panchayati raj throughout the country

- The act fulfills the constitutional goal envisaged in Article 40 of the Directive Principles of State

Policy which lays down that the State shall take steps to organize village panchayats and endow them with such powers and authority as may be necessary to enable them to function as units of self-government.

- The Constitution mandates that panchayats shall be elected every five years and States shall devolve functions and responsibilities to them through law.

ISSUES WITH THE FUNCTIONING OF PANCHAYATS

- Inadequate devolution of grants: The amount of money set apart for them is inadequate to meet their basic requirements and function as decentralized democracy

- Inflexibility in spending: Even with the meager available amount, a major part is inflexible and cannot be spent as the Panchayat likes. The use of untied grants is also constrained through the imposition of various conditions.

- Limited base of taxes and user charges: The Panchayati Raj institutions have few avenues to raise their taxes and user charges.

- Understaffed: local governments lack adequate staff to perform even basic tasks.

- Vertically integrated departmental system: This system leads to a lack of responsibility as the staff hired by higher level departments is posted in local government on deputation and thus does not feel responsible or accountable to the local government.

- Not Holding regular elections: The Constitution mandates holding regular elections every five years for the Panchayati Raj institutions. However, this is often flouted. In Tamil Nadu, for example, panchayat elections have not been held for over two years now, resulting in the State losing finance commission grants from the Union government.

- Corruption: In the 1980s Rajiv Gandhi, then the Prime Minister of India, had said that for every rupee targeted towards welfare and poverty alleviation only a fraction, 15 paise, reached the intended beneficiary. This is the real state. In local government, often a nexus is made between elected representatives and officials where bribes are used for project clearances and development suffers.

- Lack of Infrastructure: Gram Panchayat often lacks its building and has to share the building complex with Anganwadi centers or schools. Further, they often do not possess basic amenities like drinking water and functional toilets. Many times, internet connections are also not functional.

WAY AHEAD

To enable local government to truly function as grassroot democracy, several reforms need to be undertaken to strengthen their functioning

- Empowering Gram Sabha: Gram Sabha is a body consisting of all persons whose names are included in the electoral rolls for the Panchayat at the village level. It should be made more active so that the institutions feel accountable to the people.

- 2nd ARC recommendation: It recommended a clear-cut demarcation of functions of each tier of Panchayati Raj for better governance.

- Bottom-up approach: The functions and planning should be bottom-up rather than a top-down delegation as Panchayats are better equipped to understand the needs and problems of rural India

- More taxation powers: Panchayats are hesitant to levy tax. They should be pushed to collect taxes and given more sources of tax collection to generate additional revenue.

- Creating a separate Bureaucratic cadre: This will ensure more accountability by the officials. Karnataka has created a separate bureaucratic cadre for Panchayats to stop the practice of deputation officials overpowering the elected representatives.

G.V.K. Rao Committee once called Panchayati Raj institutions " grass without roots". It is necessary to ensure this doesn't happen and that local governance is strengthened to the core.

saumya khedwal

The piling RTI complaints with Information Commissions

CONTEXT

A recent report released by the Satark Nagrik Sangathan, titled 'Report Card on the Performance of Information Commissions in India, 2021-22', shows the grim state of the Right to information in India despite 17 years of passage of the Right to Information (RTI) Act, 2005. The report shows that around 3.15 lakh complaints and appeals are pending before the Central and State Information Commissions across India. It further states that the backlog of complaints and appeals is continuously increasing in commissions every year.

THE RIGHT TO INFORMATION ACT, 2005

- The Right to information is an integral right of citizens of the country.

- It is a fundamental right under Article 19(1) of the Constitution which states that every citizen has freedom of speech and expression.

- The Supreme Court in the case of Raj Narain vs State of UP, 1976 said that people cannot speak or express themselves unless they know. Hence, the right to information is embedded in Article 19.

- The Right to information act was passed to provide transparency and accountability to the people. It enabled citizens to request information from any "public authority" and the public authority is bound to reply within 30 days. In case the information sought concerns the life or liberty of a person, it has to be provided within 48 hours.

- The act also requires public authorities to proactively publish certain categories of information.

- The Act provides for the appointment of Information Commissioners at the Central and State level. Further, Public Information Officers are appointed to give information to persons who seek information under the RTI Act.

IMPORTANT PROVISIONS OF THE ACT

- **Section 2(f)**: "Information" means any material in any form, including Records, Documents, Memos, e-mails, Opinions, Advice, Press releases, Circulars, Orders, Logbooks, Contracts, Reports, Papers, Samples, Models, Data material held in any electronic form and information relating to any private body which can be accessed by a Public Authority under any other law for the time being in force.

- **Section 4** of the Act provides for suo motu disclosure of information by each public authority. However, such disclosures have not happened regularly

- **Section 8(1)** lists exemptions against furnishing information under RTI Act.

- **Section 8(2)** provides for exemption of disclosure of information under the Official Secrets Act, 1923 if a larger public interest is involved.

RIGHT COVERED UNDER THE RIGHT TO INFORMATION ACT, 2005

Right to Information Act 2005 empowers every citizen to:

- Ask any questions from the Government or seek any information

- Take copies of any government documents

- Inspect any government documents.

- Inspect any Government works

- Take samples of materials from any Government work

SIGNIFICANCE OF RTI

- **Brings accountability:** RTI enables the people to hold their elected representatives as well as organizations substantially financed by the government accountable.

- **Helps to promote Good Governance**: Good governance involves accountability, transparency, predictability, and participation. This is possible only when the general public has availability of information which is ensured by RTI.

- **Fight corruption**: RTI has been used to bring to light various scams in the past. It is an effective tool to fight corruption. Information gathered through RTI helped to expose massive corruption in the Public Distribution System in Delhi and immediate action regarding this was taken.

- **Strengthens participatory democracy**: It leads to people's participation in the governance of the country. It also improves decision-making due to public oversight.

CHALLENGES AND FINDINGS OF THE REPORT

The act has limitations and the performance has not been up to the mark. The Satark Nagrik Sangathan Report highlights this.

- **Pending cases**: The pendency is high and increasing every year. From 2,33,384 complaints in 2020, the number of pending complaints increased to 2,86,325 in 2021 which further increased to 3,14,323 in 2022. The highest number of pending cases was reported from Maharashtra where 99,722 complaints and appeals are awaiting answers and disposal.

- **Defunct Commissions**: The report highlighted that two out of 29 information commissions across the country are completely defunct

- **Lack of Women representation**: Currently, only 5% of the positions in the information commissions are being occupied by women.

- **Non-imposition of Penalty**: The report found that commissions did not impose penalties in 95% of the cases where the nature of the case demanded that penalties should be imposed.

- **Vacancies**: Currently, 41 out of 165 posts of Chief Information Commissioner and information commissioners are vacant

WAY AHEAD

- **Simplify filing RTI:** The filing of applications should be simplified as the literacy rate in the country is low and hence people find it difficult to follow the procedure.

- **Promoting usage of Digital RTI Portal:** The portal was made under the Digital RTI Mission. Visitors can access information acquired through RTI Act on the portal

- **Penalize officer:** clear procedure should be made for penalizing the officer, who denies information

The RTI Act is also called the "sunshine Act". It is necessary that it is properly implemented in letter and spirit and the issues plaguing it are addressed quickly so that it can truly function as the sunshine act

Saumya khedwal
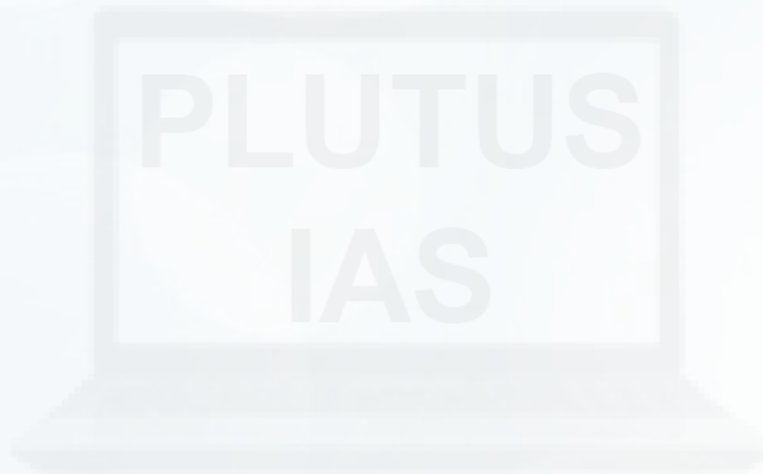
Supreme Court Verdict on Hijab Ban : Secularism versus Matter of Choice

CONTEXT

The Supreme Court has delivered the judgment of the Karnataka High Court decision to ban the wearing of hijabs in schools. However, the two-judge bench has given a split verdict with Justice Hemant Gupta upholding the ban on one hand and Justice Sudhanshu Dhulia setting aside the High Court order and holding the ban as unconstitutional.

THE ISSUE OF THE HIJAB BAN

- The issue erupted when a college development committee in Karnataka issued a notice to students to follow the Colleges' Uniform Policy. The policy did not permit wearing a hijab in the classroom. The Muslim students who wanted to wear hijab to classes were denied entry on the ground that it was not in conformity with the dress code mandated by the Colleges' Uniform Policy. The students protested against the college's directions.

- With an increasing number of protests and colleges shutting down, the State Government had to intervene. It passed an order about the dress code for students stating that as per the Karnataka Education Act,1983, students were mandated to follow the dress code decided by their respective College Development Committees.

- The students challenged the Uniform policy in Karnataka High Court.

THE KARNATAKA HIGH COURT RULING

- A three-judge bench of the Karnataka High Court in March 2022 upheld the ban imposed on wearing hijab inside classroom premises of schools.

- The bench observed that wearing a hijab did not constitute an essential religious practice in Islam. Hence, there was no violation of the Right to freedom of religion

- The test of essentially religious practice was developed by the Supreme Court in the **Shri Shirur Mutt Case of 1954** where a seven-judge bench of the Supreme Court held that the term "religion" will cover all rituals and practices "integral" to a religion. What all would constitute as integral was left to the Courts who decided it on basis of practices considered crucial by religious denominations.

- The Court also held that Classrooms are "qualified public spaces" where individual rights must give way to the interest of general discipline and decorum. Thus, there cannot be a right to freedom of expression inside classrooms.

- Lastly, it held that the ban was not targeting any particular religion as the Government's order only directed students to wear the uniforms prescribed by their educational institutions. Hence, the law was not discriminatory either directly or indirectly, against Muslim students.

APPEAL TO THE SUPREME COURT

- Dissatisfied with the judgment, the petitioners moved the Apex Court challenging the Karnataka High Court judgment.

- The division bench of the Supreme Court after 8 months has given a verdict on the hijab row. But there was a split in verdict with one Judge upholding the ban and another declaring it unconstitutional

- The matter will now be placed before the Chief Justice of India for the constitution of a larger bench to deal with the issue.

Observations made by Justice Hemant Gupta:

- Religious beliefs cannot be carried to a secular school maintained out-of-state funds.

- It is within the State's jurisdiction to restrict the carrying of symbols of religious beliefs to schools maintained out-of-state funds. Hence, the practice of wearing a Hijab can be restricted by the State.

- The mandate of the Karnataka Education Act, 1983 is to renounce sectional diversities, develop humanism and cultivate scientific and secular outlooks. If students are allowed to carry religious beliefs to a secular school, it would be opposed to the object of the act.

- Wearing uniform dress without addition or subtraction ensures uniformity in school. Any changes to the uniform would cease to be a uniform.

- Right of Expression under Article 19(1)(a) is also subject to reasonable restrictions under Article 19(2). The State order directing students to wear uniforms prescribed by their educational institutions did not violate freedom under Article 19(1)(a). It rather reinforced the right to equality under Article 14.

- The order is also not violative of Article 25 of the Constitution as the object of the order was to promote uniformity and ensure a secular environment in schools. Article 25(2) gives the right to the State to make laws for social reform and welfare.

Observations made by Justice Sudhanshu Dhulia

- A girl child has the right to wear a hijab in and outside her house and that right does not stop at her school gate.

- The girl child carries her fundamental right to dignity and privacy inside the classroom and to say these rights are derivative rights inside the classroom is wrong.

- By denying her the right to wear hijab, we are denying her right to education and not making her life any easier.

- The ban on hijab is against the constitutional values of fraternity and human dignity.

- Article 25 gives the citizens the Freedom of conscience and free profession, practice, and propagation of religion

- Wearing hijab is a matter of choice and a girl child wearing a hijab in the classroom is not a law and order problem.

WAY AHEAD

The matter will be listed before a larger bench. It is hoped that classrooms will not become an arena for competitive communalism in the future and that the matter is resolved by upholding the Constitutional rights of citizens.

Saumya khedwal

The Collegium System

CONTEXT

CJI UU Lalit has written to the government recommending Justice DY Chandrachud as his successor to the office of CJI. As per convention, the government writes to the outgoing CJI before his retirement and the CJI recommends the name of the most senior judge as the successor before his retirement. Justice D Y Chandrachud will take over as the next CJI on November 9. After he becomes the CJI, the Collegium will consist of 6 judges which is unusual and happened last in 2007. Generally, Collegium consists of 5 judges of the Supreme Court which includes the CJI

THE SUPREME COURT COLLEGIUM: (From left) Justice K M Joseph, Justice D Y Chandrachud, CJI U U Lalit, Justice Sanjay Kishan Kaul, and Justice S Abdul Nazeer

COLLEGIUM SYSTEM AND ITS NEED

- The appointment of judges is closely linked to judicial independence as any political interference in appointment can lead to direct or indirect political influence in the working of courts

- A judge should act without fear or favor. He should be impartial in conduct to strive for the highest standards in delivering judgments.

- Hence, it is only logical that appointments are made with the active involvement of the Judiciary and less of the Executive.

- To ensure this, the Collegium system was devised.

- The collegium system is the manner of appointing and transferring judges of the Supreme Court and High Courts.

- For appointment to the Supreme Court, the collegium consists of the Chief Justice of India along with 4 senior-most judges of the Supreme Court. For appointments and transfers in the case of High Courts, the Collegium consists of the Chief Justice of India along with the 2 senior-most judges of the Supreme Court.

- It does not find mention in the Constitution and has evolved through various judicial pronouncements.

ORIGIN AND EVOLUTION

- **Article 124** of the Indian Constitution states that every Judge of the Supreme Court shall be appointed by the President by warrant under his hand and seal after consultation with such of the Judges of the Supreme Court and the High Court in the States as the President may deem necessary

for the purpose and shall hold office until he attains the age of sixty-five years: Provided that in the case of appointment of a Judge other than the Chief Justice, the Chief Justice of India shall always be consulted.

- The Constitution does not provide any other detail on appointment other than the above article.

- The Collegium system evolved through three significant cases- the first judges case, the second judges case, and the third judges case.

- These three cases established the norm that a collegium headed by the CJI will have primacy in the appointment of judges to the higher judiciary.

First Judges Case: S.P Gupta v UOI (1981)

- A seven-judge bench ruled that the word " consultation" referred to in Article 124(2) of the Constitution does not mean concurrence. This implies that although the President will consult the constitutional functionaries, his decision was not bound to be in concurrence with them. This would mean that the ultimate power of appointment would vest with the Union Government and not the CJI in the event of disagreement between the constitutional functionaries

Second Judges Case: Supreme Court Advocates-on-Record Association Vs Union of India (1993)

- In this case a nine-judge bench overruled the first judges case and evolved the Collegium system to make appointments and transfers to the higher judiciary. The system provides that the recommendations of judges for appointment should be made by the CJI in consultation with his two senior-most colleagues. The executive could ask the collegium to reconsider the decision if it had any objection to the name that was recommended but on reconsideration if the collegium again recommended the same names, the executive was bound to accept it and make the appointment accordingly. The second judges case hence gave primacy to the CJI in matters of appointment and transfers

Third Judges Case: In re Special Reference 1 of 1998

- The third judges case established the present collegium system as it exists today. It was held that "consultation with the CJI" means consultation with a plurality of judges. Thus the collegium began to be composed of the CJI and the four senior-most judges of the Supreme Court. The views of the judges were to be recorded in writing. The recommendations of the Collegium are then conveyed by the CJI to the Government of India. If two or more members of the collegium dissent, CJI should not persist with the recommendation. The Apex court stated that the principal objective of the collegium is to ensure that the best available talent is brought to the Supreme Court Bench. The Chief Justice of India and the senior-most puisne Judges, because of their long tenures on the Supreme Court, are best fitted to achieve this objective."

ADVANTAGES OF THE COLLEGIUM SYSTEM

- **Judicial Independence**: It makes the judiciary independent from political interference. This aligns with the doctrine of separation of power.

- **Expertise**: The executive does not possess apple knowledge for judicial appointments. CJI and other judges are better equipped to find suitable Judges for appointment to the Supreme Courts and High Courts

DISADVANTAGES OF THE COLLEGIUM SYSTEM

- **Lack of transparency**: All deliberations happen behind closed doors. Ruma Pal, a former Judge of the Supreme Court of India, stated that this system is one of the best-kept secrets in the country.

- **Undemocratic**: Judges are not elected by the people. Hence, they are not accountable to the general public. Therefore, the selection of judges by the collegium is undemocratic

- **Promotes Nepotism**: Sons and nephews of Judges are favored for an appointment. Former Chief Justice of India, R.M Lodha related to the appointment of judges in the High Court said "Every third High Court Judge is an Uncle". This is a genuine problem and the collegium system is a major reason for this.

- **Inefficiency**: Collegium has failed to prevent the increasing cases of vacancies of judges and back-log of cases.

WAY AHEAD

The Collegium system needs to be replaced by a system that is transparent and open to public scrutiny. The Apex Court should come up with a written manual for appointments and records of all meetings in furtherance of appointments should be made public. This shall secure a rules-based process and a much-needed openness. As it is famously said, sunlight is the best disinfectant Hence, disclosure is the best solution.

Saumya khedwal

The Mediation Bill, 2021

CONTEXT

The Parliamentary Standing Committee on Law and Justice has recently completed the review of the Mediation Bill, 2021. It has recommended various changes to the bill. The bill was introduced for institutionalizing mediation in India and establishing the Mediation Council of India.

MEDIATION AND OTHER ALTERNATIVE DISPUTE RESOLUTION (ADR)TECHNIQUES

ADR is the process by which disputes between the parties are settled or brought to an amicable result without Judicial intervention. Hence, disputes are settled outside the traditional court system. This ensures efficiency and speedy justice. It can be of the following types:

1. Arbitration: In arbitration, the dispute is submitted by an agreement of parties to an arbitral tribunal. The tribunal passes a binding decision which is known as an 'award'. Procedural technicalities are avoided in the proceedings.

2. Mediation: A Mediator is appointed who guides the parties and helps them reach a mutually acceptable resolution to the dispute. A mediator in an impartial third person. He helps to facilitate dialogue and discussions between the parties in dispute.

3. Conciliation: It is a nonbinding procedure in which a conciliator who acts as a neutral third party, assists the parties to reach an amicable settlement of the dispute. A Conciliator plays a more proactive role than a mediator. Parties can accept or reject the decision of the Conciliator. However, if both parties accept the settlement document drawn by the conciliator, it shall be final and binding on both parties.

4. Negotiation: Negotiation is a dialogue intended to resolve disputes In negotiation, no third parties are involved. Rather, the disputing parties sit down and discuss terms to arrive at a negotiated settlement. Terms that best suit the mutual interest of both parties are finalized.

HIGHLIGHTS OF THE MEDIATION BILL, 2021

- Pre-litigation mediation: The bill mandates disputing parties to undergo mediation before approaching a court or tribunal.

- Time limit: It sets a timeline of 180 days to complete mediation which can be further extended by another 180 days.

- Mediation Council of India: A mediation council shall be established to register mediators.

- Binding agreements: It makes mediation agreements binding and enforceable

- Disputes unfit for mediation: It also lays out which disputes are not fit for mediation: These include disputes relating to claims against minors, disputes relating to claims against persons of unsound mind, disputes involving criminal prosecution, and disputes affecting the rights of third parties. This list is not exhaustive and Central Government has the power to amend it.

- Appointment of mediators: Mediators may be appointed by either the parties to the agreement or by a mediation service provider.

- Agreement binding in nature: Agreements formed out of mediation shall be considered final and binding and enforceable like a judgment of the court.

- Applicability: It applies to domestic as well as international mediation.

- Community mediation: where the dispute in question is likely to affect peace, harmony, and tranquility amongst the residents or families of any area or locality, community mediation may be resorted to. A panel of three mediators can be made comprising of people of standing and integrity who are respected in the community or representatives of resident welfare associations

NEED OF THE BILL

- The ex-CJI, N. V. Ramana while giving a speech at the India-Singapore Mediation Summit emphasized the need for a law to be made on mediation. He stated, "Mediation should be made mandatory as a First Step in Dispute Resolution". The following are the significance of the bill"

- There was no separate law until now which dealt solely with mediation. The arbitration and conciliation act, of 1996 did not give enough emphasis to mediation. Hence, a separate law on mediation will help to reduce the backlog of cases, especially in commercial matters.

ISSUES WITH THE BILL

- The provision of mandatory pre-litigation mitigation conflicts with Article 21 of the constitution. The bill imposes costs on parties who fail to attend the pre-litigation mediation. But Article 21 of the Constitution provides access to justice as a constitutional right that cannot be restricted or curtailed.

- The Bill considers international mediation to be domestic when it is conducted in India and the resultant settlement agreement is recognized as a judgment or decree of a court. However, the Singapore Convention does not apply to settlements that already have the status of judgments or decrees. Therefore, the benefits of the convention will not apply in the cross-border mediations conducted in India.

- The Bill does not require the representation of practicing mediators in the Mediation Council. The Council will consist of seven members, including two full-time members having experience in mediation or ADR, and ex-officio members such as the Law and the Expenditure Secretaries. The Bill fails to provide a practicing mediator to be a member of the Council.

- Central Government approval is needed by Council before issuing regulations. This goes against conflict of interest as the government may also be a party to the mediation.

WAY AHEAD

It is imperative to hold consultations with all stakeholders. During the Ease of Doing Business rankings, India ranked poor in enforcing contacts. The Mediation Bill is a significant step to improving this and providing speedy justice. The issues of the bill should be addressed to make India an international mediation hub for easy business transactions.

saumya khedwal
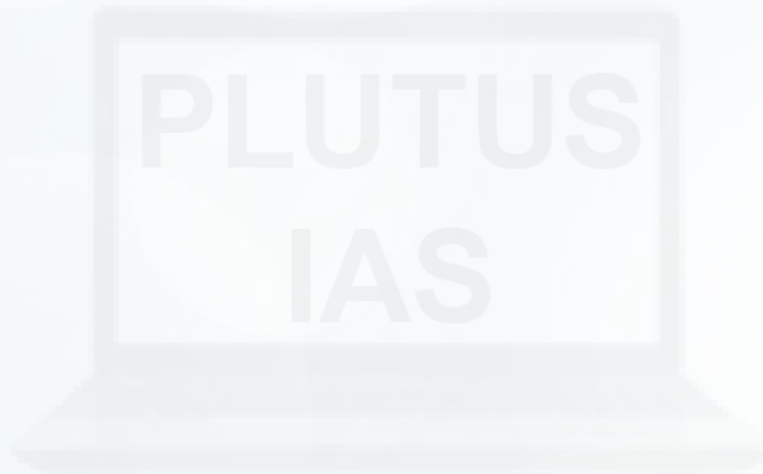
The need to strengthen CSR framework in India

CONTEXT

The Companies (Corporate Social Responsibility Policy) Amendment Rules, 2022 were recently introduced by the Ministry of Corporate Affairs. The rules make certain changes to the Corporate Social Responsibility Policy (CSR) regime in India.

WHAT IS CORPORATE SOCIAL RESPONSIBILITY (CSR)

- Mahatma Gandhi advocated the concept of Trusteeship wherein wealthy people set aside that part of their wealth that is in excess of their needs for the benefit and welfare of the society. The concept of CSR is inspired by this.

- Every company has a moral responsibility to look after the social, economic, and environmental development of society and give back to society since it profits from its money. Hence, they have a duty to be good corporate citizens

- CSR takes a 'stakeholders approach' rather than a 'shareholders approach'. A company should protect the interest of all stakeholders like employees, customers, and the community in which it operates. It goes beyond the traditional view that the sole aim of a company is to earn profits for its shareholders

- India became the first country to legislate the need to undertake CSR activities and mandatorily report CSR initiatives under the new Companies Act 2013.

LEGAL PROVISIONS ON CSR

- The concept of CSR was introduced in India through **Section 135 of the Companies Act, 2013**. Companies satisfying the below-mentioned criteria are required to spend at least 2% of their average net profit of the immediately preceding three financial years on CSR activities: a) a net worth of Rupees 500 crore or more b) a turnover of Rupees 1000 crore or more c) a net profit of Rupees 5 crore or more

- CSR is also applicable to foreign companies having a registered arm in   India

- Companies that come under the above category are required to establish a **CSR committee**. The committee will have the following functions: (a) formulate a CSR policy and recommend it to the Board of Directors (b) recommend the amount of expenditure to be incurred on the activities (c) monitor the Corporate Social Responsibility Policy of the company from time to time.

- The board ensures the implementation of the policies recommended by the CSR Committee.

- CSR must be undertaken in any of the 17 activities mentioned in the Schedule VII of the Companies Act

- A company failing to comply with the provisions of CSR attracts a penalty of up to Rs.1 crore and an additional amount of Rs.2 lakh for each defaulting Officer

CURRENT STATUS OF CSR IN INDIA

- CSR spending in India has risen from ₹10,065 crores in 2014-15 to ₹24,865 crores in 2020-21

- 2,926 companies in 2020-21 did not spend any amount toward CSR

- The number of companies spending less than the prescribed limit of 2% increased from 3,078 in 2015-16 to 3,290 in 2020-21.

- There was also a decline in the number of companies participating in CSR- 25,103 in FY2019 to 17,007 in FY2021.

ISSUES WITH THE WORKING OF CSR

- **Bare minimum**: If a company spends an amount over the minimum 2%, as stipulated, the excess amount is liable to be set off against spending in the succeeding three financial years. This above provision works as a deterrent as 2% is only the minimum limit and ideally companies should spend more than this.

- **Geographical Bias**: There is a geographical bias. Section 135(5) of the Act states that a company should give preference to the local areas around it where it operates. However, this leads to the regional disparity. a recent report by Ashoka University's Center for Social Impact and Philanthropy noted that since the majority of CSR companies are located in the states of Maharashtra, Tamil Nadu, Karnataka, and Gujarat, states like U.P and M.P are left out from availing benefits of CSR

- **Sectorial Bias**: There is also a sectorial bias. An analysis of CSR spending (2014-18) reveals that while most CSR spending is on education (37%) and health and sanitation (29%), only 9% was spent on the environment. This is a problem since the operation of industries leads to pollution and more needs to be done to curb environmental degradation.

- **Lack of Community Participation**: This is due to a lack of awareness and interest in activities relating to CSR. No plan can be successful without community engagement.

- **Incomplete information**: According to the Standing Committee on Finance, the information on spending by companies on CSR is insufficient and difficult to access.

WAY AHEAD

- **Centralized Platform:** a national-level centralized platform should be created by the Ministry of Corporate Affairs where all States could list potential CSR projects. Companies can check this platform and assess as to where the CSR funds would be most impactful.

- **Environmental restoration**: At least 25% funds of CSR should go towards the restoration of the environment.

- **Active Community Participation**: All CSR projects should be taken up with active community engagement so that benefits can reach the grassroots.

- **Recommendations by the high-level committee on CSR (2018)**: These should be incorporated into the current CSR framework to improve the existing monitoring and evaluation regime, including measures on (a)Strengthening the reporting mechanisms with enhanced disclosures concerning the selection of projects, locations, implementing agencies, etc. (b)Bringing CSR within

the purview of the statutory financial audit with details of CSR expenditure included in the financial statement of a company (c)Mandatory independent third-party impact assessment audits.

CSR aims to push India towards the achievement of sustainable development goals and public-private partnerships in transforming India. The above reforms should help India achieve these goals.

saumya khedwal

Animal Adoption Scheme

Details on topic " Animal Adoption Scheme "

Prelims: General issues on Environmental ecology, Bio-diversity and Climate Change – that do not require subject specialization.

Mains: General Studies III: Conservation, environmental pollution and degradation, environmental impact assessment.

Why in the headlines?

Delhi Zoo, the National Zoological Park has launched an Animal Adoption Scheme, which will allow people to sign up to pay for the care of animals at the facility.

This scheme was introduced for the very 1st time at Zoo and it is to "encourages the participation of people in wildlife conservation." Started by the director of Zoo Dharam Deo Rai.

About the animal adoption scheme

- The forms will be available on the official website of the National Zoological Park.

- Those who want to adopt or support any animal of their choice can enter into an agreement with zoo management after.

- The person can pay the National Zoological Park, New Delhi, through Account Payee Cheque, Demand Draft, Credit or Debit Card.

- After the registration process is done the adapter will have a membership card mentioning his name and the animal's name that s/he has adopted.

- The adopter will be allowed to enter the zoo during visiting hours, but only once a month on showing the membership card

- Also, the adopter will not be allowed to visit the zoo during any outbreak of pandemic or any zoonotic disease

Rate list:

- The range will start from Rs 700 for birds, per year

- Rs 600000 for lions, tigers and rhinos, elephants per year

- For leopards, it will be around 360,000 per year

- For sambar dear, swamp deer or some extraordinary hornbill, it will be around Rs 40,000 per annum.

- For Indian wolf, it will be Rs 18,0000 per year

- And for Indian Bison or Guar at Rs 2,25000 per year.

Validity of the membership card

- The validation of the membership card last for 1 or 2 years, after that the adopter can renew or withdraw the membership.

- But the given money will not be refunded in any way. The revenue which will be generated from the adoption of animals will go back to the zoo on a quarterly basis for the welfare activities of the animals and its personnel.

Implementation of the scheme

In 2013 the adoption schemes were reopened in Sanjay Gandhi national park of Maharashtra under the Central Zoo Authority,

The adoption scheme is not only bound for Zoo only

What is Central Zoo Authority

- The Central Zoo Authority is a statutory body under MoEFCC

- In effect, the Wildlife (Protection) Act, of 1972 was amended to establish Central Zoo Authority (CZA) as a statutory body under the Ministry of Environment & Forests in 1992.

- There is a chairman in the authority, ten members and a Member Secretary.

- Each and every zoo in the country is required to get recognition from the Authorities for its operation.

The function of the CZA

- Identifying the minimum standards for housing, upkeep and veterinary care of the animals kept in zoos.

- Check and assess the functioning of the zoos as per the prescribed standards or norms.

- Recognize or derecognize zoos.

- Recognisation of endangered species of wild animals for purposes of captive breeding.

- Provide technical and financial support to such zoos which have the potential to attain the desired standard in animal management.

- Regulate the exchange of animals of the endangered category listed under Schedule-I and II of the Wildlife (Protection) Act among zoos.

- The exchange of animals between Indian and foreign zoos is approved by the Authority before the requisite clearances under EXIM Policy and the CITES permits are issued by the competent authority.

How it will help

- Contribution from the adoption of animals will help them to get better food, enclosed encroachments and renovations

- The adoption scheme would bring public corporate bodies and institutes closer to their love and care for the captive animals Sources https://indianexpress.com/article/cities/

  delhi/delhi-zoo-adopt-an-animal-8188845/

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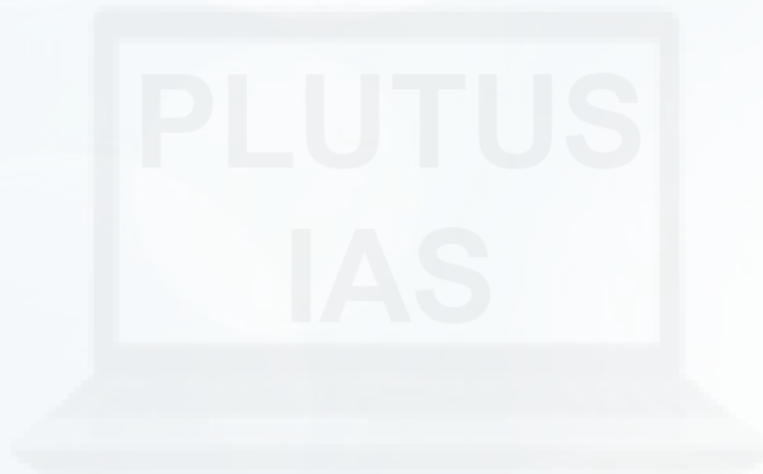
One nation, one law, demand for Uniform civil code

Prelims: Indian Polity and Governance

Mains: GS II: Indian Constitution—significant provisions etc.

GS II: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

Context

- Center has suggested the supreme court put up a Uniform Civil Code for its citizens and that people of different religions and denominations following different property and matrimonial laws is an "affront to nations unity "before the 22nd law commission

What is article 44 of the Indian constitution?

- Article 44 is a DPSP which means Directive principles of states policies

- This article of the Indian constitution defines the Uniform Civil Code.

- This article states that 'The State shall endeavour to secure for the citizens a Uniform Civil Code throughout the territory of India.'

About the Uniform Civil Code

- A collective set of governing laws for every citizen without taking into consideration religion.

What is the Directive Principle of States (DPSP)?

- DPSP are the kind of instructions/guidelines framed for the central as well as state governments. However, these are fundamental in the governance of the country, but they are non-justifiable.

Difference between Fundamental Rights and DPSP in India

Fundamental Rights
- Negative since they prohibit the state from doing certain things

- Justiciable in nature

- Aim: establishing political democracy

- Legal sanctions

- Do not require legislation for their implementation

- Courts are bound to declare a law invalid if they violate FRS

DPSP

- Positive since they compel states to take actions

- Non-justiciable in nature

- Aim: economic and social democracy

- Moral and political sanctions

- Requires legislation for their implementation

- Courts cannot declare a law invalid if they violate FRds

The history

- The idea of the Uniform Civil Code in India during the Colonial period, when in 1853 the British Government gave its report, emphasizing the need for homogeneity in the codification of Indian laws relating to crimes, shreds of evidence and contracts, particularly the personal laws of Muslims and Hindu be kept outside of such codification.

- But, the 1st war of Indian Independence which is famously known as the Sepoy Mutiny in 1857 gave a strong signal to the British to not change the social structure of India and also gave a lesson to respect the personal codes governing aspects of marriage, divorce, maintenance, adoption, and succession.

- The communal disharmony and hostility to the removal of personal laws, after the Indian independence, against the backdrop of Partition, resulted in accommodating the UCC as a DPSP

- However, the makers of the Constitution tried to put a Hindu Code Bill in the Parliament that included reforms like women's equal rights of inheritance, regrettably, they didn't successful

- But on 5th September 2005, when the Hindu Succession (Amendment) Act, 2005 received assent from the President of India that the discriminatory provisions considering property rights in the Hindu Succession Act, 1956 were removed.

Need for Uniform civil code

- India being a secular country, needs a general law for all the citizens instead of laws based on different religious practices.

- Gender Justice: under religious law, women's rights in India are limited be it Muslim or Hindu. Many practices regulated by religious tradition are at odds with the fundamental rights –guaranteed in the constitution of India

- Cases like Saira Bano augured for the Uniform Civil Code.

Reform of Family Law report by 21st Law Commission of India on Article 44-

- The report states that the diversity of Indian culture can and should be celebrated, and specific

groups or weaker sections of the society must not be 'in the process. Resolution of this conflict does not mean the abolition of difference, it said.

- The report states that

- The cultural diversity of India can and should be celebrated. However, particular groups, communities, or weaker sections of society should not be 'dis-privileged' in this process.

- Hence, the commission concluded, considering the discriminatory laws rather than giving Uniform Civil Code, which is not necessary nor Desirable at this point.

- The way forward may not be a Uniform Civil Code but the codification of all personal laws so that prejudices and stereotypes in every one of them would come to light and could be tested on the anvil of Fundamental Rights guaranteed by the Constitution.

- The commission has already suggested certain amendments in personal laws including setting the marriageable age for boys and girls at 18 years so that they may marry as equals, making adultery a ground of divorce for men and women and simplifying divorce procedures.

- Recommendations were also made to abolish polygamy by law.

Does India don't have any Uniform Civil Code?

- In most civil matters, Indian Law does not follow a uniform code, such as

- Indian Contract Act,

- Civil Procedure Code,

- Sale of Goods Act,

- Transfer of Property Act,

- Partnership Act, Evidence Act etc.

- States, as well, have made put in many efforts and therefore in certain matters, there is diversity even under these secular civil laws.

Why UUC is not needed at this point?

- The secularism of the nation cannot contradict the plurality widespread in the country.

- The cultural diversity of India cannot be compromised to the extent that our want for uniformity itself can turn out to be a reason for threat to the territorial integrity of the nation.

Constitutional Obstacle

- Article 25 of the Indian constitution, which gives the right of freedom to practice and propagate any religion gets into conflict with the concepts of equality enshrined under Article 14 of the Indian Constitution.

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Lakshmi-Ganesh on Indian currency

Prelims: Economic, Bodies responsible for taking decisions

Mains: GS III: Indian Economy and issues relating to planning, mobilisation, resources, growth, development and employment.

Context: Leaders of AAP, asked the government of India to put pictures of Goddess Lakshmi and Lord Ganesh on currency notes in order to bring "prosperity" to the country.

Who is the deciding body of the look of Indian Bank Notes?

The Reserve bank of India i.e. RBI, the central bank and the regulatory body along with the Central Government are responsible for the changes in the designs and forms of the banknotes and coins. The changes in the designs of a currency note in India have to be approved by the Central Body of RBI and the Central Government of India.

The Central government of India has the sole authority to change the design of the coins **RBI's role in issuing currency**

According to Section 22 of the Reserve Bank of India Act, 1934, RBI has the "sole right" to issue banknotes in India

According to the Sector 25 of the Reserve Bank of India Act,1934, the design, form and material of the banknotes of India shall be such as may be, after the recommendation of the central board of the RBI, the central government will approval.

The responsibility of administering the main function of currency management is of the Department of Currency Management of the RBI, If the currency note's design has to be changed, this Department works on the design and submits it to the RBI which recommends it to the central government. The final approval comes from the central government of India

Printing of Currency Notes:

There are two currency note printing presses in India and they are owned by the Government of India.

One of these is in Nasik and another one is in Dewas

There two more printing presses are in India one of the two is in Mysore and another one is in Salboni.

These two printing presses are owned by the RBI through its wholly-owned subsidiary, Bharatiya Reserve Bank Note Mudran Ltd (BRBNML).

About the coin minting

According to the Coinage Act, of 2011 the central government has the authority to design and mint coins in many different denominations.

The role of the RBI is limited in the case of coins, to the distribution of these, which are supplied by the central government.

The government decides on the number of coins to be minted on the basis of indents received from the RBI on a yearly basis.

The Coins are being minted in four mints owned by the Indian Government.

They are in Mumbai, Hyderabad, Kolkata and Noida.

The various types of notes issued so far

Ashoka Pillar Banknotes:

The 1st banknote issued after the independence of India in 1949 was the Re 1 note. In the Re 1 note, the portrait of King George was replaced with the symbol of the Lion Capital of the Ashoka Pillar at Sarnath in the watermark window.

Mahatma Gandhi (MG) Series, 1996:

All the banknotes of this series carry the portrait of Mahatma Gandhi on the front side, in place of the symbol of the Lion Capital of Ashoka Pillar, which was moved to the left, next to the watermark window.

Mahatma Gandhi series, 2005:

They have some advanced new security features as compared to the 1996 MG series.

Mahatma Gandhi (New) Series, 2016:

These new notes draw special attention to India's cultural heritage and scientific achievements. The banknote from the new series is of Rs 2,000 denomination — was introduced on November 8, 2016,the theme of this note is Mangalyaan.

Sources: The Indian Expres

Farhin

PM-SHRI

Prelims: PM SHRI Scheme

For Mains: Reforms in Education Sector

Why in the news?

Recently, Prime Minister Narendra Modi announced that 14500 schools across India will be upgraded to exhibit the components of the National Education Policy(NEP),2020.

What is PM –SHRI?

- The PM-SHRI is a centrally sponsored scheme for the period of five years from 2022-23 to 2026-27.

- Under this scheme, around 14500 government schools across India will turn into model schools

- It will exhibit all the features of the National Education Policy 2020, by performing as a

- It will showcase all components of the National Education Policy 2020, act as ideal schools and also provide mentorship to other schools in their locality.

- To check the progress and performance of these schools a 'School Quality Assessment Framework' is being launched.

The key features of the scheme:

- The NEP envisioned a curricular structure and teaching style classified into various stages foundational, preparatory, middle and secondary.

- The beginning years of a child in schools (pre-school and grades I, and II) will include play-based learning.

- At the preparatory level i.e. from class III to V, easily understandable textbooks will be introduced along with some formal classroom teaching. Subject teachers will be introduced in the middle stage i.e. from class VI to VIII.

- The secondary stage i.e. from class IX to XII will be multidisciplinary in nature with no hard separation between arts and sciences or commerce or any other discipline.

- Additionally, the board exams be held twice a year so that students to improve their scores, and

two types of papers on mathematics should be offered, a standard paper and a different one to test higher levels of competency.

A centrally sponsored scheme:

- It is a scheme where the cost of implementation is likely to be split in the 60:40 ratio among the Union government and the states/Union Territories.

- For example, PM Poshan and PM Awas Yojana are centrally sponsored schemes.

- However, in the cases of the Northeastern states, Himachal Pradesh, Uttarakhand, Jammu and Kashmir and UTs without legislatures, the Centre's contribution can go up to 90 % of the cost implemented

How the schools under PM-SHRI schools will be different from other government Schools

- Kendriya Vidyalayas or Jawahar Navodaya Vidyalayas are schools under the central schools that come entirely under the Centre's Ministry of Education.

- They are fully funded by the Union government under Central Sector Schemes.

- While KVs largely serve children of employees of the Union Government posted in states and UTs, JNVs were set up to encourage talented students in rural parts of the country.

- As compared to this, PM SHRI schools will be an upgradation of existing schools run by the Centre, states, UTs and local bodies.

- This primarily means that PM SHRI schools can either be KVs, JNVs, state government schools or even those run by municipal corporations.

Where will the PM SHRI schools come up?

- The list has not been released for the schools under PM-SHRI, by the centre

- But it has been announced that the PM SHRI schools will also provide mentorship to other schools in their locality.

- These schools will be provided with modern infrastructure including labs, smart classrooms, libraries, sports equipment, art room etc.

- The schools shall be developed as green schools with water conservation, waste recycling, energy-efficient infrastructure and integration of organic lifestyle in the curriculum.

Fahin

The Kantara movie controversy, IPC section 505

Context

- The police have booked Chetan, a Kannada actor under Section 505 (2) of IPC. Seshadripuram police have registered a case against the Kannada actor Chetan, which states that the actor is insulting and allegedly hurting the sentiments of the community.

- Bengaluru state police registered a case against Chetan under Indian Penal Code section 505 (2) (Statements creating or promoting enmity, hatred or ill-will between classes)

About the movie Kantara:

- The movie is based on a fictional story, it is inspired by the relationship between human beings and forests that takes place over two centuries.

- In 1847, a King was travelling to find peace of mind and he ended up in a forest. There he finds preternaturally found in the form of Panjuri which is a divine spirit that protects the forest and its inhabitants.

- Then the King urged the forest dwellers to let the Panjuri return with him, and in consideration of this favour, the kind will give the rights over the forest lands.

- Then the film moves to the 1990s, the forest residents come up with a new bureaucratic term forest officer who declared the forest as a 'reserve forest'. Meanwhile, a descendant of the king has become the "landlord" of the forest dwellers now. Shetty plays the unofficial, youth leader. Shetty is also a descendant of the family that traditionally performs "Bhoot Kola " an animist form of worshipping the traditional god, commonly practised in coastal Karnataka.

- The issue is related to the Bhoot Kola

What is bhoota Kala :

- In Tulu Bhoota means "spirit" and "Kola " means to play.

- It is an annual ritual performance where local spirits or deities are worshipped.

- Tulu is a Dravidian language, speakers are concentrated in Dakshina Kannada and the southern part of Udupi of Karnataka in southwestern India and in the northern parts of the Kasaragod district of Kerala.

- It is primarily a spirit worship ritual practised by Tulu-speaking people in Dakshina Kannada in Karnataka and some districts of Kerala.

- They worship the local deity, who protects their land and the practice has been continuing for the last 300 to 500 years.

- Kola is also called 'nema' which means ceremony, which goes on from dusk to dawn.

- The Kola is performed by trained persons, and usually, they belong to the lower castes of society

- The person who performs the kola usually wears a skirt of tender palm leaves which is easily flammable and helps them to perform acts with fire.

- The performer exhibits an aggressive outlook, dances fiercely and performs multiple rituals.

- This performer is feared and respected by the people of the community and is believed to give answers to people's problems on behalf of the spirit.

- The area is decorated with flowers, mainly jasmine, firecracker flower (Abbolige/ Abboli) and others.

- Drums and music give company to the dancing and pooja rituals.

- the community seeks God's blessing, prosperity and riddance of various problems the community is challenged with while praying together during Bhootada Kola

- Bhootada Kola is believed to have some influence from Yakshagana, which is a more popular and widely performed folk dance in the coastal regions of Karnataka.

- A few of the Bhoota Kola rituals also involve walking on a bed of hot coal.

- Popular Bhootas:

- Some of the popular gods (Bhootas) worshipped as part of Bhootada Kola Panjurli, Bobbarya, Pilipoota, Kalkuda, Kalburti, Pilichamundi, KotiChennayaare.

About the controversy

- During a press meeting, Shetty stated that the practice of Bhoota Kola is a part of Hindu culture,

- Actor-turned-activist Chetan Kumar, also Bhoota Kola was not part of Hindu tradition but of indigenous people who are Adivasis, and it had been "hijacked" by Aryans who came to India in the later years.

What is IPC?

- Mohammedan Criminal Law was changed by IPC, the former one had a very close relationship with Islam. Hence, the IPC laid the foundation of secularism.

- It was widely acknowledged as a state-of-the-art code and was, indeed, the 1st codification of criminal law in the British Empire.

- The Indian Penal Code (IPC) is the official criminal code of India.

- It is a complete code intended to cover all substantive aspects of criminal law.

- On the recommendations of the first law commission of India established in 1834, it was drafted in 1860, under the Charter Act of 1833 under the chairmanship of Macaulay.

- It came into force in British India during the early British Raj period in 1862.

- But, it did not apply naturally in the Princely states, as they had their own courts and legal systems until the 1940s.

- This code has since been amended many times and is now supplemented by other criminal provisions.

IPC section 505

- Whoever makes, publishes or circulates any statement, rumour or report with intent to cause, or which is likely to cause, any officer, soldier, sailor or airman in the Army, Navy or Air Force of India to mutiny or otherwise disregard or fail in his duty as such; or

- with intent to cause, or which is likely to cause, fear or alarm to the public, or to any section of the public whereby any person may be induced to commit an offence against the State or against the public tranquillity; or

- with intent to incite, or which is likely to incite, any class or community of persons to commit any offence against any other class or community, shall be punished with imprisonment which may extend to three years, or with fine, or with both.

- **Statements creating or promoting enmity, hatred or ill will between classes**

- Whoever makes, publishes or circulates any statement or report containing rumour or alarming news with intent to create or promote, or which is likely to create or promote, on grounds of religion, race, place of birth, residence, language, caste or community or any other ground whatsoever, feelings of enmity, hatred or ill-will between different religious, racial, language or regional groups or castes or communities, shall be punished with imprisonment which may extend to three years, or with fine, or with both.

- An offence under sub-section (2) committed in place of worship, etc- Whoever commits an offence specified in sub-section (2) in any place of worship or in any assembly engaged in the performance of religious worship or religious ceremonies, shall be punished with imprisonment which may extend to five years and shall also be liable to fine.

Fahin
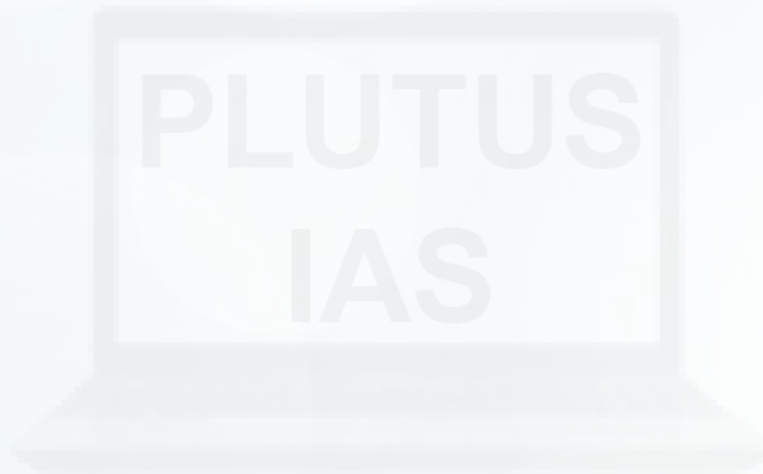
OPEC and OPEC plus

Details on topics "OPEC and OPEC plus"

Subject: International bodies

Why in the headlines

Recently, OPEC+ decided to cut oil production by 2 million barrels per day (bpd). This is the largest cut since the beginning of the Covid-19 pandemic. Brent crude, the international benchmark, was up 28 cents or 0.3%, at $92.08 a barrel after the cut was announced, reported Reuters.

What is OPEC?

- OPEC stands for Organization of the Petroleum Exporting Countries.

- It is headquartered in Vienna, Austria.

- The organization was created in 1960, in Baghdad by Iran, Iraq, Kuwait, Saudi Arabia and Venezuela.

- It is a permanent intergovernmental organization

- The main objective of this organization is to manage the supply of oil in a way to set the price of oil in the international market, also in order to avoid fluctuation that might affect the economics of both production and purchasing.

- Membership in OPEC is open to any country that is a significant exporter of oil and which shares the ideals of the organization.

- Gabon terminated its membership in January 1995. However, it rejoined the Organization in July 2016.

- Current OPEC members are Algeria, Angola, Equatorial Guinea, Gabon, Iran, Iraq, Kuwait, Libya, Nigeria, the Republic of the Congo, Saudi Arabia, the United Arab Emirates and Venezuela. Ecuador, Indonesia and Qatar are former OPEC members

What is OPEC +?

- A larger group called OPEC+ was formed in late 2016 to have more control over the global crude oil market.

- A number of non-OPEC member countries also participate in the organization's initiatives such as voluntary supply cuts in order to further bind policy objectives between OPEC and non-OPEC members. This loose grouping of countries, known as OPEC+, includes Azerbaijan, Bahrain, Brunei, Kazakhstan, Malaysia, Mexico, Oman, Philippines, Russia, Sudan and South Sudan.

Why OPEC + is more prominent?

- OPEC having 14 members controls 35%of global oil supplies including 82 % of proven reserves.

- Additionally, OPEC + has 10 important countries like Russia, Mexico and Kazakhstan, the share has increased to 55 p%and 90 % of the holdings respectively.

- This gives OPEC+ a higher level of influence over the world economy than OPEC countries.

India and OPEC +

- India has almost spent 120 billion dollars importing 228.6 million tonnes of crude oil.

- From Iraq India imports almost 23 billion dollars worth of oil yearly.

- Iraq is the largest importer of India followed by Saudi Arabia, Iran, Nigeria and UAE.

- However, also from OPEC + countries like Mexico, Malaysia, Oman and Russia, India buys oil spending more than 10 billion dollars as well.

- Yet, the range of volume is not much large, effort fewer imports can never decline, hence OPEC and OPEC + countries both are important for India

Why there is a sudden slashing of production?

- The rapid increase in oil prices as a consequence of Russia's invasion of Ukraine in February this year, now it started to fallen over the past few months, before dropping sharply to under $90 in recent September. Due to the fear of recession in Europe and turning down the demand from China because of its lockdown measure.

- The recent cut is the biggest of its kind since 2020 when OPEC+ countries slashed outputs by 10 million bpd during the Covid-19 pandemic.

- The reductions would stimulate the prices and be extremely beneficial for the Middle Eastern member states, to whom Europe has turned for oil after levelling sanctions against Russia since it invaded Ukraine.

- As a result of an increase in oil prices after the Russian invasion of Ukraine helped, Saudi Arabia, one of the founding members of OPEC, turned into the world's fastest-growing economy. This became a reason of concern for the countries of OPEC +, that a fathering global economy may reduce the demand for oil, and the cuts are seen as a way to protect profits.

Fahin

Iranian minority: Kurds

Prelims: International Organization

Mains: GS II: International Relations, International conflicts

Why in the news?

A countrywide protest over the death of a young Iranian Kurdish woman in the custody of Iran's morality police.

Who are Kurds?

- Kurds or also known as Kurdish people, these people are an Iranian ethnic and linguistic indigenous tribe of the highlands of Western Asia known as Kurdistan, which spans south-eastern Turkey, north-western Iran, northern Iraq, and northern Syria.

- It has been estimated that the population of these tribes is between 30 to 45 million

- They are an exclusive community, united through race, culture and language, even though they have no standard dialect.

- They speak the Kurdish language as well as the Zara-Gorani language, which originated from the western Iranian branch of the Iranian language from the Indo-European language family.

- In the current times, the Kurds have been involved in many genocides and rebellions, as well as with ongoing armed conflicts in Turkish, Iranian and Iraqi Kurdistan

- Kurds in Iraq and Syria have independent regions, while Kurdish movements continue to pursue greater cultural rights, autonomy, and independence throughout Kurdistan.

- They also practice a number of different religions and creeds, however, the majority are Sunni Muslims.

- Kurds are commonly known for being **fearless fighters, and they have served as mercenaries in many armies** over the centuries

- They are considered the world's largest stateless ethnic group.

Why have they been considered a stateless tribe?

- The Kurds have never got nation-state status, except in Iraq, where they have a regional government called Iraqi Kurdistan.

- In the early 20th Century, many Kurds began to consider the creation of a homeland – and called for **an autonomous Kurdistan**

- Following World War I and the conquest of the Ottoman Empire, the victorious Western allies made a clause for a Kurdish state in the 1920 Treaty of Sevres.

- In spite of that, that hope was shattered three years later, when the Treaty of Lausanne laid down the boundaries of contemporary Turkey and made no such clause, leaving Kurds with minority status in all of the newly formed countries.

- Since then, for over 80 years, any move by Kurds to set up an independent state was brutally put to an end.

Kurdish-Iranian dispute

- The Kurdish-Iranian conflict is a kind of never-ending, separatist dispute between the western Iranian Kurdish opposition and the Iranian government.

- Iran never commissioned the same level of cruelty against its own Kurdish population but has always been constantly opposed to Kurdish separatism.

Kurdish-Iraq dispute

- The Iraqi-Kurdish dispute comprise a series of rebellions and wars by the Kurds against the central authority of Iraq during the 20th century, which started just after the defeat of the Ottoman Empire in World War I and lasted until the U.S. invasion of Iraq in 2003.

Kurdish-Turkish war

- The Kurdish-Turkish is an armed war between Turkey and various Kurdish insurgent groups who have either crippled the separation from Turkey to create an independent Kurdistan or make an effort to gain autonomy and greater political and cultural rights for Kurds inside the Republic of Turkey.

Farhin

Rejection of Delhi Interpol Red Corner

Prelims: Current events of national and international importance.

Mains GS II: Effect of policies and politics of developed and developing countries on India's interests, Indian diaspora. GS III: Role of external state and non-state actors in creating challenges to internal security.

Why in the news?

The ongoing story

- Interpol has cancelled the 2nd request of India for issuing a Red corner notice on terror change against the Sikh for Justice (SFJ)a Canada-based founder and legal advisor for pro-Khalisthan setup, stating that authorities of India were unable to provide the required information to support their case.

What is Interpol?

- Its stands for International Criminal Police Organization

- They are an inter-governmental organization.

- They have 195 member countries, and they help police in all of them to work together to make the world a safer place. Interpol is the world's biggest international police organization.

- It was established in 1923.

- The objective of Interpol is to provide international police cooperation even between those countries where diplomatic relations are not present.

Who is the 'Sikhs for Justice (SFJ)' group?

- Sikhs for Justice (SFJ) is an organization, formed in 2007.

- It is based in the United States

- This group is seeking a "Khalistan" homeland from Sikhs

- A law graduate from Punjab University, now an attorney at law in the US, is considered the face of SFJ . his name is Gurpatwant Singh Pannun, he is also the legal advisor of the organization.

- He had launched the secessionist Sikh Referendum 2020 campaign, which was eventually discontinued later

- It was claimed in 'Referendum 2020' they wanted "liberate Punjab from Indian occupation".

- Gurpatwant Singh Pannun was one of the 9 individuals designated as "terrorists" by the Union Ministry of Home Affairs in July 2020.

- Under the UAPA Act, the Sikh association is an unlawful association

UAPA Act

- UAPA act stands for Unlawful activity prevention act

- It was passed in 1967.

- The objective of this act is to provide effective prevention from unlawful activities executed by the associations in India.

- Unlawful activity implies any action taken by an association or individual intending to create havoc in the territorial integrity and sovereignty of India.

- The Act assigns absolute power to the central government, by way of which if the Centre deems an activity as unlawful then it may, by way of an Official Gazette, declare it so.

- This act has given the central government absolute power, by which the centre can count action as unlawful, then it can be declared so by an official Gazette.

- It has the authority to give the death penalty and lifetime imprisonment has the highest punishment.

- Under this Act, both National and international guilty can be charged. If the crime has been committed in a foreign land, it will be applicable to the offender in the same manner, which will be applicable to the offender in the country

What is the history of the Khalistan movement?

- The partition of India in 1947, was not a joyful event for the nations, especially for Sikhs as they lost there their traditional land.

- In 1955, the Akali Dal -a Sikh dominated political party, initiated a movement by the name of the Punjabi Suba Movement.

- Through the movement of the Punjab Suba, they seek re-organisation of Punjab along linguist line, seeking division of the state into Punjabi and non-Punjabi speaking regions

- However, the division turned into a communal riot, with Sikh voting for Punjabi as their mother – tongue and Hindus voting for Hindi as their mother tongue.

- The demand for a separate statehood by the Akali dal was rejected by the State organization commission.

- As a consequence of this movement, Punjab got divided into three states namely, Punjab, Haryana and Himachal Pradesh

- The Khalistan dispute was created because of the disputes between Chandigarh and the water sharing of Ravi- and bias between the two states.

The course of the Khalistan Movement

- The movement's main objective is to form an independent state for Sikh people.

- The idea of Khalistan came to the light in the 1940s, but remained idle however was revived by an NRI seeking a separate homeland for Sikhs.

- the movement emerged in the early 1980s, as a large separatist movement, encouraged mostly by the bias of the Indian Government against Punjab in the case of Chandigarh and also the sharing of Ravi-Beas waters.

- There was an intense political conflict between Congress Party and the Akali Dal at that time period, Akali Dal was slowly gaining ground as the political representative of the Sikh community.

- The leadership of the congress party of that time tried to divide the Akalis by propping up diverse groups of people within the Akali Dal.

- Jarnail Singh Bhindranwale, the most known name directed Khalistan as an extremist movement, at first he was used as a pawn by the congress party leadership to counter Akali Dal but later he was influenced by the Khalistan ideology and turned against the Indian government.

- Under the shadow of Pakistan, 'the movement was fed on arms who were looking for revenge for the creation of Bangladesh.

- Bhindranwale come out as the extremist voice of Sikhs, over-ruling the moderate voices of leaders declared himself as the protector and arbiter of Sikh rights and acquired arms.

- Demands for separate nation-hood for Punjab were carried out through violent protests and innocent as well as famous congress leaders of the nation like our PM Indira Gandhi

The recent status

- The recent status of the Khalistan Movement

- Raising flags of imaginary Khalistan were put up on the gate of the housing complexes, and slogans were scribbled on the walls.

- June 6 is announced as Khalistan's "referendum day" made the State police seal the border.

- A U.S.-based Khalistani separatist named Gurpatwant Singh Pannun has been charged in Himachal Pradesh under the Unlawful Activities Prevention Act (UAPA).

- On the very same day, the police in Punjab stated they had to stop a terror attack after arresting two men, considered to be Khalistani sympathisers, with explosives.

How this movement affected Indo-Canadian relationships?

- **International Sikh Youth Federation** (ISYF)has been declared a terrorist setup and put banned on it, under the Unlawful Activities (Prevention) Act in 2001 by India .

- The organization is also banned in Canada, the United Kingdom and the USA, which have sizeable Sikh populations.

Farhin

PoK reunites with India:

The Union Home Minister Rajnath Singh:PoK reunites with India:

- Prelims: geographical locations in the map

- Mains: GS paper 1: Post-independence consolidation and reorganization within the country. GS paper II: India and its neighbourhood- relations.

Context

- Amit Shah, the Union Home Minister said on Thursday(27th October 2022) that States should have a uniform law and order policy as certain crimes such as cross-border terrorism and cyber-crimes transcend regional and international boundaries.

- Amit Shah, the Union Home Minister stated that by 2024, to counter terror activities, each State would have a National Investigation Agency (NIA) office as the agency had been given "extraterritorial jurisdiction" and additional powers to confiscate property in terror-related cases.

- He called for the centralization of data on terror and other crimes and said that following the principle of "one data, one entry," the NIA had been entrusted with the task of maintaining a national terror database, the Enforcement Directorate a dataset on financial crimes and the Narcotics Control Bureau (NCB) on narco crimes

Where are Gilgit and Baltistan-

- Gilgit-Baltistan, earlier it was known as the Northern Areas,

- It is a region that comes under the administration of Pakistan, as an administrative territory,

- This region includes the northern part of the larger Kashmir region which has been considered as a dispute between India and Pakistan since 1947, and later on and between India and China from

- The region shared the border with Azad Kashmir to the south, the province of Khyber Pakhtunkhwa to the west, the Wakhan Corridor of Afghanistan to the north, the Xinjiang region of China, to the east and northeast, and the Indian-administered union territories of Jammu and Kashmir and Ladakh to the southeast.

- The region, together with Azad Kashmir in the southwest, is grouped and referred to by the United Nations and other international organisations as "Pakistan-administered Kashmir".

- Gilgit-Baltistan is 6 times larger than Azad Kashmir in terms of geographical area.

A brief history of Gilgit-Baltistan

It was a part of J&K:

- The beautiful region was a part of the Princely state of Jammu and Kashmir, however, it was directly ruled by the British rule, they took this region on lease from Hari Singh, a Hindu king of the Muslim majority states.

Gilgit Scouts rebellion:

- On October 26, 1947, when King Hari Singh agreed to India, there starts a rebellious movement from the Gilgit Scouts.

- They headed to take over the Baltistan, but at that time it was a part of Ladakh, they got captured by the Skardu, Kargil and Dras.

- After a battle, Indian forces retook Kargil and Dras in August 1948.

Pak enters into an agreement with Azad J&K govt:

- When India and Pakistan agreed to a truce in January 1949.

- Pakistan agrees with an agreement with the "provincial government " of "Azad Jammu and Kashmir" the region which was occupied by Pakistani troops and irregular, to take over the foreign and defence affairs.

- The agreement also Azad Jammu and Kashmir government gave the administrative control of Gilgit- Baltistan to Pakistan

Gilgit-Baltistan not recognised as a province:

- When Pakistan adopted its first full-fledged civilian Constitution, in 1974, there are only four listed in the constitution. they are

Punjab,

Sindh,

 Balochistan and

Khyber Pakthunkhwa.

- Pok i.e. Pakistan-Occupied Kashmir and Gilgit-Baltistan were not included in the constitutional list as provinces.

- In 1975, PoK adopted its own Constitution, however, it still remained under the control of the Pakistani federal administration and the security establishment, through the Kashmir Council.

- Pakistan brought in the Gilgit-Baltistan (Empowerment and Self-Governance) Order, 2009, In 2009, changing the Northern Areas Legislative Council (NALC) into Legislative Assembly, and the Northern Areas were given back its original name of Gilgit-Baltistan.

- Gilgit-Baltistan observed November 1, 2020, as "Independence Day", Imran Khan also announced that his government would give the region "provisional provincial status".

What was happening in Gilgit?

- Presently, the Gilgit area is under the possession of Pakistan,

- The area is currently under the possession of Pakistan, in contravention of the United Nations Commission for India and Pakistan (UNCIP) resolution of 28 April 1949.

- Pakistan occupied the region without the consent of the Gilgit-Baltistan people and, in spite of the UNCIP's calls for Pakistan to take out their forces from the disputed area, the occupation remains to till date.

- For the last 60 years, the region of Gilgit-Baltistan has lacked a proper constitutional status, a functioning legal system and political autonomy.

What is the significance of Gilgit-Baltistan?

Political and geographical:

- The region is a trijunction, located between three geographical regions southern, central and eastern Asia, it makes one of the world's most significant geostrategic points, both in terms of politics and geography.

Military significance:

- In a matter of a two-front war against India, control over the Gilgit-Baltistan region can help with drastically affecting and determining the outcome.

- Setting up an advanced Air Force base in Gilgit-Baltistan can ruin the enemy's confidence and control the movement of conflict to India's side.

Rich in resources:

- it is a treasure of many earthy resources, the region is rich in mineral deposits.

- One can find, metallic, non-metallic, energy minerals, precious stones and different rocks of industrial use.

- The southern region of Gilgit-Baltistan is rich with substantial deposits of nickel, lead, copper and zircon.

- Towards the northern part, it has deposits of iron, silver, gold, garnet and topaz.

- Almost all of its mining potential is unused and has the capability to boost our economy.

Strategic importance for India:

- Under the CPEC(China-Pakistan Economic Corridor) agreement, Beijing is investing a big amount of wealth, to develop the region as a part of its Belt and Road Initiative, and the concerns of a two-front war the standoff in the Eastern Ladakh in 2020, hence the areas has an increase in the strategic significance for India in light of CPEC.

Sources

The Hindu

The Indian Express

Farhin

General Studies - 3

(Technology, Economic Development, Biodiversity, Security & Disaster Management)

How the fall of the Indian rupee hurts economic stability of the country

Detail on topic "How the fall of the Indian rupee hurts economic stability of the country"

CONTEXT

The Indian Rupee (INR) has been depreciating at a fast pace against the US dollar crossing the 81 mark. The recent decline in the exchange rate of the INR against the US Dollar (USD) has been worrying economists as it affects the macroeconomic stability of the country.

CURRENCY APPRECIATION AND DEPRECIATION

• Currency depreciation takes place in the foreign exchange market when the domestic currency loses its value in front of foreign currency.

• It occurs due to the demand for dollars increasing its supply. For example, earlier $1 = Rs.70, now $1 = Rs.81. The demand for the dollar is more, and hence the value of the dollar is increasing.

• This happens when there is an increase in imports or a fall in exports.

• On the other hand, if the value of domestic currency increases in comparison to foreign currency, it is referred to as Currency appreciation

• Currency appreciation takes place when there is a surplus of the dollar in the market and hence, the supply of dollars exceeds its demand. For example, if $1 = Rs.81 today and later $1= Rs.70, then we can say that there has been an appreciation in the value of INR.

• This is seen when there happens to be a rise in exports and a fall in imports.

REASONS FOR FALL OF RUPEE

The Government has stated global factors to be the reasons behind the fall of the rupee Prominent global factors are -Russia-Ukraine conflict, soaring crude oil prices, and tightening of global financial conditions. All these have led to an outflow of foreign funds from India.

Russia- Ukraine War: Any war leads to economic instability. Investors fear losing money due to war. Hence, ever since the Russia-Ukraine War broke out, investors shifted their investments to safe havens like USA instead. USA being a stable market attracts investors.

Increasing Crude oil Prices: Countries that purchase crude oil have to make payment in USD to the countries that produce oil. This system is known as the petrodollar system and it negatively effects the importing country.

Rate hike by US Federal Reserve: This move further strengthens the dollar as investors move their money to USA since they are getting a better return on their investment

ISSUES WITH DEPRICIATION OF RUPEE
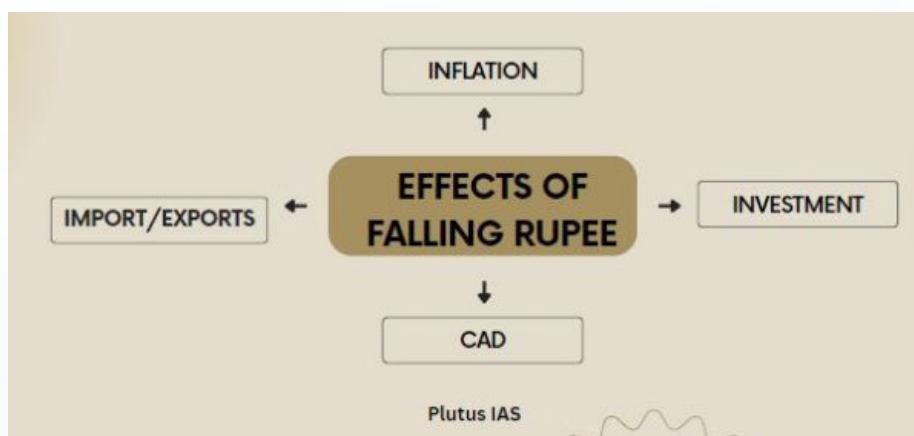
- To control Rupee Depreciation, the RBI has been intervening in the forex market.

- This has led to the decline of forex reserves rapidly. From USD 642 billion in October 2021, India now has USD 545.6 billion in September 2022.

- This decline in forex reserves corresponds to a decrease in import cover. Import cover measures the number of months of import that can be covered with foreign exchange reserves available with the Central Banks of the country.

- India's forex reserves were earlier sufficient enough to cover 16 months of imports in October 2021. Now, this has declined to 9 months of import cover as of September 2022

The fall in Rupee impacts the following impacts:

- Impact on Inflation: Depreciation of INR means the amount we are paying towards import of good increases. Thus import becomes costly. and this leads to higher inflation as being a net importer, India depends on overseas goods for its requirements. This phenomena is known as import led inflation. Given the fact that India imports more than 80% of its crude oil, inflation in the country increases. As per RBI's Report, a 5% depreciation of the currency would add about 15 basis points to domestic inflation. Due to increase in price of oil, transportation costs increases which has indirect impact on daily household items. Daily goods like vegetables, soap, flour, etc goes up.

- Impact on Investments: When the rupee depreciates against the dollar, it effectively means an additional return on one's investments in US market. Hence, rupee depreciation against the dollar works in favour of investors. In order to invest in the US stock market, the investor's money is converted into dollar and then back to INR when he redeems it. So, if one invested ten years ago when $1=Rs.53, and withdrew today, he gains additional amount since now the same $1=Rs.81

- Impact on Imports and Exports: The depreciation of rupee impacts imports negatively and exports positively. If earlier $1=Rs.75 and now $1=Rs.81, that means now importers would have to pay Rs.6 more for the same commodity. Similarly, on exporting goods worth $1, exporters would earn Rs.6 more compared to earlier when $1 was for Rs.75

- Impact on Current Account Deficit (CAD): The current account measures the flow of goods, and services into and out of the country. It is a record of visibles and invisibles. Even though currency depreciation means exports become profitable, India being an import dependent country has more imports than exports. This negatively affects the trade balance and leads to widening of current account.

- Impact on External Commercial Borrowings: A depreciating rupee poses risk to external commercial borrowing (ECB), as the cost of borrowing increases. ECB having lower interest rates compared to domestic banks are a favoured route for Indian companies to raise funds. The fall in rupee means their cost of borrowing increases and may have to look for other options to raise funds.

RBI INTERVENTION

In order to halt the sliding rupee, RBI has taken various steps like liberalising the norms for foreign investments in government and corporate bonds, easing the limits for foreign currency borrowings and easing norms to help banks attract greater deposits from non-residents. It has RBI has been selling dollars from the forex Reserves. By doing so, it has been able to ensure that there is no large-scale Rupee Depreciation. However, this has depleted our forex reserves at high speed.

WAY AHEAD

For a long term solution and to make the INR stronger and more stable, there should not be sole reliance on buying dollars to curtail the depreciation. Instead, a multi-pronged strategy is needed. The following steps can be taken for this :

- Change in norms to attract inflow of dollar : This can be done by easing the ECB norms, attract NRI Deposits, increasing the FPI investment limit in G-Secs etc.

- Increasing the interest rate: the policy rates should be hiked to reduce the interest difference between US and India. This will attract more FPI inflows

- Limited RBI intervention: The Central Bank intervention should be limited to cases where there is large scale volatility. India should have enough import cover for times of crisis. Hence, regular intervention by RBI by purchasing dollars with India's forex reserves should be decreased.

- Reserve Bank of India will have to ensure price stability and prevent further weakening of the rupee

saumya khedwal

The backbone of Kashmir's economy, Kashmiri apple is facing a crisis

Prelim: Economy of India, Social and Sustainable Development, Poverty, Inclusion, Social Sector initiatives demographics,

Mains: GS III India's scope in food processing Its significance

Why in headlines:

The apple industry of Kashmir, the backbone of its economy, is going through a crisis in a year of a bumper crop.

The Major apple-producing states and UTs of India

Conditions required for the Apple production

- Apple *or Malus pumila* is a prime temperate fruit.

- Apples are commonly consumed fresh however a small part of the production is processed into juices, jellies, canned slices and other items.

- In India, Apple is commonly cultivated in Jammu & Kashmir; Himachal Pradesh;

- Some hilly areas of Uttarakhand and Uttar Pradesh.

- Also, it is cultivated to a small extent in Nagaland, Arunachal Pradesh and Sikkim

Climate required

- Despite the fact that the apple is a temperate fruit crop, apple-growing areas of India do not fall in the temperate zone. The areas of apple growing prevail temperate climate of the regions because of the Himalayan ranges and high Altitudes.

- During the active growth time of the crop, it requires a climate of average summer temperature

of around 21-24oC

- Apple works outs best in the areas where the trees get a steady rest in winter and abundant sunlight for better colour development.

- It commonly grows at the height of 1500 to 2700 m above sea level.

- For optimum growth and fruitfulness of the apple trees, it requires a well-distributed rainfall of 1000-1250 mm throughout the growing seasons

Soil requirement

- It requires well-drained loam soils.

- Having a depth of 45 CM.

- The required pH range of pH 5.5-6.5

- The soil must be free from hard substrata and also any kind of water-logged condition

- The soil consists of heavy clay or compact subsoil that is not suitable for it

Propagation

- **Grafting:** Apples are cultivated in many ways like whip, tongue, cleft and roots grafting.

- Tongue and cleft grafting at 10-15 cm above the collar throughout February-March gives the best results. Grafting is done at the end of winter.
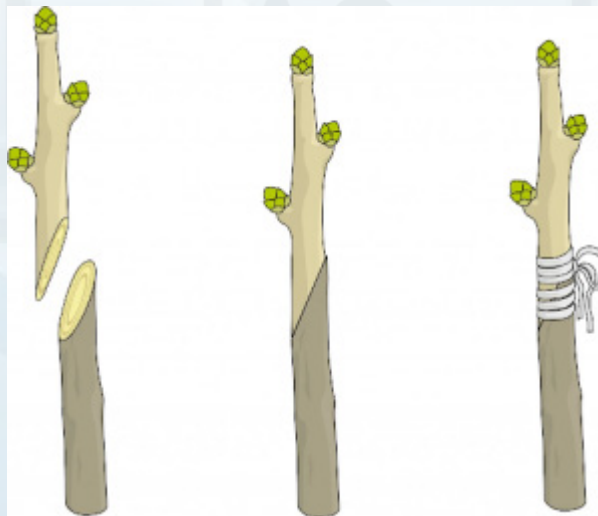
Budding :

- Apples are usually cultivated by the process of shield budding, which gives a high chance of success.

- A single bud, as well as a shield piece of stem, is cut along with the scion and inserted beneath the rind of the rootstock through a 'T' shaped incision during the active growth period in Sheild budding process.

- When the buds are fully grown during summer, Budding is done at that time.

- The perfect time for budding in Kashmir Valley is September, Kumaon hills of Uttaranchal, high hills of Himachal Pradesh and June in mid hills of Himachal Pradesh
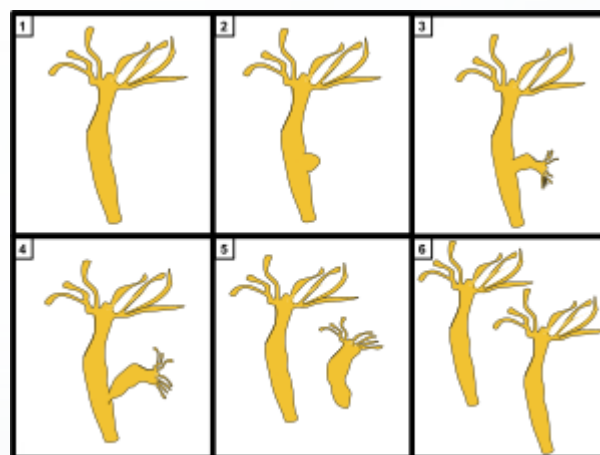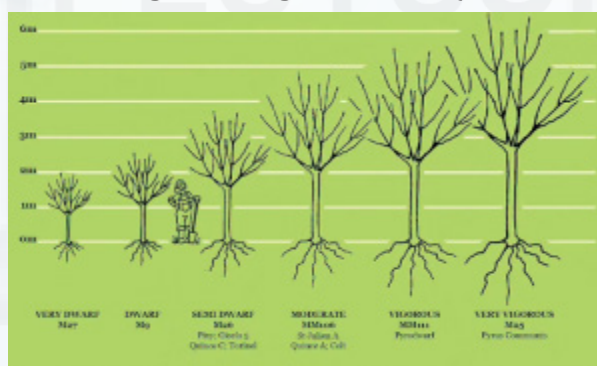

Rootstocks :

- A huge amount of apples is grafted or budded on the seeding of wild crab apples.

- The seedling rootstocks obtained acquired from the seeds of diploid cultivars like Golden Delicious, Yellow Newton, Wealthy, Macintosh and Granny Smith also can be used

- High-density planting is done using dwarfing rootstocks (M9, M4, M7 and M106).

Varieties

1. **Jammu and Kashmir:** Golden Delicious (Late Season), Lal Ambri, Mollies Delicious, Starkrimson, Red June, Irish Peach, Benoni and Tydeman's Early

2. **Himachal Pradesh:** Golden Delicious (Late Season), Red Delicious (Midseason), McIntosh

3. **Uttarakhand, Uttar Pradesh:** McIntosh, Chaubattia Anupam

4. **Arunachal Pradesh:** 24 varieties of apple are grown

Post harvesting management

Pre-cooling

- The surface of the fruit must be free from any kind of moisture before grading, wrapping or packing

for transportation in cartons

Grading

- On the basis of the size and appearance of the fruit or the quality of the fruit, the grading of apples is done manually in 6 grades.

- Apple can be graded in 3 or more quality grades, on the basis of colour, shape and quality.

- These grades are named AAA, AA and A, or A, B, C or extra fancy, fancy class I nad fancy Class II.

Storage

- Apples have a long storage life as compared to other fruits i.e up to 4 to 8 months after harvesting.

- This fruit can be kept in cold storage at 1.10 to 00 C temperature and 85-90% relative humidity.

Packing

- Usually, wooden books or corrugated fiberboard cartons having of capacity 10 to 20 kg are used in the packaging of Apple for transportation

Transportation

- Roadways are the most preferred way of transportation for this fruit as it is convenient to reach from the orchards to the market

Marketing

- The marketing of this fruit is primarily done by the intermediaries such as wholesalers and commission agents.

- During years of good production, the wholesale prices in producing areas slip down to un-remunerative levels.

Reason for the crisis in apple farming

- The reasons for the crisis in apple farming in India

- Increasing cost production.

- The rising input cost of fertilizers, insecticides, and fungicides in the last 10 years by 300%

- As well as the cost of packaging cartons, and trays have also raised in that few years.

High taxation:

- To ensure that the farmers sell their stocks to the big buyers rather than selling the open markets, the GST on cartons has been raised from 12% to 18 %,

No MSP in Himachal:

1. Like J and K , there is a minimum rate for procurement, there is no such kind of law in Himachal Pradesh, as well the government is not ready to introduce such kind of law.

2. Even the farmers are asking for the MSP(C2+50) should be ensured to upgrade the apple farmers' condition

How to resolve this problem

- Need for a regulating body

- An independent body must be required which can duly support the farmers and can be trusted by them

- The body must be a statutory body having the authority to conduct research on the apple ceremony.

- These bodies must have their representative apple cultivators, market players, commission agent and the government.

The Directorial efforts ;

Issues like lack of fair price, high input cost and unavailability of infrastructure like cold storage must be addressed

Research works to improve Apple farming research.

- This is very important to enhance the net incomes and livelihood of the apple cultivator in India by introducing the European varieties in India. The research work that is done in the past few decades and government policies, basically, focus on apple production to improve the tree productivity and quality of the product. Government must focus to upgrade the living condition of the cultivators

Farhin

Moonlighting in the gig economy

Details on Topic "Moonlighting in the gig economy"

WHAT IS MOONLIGHTING

- Moonlighting is the act where employees work for remuneration with companies other than their employers. It is mostly associated with the gig economy where the flexibility of work permits people to take up a second job. The term is not defined in any law even though some legislations deal with double employment.

- In July, a study by Kotak Securities stated that at least 60% of 400 employees surveyed said they had or knew someone who had engaged in moonlighting.

- A few months ago, Swiggy, a food delivery company launched a Moonlighting Policy permitting its employees to work on projects outside of their employment.

LEGAL PROVISIONS

- Since moonlighting is a relatively newer phenomenon that gained prominence after the onset of Covid pandemic, no Constitutional court has given any judgment so far on it.

- Though some legislation touches upon it, no law covers it comprehensively.

- Section 60 of the Factories Act, for example, deploys restriction on double employment stating that "No adult worker shall be required or allowed to work in any factory on any day on which he has already been working in any other factory, save in such circumstances as may be prescribed" However, this deals only with factories and not other employments

- In the case of Glaxo Laboratories India Ltd. v. Presiding Officer Labour Court Meerut, the Supreme Court held that "the employer has hardly any extraterritorial jurisdiction. He is not the custodian of general law and order situation nor the Guru or mentor of his workmen for their well-regulated cultural advancement. If the power to regulate the behavior of the workmen outside the duty hours and at any place wherever they may be was conferred upon the employer, contract of service may be reduced to the contract of slavery"

- Hence, by the above case, it is clear that the terms of employment are not extendable beyond the working hours of the employee or outside the place of employment. Therefore, technically employees cannot be stopped from pursuing other job avenues after their shift or office hours are over.

- Unless and until this act of having a second job leads to serious loss of the primary employer, Courts may refuse to entertain such cases.

ARGUMENTS FOR MOONLIGHTING

- Extra income for employees: Moonlighting allows employees to earn extra money. The high cost of living in urban areas and metropolitan cities often requires undertaking more than one job to financially sustain oneself and or her family.

- Developing new skills: Moonlighting lets employees gain new skills which are different from their

current employment.

- Managing inflation levels: With prices soaring high, people find it difficult to afford necessities leading to taking up more jobs.

- Job Security: With the gig economy, hiring and firing is done in the blink of an eye. This has been more so during COVID Pandemic when companies undertook mass lay off. Having additional employment gives people some sense of security that even if they are fired from one job they have another job to fall back upon.

- Productively utilizing extra time: With the new work-from-home norm, people have extra time at hand since time for commutation is saved. Employees use this to take up side gigs

ARGUMENTS AGAINST MOONLIGHTING

- May lead to Conflict of interest: Employees may end up working for rival firms and leak sensitive business information. Wipro recently sacked 300 employees following the discovery that they were working for rival firms on the side, leading to a conflict of interest.

- May lead to a decline in productivity: Since the physical capacity of people is limited, working at two places can drain a person and job performance may deteriorate.

- Misuse of resources: To complete gigs, the employee may be using the resources like the internet and laptop provided by the primary employer.

- Unethical: Though it may not be illegal, moonlighting is unethical and some companies have simply called it cheating

WAY AHEAD

- In India, there is no clear-cut legislation regarding moonlighting that can be applied to every field of employment. So the idea of moonlighting being legal or illegal for now widely depends on the employers and their terms of appointment. The terms of employment may be modified to include the provision that it should not cause any conflict of interest or reduction in productivity

- It is imperative that the Government brings a policy or law to deal with the subject and give some clarifications since moonlighting is inevitable in a gig economy.

saumya khedwal

Rice insecurity

Details on topic "Rice insecurity"

Prelims: Economic and Social Development

Mains: GS III: Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment, Major crops-cropping patterns in various parts of the country

Story behind

- On August 8, the Indian government put a ban on the export of broken rice and imposed a 20% duty-free on the export of various grades of rice and High cereal Inflation and uncertainties with respect to the domestic supplies

- Poornima Varma wrote "UP ahead: Rice insecurity " mentioning the: Unreliable rice export policy and precarity of production among other factors, will have a long-term impact

Cultivation of Rice in India

- Rice scientifically known as Oryza sativa is a food crop that originated from wild grass species.

- A few of the oldest varieties of rice are 'Indica' (originated in the Eastern Himalayan foothills) and 'Japonica' (originated in Southern China).

- India is one of the largest rice producers as well as the leading exporter of Basmati

- There are many different types of rice cultivated in India such as Jasmine, Ambemohar have GI tagged to Maharashtra, Seeraga Samba, etc. The most recent addition to GI-tagged rice varieties of India is the Manipur black rice, called 'Chakhao' .

- The largest rice-producing state in India is West Bengal. Other states Uttar Pradesh, Punjab and Tamil Nadu are also significant rice producers.

- In India, specifically in Northern states, rice is mainly grown as a Kharif crop. However, it is also cultivated as a Rabi crop in many states like West Bengal, Assam, Tamil Nadu, Odisha and Andhra Pradesh.

The geographical condition required for rice cultivation :

- It requires a humid and warm climate, with the required temperature between 20°C and 35°C.

- It required well-distributed rainfall of around 100 cm or irrigation facilities

- Rice needs fertile alluvial soil. The soil found near the delta and valley soil is most suitable for rice cultivation. The soil with higher clay content has a better retention capacity so it is the most preferred type of soil for rice cultivation

3 types of rice are found in India, due to the climatic variation :

1. Winter/ Agahani/ Aman – cultivated in July-August and harvested in October-December. 86% of the total rice cultivation comes under this variety.

2. Autumnal/ Kuari/Aus – cultivated in May-June and harvested in September – October.

3. Summer/Boro – It is cultivated in November – December and harvested in March-April. It is grown on 1% of the total rice area.

Importance of India's rice export

• India is the largest rice exporter in the world, accounting for 40% of the total global rice exports.

• In 2021, it shipped over 21 mt of rice– way ahead of Thailand (7.2 mt), Vietnam (6.6 mt) and Pakistan (4.8 mt).

• The recent restrain are supposed to affect around 50% of the rice export of India in terms of quantity and over 33 % of the exports in terms of value.

• Considering India's exports of rice to over 150 countries, the recent curbs are expected to increase food prices around the world- already worsening the condition due to the Russia-Ukraine situation, heat waves and drought.

• China is purportedly the largest buyer of Indian broken rice– used to make animal feed, noodles and wine. Therefore the broken rice export ban could possibly trigger the food crisis in China.

Virtual Water Trade

The concept was introduced by Tony Allan in 1993. Virtual water trade exactly means what the name implies – the import and export of 'hidden' water present in various products, such as textiles, machinery, livestock, and crops. All these require water inevitably for their production.

Virtual water trade is now a globally relevant topic, especially when nations are struggling with the consequences of climate change. China, historically, has been a net importer of virtual water. On the other hand, India's exports are highly water-intensive due to its large variety of agricultural exports. As a result, it puts water sustainability at significant risk.

Virtual Water Trade and India:

International:

- India is a net virtual water exporter, because of the export of agricultural commodities.
- India exported 26 billion litres of VW every year between 2006-2016

Inter-state:

- Punjab and Haryana are water stressed.
- Still, water-intensive crops like rice are grown there.
- These crops are sent to North-East India.
- But, NE states have better agro-climatic conditions to grow rice.

What benefits of framing a virtual water trade policy?

a) Awareness about water footprint will increase.

b) India can save precious fresh water for drinking purposes.

c) Reduce pressure on scarce water resources in water-stressed areas.

d) Reduce the need for river interlinking (expensive financially and environmentally)

Challenges:

a) Estimating the quantity of virtual water is difficult.

b) Estimating movement of water-intensive products.

c) Convincing farmers to change cropping patterns permanently.

The way forward

- In place of a consequence knee-jerk reaction, the Agri-tech policies of india need to be more stable and predictable
- The commodities which have short life like vegetables and fruits, India should make an efficient value chain and link these to processing facilities.,which will be made it convenient for people to switch to processed forms of food in case of high prices of vegetables.
- The Indian food industry is way too behind to curve compared to many Southeast Asian nations, hence India must have to take food processing industry at priority
- India must have to avoid sudden and abrupt bans if it wants to be a globally responsible player.

Conclusion

- The recent decision to put a ban on rice export is understandable given the real danger of a domestic foodgrain shortage in the near future.

- Nevertheless, it is more rational to stick to raising tariffs, in place of putting bans. The sustainable issues plaguing agricultural policymaking need to be addressed to avoid similar situations in the future.

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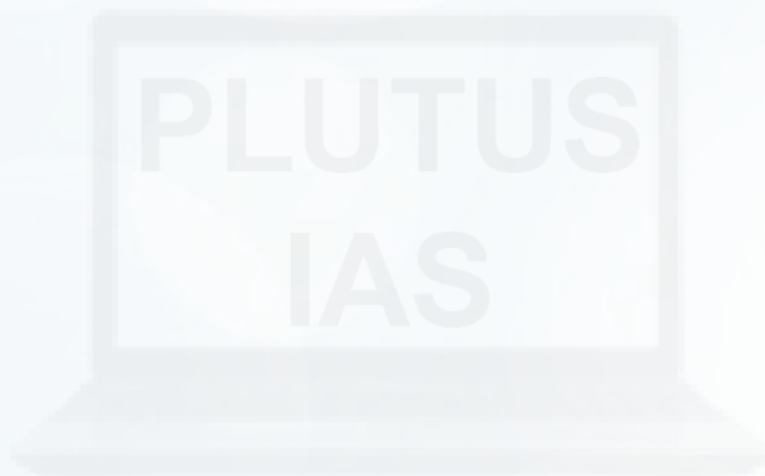
Arunachal Pradesh denies, Dibang multipurpose project

Prelim: Issues on Environmental ecology, climate change and biodiversity

Mains: GS III: Conservation, environmental degradation and pollution, environmental impact assessment.

Why in headlines:

The National Green Tribunal (NGT) dissolve the case it took up suo motu on the grant of forest clearance for the 3000-MW Dibang hydel project without encountering the preconditions of declaring a national park.

Dibang Multipurpose project:

- It is located on river Dibang. In the lower Dibang Valley district of Arunachal Pradesh.

- It is expected that the project will generate 2880 MW(12x240MW) power to produce 11223MU of energy in a 90% dependable year.

- This is India's largest ever Hydro Electric Project

- The height of the dam is 278 Metres and will be the highest dam in India once it will be completed

- It has been estimated by the government that the project will take nine years to complete

- The dam will be a type of concrete gravity dam

- Dibang River is one of the prime tributaries of the Brahmaputra,

- It makes its way from the northeastern states of India, Arunachal Pradesh and Assam.

- The River originates near Keya pass on the Indo-Chinese border in the Upper Dibang Valley district of Arunachal Pradesh.

- The drainage basin of the river within Arunachal Pradesh covers the districts of Upper Dibang Valley and Lower Dibang Valley

- The demographic area type of the Dibang River Valley is Hydrographic

- The river merges with the Luhit river and flows across the northern side of the Saikhowa Reserve forest

Why this dam can turn into a disaster?

- Due to the unique and compounded geological ecosystem, weather and climate condition, the region of the dam is a high mountain watershed prone to the natural disaster

Few probable risks:

- Seismic hazards

- Glacial hazards like glacial lake outburst floods

- Flooding due to extreme precipitation events

- Landslides

Seismic Risk

- This region lies in the tectonically active areas of the Eurasian plate that why the region is geologically unstable.

- The Indian plate is still pushing against the Eurasian plate, consequently, the Himalayans are still rising and so they the unstable

- Since the 18 century, 34 earthquakes have been recorded in the Dibang Valley district.

Change in climate

- The rivers on which the two mega dams are proposed to be constructed are situated just 80 km from the closest glacier.

- The Dibang watershed has around 350 glacial lakes with a cumulative area of 50 square km.

- These glaciers can lose mass and retreat due to climate change.

- One of the effects of glacial thinning is the appearance of lakes on the surface of glaciers (supraglacial lakes).

- Glacier lake outburst floods can be a hazardous result of it

Floods due to high precipitation

- Supraglacial lakes have already formed and ice chunks broke off glaciers.

- The capacity for the generation of electricity will be impacted by the glacial melt due to climate change

- The expected Dibang river summer glacial melt will be likely replaced by far less expected rainfall events and snow-melt runoffs.

It has been predicted that these glaciers will lose up to 40% of their recent volume by 2030 and 60% by 2050.

Risk of land Slide

- The rate of growth in landslide activity is expected to be significant over areas covered by current glaciers.

- Cases of heavy rainfall will increase with climate change and consequently, the cases of landslides will also increase.

Forest Advisory Committee (FAC)

- It is constituted by the Forest Conservation Act 1980.

- It is a statutory body.

- It is an advisory body

- Ministry of Environment, Forests & Climate Change (MoEF&CC) is its regulatory body.

- It checks the cases on the diversion of forest areas for non-forest uses such as mining, industrial projects, townships and councils the government on the issues of granting forest clearances

Environmental Impact Assessment' (EIA)

- This is a decision support tool for evaluating the probable environmental impacts of a proposed project or development.

- It provides information on the potential implications of projects to those responsible for the decision.

- The objective of an Environmental Impact Assessment is to check the potential ecological, socio-economic, and wellness outcomes of any project.

Importance of it

- Facilitates sustainable development

- In modern times human activities like rapid industrialization mass production and the cleaning of the forest have put immense pressure on the natural environment.

- The tools like EIA assists to balance the requirement of economical growth along with the importance sustainability concept.

Mitigating the Negative impact and informed decision making

- It helps to check the negative impact of various development projects.

- It enables monitoring programmes to be made to access subsequent impacts and give data on which managers can take informed decisions to eliminate environmental damage.

- Baking cost-effectiveness

- EIA helps in picking and forming projects, programs or plans with long-term viability and hence improves cost-effectiveness

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Status of poverty, inequality, unemployment

Prelims: Economic and Social Development-Sustainable Development, Poverty, Inclusion, Demographics, Social Sector Initiatives, etc.

Mains: General Studies III: Inclusive growth and issues arising from it.

Why in headlines?

RSS general secretary Dattatreya Hosabale put forward the issues of poverty, unemployment, and rising inequality in the country in a webinar organized by RSS-affiliated Swadeshi, Jagran Manch.

Who is Dattatreya Hosabale?

- He was born in Sorab in Shivamogga, Hosabale, he is a 65-years, a postgraduate in English literature, He has grown in RSS, which he joined in 1968.

- At first, he was associated with the Akhil Bharatiya Vidyarthi Parishad (ABVP), the student wing of the RSS, and there he became an organizer of RSS.

- He can speak various languages including English, Tamil, Sanskrit, and Marathi among others.

- Dattatreya Hosabale served as the Joint General Secretary of the RSS.

- At present, he is holding the responsibility for the next three years in the post of Sarkaryavah.

What did Hosable Say?

- 20 crore people are still below the poverty line

- According to Quoting United Nations observations on poverty and development as many as 23 crores, of people have less than Rs 375 income per day

- A large part of the country still does not have access to clean water and nutritious food

- Civil strife and the poor level of education are also a reason for poverty

- There are four crore unemployed people in the country.

- The labour force survey says we have an unemployment rate of 7.6 per cent

What is poverty?

- Poverty is a condition or state, of a person or a community, in which there is a scarcity of financial resources and essentials needed to live a minimum standard of living.

- Poverty indicates that the income level from employment is so minimum that the basic human needs can't be met.

- As per the World Bank, Poverty is pronounced deprivation in well-being and comprises many dimensions, it also includes low income and the inability to acquire the basic goods and services necessary for survival with dignity.

- Poverty also encircles the petty of health and education, poor access to clean water and sanitation, inadequate physical security, lack of voice, and insufficient capacity and opportunity to better one's life.

- In India, 21.9% of the population lives below the national poverty line in 2011.

- In 2018, almost 8% of the world's workers and their families lived on less than US$1.90 per person per day (international poverty line).

Types of Poverty:

Absolute Poverty:

- It is also called extreme poverty; it implicates the scarcity of basic food, clean water, health, shelter, education and information.

- Absolute Poverty is usually uncommon in developed countries

Relative Poverty:

- It is a type of poverty which defines the social perspective that is living standards compared to the economic standards of the population living in the surroundings.

- Therefore it is a measure of income inequality.

Rural Poverty

- It happens in rural areas, where there are limited job opportunities, limited access to services, limited support for disabilities and limited quality education opportunities.

Urban Poverty

- The prime challenges faced by the Urban people, because of Poverty includes:

- Inadequate housing and services

- Violent and unhealthy environment because of overcrowding

- Less or no social protection mechanism.

The main reasons for Poverty

1. Rapidly increasing population.

2. Less productivity in agriculture.

3. Less utilization of resources.

4. A short rate of economic development.

5. Increasing price rise.

6. Unemployment.

What is Inequality?

- India is one of the most unequal countries in the world.

- According to the World Inequality Report 2022

- India stands out as a "poor and very unequal country, with an affluent elite", where the top 10 per cent holds 57 per cent of the total national income while the bottom 50 per cent's share is just 13 per cent in 2021

- The average annual national income of the Indian adult population is Rs 2,04,200 in 2021.

- The bottom 50 per cent earned Rs 53,610, while the top 10 per cent earned over 20 times more (Rs 11,66,520), the report states

- In India, the top 10% and top 1% hold 57% and 22% of the total national income respectively while the share of the bottom 50% has gone down to 13%.

Reasons for the inequality in india

- Large-scale informal employment.

- Historical reasons.

- Females were always treated to be subordinate and weaker to males. Girl education is considered to be a burden on the family and women have limited choices in employment.

- A huge proportion of the population is still dependent on agriculture but the share of agriculture in the total GDP is falling.

What is Unemployment?

- Unemployment is a state in which a person who is actively searching for employment is unable to find work despite being skilled or talented or educated.

- Unemployment is often used as a parameter to measure the health of the economy.

Types of Unemployment in India

Disguised Unemployment:

- It is a type of unemployment, in which more people are employed than actually needed.

- It is primarily traced to the agricultural and unorganised sectors of India.

Seasonal Unemployment:

- This type of unemployment happens during a certain period of the year.

- Agricultural labourers in India often go through this unemployment.

Structural Unemployment:

- This unemployment arises when there is a dissimilarity between the jobs available in the market and the skills of the available workers in the market.

Cyclical Unemployment:

- It is a consequence of the business cycle, where unemployment rises during recessions and declines with economic growth.

- Cyclical unemployment figures in India are negligible.

- It is a phenomenon that is mostly found in capitalist economies.

Technological Unemployment:

- A person who lost their job because of a change in Technology.

- In 2016, World Bank data predicted that the proportion of jobs threatened by automation in India is 69% year-on-year.

Vulnerable Employment:

- This type of unemployment is commonly seen in India .

- In this unemployment, people work informally, without proper job contracts and thus sans any legal protection.

- These persons are deemed 'unemployed' since records of their work are never maintained.

- India has committed to attaining the Sustainable Development Goals by 2030, and to ending extreme poverty by that year.

- As per Oxfam, if India stops inequality from rising further, it could end extreme poverty for 90 million people by 2019. If it goes further and reduces inequality by 36%, it could virtually eliminate extreme poverty.

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MGNREGS to fund work to reverse desertification of land across States

LAND DEGRADATION

Details on Topic "MGNREGS to fund work to reverse desertification of land across States"

CONTEXT

India has been facing the problem of land degradation and desertification persistently. To reverse these, a huge amount of investment is needed. But with limited funds, this seems like a distant dream. To tide over this difficulty, the government is planning to bring convergence between the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) and the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)

WHAT IS LAND DEGRADATION

- Land degradation is the deterioration or loss of the productive capacity of the soils for the present and future.

- It leads to various threats like food insecurity, higher food prices, climate change, environmental hazards, and the loss of biodiversity and ecosystem services

- It can happen in various ways like soil erosion, acidification, desertification, salinization, etc.

- It is happening at an alarming pace and currently about 25% of global land is degraded.

- According to the Desertification and Land Degradation Atlas published by the Environment Ministry in 2021, at least 30% of India's total geographical area is under the category of "degraded land"

- The most glaring example of land degradation is seen in the states of Jharkhand, Rajasthan, Delhi, Gujarat, and Goa which have more than 50% of a land area undergoing desertification or degradation.

REASONS FOR LAND DEGRADATION

- Deforestation: Forests play a vital role in maintaining soil health. Tree roots bind soil particles preventing easy erosion. Urbanization creates more pressure on land and forests are cut down to build houses and supply timber. This contributes to land degradation in a significant manner.

- Overgrazing: India has a large livestock population. While it contributes to farmers' income, it has led to the overexploitation of pastures. The lack of vegetation cover leads to soil erosion.

- Fertilizer overuse: Overuse of fertilizers and pesticides adversely affects the soil quality. Nutrients are depleted this way.

- Salinisation: Salinisation is the increasing salt content within the soils. India has approximately six million hectares of saline land.

- Soil erosion: Soil erosion refers to the removal of the top fertile layer of the soil. Wind and water are the main agents of soil erosion. In the absence of tree cover, strong winds blow away the loose soil particles to great a distance. Heavy rains or running water may lead to removal of the top layer of soil. This leads to sheet erosion

- Climate Change: It may increase desertification through alteration of spatial and temporal patterns in temperature, rainfall, solar radiation, and winds.

- Non-adoption of soil conservation measures: Non adoption of soil conservation measures like crop rotation, contour ploughing, mulching, terrace farming, etc further aggravates the problem of soil degradation.

IMPACT OF LAND DEGRADATION

- It leads to loss of soil productivity: It leads to loss of soil and agricultural productivity. This poses a threat to food security and the livelihood of farmers.

- Water Scarcity: Land degradation has an adverse effect on water. It leads to an increased us to compensate for the degraded soil causing depletion of water both on the surface and in the groundwater table.

- Increased GHGs emissions: Land degradation leads to higher emissions of GHGs and in turn, increases their concentration in the atmosphere.

- Loss of biodiversity: Between 1970 and 2012 the average populations of wild land-based species fell by 38 %, and freshwater species by 81 %.

LINKING OF PRADHAN MANTRI KRISHI SINCHAI YOJNA AND MGNREGS

- PMKSY is a significant scheme to reduce land degradation.

- The Accelerated Irrigation Benefit Programme (AIBP) under PMKSY helps water to reach a larger distance and cover more area.

- Watershed development program under PMKSY helps in proper management of runoff water and improves soil conservation. This is done by using techniques like rain water harvesting, drainage line treatment, in situ soil moisture conservation, etc

- The Central Government has recommended states carry out the components of PMKSY using MGNREGS funds

- The MGNREGA scheme has a budget of ₹73,000 crores for the year 2022-2023, By using this for PMKSY, the government can increase the area to be covered.

- By the Ministry's estimate, convergence with the MGNREGS could help take up treatment of about 30% more land than feasible with the current scheme size.

- During COP 14 of the UN Convention to Combat Desertification(UNCCD), India put forward an ambitious target of restoring 26 million hectares of degraded land by 2030. If the above schemes work in tandem, India can follow the path towards reaching this target.

WAY AHEAD

There is a need to take further steps to counter land degradation. This includes the following:

- Afforestation: An afforestation drive to plant more trees should be taken up

- Planting Windbreaks: This checks on soil erosion by wind. It checks wind movement and conserves soil.

- Controlling overgrazing: This leads to the removal of grass from roots and leads to erosion of soil. Separate ground for pastures should be created and fodder should be made available.

- Controlling mining: Mining contributes big time to land degradation. This problem is aggravated by illegal mining which does not follow any pollution control protocols. Cleaner techniques need to be adapted to check land degradation.

- Adoption of Soil Conservation Management Practices: Terrace farming, rain water harvesting, contour bunding, etc are easy methods and go a long way to preserving soil

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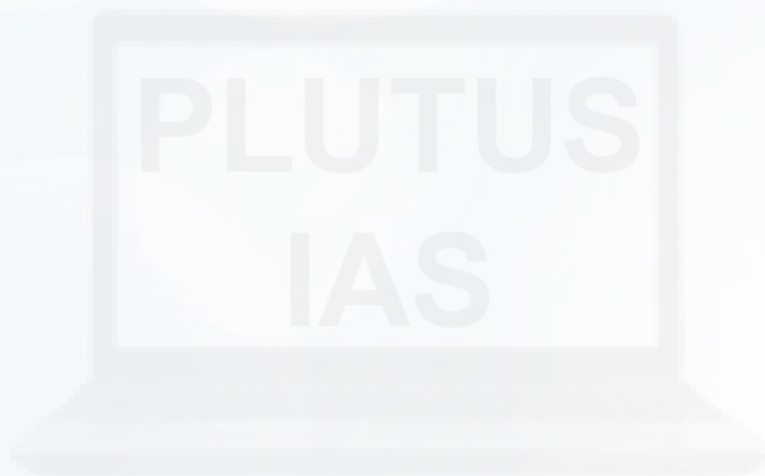
Credit Suisse is on the way to collapse

Credit Suisse is on the way to collapse

Prelim: Current events of national and international importance.

Mains: GS III: Indian Economy and problems relating to planning, mobilization, of resources, growth, development and employment.

Why in headlines:

- Since the start of 2022, the share prices of Credit Suisse, one of the oldest and historically one of the most influential banks in the world, have fallen close to 60%, it's an all-time low.

What is Credit Suisse?

- It was founded by Alfred Escher and Allgemeine Deutsche Credit-Anstalt in 1856; 166 years ago. Its headquarter of it is in Paradeplatz Zürich, Switzerland

- It maintains offices in all major financial centres around the world and is one of the nine global "Bulge Bracket " banks providing services in investment banking private banking asset management and shared services

– Bulge bracket banks are the world's largest multinational investment banks servicing mostly large corporations, institutional investors and governments.

How was it triggered?

- The straightforward reasons for the downfall of Credit Suisse are

- The losses were influenced by high-profile managerial malpractices and exit further undermining the confidence of investors.

- Like in 2020 The CEO Hdjane Thiam quit after it became evident that he was spying on Iqbal khan the head management executive.

- Credit Suisse directed many customers to invest as much as $10 billion in Greensill Capital. Greensill was a lender of sorts — it intermediated between suppliers and clients.

- Like so, Credit Suisse was involved in many other controversies in the past few years like

  - Archegos Capital, 2021

  - Drug money laundering scandal, 2022

  - Suisse secrets leak, 2022

  - Russian oligarch loans documents destruction after the invasion of Ukraine, 2022

  - Social Media Rumours, 2022 and collected accumulation of all these resulted in losses for the institution.

- It has made several risky bets and turned out to lose a lot of investor money.

- As a result of it, Credit Suisse has hurt its profitability, eroded investor confidence, and made raising fresh capital costlier.

How is it impacting Credit Suisse?

- The secular shrink in shares of Credit Suisse is one good way to understand how investors have gradually shrugged away from the iconic bank

- Additionally, the bonds of Credit Suisse became must cheaper due to this very few people who want to lend money to it.

- Consequently, the yields rose quite sharply.

- Higher yields basically indicate that the bank would have to pay higher returns for every dollar or euro it takes from the market.

Why this is so?

- This has to turn into a problem, chiefly in the present scenario facing the developed economies, when growth prospects are tanking and central banks are raising the interest rates to contain inflation.

- The banks which have aggravated the profitability have to uplift the money at very rapidly increasing interest rates, but in a market that does not provide a very high return, it is predestined struggle.

- The other equally worrisome issue is the rise in the spread of Credit Default Swaps.

What Is a Credit Default Swap (CDS)?

- CDS is a financial derivative that permits an investor to swap or offset their credit risk with that of another investor.

- To swap the risk of default, the lender buys a CDS from another investor who agrees to reimburse them if the borrower defaults.

- Most CDS contracts are maintained via an ongoing premium payment similar to the regular premiums due on an insurance policy.

A lender who is worried about a borrower defaulting on a loan often uses a CDS to offset or swap that risk.

Mechanism of CDS

- A credit default swap is a derivative contract that transfers the credit exposure of fixed-income products. It may include bonds or forms of securitised debt—derivatives of loans sold to investors.

- For instance, consider a company selling a bond with a $100 face value and a 10-year maturity to an investor. The company might agree to pay back the $100 at the end of the 10-year period with regular interest payments throughout the bond's life.

- Because the debt issuer cannot guarantee that it will be able to repay the premium, the investor assumes the risk. The debt buyer can purchase a CDS to transfer the risk to another investor, who agrees to pay them in the event the debt issuer defaults on its obligation.

- Debt securities often have longer terms to maturity, making it harder for investors to estimate

the investment risk. For instance, a mortgage can have terms of 30 years. There is no way to tell whether the borrower will be able to continue making payments for that long.

- That's why these contracts are a popular way to manage risk. The CDS buyer pays the CDS seller until the contract's maturity date. In return, the CDS seller agrees that it will pay the CDS buyer the security's value and all interest payments that would have been paid between that time and the maturity date if there is a credit event.

- Credit Events

- The credit event stimulates causes the CDS buyer to settle the contract.

- The credit event acknowledges the CDS purchases and is part of the contract.

The majority of single–name CDSs are traded with the following credit events as triggers

Reference entity default other than failure to pay:

- An event where the issuing entity defaults for a reason that is not a failure to pay

Failure to pay:

- The reference entity fails to make payments

Obligation acceleration:

- When contract obligations are moved, such as when the issuer needs to pay debts earlier than anticipated

Repudiation:

- A dispute in the contract validity

Moratorium:

- A suspension of the contract until the issues that led to the suspension is resolved

Obligation restructuring:

- When the underlying loans are restructured

Government intervention:

- Actions are taken by the government that affect the contract

CSD is used when

- Like an insurance policy against a credit event on an underlying asset, credit default swaps are used in several ways.

Speculation

- Due to swaps being traded, they naturally have fluctuating market values that a CDS trader can profit from. Investors buy and sell CDSs from each other, attempting to profit from the difference in prices.

Hedging

- A credit default swap by itself is a form of hedging. A bank might purchase a CDS to hedge against the risk of the borrower defaulting. Insurance companies, pension funds, and other securities holders can purchase CDSs to hedge credit risk.

Arbitrage

- Arbitrage generally involves purchasing a security in one market and selling it in another. CDSs can be used in arbitrage—an investor can purchase a bond in one market, and then buy a CDS on the same reference entity on the CDS market.

Advantages and Disadvantages of Credit Default Swaps

Advantages

- Can reduce risk to lenders
- No underlying asset exposure
- Sellers can spread risk

Disadvantages

- Can give lenders and investors a false sense of security
- Traded over-the-counter
- Seller inherits the substantial risk

Legality of CDS

- Credit default swaps are not illegal, but they are regulated by the Securities and Exchange Commission and the Commodity Futures Trading Commission under the Dodd-Frank Act.

How India will be impacted?

- Surely, a global financial crisis is always a concern but because Credit Suisse's India operations are limited the threat to the Indian banking system is not grave.
- Credit Suisse AG has an Indian entity.
- It came to India in 1997 when the East Asian currency crisis was in full swing.
- However, India remains unaffected by the currency crisis partly due to capital control.
- Like its parents, the bank in Indian entity focused on investment banking wealth management and share breakage services.
- Also, Credit Suisse AG has an Indian operation under the branch model and is not a wholly owned subsidiary

Farhin

Global Hunger Index report and the issue of food security in India

Global Hunger Index report in India

Details on topic "Global Hunger Index report and the issue of food security in India"

CONTEXT

The latest edition of the Global Hunger Index report in India was recently released by Concern World-wide and Welthungerhilfe. The report ranked India 107th out of 136 Countries. The report barely two days after the world celebrated World food day on 16th October which is the foundation day of FAO, a UN body.

GLOBAL HUNGER INDEX REPORT

The index measures and tracks hunger at the regional, country, and global levels by using four separate indicators to "capture the multidimensional nature of hunger". The four indicators are:

- Undernourishment: It measures the share of the population who have insufficient calorie intake. This reflects hunger to the closest and occupies 1/3 of the GHI score.

- Child Stunting: It reflects the share of children under the age of five years who have low height for their age. It has a weightage of 1/6 of the score and shows chronic undernutrition.

- Child Wasting: It is the share of children under the age of five years who have low weight for their height. It also has a weightage of 1/6 of the total score.

- Child Mortality: It refers to the death of a child under five years of age. This makes up 1/3 of the GHI score.

The Global Hunger Index reflects deficiencies in calories as well as in micronutrients.

The report again throws light on the issue of hunger and food security in India

WHAT IS FOOD SECURITY

According to the World Food Summit, 1996, Food security exists when all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food which meets their dietary needs and food preferences for an active and healthy life. Food Security has the following three components:

- Availability: It signifies adequate food production within the country, the amount of food imported as well as the food stored in government granaries.

- Accessibility: It means food is within the reach of every person without any discrimination.

- Affordability: It suggests that people have enough money to buy sufficient, safe, and nutritious food to meet their dietary needs.

CHALLENGES TO FOOD SECURITY

- COVID-19 Pandemic: The pandemic shook the world and exacerbated hunger and poverty everywhere, especially in India. The World Food Programme estimated that an additional 130 million people could fall into the category of "food insecure"

- Russia-Ukraine Conflict: The Russian attack on Ukraine stopped grains from leaving Ukraine. Russia and Ukraine together export around one-third of the world's wheat and barley. The tensions created between the countries have made it difficult for the grains to reach other countries that are dependent on them. This has increased food shortage and made food more expensive globally.

- Climate Change: Excessive heat or shortage of water can hamper crop growth, lead to a reduction in yields, and influence irrigation, soil quality, and the ecosystem on which agriculture depends. It can change rainfall patterns and lead to low production and yields. The recent Climate shocks like sudden rains in October have raised concerns about India's wheat and rice production over the next year with the possibility of damaging crops.

- High Population: India's population is expected to reach 1.5 billion people by 2030 The UN Population Prospects Report, 2022 suggests that India would surpass China as the world's most populous country by 2023. This puts an additional burden on the agri-food system.

EFFORTS TOWARD FOOD SECURITY

- The Constitution of India has recognized the right to food as part of the right to life under Article 21 of the Constitution. Article 21 includes the right to live with human dignity and access to food is an integral part of it.

- In terms of production, from being a food-deficient country that had to rely on PL 480 imports, India had come a long way to ensure sufficient production. During 2021-22, India recorded $49.6 billion in total agriculture exports, a 20% increase from 2020-21.

- India has also provided humanitarian food aid to Afghanistan, and many other countries which are battling food supply shortages and disruptions

- The National Food Security Act, 2013 (NFSA) moves from a welfare to a rights-based approach. It covers 75% of the rural population and 50% of the urban population. The Antyodaya Anna Yojana under it is to target the poorest-of-the-poor households, giving them 35 kg of foodgrains per month.

- Targeted Public Distribution System (TPDS), provides food grains to a targeted population that falls below the poverty line (BPL).

- PM POSHAN scheme: It aims to provide hot cooked meals in Government and Government-aided schools. It replaced the mid-day meal scheme in schools. The scheme shall provide adequate nutrition to children.

- Pradhan Mantri Garib Kalyan Anna Yojana (PM-GKAY)scheme was introduced in 2020 to provide relief to 800 million beneficiaries covered under the NFSA from COVID-19-induced economic hardships

WAY AHEAD

Though we have come a long way, recent reports highlight the need to further improve the food secu-

rity system.

- Sustainable Farming Practice: Better watershed management, micro-irrigation facilities, and bio-technology need to be adopted.

- Crop diversification: India has a variety of crops. We need to diversify other than wheat and rice production for food and nutritional security. Millets are rich in nutrition, climate resilient, and nonwater intensive. They should be promoted.

- Replacing TPDS with Direct Benefit Transfer (DBT): this will decrease government costs and provide easy cash to people and help to fight hunger. Hence, it will be more efficient.

- Adopting ZBNF: It will reduce carbon footprint and loss of soil nutrients thus leading to better production.

- Strengthening transparency in the agricultural system: This can be done by promotion of labeling and tracing of crops.

- Community participation: Revamping of existing direct nutrition schemes by community participation can give new life to these programs. Roping in Women's SHG, local bodies, health workers, and Panchayati Raj Institution (PRI) members is the need of the hour.

saumya khedwal

# How Direct Benefit Transfer scheme has transformed social welfare in India

CONTEXT

Last week, India got global laurel when the IMF appreciated the Direct Benefit (DBT) Scheme of the Government of India and called it a 'logistical marvel'. David Malpass, President of the World Bank Group, also gave a call to other countries to adopt India's move of targeted cash transfer instead of broad subsidies stating that "India managed to provide food or cash support to a remarkable 85 percent of rural households and 69 percent of urban households".

WHAT IS THE DIRECT BENEFIT TRANSFER (DBT) SCHEME

- The DBT scheme was introduced in 2013 to improve the Government's delivery system in welfare schemes by making the flow of funds and information faster, and more secure and reducing leakages.

- It transfers subsidies and cash benefits directly to the people through their Aadhar-seeded bank accounts instead of transferring them to the Government offices.

- Aadhar serves as the backbone of the scheme though it is not mandatory for the scheme

- It operates in two ways- cash transfer or in-kind transfer.

- In the in-kind transfers, benefits are given by the Government to individuals through an intermediate agency that procures the goods for public distribution and makes them available to the beneficiary for free or at subsidized rates. The biggest example of this is the Public Distribution System (PDS)

- The other way is cash transfers. Under this, cash benefits are transferred by the Government to individual beneficiaries. Examples of cash transfers include the PAHAL scheme wherein subsidized liquefied petroleum gas (LPG) cylinders are sold at market rates to the consumers who receive LPG subsidies directly into their bank accounts. Another case of cash transfer is the MGNREGA scheme.

- The Office of the Controller General of Accounts' Central Plan Scheme Monitoring System (CPSMS) serves as a common platform for routing DBT. It prepares the list of beneficiaries and processes payments in the account of the beneficiary Aadhaar Payment Bridge.

REQUIREMENTS FOR DBT
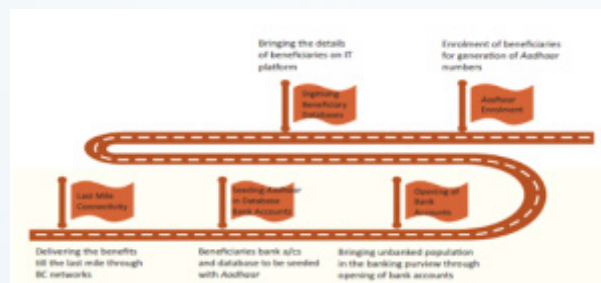
(Image: Vikaspedia)

ENABLERS OF THE DBT SCHEME

- **JAM Trinity:** JAM trinity means linking the Jan Dhan accounts, mobile numbers, and Aadhaar cards of people. This ensures proper targeting, elimination of frauds and ghost accounts and that money reaches the intended beneficiary.

- **Business Correspondents Infrastructure:** Business Correspondents are retail agents employed by banks for providing banking services at locations other than a bank branch/ATM.

- **Payments Bank:** Payment banks were created for furthering financial inclusion by enabling the transfer of money through mobile phones. They cannot issue loans or credit cards. Payment banks help to spread financial services to low-income households and small businesses as well as migrant workers. It operates in a secure technology-driven manner.

- **Mobile money:** Mobile money refers to financial transactions and services that can be carried out using a mobile device such as a mobile phone or tablet.

BENEFITS OF DBT

- The DBT has proved to be an ambitious and well-structured financial inclusion program that has been working to include all households within the fold of the formal financial network

- Today, it has 318 schemes of 53 central ministries spanning across different sectors, covering the vast geography of the country.

- DBT has helped to remove leakages, ghost, or fake accounts and transfer funds to the genuine beneficiary.

- It has helped farmers tremendously by lowering the input costs on fertilizers and irrigation through programs like PM Kisan Samman Nidhi, and PM Krishi Sinchayi Yojana

- DBT has enabled social security in the nation through various scholarship schemes and the National Social Assistance Programme

- It increases transparency in the system and the incidents of theft and loss of public resources.

CHALLENGES IN DBT

- **Digital illiteracy**: a large proportion of people in rural areas lack the digital literacy needed for the smooth working of DBT

- **Exclusion**: Aadhar registrations presently covers around 91% of the population. Since DBT is linked with Aadhar for the majority of the schemes, there is a need to improve Aadhar linkage to 100% so that no one is left out.

- **Duplication**: a recent Comptroller and Auditor General of India (CAG) audit on the functioning of the Unique Identification Authority of India (UIDAI) revealed that the Aadhaar database may contain identical biometric data for multiple citizens. This leads to duplication and crediting wrong accounts.

WAY AHEAD

Despite the big population and vast size of the country, DBT has proved to be efficient in targeting the intended beneficiaries and ensuring welfare through financial support. It is expected to scale up further and improve the ease of living for people. However, digital and financial literacy, robust grievance redressal, enhancing awareness, and an empowering innovation system are some of the aspects that would require continued focus. This would ensure inclusive growth and development of the people and the nation.

Saumya khedwal
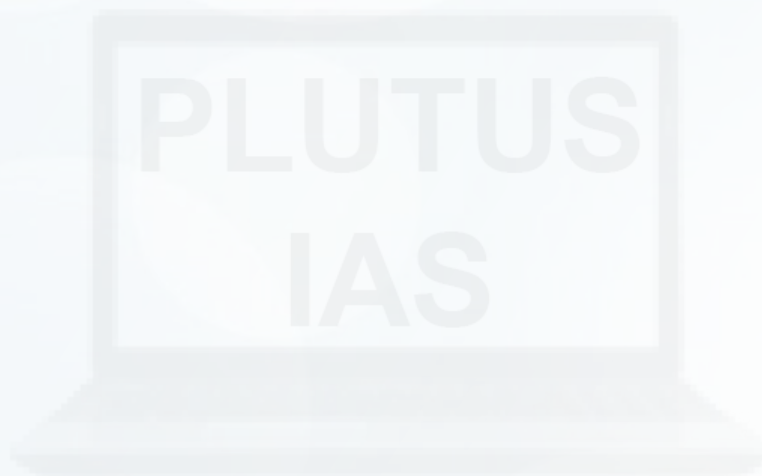
NDMA, Aapada Mitra

- **Prelims:** NDMA **Mains:** GS III and GS IV: Government Schemes, case study, Essay **why in the news:** NDMA celebrated its foundation day on 18th September The theme for this year's Foundation Day was "Volunteerism in Disaster Management". The government is working on a programme to build teams of disaster management volunteers (Aapada Mitra) in 350 districts of the country.

- **About NDMA** NDMA stands for National Disaster Management Authority. It is an apex statutory body for disaster management in India. The NDMA was formally set on 27th September 2006, under the Disaster Management Act, of 2005.

  The Chairperson of the body is Prime Minister and he is assisted by nine ot er members, one of these 9 members will be the Vice-chairperson. <u>What is Disaster Management Act?</u>

  The Disaster Management Act, 2005 The Act was sanctioned on 26th December 2005. It came into effect in the repercussions of the 2004 tsunami when our nation lost thousands of lives.

  It was approved by the government for efficient management of disasters, including preparation of mitigation strategies, capacity-building and related matters.

  Role of NDMA the primary role of this body is to coordinate response to natural or man-made disasters and for capacity-building in disaster bouncebackability and crisis response.

  It is also the supreme body to set down policies, plans and guidelines for Disaster Management to ensure a timely and effective response to disasters.

  The aim of NDMA Is to form a safer and disaster-resilient India through a holistic, proactive, technology-driven and sustainable development strategy that includes all stakeholders and fosters a culture of prevention, preparedness and mitigation.

  Evolution of NDMA

  The government of India set up a High-Powered Committee (HPC) in August 1999 and a National committee after the Gujarat earthquake (2001), for making recommendations on the preparation of Disaster management plans and suggesting effective mitigation mechanisms, to identify the importance of Disaster Management as a national priority

  There was a complete detailed chapter on Disaster management in the 10th 5-year Plan document.

  The 12th finance commission was also mandated to evaluate the financial arrangement for disaster management.

  The Government of India enacted the Disaster Management Act, which anticipates the creation of NDMA, with the Prime minister as the head and In state, the respective CM is the head of state disaster management authorities SDMAs, to initiate and execute a holistic and integrated approach to Disaster Management in India.

  Functions of NDMA

  Set up the policies on disaster management. Approve the National Plan. Approve plans prepared by the Ministries or Departments of the Government of India in accordance with the National Plan. Set up the guidelines supposed to be followed by the State Authorities in drawing up the State Plan.

Set up the guidelines supposed to be followed by the different Ministries of Departments of the Government of India for the Purpose of integrating the measures for the prevention of disaster or the mitigation of its effects in their development plans and projects. Coordinate the enforcement and implementation of the policy and plans for disaster management. Recommend provision of funds for the purpose of mitigation. Provide such support to other countries affected by major disasters as may be determined by the Central Government. Take other measures for the prevention of disaster, or the mitigation, or preparedness and capacity building for dealing with threatening disaster situations or disasters as it may consider necessary. Set up broad policies and guidelines for the functioning of the National Institute of Disaster Management.

Aapada Mitra:

It is a Central Sector Scheme that was launched in May 2016.

the central sector schemes are

1. These schemes are funded and implemented by the union government.

2. Usually they are schemes related to the subjects over which the union government has jurisdiction as per Schedule VII)

The scheme was implemented by the NDMA Through this scheme, individuals will be identified as suitable individuals in disaster-prone regions who can be trained to be first responders in times of disaster. To come up with the community volunteers with the skills that they would need to respond to their community's immediate needs in the aftermath of a disaster in the way capacitating them to undertake basic relief and rescue tasks during emergency situations such as floods, flash-floods and urban flooding. Why these schemes Commonly when disaster happens, volunteers from the affected community are the first ones to act. When any disaster happens, no matter how fast the government machinery may be, the help from outside of the community will rich the affected people will take some time, and this time lag is very important in saving lives and livelihood. The impact of volunteers in disaster response can be tremendous, as the extent of damage – in terms of economic and human loss – is greatly influenced by the initial response to a disaster. Hence, there is a very necessary need to train these volunteers in certain basic skills in disaster management so that they can be able to respond in an informed and immediate manner along with assisting the concerned agencies in rescue and relief operations.

The drawbacks of NDMA

During the Uttarakhand Floods of 2013, the participation of the NDMA was negligible when it was unable to alert timely people of flash floods and landslides have been questioned. The post-disaster relief response was also insufficient.

The higher authority has blamed the NDMA's poor planning of the unfinished flood and landslide prevention measures.

The completion of projects under the flood management programs has also been delayed, according to a CAG study.

It stated that the measure was not executed in a coordinated manner and blamed the NDMA for poor flood management due to institutional failings.

It has affirmed that there had been a notable delay in the execution of river management activities and

works relating to border area projects, which were aimed to provide long-term solutions to Assam's, north Bihar's, and eastern Uttar Pradesh's flood concerns.

The destruction caused due to the Kerala floods in 2018 and the Chennai floods in 2015 disclosed the inefficiency of institutions in terms of disaster preparedness.

The NDRF's personnel don't have the necessary training, equipment, facilities, and living quarters to effectively deal with the problem.

Missing using the finds: To deal with disasters, the government established the National Disaster Response Fund and the State Disaster Response Fund.

Way Forward

At each level of disaster management, the community, NGOs, CSOs, and the media should participate

At the local, state, and national levels, robust early warning systems and fruitful reaction plans should be executed.

Adaptation and mitigation should be used to handle climate risk management. Through sufficient research investment, a dynamic policy is crucial to construct disaster-resilient infrastructure. ISRO, NRSA, IMD, and other organizations must work together to develop technical solutions to improve disaster response capabilities.

India should take note of best practices from countries throughout the world.

Farhin

Avalanches: A Himalayan disaster

Avalanches- A Himalayan disaster

Details for topic "Avalanches- A Himalayan disaster"

Prelims: General issues on Environmental ecology, Bio-diversity and Climate Change – that do not require subject specialization.

Mains: General Studies III: Disaster and disaster management.

Why in headlines?

Recently 12 dead bodies were recovered from the site of an avalanche that hit a team of Climbers in Uttarkashi in the Uttarakhand district,

Avalanches are

• These are masses of snow, ice, and rocks that fall expeditiously down a mountainside.

<u>There are mainly three types of Avalanches</u>

<u>Slab avalanches</u>

• A slab avalanche takes place when the weak layer lies lower down in a snowpack.

• The weaker layer is covered with other layers of compressed snow.

• When the avalanche is triggered, the weak layer breaks off, pulling all the layers on top of it down the slope. These layers tumble and fall in a giant block, or slab.

<u>Loose snow avalanches</u>

• Loose snow avalanches take place when under the 'weight when poorly bonded surface snow slides downhill.

• They usually occur on steep slopes and are seen after a fresh snowfall.

Cornices

- These are overhanding masses of wind–deposited snow projected from sharp terrain features like ridges or peaks.

- They can be as beautiful and as deadly, breaking off in response to changing weather or the weight of a person or machine

Powder Snow Avalanches

It is a mixture of all other types of Avalanches, like Loose Snow and Slab.

The bottom half of power snow avalanches is made of a slab or a dense concentration of snow, ice and air.

The main causes of Avalanches

Heavy rainfall

- Heavy rain rainfall is the primary cause of avalanches because it deposits the snow in unbalanced areas and it puts pressure on the snow back

- Raining during the summer also leads to a cause of wet snow avalanches

Natural Causes

- the natural courses like earthquakes and tremors also trigger avalanches as they sometimes create cracks in the snowpack

- the fresh snow or rain can cause built-up snow to loosen and fall down in the snowpacks

Human Activity

- In recent years human activities have triggered many avalanches

- Heavy deforestation and soil erosion in mountains, result into the a very less stability of snow during winter seasons

- Winter sports that require steep slopes often put pressure on the snowpack, which it cannot deal with.

- Sometimes the weak layers of the snow cannot withstand the vibrations within the snow created by the Terrain vehicles,

Steep Slopes

- Layers of snow build up and slide down the mountain at a faster rate as steep slopes can increase the speed of snow.

- A rock or piece of huge ice can shake the snow and cause it to come down.

Winter Sports Activities

- Above all factors, this factor will act like the last nail to trigger steep slopes or loose snowpacks by skiers or other winter sports activities.

Effects of Avalanches

Damage to Life and Property

- A huge number of casualties take place when avalanches hit a largely populated area

- The roadways blockages caused due to avalanches impact the livelihoods of local peoples

- The infrastructure is damaged, as strong avalanches can destroy buildings

- Infrastructure is damaged, and the blockage caused impacts the livelihood of many.

Flash floods

- All the debris came along with the avalanches when it takes place and can cause calamity in low-lying areas.

- In general, flash floods are seen to happen after avalanches,

Property and Transportation

- A huge amount of snow can cover entire mountain passes and travel routes with cars and trains travelling on these routes.

Utilities and Communication

- strong snow waves have the capability to completely destroy pipelines carrying gas or oil, thus causing leaks and spillage.

- Broken power lines can cause a disruption in electricity and cause thousands of people to go without power.

- Communication fields, such as telephone and cable lines, could go silent, causing panic and a delay in response time and rescue.

Why the Himalayas are vulnerable to Avalanches?

- The climatic condition is fragile snow-covered Himalayas has been changing very fast

- Experts stated that it has been found that winter temperatures in the northwestern Himalayas have risen on an average 0.65-degree celsius over a period of 25 years from 1991 — greater than the global average rise of 0.44 degrees Celsius.

- At this time, total winter precipitation has increased with greater rainfall and lesser snowfall.

- Increasing temperatures have driven an increase in the frequency of avalanches since 1970, creating a threat to the road that provides access to the newly built Rohtang tunnel.

What are the Prediction and protective measures for Avalanches in India

In order to reduce causalities and to provide protection to villages and roads, the government attempt to predict and prevent avalanches

Avalanche Prevention Structure

- Stepped Terrace
- Avalanche prevention piles
- Avalanche prevention fence
- Suspended tence
- Snow netSnow prevention fence
- Collector type
- Snow prevention fence
- Blower type

To prevent avalanches from initiating or to retard movement before it gains momentum

Snow Drift Prevention Structure

- Avalanche retaining wall
- Avalanche protection tence
- Avalanche wedge
- Earthbound
- Protection piles
- Retarding structure
- Deflecting structure
- Snow Shed Corrugated pipe

To keep the moving snow of an avalanche away from structures in a critical location.

Snow Removal & Melting Structures

- Show melt channel
- Snow-melting water
- Electric snow melter

To prevent the accumulation of water caused by the melting of ice and provide to outlet

Farhin

Uncertainty in climate

Prelims: common problems on Environmental ecology, Biodiversity and Climate Change

Mains GS III Indian Economy and issues relating to planning, mobilization, resources, growth, development and employment.

Context

What is climate change?

- Climate Change is a cyclic change of the climate of Earth that comes out as a consequence of changes in the atmosphere along with influencing the atmosphere and many other geologic, chemical, biological, and geological factors in the earth system.

- Generally, climate change refers particularly to the rise in global temperatures from the mid-20th century to the present.

- The rate of change in the climate depends on the nature of very common factors. These changes may be gradual or rapid, partly or drastic, short-term or long-term, regional local or global scales.

Climate change-causing factors?

There are many reasons that affect the Climate Change

Natural Factors:

There are many natural factors that are affecting climate, since the formation of the earth. They are as follows

Continental Drift:

- In the current situation, the continents are not the same as they used to be 200 million years ago.

- This movement of land masses had an impact on climate change because the change in land mass started to drift apart because of plate displacement. It has an impact on the change of climate as the physical features of the landmasses have changed, the position in water bodies has been changing, and the effect of oceanic currents and winds has changed.

- This continental drifting of the landmasses is still in process. The Himalayan range is rising by 1 mm (approximately)every year as the Indian landmass is moving towards the Asian landmass.

Variation of Orbit of Earth:

- The orbit of the earth put an impact on the seasonal disturbance done by sunlight which is reaching the surface of the earth

- There are minor changes occur to the annually averaged sunshine, but there can be a huge change in the geographical and seasonal distribution

- The three types of orbital rotation – are variations in the Earth's eccentricity, variations in the tilt angle of the Earth's axis of rotation and precession of the Earth's axis.

Plate tectonics:

- The temperature change in the core of the earth leads to the mantle plumes and the convection current forcing the plates of the Earth to adjust leading to the rearrangement of the Earth's Plate.

- This can easily affect the global and local patterns of climate and atmosphere.

- Volcanic Activity:

- During a volcanic eruption, it emits gasses and dust particles, resulting in a blockage in the Sunrays, this can result in a partial block of sun rays, and it can lead to cooling of the weather.

- However, volcanic activities remain only for a few days, and the gasses and ashes released by it can last for a long period, leading to affecting climate patterns.

Ocean Currents:

- It is one of the very important natural reasons for the climate system.

- It influenced the horizontal winds resulting in the movement of the water against the sea surface.

- The temperature differences of the water influence the climate of the region.

- Human causes :

- Studies have stated that climate change is caused by human activities.

- Global warming, which has raised the average temperature of the Earth's climate system, is a major aspect of climate change.

- It is the primarily human-caused increase in global surface temperature.

- The human factors causing climate change are as follows:

Greenhouse Gasses:

- The greenhouse gases absorb the heat radiations from the sun, the industrial revolutions, and the emissions of greenhouse gasses in the atmosphere have increased rapidly.

- Which resulted in an increase in Global Temperature.

- Change in the land use pattern:

- During the industrial era, half of the land use patterns have been changed

- Most of the forest areas were deforested for agricultural or grazing purposes.

Atmospheric aerosols:

Atmospheric aerosol can:

- The aerosol in the atmosphere can

- scatter and absorb the solar and cosmic radiation

- it can alter the microphysical and chemical properties of the clouds

- When Solar radiation is scattered, it cools the planet, however, when the aerosols absorb solar radiation, consequently it can increase the temperature of the air instead of allowing the sunlight to be absorbed by the Earth's surface.

- It has the capability to influence climate change by absorbing or reflecting solar radiation. They can also produce indirect effects by altering the cloud's formation and properties.

- There are two types of aerosols – Natural aerosols and Anthropogenic aerosols.

The effect of climate change

- The change in the climate in recent days like the rainfall pattern, increasing floods, drought, heatwaves, etc are the consequence of Global warming. The oceans and glaciers have experienced significant changes. At present, the oceanic water is warming up and becoming more acidic. These major changes are expected to be more prominent in the coming decades,

A few of the impacts of rapid climate change are :

 A rise in atmospheric temperature:

- Human activity is the main reason behind the temperature rise in the atmosphere due to an increase in greenhouse gasses.

- The temperature increase is a primary cause of the current increase in heat-related deaths and illnesses, the rise in sea levels and increased risks of natural disasters.

Change in landscapes:

- Temperature increases and weather patterns and climatic changes across the globe are resulting in the shift of trees and plants towards Polar Regions and mountains.

- As vegetation tries to adjust to changes in climate by shifting to the colder regions, it becomes necessary for the animals that feed on them to follow them for survival.

- The species like polar bears, who are indigenous to the cold terrains will not have any habitat due to the melting of ice, causing a risk to their lives

The danger to the ecosystem :

- The increasing temperature of the earth is resulting in changes in weather and vegetation patterns, also forcing the species to migrate to cooler areas for survival. Which puts a threat to the survival of many species.

Rising sea levels:

- The temperature increase across the globe results in the rising of sea level because of thermal expansion. The glacier melting adds to this issue.

- The living creatures living in under-lying areas, islands and coasts are threatened by the rising sea levels.

Ocean Acidification:

- The increasing concentration of CO2 in the oceanic atmosphere has made the ocean acidic

- The increasing amount of acids in the oceans can be harmful to many marine species like plankton, molluscs, etc. The corals are particularly at risk of it, as they find it difficult to create and maintain the skeletal structures needed for their survival.

Health issues:

- The abnormal high temperature on the earth can pose health risks and deaths.

- Climate change can increase the spreading of contagious diseases as the long-term warm weather allows disease-carrying insects, animals and microbes to survive longer.

Economic impacts:

- Studies have stated that if action is not taken to address the emission of carbon, the climate could cost up to 5 to 20 % of the annual global GDP

- On the contrary, the cost to lessen the most damaging effects of climate change is just 1% of the GDP.

- Coral reefs generate approximately $375 billion each year in goods and services, but their very survival is currently under threat.

- Agriculture productivity and food security:

- Crop cultivation is relying on solar radiation, favourable temperature and precipitation.

- Therefore, agriculture relies on climate patterns.

- The present climate change has influenced agricultural productivity, food supply and food security.

How climate change is affecting India

- It was declared by the Indian Meteorological Department (IMD), March 2022 was the hottest month since record-keeping began 122 years ago.

- India encountered around 300 forest fires around the month of April 2022.

- It also indicated some expectations about future heat waves in the subcontinent.

- Extreme Weather and Its Impact:

- These weather events are those that were once expected to occur once in 100 years and are now 30 times more likely than before.

- In addition to this, March 2022 was recorded as one of the driest months, and the 2022 April's rainfall was way less than normal in north India's crop-growing regions.

- In some parts of Kerala, unseasonal rains forced cultivators to paddle through watery fields to harvest paddy consequently in low-quality crops.

Overseas Sales Ban:

- The extreme rainfall along with the extreme heat influenced the growth of wheat in the grain basket of India, i.e, Punjab, Haryana and western Rajasthan and Uttar Pradesh

What is winter disinflation?

- The price of vegetables falls in December to February period, popularly known as winter disinflation, which gives an implicit indication to the central bank not to get carried away by the price rise in prices of vegetables in the summers

Farhin
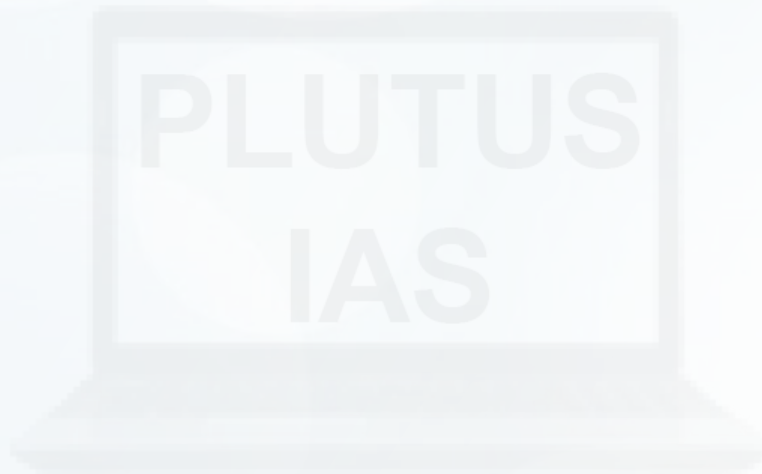
Centre to help set up paddy straw pellet units to curb stubble burning

CONTEXT

The Ministry of Environment has announced financial aid to industries to establish paddy straw pelletization and torrefaction plants. The Government has set aside Rs.50 crore for it. With increasing cases of stubble burning being witnessed in Punjab and Haryana and the onset of the winter season, the scheme is aimed to lower the rising air pollution in Delhi while at the same time converting "waste to wealth" and ensuring a "Clean India"

DELHI AIR POLLUTION AND ISSUE OF STUBBLE BURNING

- Delhi has been consistently facing the problem of air pollution for about two decades now. Last week, the Air Quality Index in Delhi dropped to 211 which is considered "Poor" according to the National Air Quality Index.

- A recent report released by US-based Health Effects Institute Air Quality carrying a global analysis of air quality of different cities found Delhi's PM 2.5 levels to be the worst in the world.

- Scientists have also warned of a possible rise of 30 to 70 percent in pollution levels in Delhi in the upcoming days with the new crop season quickly approaching which would result in massive stubble burning by farmers.

REASONS FOR AIR POLLUTION IN DELHI:

Stubble Burning:

- Stubble burning is one of the driving reasons for the issue of air pollution in Delhi every year. Farmers have to clear the fields of the residue of the rice harvest in October to prepare the fields for sowing wheat.

- Thus, farmers prefer to burn the rice stubble since it is a quick and cheap method to get rid of the stubble and prepare the field for rabi season.

- This practice had been ongoing since the 1980s but it became problematic after the passage of the Punjab Preservation of Subsoil Water Act, 2009 (PPSW)

- Before the act, the farmers sowed and transplanted paddy between April and May but the amount

of water required for irrigation in peak summers depleted groundwater.

- Thus, to preserve groundwater and ensure the major water requirement of irrigation is met through the monsoon, the Punjab government passed the act barring the sowing of paddy before 15th May and transplanting of paddy before 15th June, respectively.

- This move left farmers with little time between the harvesting of paddy and preparing the field for sowing wheat. Therefore, farmers were left with no choice but to burn the stubble since it saved time.

- The stubble period now coincides with the onset of winters in northern India which creates such geographical conditions that the burnt particles and smog settle in the air causing air pollution levels to rise.

Geographical Factors

- As the monsoon withdraws by October from Northwest India, the predominant direction of winds also changes to northwesterly. This change in the direction of wind brings pollutants from Punjab and Haryana to Delhi

- With the Himalayas acting as a huge barrier to the north, the smog from stubble burning has no way to escape and accumulate in Northern India, especially in Delhi.

- Temperature inversion also makes the matter worse. Hot air generally rises above and escapes from the near ground but due to cool winter air, the smog is unable to rise and remains trapped within the plains.

Thermal Power Plants

- Emissions from thermal power plants cause air pollution in the national capital. These pollutants travel long distances and get converted into secondary particles due to photochemical, oxidation, and adsorption reactions.

- These secondary particles remain in the atmosphere for a long time and move to longer distances.

Vehicular Emissions

- A recent report jointly published by IIT Kanpur, the Delhi Pollution Control Committee, and the Department of Environment, NCT Delhi (2016) reveals that Road Dust is the single largest contributor to Delhi's air pollution. It accounts for about 56 percent of PM10 and about 38 percent of PM2.5 particles.

Diwali firecrackers

- Firecrackers during Diwali add to the above pollution sources. The emissions from crackers stay in the air due to temperature inversion and particles accumulate to create smog in the air. A report by the Centre for Science and Environment found that the concentration of PM2.5 increased during Diwali in 2018, 2019, and 2020 in Delhi.

PADDY STRAW PELLETISATION AND TORREFACTION PLANTS

- Pelletisation refers to converting paddy straw into pellets which can be utilized in thermal power plants and industries as fuel.

- Torrefaction is a thermal process used to produce high-grade solid biofuels from various streams of woody biomass or agro residues. It enhances the physical and chemical properties of biomass.

- This will ensure ex-situ management of crop residue by using it as biofuel.

- Farmers will be incentivized not to burn stubble and gain some additional income by selling the stubble to industries manufacturing pellets

- The paddy straws can be mixed with coal after it is converted to pellets or torrefied. Hence, carbon emissions are reduced.

WAY AHEAD

- While paddy straw pelletization and torrefaction are significant steps to incentivize farmers not to burn stubble, other steps need to be combined with this move:

- **Use of agricultural machines like:**

- Happy Seeder(used for sowing of the crop in standing stubble)

- Rotavator (used for land preparation and incorporation of crop stubble in the soil)

- ZBNF (directly sowing of seeds in the previous crop stubble)

- Baler (used for collection of straw and making bales of paddy stubble)

- Paddy Straw Chopper (cutting of paddy stubble for easily mixing with the soil)

- Reaper Binder (used for harvesting paddy stubble and making it into bundles)

Promoting the use of bio-decomposer

- Bio-decomposer is a mix of seven fungi that produce enzymes to digest cellulose, lignin, and pectin in paddy straw. A liquid formulation is made using the decomposer and then sprayed on the fields with crop stubble to ensure speedy bio-decomposition of the stubble. The Delhi Government has been promoting its use to help decompose stubble into manure.

Controlling Vehicular Pollution

- This can be done by imposing a ceiling on the number of vehicles a household can own. The use of CNG and e-vehicles can be promoted to phase out petrol and diesel cars in the future. Further, public transport needs to be strengthened and its uses encouraged

Saumya khedwal

Dolphins in Ganga

Details on topic "Dolphins in Ganga"

Prelims: Environment and Conservations efforts

Context: Recently, it has been observed that with improvement in quality of water, Dolphins which are considered as indicator species have returned to river.

About Ganges River Dolphin:

• Ganges River Dolphin (Platanista Gangetica) are found in river systems of Ganga, Brahmaputra, Meghna, and Karnaphulli-Sangu in Nepal, India and Bangladesh. It was officially discovered in 1801.

• The government has declared Ganges River Dolphin as National aquatic animal of India in 2009.

• They are indicator-species which means if a stretch of river is polluted, the dolphin is likely to shift to another stretch indicating pollution in water.

• They are also called Susu owing to voice they create.

• Since they are blind, they the use the method of "Echolocation" to catch their prey.

• Their lifespan varies from 20-26 years.

Threats to Gangetic Dolphin:

1. Toxicity of rivers

2. Dredging in river for creating transport channels.

3. Killing for their flesh, oil derived from their bodies.

4. Fishnets

Initiative taken to conserve:

1. Project Dolphin: This initiative was introduced during the first meeting of National ganga Council in 2019 under Arth Ganga. It is brought on the lines of Project Tiger, which increased the population of tiger in India.

2. It is listed as "Endangered" in IUCN red list since 1996.

3. The government in order to create awareness among people celebrates 5th October as National Ganga Dolphin Day.

4. The government has established state-of art Vikramshila Ganges Dolphin Sanctuary.

Rishabh

UNICEF Report

Details on "UNICEF Report"

How heat waves are impacting children globally

Prelims: common issues on Environmental Ecology, Biodiversity, and Climate Change

Mains: GS III: Conservation, environmental pollution and degradation, environmental impact assessment.

Context :

- This news is based on the article published by The Indian Express, titled "UNICEF's 'The coldest year of the rest of their lives report". The article gives the details of the report released by UNICEF.

- United Nations Children's Fund,(UNICEF), has released a report named "Coldest Year of the Rest of Their Lives – Protecting children from the escalating impacts of heatwaves", it shows that by 2050, almost all children across the globe will be exposed to more common and severe heat waves.

United Nations Children's Fund (UNICEF)

- This was formerly known as United Nations International Children's Emergency Fund.

- At first, It was initiated in 1946, to provide relief to children in countries shattered by World war II.

- The Headquartered of UNICEF is in New York City

- It is a special program of the UN committed to assisting the national initiatives to upgrade the health, nutrition, education and general studies and general welfare of the children.

- However, after 1950, it was instructed to put, its efforts toward general programs for the improvement of children's welfare, especially in less-developed countries and many different emergency situations.

- Its aims were reflected when the present name is adopted in 1953.

- UNICEF was honoured with Nobel Prize for Peace in 1965.

- Both government and private contributions finance the activities of UNICEF.

- I also hold-ups immunization programs for childhood diseases and programs to prevent the spread of HIV/AIDS.

- It also provides funding for health services, educational facilities and other welfare services.

The observation of the UNICEF Reports

Current situation :

- About 599 million children across the world are exposed to high frequency and about 624 million children are exposed to one of the three other high heat measures – high heat wave duration, high heat wave severity and extremely high temperature.

- One in every four children lives in regions, where the average heat waves event lasts 4.7 days or

longer as in 2022

- It is expected that the ratio will increase by over 3 in every 4 under a low-emission scenario by 2050.

- It was noted that the children belonging to the regions like western and south-eastern Asia, eastern and southern Europe and northern Africa experience heat waves of longer duration.

- What will be its future impacts?

- It is predicted that 2050 the number of children exposed to heat waves will quadruple to over 2 billion by 2050, which will be 24% more than the children exposed to heat waves in 2020.

- This amount is increased to 1.5 billion children till now.

- It is estimated that in 2050 every child on earth will experience severe heat waves in spite of a low greenhouse gas emission scenario with 1.7oC of warming.

- 94% of children expected to be exposed with only small areas of Southern America, Central Africa, Australia and Asia not exposed to high heat waves duration, at 2.4oC of warming

- Extreme atmospheric heat can result in drought, which will cause hurdles in accessing clean drinking water and healthy food.

- The report highlights that the heat waves will result in the stunted development of children and force families to migrate.

Heat waves are:

- It is a period of 3 days or more when the maximum temperature every day is in the top 10% of the local 15-day average.

- Dangers of heat waves include heat stroke, heat stress, allergy, chronic respiratory conditions, asthma,mosquito-borne disease, cardiovascular disease,under-nutrition and diarrhoea.

Higher susceptibility of the children's

As children spend more time outdoors than indoors compared to an adult for activities like sports and other activities, heat waves pose more risk for them, putting them at greater risk for heat injury

How it will put an Impact on Health:

- High temperatures are connected to an increase in mental health issues in children and adolescents

- It also includes post-traumatic stress disorder (PTSD) and depression.

- Utmost heat will essentially influence the children's education and future livelihoods

How it is threatening the Children's Safety:

- Communities are compelled to hunt for resources for and complete over food and water resources as pastures and it also disturbs the household incomes, as a result, the communities' migrates, displacement and conflicts expose children to major physical harm and risks.

4 P's Recommended by THE UNICEF

According to the UNICEF report

- "Heat is especially damaging to children's health and affects their education and future livelihoods.

- It is high time for Individual Countries to some actions :

- Protecting children from climate devastation by encouraging social services

- Preparing children to live in a climate-changed world

- Prioritising children and youth in climate finance and resources

- Preventing a climate catastrophe by reducing greenhouse gas emissions

The 27th Conference of Parties (COP-27) which is going to be held on the 2nd week of November, in Egypt, to the United Nations Framework Convention on Climate Change

Bring into the focus of progress on loss and damage, placing the resilience of children and their communities as the topic of the discussions on action and support.

Other related indexes

UNICEF: Climate Risk Index of children.

- It ranks the nations based on the children's exposure to climate and environmental shocks, like heat waves and cyclones, as well as their vulnerability to those shocks, based on their access to

- It ranks countries based on , such as Cyclones and Heatwaves, as well as their vulnerability to those shocks, based on their access to basic services.

Notre Dame Global Adaptation Initiative (ND-GAIN) Index:

- It has reported the impact of climate change on children across the world.

- It describes that the children will be impacted by food shortages, diseases and other health threats, water scarcity, or be at risk from rising water levels or all of these factors.

Rishabh
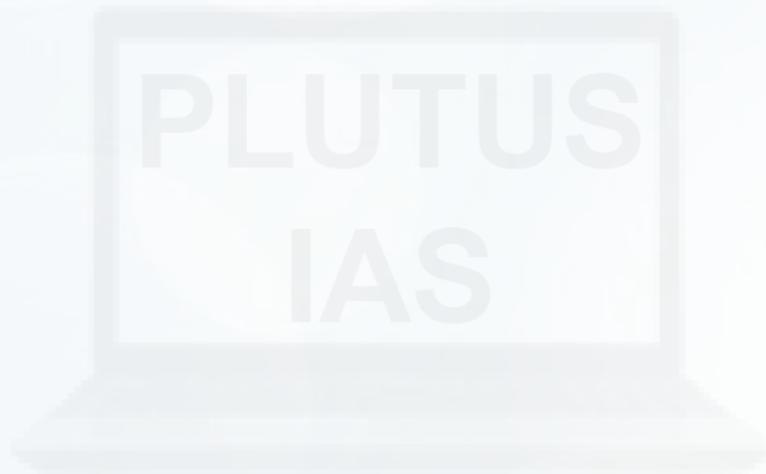
Urban Naxals

Mains GS III: Linkages between development and spread of extremism and Role of external state and non-state actors in creating challenges to internal security.

Why in the news

Recently Prime Minister Narendra Modi has warned the tribal community against "falling for urban Naxal who have arrived in disguise "

What is Urban Naxalism?

- The term Urban Naxals is not clearly defined. The phrase "Urban Naxal" loosely means people of the Naxalite bent of mind who reside in urban areas and work as activists, supporters and protectors of the ideology, while the active Naxals battle it out in the jungles and vast swathes of Maoist-dominated areas.

- Urban Naxalism

- The phrase 'Naxal' originated from the name of the village Naxalbari of district Darjeeling in West Bengal, where the movement was initiated under the leadership of Charu Majumdar and Kanu Sanyal in 1967.

- The word "Urban Naxals" is more or less attributed to the people with a Naxalite bent of mind inhabitant of urban areas and acting as activists, supporters and protectors of the ideology while the active Naxals battle it out in the forests and vast swathes of Maoist-dominated areas.

How Naxalism evaluated in India:

- The Naxalism in India was a consequence of the Communist Party of India (Marxist) in which a small group of the party workers decided to break away to initiate an armed struggle against big landowners and establishment.

Spread of Naxalism

- The spread of Naxalism was reassured by sustaining the interests of the suppressed ones against the prevailing injustices of the establishment, harassment by petty government functionaries, extortion by policemen, and callousness of officers in addressing their grievances.

- It's an indication of poor governance.

The objectives of Naxals

- the stated goal of Naxals is the violent overthrow of the state through armed revolution

Expansion of Urban Naxalism

- According to the intelligence reports, they must have been able to form urban cells and industrial belts of Raipur, Surat etc also front organisations have been set up in prominent cities like Delhi,

Mumbai, Calcutta, Hyderabad etc

Difference between urban Naxals and civil rights activists

- the civil rights activists take up democratic methods like rallies, petitions etc to achieve their goals whereas Naxals do not take a democratic route

What is Red Corridor?

- The area comes under the passage from Tirupati in Andhra Pradesh to Pashupati in Nepal where Naxals have a broad influence, it is one of the most underdeveloped regions of the country

- Hence, it would not be an exaggeration to state that Naxalism also indicates poor governance.

Factors trigger Urban Naxalism:

Land reform policies of India

- After independence, the land reform policy of India was not so successful in some parts of the country, which lead to the evaluation and growth of the Naxal movement in India.

Development Projects and Tribal Alienation

- The tribal's are driven by complaints with the Indian Government over decades-long resource mismanagement and systematic marginalization that started with a series of development projects in the 1980s that detached tribal's from their lands in the name of the public good.

- The dispute between economic progress and aboriginal land rights continues to boost the Naxalite's activities.

Forest Protection Act of 1980:

- However, the legislature had put an attempt to protect the country's natural resources from exploitation, the law essentially outlawed the existence of many tribal villages that had been in place for centuries.

- As areas were described as reserve forests, traditional occupations of even gathering twigs were forbidden.

- People who earned their livelihood through access to forest resources in a sustainable manner suddenly found themselves outside the law.

Government's shortfall

- Poor quality of education facilities and basic sustainable employment

- Unable to provide the basic healthcare facilities

- Poor routine administration and poorly motivated public personnel

- Mishandling and corruption in government schemes like the Public Distribution System.

- Below bar implementation of special laws

- Infrastructure deficit

- Problems related to law and order, grievance redressal

Government policies:

- Prohibition on CPI Maoist, as well as all its formations and front organizations under the Unlawful Activities (Prevention) Act, 1967.

- Aiding to the LWE States: 'Police' and 'Public Order' being State subjects, action with respect to the maintenance of law and order lies chiefly in the domain of the concerned State Governments. Although, the Central Government closely supervise the situation and coordinates and supplements their efforts in several ways to deal with the LWE problem.

These include:

- Providing Central Armed Police Forces (CAPFs)

- Commando Battalions for Resolute Action (CoBRA),

- Systemizing of Counter Insurgency and Anti Terrorism (CIAT) schools;

- Updating the State Police and their Intelligence apparatus etc.

The central government has also provided assistance under the following schemes

- Security Related Expenditure Scheme (SRE)

- Special Infrastructure Scheme (SIS)

- Central Scheme for assistance to civilian victims/families of victims of terrorism, communal and Naxal violence

- Civic Action Programme (CAPs)

Way ahead:

- Government and political parties should avoid, tagging overt and peaceful rebellion as Naxalism is a pad tactic, a political and moral blunder

- The government put an effort to cut down the propaganda of the real Maoists in rural remote areas of central India.

- Taking up real counter campaigns and outreach programs is the best way to ideologically defeat the leftist insurgency.

Farhin

North East and PM- DevINE

North East and PM- DevINE

Syllabus:

Prelims: social and economic development,

Mains: GS II, Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

Key Points to Ponder:

What's the ongoing story?

- Prime Minister's Development Initiative for North East Region (PM- DevINE) has got approval from The Union Cabinet.

- This new scheme was announced in the Union Cabinet Budget year.

What is PM- DevINE?

- This is a Central Sector Scheme which will be completely funded by the central government.

- This scheme will be implemented by the Ministry of Development of North Eastern Region (DoN-ER) through North Eastern Council or Central Ministries/ agencies.

- The scheme will have an outgoing of 6600 crores for four years from 2022 to 2025 to 2025 to 2026(remaining years of the 15th Finance Commission period).

- This scheme will open up the doors of better infrastructure, supporting industries, and social development and also generate livelihood activities for the women and youths, which will lead to employment generation.

- The measures will be taken to ensure reasonable operations and maintenance of the projects approved under the scheme so that they can sustain.

- To the extent possible, the Engineering –procurement-Construction (EPC) basis will be implemented so the construction risk of time and cost overrun can be minimized.

- Efforts will be made to complete the PM-DevINE projects by 2025-26 so that there are no committed liabilities beyond this year
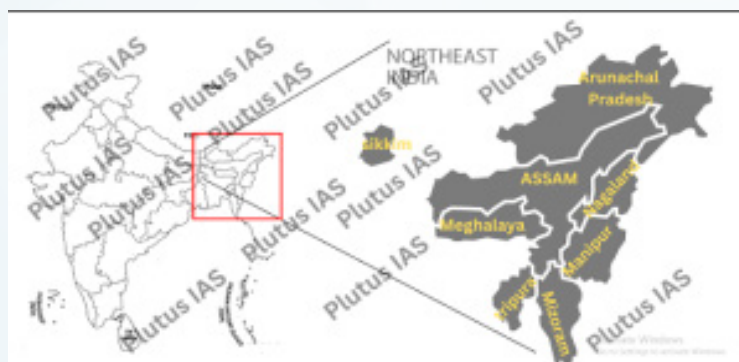
Objectives of the scheme

- Fund infrastructure convergently, in the spirit of PM Gati Shakti;

- Subsidize the social development projects based on the felt needs of the NER;

- Facilitate livelihood activities for youth and women

- Fill the development gaps in various sectors.

Why are North earthen regions underdeveloped?

Historical Legacy:

- The Northeastern region of India never got the affirmed focus and attention as it is considered isolated.

- During British India, communication was mainly practiced through Bangladesh(East Bengal).

- At that time the British granted an autonomous tribal region to them, and after independence, the tribals wanted to keep their independence.

- The entire area comes under a single state of Assam, except Sikkim. Gradually, hived to form new individual states and now comprises 1/3rd of its earlier territory.

Human issues:

- "Nagas' ' does not indicate a single tribe. They consist of 17 majors and around 20 sub-tribes.

- Each tribe has its own dialects, traditions, culture and regional influence. These groups of tribes with conflicting interests make it difficult to negotiate.

Economic Neglect.

- Lack of better communication between the states.

- Very minimal railways connectivity, however, a new line has been laid up to Imphal the capital city of Manipur. Also, the road connectivity is poor. and the area is prone to natural disasters like earthquakes, landslides etc.

- The economical assistance which has been provided by the government is being poured into the pockets of politicians and the common citizens do not get the benefit of it.

- A huge amount of the funds ends up as 'taxes' to rebellious organizations. Thus, in effect, the central funds are a bank-rolling insurgency.

Separatist Movements:

- The 'Naga Club' was formed in 1918, to boost the idea of Naga Separatists. The demands of Naga Separatists are totally impermissible, as it would have intensified the demands of other regions too.

- The central government has introduced counter-insurgency operations to suppress these demands

The Northeast states of India

Importance of North East to India

Strategic Location:

- It is situated between Bangladesh to the west, Myanmar to the east and Bhutan and China to the north, this is one of the regions why the north-eastern states of India remain geographically isolated from the rest of the country

It is a gateway to Southeast Asia:

- o With ASEAN engagement becoming a central pillar of India's foreign policy direction. As the northeast act as the physical bridge known as the chicken neck, between India and Southeast Asia, it plays a very crucial role in the country

- **India's Act East Policy:**

- India's Act East Policy places the northeastern states on the territorial border line of eastward engagement of India.

Economic Significance:

- The North Eastern region is rich with natural resources, like oil and gas, agro- horticultural resources, mineral deposits, immense hydroelectric potential and important forest resources.

- The Indian government has been making intensive efforts for the economic development of this region.

- The region has abundant natural resources, around 34% of the country's water resources and almost 40% of India's hydropower potential.

Tourism Potential:

- North Eastern Region (NER) of India has enormous resource potential to develop tourism.

- This region of our nation is called the home to many wildlife sanctuaries like Kaziranga National Park famous for the one-horned rhinoceros, Manas National Park, Nameri, Orange and Dibru Saikhowa in Assam.

What is chicken's neck or Siliguri corridor?

- The Siliguri Corridor, or **Chicken's neck**, is a narrow stretch of land located in West Bengal, that connects the northeastern states of India with other states of India.

- The corridor is just 17Km wide.

- It is surrounded by Nepal, Bangladesh and Bhutan.

- The corridor reaches out from the Darjeeling, Jalpaiguri and Terai regions of West Bengal towards the North East.

Significance of Siliguri Corridor

- The region has significance for trade, commerce and tourism for West Bengal, Nepal, Bhutan and North Eastern states

- All land trade between the North East and the other states of India happens through this corridor.

- The corridor is the **center of a rail and road network** connecting West Bengal and the other states to the North East,

- It is also the **center of the railway network that connects to the strategic military formations along the Line of Actual Control (LAC**

- It is from here that a road network moves towards the strategically important Tawang town in Arunachal Pradesh.

Other projects for the northeast region:

- 4,000 km of roads, 20 railway projects for 2,011 km, and 15 air connectivity projects are being developed.

- 4000 km of road connectivity, 20 railway projects of 2,011 km, and almost 15 air connectivity projects have been developed.

- To provide more developed and cheap trade connectivity, three major National river ways are being developed namely, nations waterway_1on the river Ganga, , National Waterways-2 on the Brahmaputra, and National Waterways-16 on Barak

- North Eastern Region Power System Improvement Project (NERPSIP) is a very crucial project set up for the economic development of the northeastern region as it will escalate the Intra – State Transmission and Distribution systems.

Challenges and way forward

- The region is isolated geographically from the rest of India, which makes the interrelatedness to the region difficult.

- The inadequate condition of basic l infrastructure facilities is the main reason for the underdevelopment of the economic condition of this region.

- There are ongoing territorial disputes between states and between nations, within the northeastern region that frequently intensifies old border disputes and divergent ethnic, tribal, or cultural affiliations.

Farhin

Protecting India's cyberspace from quantum techniques

Prelims: Current events of national and international importance.

Mains: GS III: Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology and issues relating to intellectual property rights.

Context :

- Based on the article written by Arjun Gargeyas and Sameer Patil "Securing India's cyberspace from quantum techniques" on *The Indian Express*

What is Cryptography?

- Cryptography is the art and science of converting ordinary plain text into unintelligible text and vice-versa.

- In this method, the data is sorted and transmitted in a particular way, so that the person for whom it is intended can read and process it.

- Cryptography not only protects data from theft or alteration but can also be used for user authentication.

- It can ensure the confidentiality and integrity of both data in transit as well as data at rest.

- It can also authenticate senders and recipients to one another and protect against repudiation.

- In the present day, it is mainly based on mathematical theory and Computer science practice, but prior to this cryptography was another of encryption

Modern cryptography involves with:

- Confidentiality –

No one can acknowledge the information

- Integrity –

 Information cannot be changed.

- Non-repudiation –

The sender cannot deny their intentions in the transmission of the information at a later stage

- Authentication

 The sender and receiver can confirm each

- The science of Cryptography is used in various applications such as banking transactions cards, computer passwords, and e-commerce transactions.

The types of cryptographic techniques used in general.

- 1. Symmetric-key cryptography

- 2. Hash functions.

- 3. Public-key cryptography

Symmetric-key Cryptography:

- A single is shared between the sender and the user.

- The key used by the sender is to encrypt plain text and send the coded text to the receiver.

- On the other side, the receiver uses the same key to decode the encrypted message and recover the plain text.

Public-Key Cryptography:

- In the last 300-400 years, this is the most inventive idea.

- In this cryptography process, two related keys are used they are public and private keys.

- The public key can be freely distributed, while coupled private key, remains a secret.

- The public key is used for encryption and for decryption private key is used.

Hash Functions:

- In this algorithm, no key is used.

- A fixed-length hash value is computed as per the plain text, making it impossible for the contents of the plain text to be recovered.

- Hash functions are also used by many operating systems to encrypt passwords.

What are the current encryption models with the Indian Army?

- The Indian Army is developing cryptographic techniques to make its networks resistant to attacks by systems with quantum capabilities.

- In 2019, the Centre affirmed quantum technology as a "mission of national importance".

- 2020-21, Union Budget had put forward to spend Rs 8,000 crore on the newly launched National Mission on Quantum Technologies and Applications.

- In Feb 2022, A joint team of the Defence Research and Development Organisation and IIT Delhi successfully demonstrated a QKD link between two cities in UP, Prayagraj and Vind-hyachal.

Indian Army needs the upgradation in the encryption model

- The Traditional encryption models of the Indian army are at risk.

- The recent encryption standards can be broken by quantum cryptography. There are increasing military applications of quantum technology.

- India will have to dynamically deal with cyber risks arising from quantum computing advances by some nations in this sector.

- The US National Quantum Initiative Act has already allocated $1.2 billion for research in defence-related quantum technology. China now hosts two of the world's fastest quantum computers.

- Another vulnerability is India's dependence on foreign hardware, particularly from China.

- Two of the world's fastest quantum computer is hosted by China now, which is a reason for concern for India

- India has so far experienced a barrage of attacks from state-sponsored hackers of China.

- These China's headways in quantum computing supplemented the spectra of quantum cyber attacks against India's digital infrastructure

Quantum Technology

- This technology is based on the principles of Quantum mechanics

- This technology was developed in the early 20th century to set out nature at the scale of atoms and elementary particles.

- In the 1st stage of the revolution, this innovative technology has buildup the foundations of understanding the physical world and inspired ubiquitous inventions such as lasers and semiconductor transistors.

- The 2nd stage of the revolution is currently underway with the goal of putting properties of quantum mechanics in the realms of computing.

What are quantum computers?

- These computers can empower machine learning by enabling AI programs to search through enormous datasets with respect to medical research, consumer behaviour, financial markets, etc.

- This computing system provides assistance to integrate data and quickly analyze and understand the patterns.

How to make India's cyberspace resilient?

- To stand up the quantum cyber attacks India has very few capabilities in developing advanced systems.

Procurement of NSA Quantum Resistant Suite

- Our country can procure the United States **National Security Agency's (NSA) Suite B Cryptography Quantum-Resistant Suite** as its official encryption mechanism.

- The NSA is developing new algorithms for their cypher suite that are resistant to quantum

cyberattacks, This can also facilitate India's official transition to quantum-resistant algorithms.

Emulating NIST cryptographic standards

- The Indian defence establishment can emulate the cryptographic standards set by the US's National Institute of Standards and Technology (NIST).

- The NIST tools **can handle quantum computer attacks and can use algorithms** to frame a post-quantum cryptographic standard.

Focus on collaboration

- India can adopt these and start its national initiatives to develop quantum-resistant systems.

- The government **can fund and encourage existing open-source projects** related to post-quantum cryptography.

Active participation in the Open Quantum Safe Project, a global initiative started in 2016 for prototyping and integrating quantum-resistant cryptographic algorithms.

Focus on Implementation and Indigenization

India should start implementing and developing capabilities in quantum-resistant communications, specifically for critical strategic sectors.

Quantum Key Distribution (QKD's) over long distances for connecting military outposts for sensitive communications, can be prioritized.

It will ensure secure communications whilst protecting key intelligence from potential quantum cyberattacks.

Diplomatic partnerships with other "techno-democracies"

- India can use its diplomatic resources to establish partnerships with countries with top technology sectors, advanced economies, and a commitment to liberal democracy.

- It can help India pool resources and mitigate emerging quantum cyber threats.

Way forward:

- India should think about, procuring the United States National Security Agency's Suite B Cryptography Quantum-Resistant Suite because of its official encryption mechanism.

- It is resistant to quantum cyber attacks.

- The Indian defence establishment can also consider emulating the cryptographic standards set by the US's National Institute of Standards and Technology.

Farhin

Satellite Internet: India's first High-Throughput Satellite(HTS) broadband service launched

CONTEXT

India's first High-Throughput Satellite(HTS) broadband service was recently launched by Hughes Communications India (HCI), a satellite internet service provider with the help of the Indian Space Research Organization (ISRO). In another significant step, Reliance has launched a joint venture (JV) with European satellite-based broadband service company SES to explore satellite internet space.
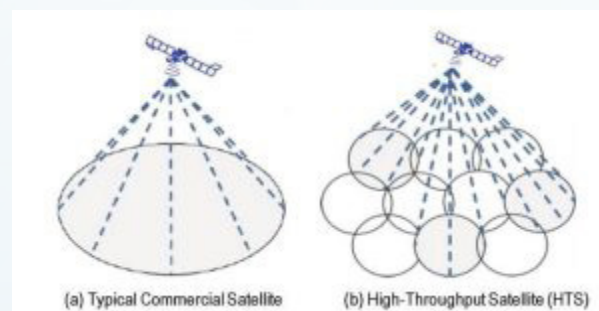
WHAT IS SATELLITE INTERNET

In Satellite-based internet, wireless internet is beamed down from communication satellites orbiting the Earth. It does not make use of wires. Satellites are placed either in Lower Earth Orbit(LEO) or geostationary orbit(GEO). Internet service providers send an internet signal to a satellite located in space. This signal is then sent back to the user which is captured by a satellite dish that is connected to the modem of the user.
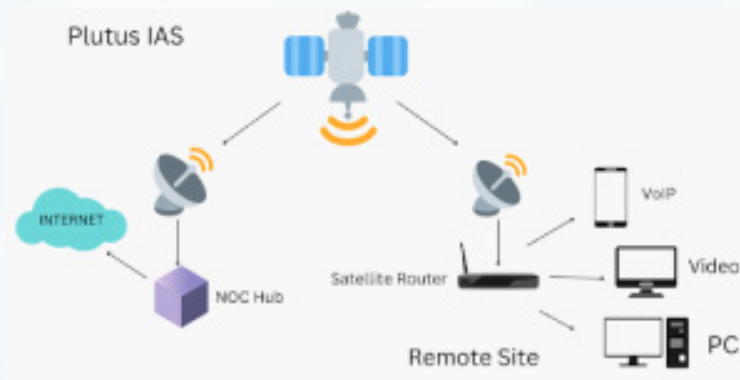
WHAT IS High-Throughput Satellite(HTS)

HTS is a communication satellite that provides more throughput than conventional communication satellites (Fixed Satellite Service). By utilizing the same amount of orbital spectrum as FSS, HTS provides a greater capacity than FSS and thus not only increases efficiency but leads to decreased cost. FSS generally use the broad single beam to cover a vast expanse of geographical area. This reduces its spectral efficiency. HTS, on the other hand, uses a large number of "spot beams" with smaller footprints, each covering a smaller area. Therefore, each beam will provide a separate signal, and hence the overall system will have improved spectral efficiency, leading to enhanced speed, higher data processing, and better transfer capacity.

(a) Typical Commercial Satellite   (b) High-Throughput Satellite (HTS)

BENEFITS OF SATELLITE INTERNET

- **Easy availability:** Satellite internet has the potential to reach the remotest parts of the country. It can be accessed from any part of the world even in difficult geographical terrains. With about 37% of the global population still without the internet, there is a need to make the internet available and accessible.

- **Better Reliability**: Chances of terrestrial internet networks failing are more than satellite internet.

- **Higher Speed:** Satellite internet is faster than traditional network internet. On average, satellite internet is 10 to 35 times faster than conventional internet. This leads to more efficiency.

- **Lower costs**: Since satellite internet does not require laying fiber networks or putting up towers, it is relatively cheaper.

- **Lower Environmental damage**: Laying optical fibers requires digging up soil, laying the groundwork, and constructing towers. Satellite internet does not require this and hence is less invasive for the environment.

- **Faster deployment**: satellite antennas can be easily installed and deployment takes very less time compared to traditional internet networks.

- **Security:** Satellite internet is more safe and more secure due to better encryption technology.

**CHALLENGES WITH SATELLITE INTERNET**

- **High Latency**: In the case of satellite internet, data is first sent to space which is then sent to the internet service provider and back again to the device which causes high latency. Satellite internet data travels a long way as satellites are positioned 22,000 miles above the earth. As the distance required to be covered for data increases, the latency also increases.

- **Susceptible to bad weather**: The signal path of satellite internet is affected by the weather condition. Storms, rains, and high-speed wind may lead to poor signal and the internet may not reach the Earth.

- **Initial installation is expensive**: Designing, building, and launching satellites in space is an expensive process. Thus, the cost of satellite internet is relatively higher compared to traditional internet.

- **Prone to obstruction**: Even minor obstructions can block satellite internet signals. Trees and buildings can block satellite signals.

- **Space Debris**: satellite internet can increase space debris or space junk. These are defunct human-made objects in space in the Earth's orbit that no longer serve a useful purpose. This can lead to Kessler syndrome which is a self-sustaining cascading collision of space debris that can lead to Earth's orbit becoming unusable.

WAY AHEAD

Satellite internet can be used to provide access to the internet to the whole world. It can bridge the digital divide, help rural areas get access to telemedicine and distance learning, and help India develop at a faster pace. The drawbacks must be addressed and outer space is utilized responsibly. The draft Indian Spacecom Policy, 2020 which will provide a framework for companies operating in the

spacecom domain to launch space broadband services in India via the low-earth orbit (LEO) and medium-earth orbit (MEO) is a much-needed step to ensure the regulation of satellite internet.

Saumya khedwal
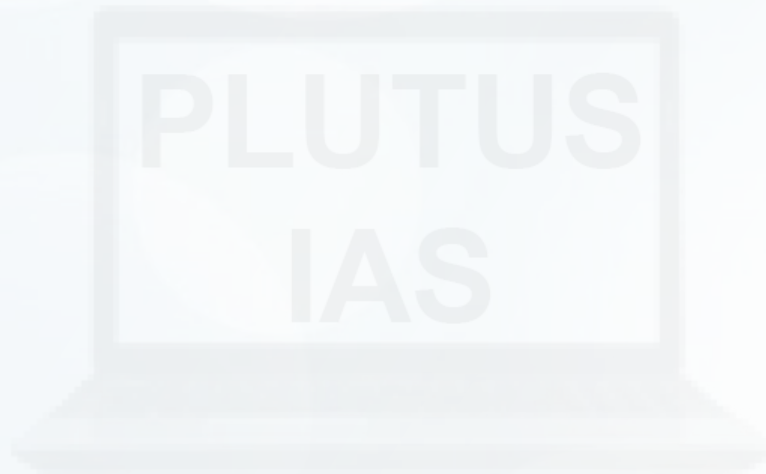
Sitrang cyclone

Prelims: Indian and World Geography-Physical, Social, and Economic Geography of India and the World.

Mains: GS I: Important Geophysical phenomena, geographical features and their location-changes in critical geographical features and in flora and fauna and the effects of such changes.

Context

- Cyclone Sitrang slammed into the densely populated region, it s a low-lying area of the nation, and 24 people were killed.

- It is the 1st tropical of the post-monsoon of 2022, it was developed in the Bay of Bengal and is called Sitarang.

- It was named after Thailand.

Cyclones

- These are a type of low-pressure environment with fast inward air circulation.

- The air flows counterclockwise in the Northern Hemisphere, on the other hand in the Southern Hemisphere, it flows clockwise.

- The cyclone is usually accompanied by violent storms and bad weather.

- Storms and poor weather are often associated with cyclones.

- The *cyclone* word comes from the Greek word Cyclos, which means snake coils.

- The term was invented by Henry Paddington because tropical storms in the Bay of Bengal and the Arabian Sea resemble coiled sea serpents.

Formation of Cyclone

- Cyclogenesis is an important element in the creation and strengthening of cyclones.

- Tropical cyclones happen near the equator over warm ocean water.

- Warm, moist air at the ocean's surface rises upward.

- Which makes a low-pressure zone close to the surface.

- As a result, cooler air from the surrounding areas flows into the low-pressure area.

- Even this cold air is now warm and moist, and it rises.

- This cycle continues likewise.

- The water in the air cools as warm wet air rises, resulting in the development of clouds.

- This cycle repeats itself, resulting in a cyclone.

- A tropical storm happens when winds exceed 63 miles/ hour, and a tropical cyclone or hurricane happens when winds reach 119 miles /hour.

Common names of Cyclone

cyclones are referred to by different names, in different areas.

- Hurricanes – In the Atlantic and Eastern Pacific.

- Typhoons – In Southeast Asia

- Cyclone – In the Indian Ocean and Western Pacific around Australia.

Anticyclones

- An anticyclone is the reverse situation of a cyclone i.e. it has an outward-spiralling air circulation

- nearby a high-pressure centre.

- An anticyclone's winds rotate clockwise in the Northern Hemisphere around a centre of high

- pressure.

- In this situation, air comes in from above and sinks to the ground. High-pressure centres usually

- have fair weather.
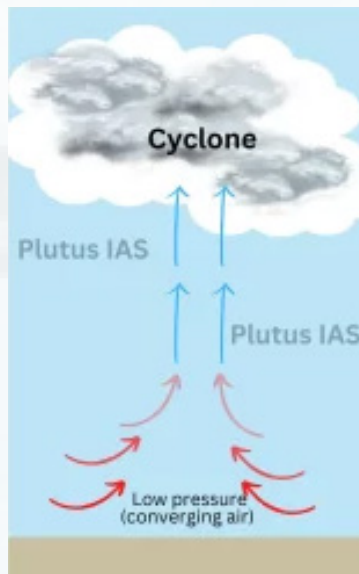
How the cyclones are named?

- An international committee of the World Meteorological Organisation maintains and updates cyclone lists and names (WMO).

- In the original list, only women's names were there.

- In 1979, Men's names were included in the list.

- Men's and women's names are alternately used.

- Six different lists are used in a rotating fashion.

- Hence, the 2020 list will be used again in 2026.

- .For genuine reasons, if the storms have imposed damage on a country, the name will not be mentioned again.

- Such names are

1. Katrina in the United States (2005),

2. Sandy in the United States (2012),

3. Haiyan in the Philippines (2013),

4. Irma, and Maria in the Caribbean (2017).

Types of Cyclones

On the basis of the prevailing low-pressure system, cyclones are categorized into two types:

- Extra-tropical cyclones.

- Tropical cyclones.

Extratropical Cyclone

- Extratropical cyclones are described the mid-latitude depressions, temperate cyclones, frontal

- Depressions and wave cyclones.

- These cyclones are functions above the mid-latitudinal region between 35° and 65° latitude in

- both the hemispheres.

- In the winter seasons, the direction of movement is from west to east and is more pronounced.

- Fronts are formed in the latitudinal zone where the polar and tropical air masses meet.

- Formation

- The polar front theory explains the origin and development of this.

- As per the theory, the warm-humid air mass from the tropics encounters the dry-cold air masses from the poles and hence a polar front occurs.

- As the cold air mass is denser and heavier, the warm air mass is moved up.

- This interchange of cold and warm air masses creates instability and low pressure is happened at

- the junction, particularly in the centre of interactions.

- Hence, due to low pressure, a void is created. The air around rushed in to occupy

- this void and coupled with the earth's rotation a cyclone is formed.

- These cyclones present a contrast to the more violent cyclones or hurricanes of the tropics, which occurs in regions of relatively uniform temperatures.

Air Mass

- This is a very large body of air whose properties of temperature and humidity at any fixed altitude, are fairly similar.

- It can envelope many hundreds of square miles of area.

- It can have a small amount of horizontal variation in temperature and moisture throughout the air

- mass.

- When an air mass remains over a homogenous area for a considerable long time, it obtains the

- characteristics of the area. The homogenous regions can be the extensive ocean surface or extensive plains.

Fronts

- When two air masses having distinctly different properties meet, the frontier zone between them is known as a front.

- The 4 types of fronts

Stationary front:

When the front remains stationary

Cold front:

The contact zone is termed as the cold front, when the cold air moves towards the warm air mass, the,

Warm front:

When the warm air mass shifts towards the cold air mass, the contact zone is a warm front.

Occluded front:

When an air mass is fully lifted above the land surface, then it is known as an occluded front.

The fronts take place in middle latitudes and are characterized by steep gradients in temperature and

pressure.

They bring sudden changes in temperature and cause the air to rise to form clouds and cause precipitation.

Tropical Cyclone

- They are violent storms that develop over oceans in tropical areas and shift over to coastal areas.

- It causes huge destruction by violent winds, very heavy rainfall and storm surges.

- The winds move counterclockwise in the Northern Hemisphere and clockwise in the Southern Hemisphere.

Favourable condition

- Huge sea surface holding a temperature of 27° C +;

- Presence of the Coriolis force;

- A small change in the vertical wind speed;

- pre-existing weak low-pressure area or low-level-cyclonic circulation;

- Upper divergence above the sea level system.Characteristics
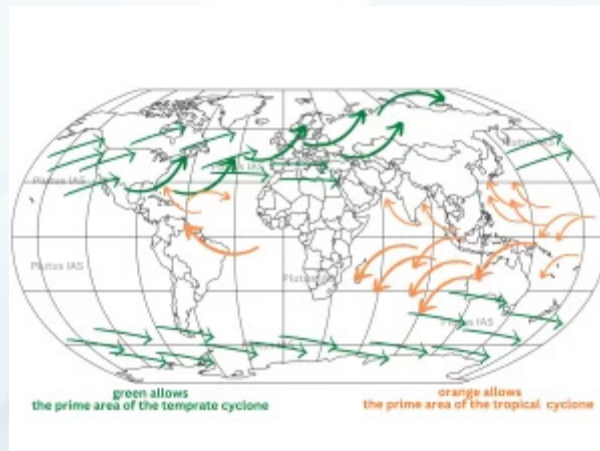
Eye of the Cyclone

- The "eye" of a cyclone is generally referred to as the circular area of comparatively light winds and fair weather found at the centre of a severe tropical cyclone.

- There is very less precipitation and often blue sky or stars can be seen.

- Particularly, the eye of a cyclone refers to the region, in which it has the lowest surface pressure and warmest temperatures aloft (in the upper levels) –the temperature in the eye can be 10°C warmer or more at an altitude of 12 km than the surrounding environment, however only 0-2°C warmer at the surface in the tropical cyclone.

- Eyes can vary in size from 8 km to over 200 km across, but usually, they are around 30-60 km in diameter.
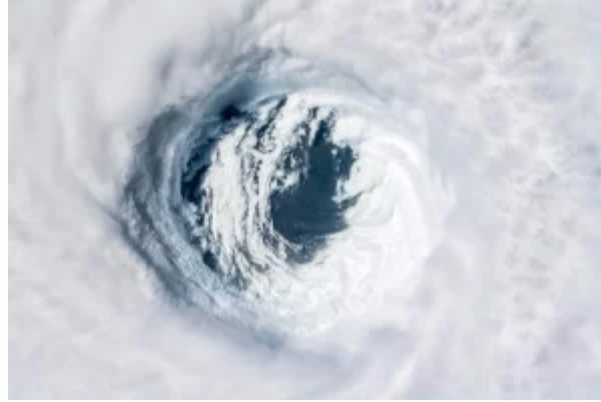
Eyewall

- The eye is enveloped by the "eye wall", close to a circular ring of deep convection, it is the area of highest surface winds in the tropical cyclone.

- This region also experiences the highest sustained winds, which means it has the fastest winds in a cyclone that happens along the eyewall region.

- The eye is made of air that is slowly sinking and the eye wall has a net upward flow as a result of many moderate – occasionally strong – updrafts and downdrafts [Explained in 'Thunderstorms'].

- The eye has temperatures because of the compression warming (adiabatic) of the subsiding air.

Indian tropical cyclones :

- Tropical cyclones that hit India usually originate in the eastern side of India.

- The Bay of Bengal is more vulnerable e to cyclones than the Arabian Sea, because, the Bay of Bengal receives high sea surface temperature, and low vertical shear winds and has enough moisture in the middle layers of its atmosphere.

- The frequency of cyclones in the region of the Bay of Bengal is bi-modal, as a result, the Cyclones occur in the months of May–June and October–November.

Indian cyclonic management

India is extremely vulnerable to cyclones. 8% of the total area in India is prone to cyclones.

India has a 7,516 km long coastline, and 5,700 km of the coastline is prone to cyclones of various degrees.

Loss due to cyclones:

- Loss of lives, livelihood opportunities, damage to public and private property and severe damage to infrastructure is the resultant consequences, these losses can disturb the process of development

- Indian Meteorological Department (IMD) is the nodal agency which provides early warning of cyclones and floods.

- Natural Disaster Management Authority is directed to deal with disaster management in India. It

has prepared National Guidelines on the Management of Cyclones.

- The Home Ministry has established the National Cyclone Risk Mitigation Project (NCRMP to upgrade the forecasting, tracking and warning regarding cyclones in states.

- National Disaster Response Force (NDRF) has done a commendable performance in rescuing and managing relief work.

Farhin

Offshore Wind Energy

Context: Ministry of **New and Renewable Energy** is exploring options for leasing blocks for generating power through offshore wind energy projects.

About Wind Energy:

It can be divided into two different categories namely, ***onshore wind farms*** (Wind turbines located on land) and ***offshore wind farms*** (wind turbines installed on water bodies).

India's progress of Wind Energy in India:

Currently, Total installed wind power capacity stands at **41.666 GW,** which is fourth largest wind power capacity in the world. Majority of the commercially exploitable resources are located in seven states: Rajasthan, Tamil Nadu, Gujarat, Maharashtra, Andhra Pradesh, Madhya Pradesh.

According to the **Global Wind Energy Counci**l, India has potential to generate more than *60GW* from wind.
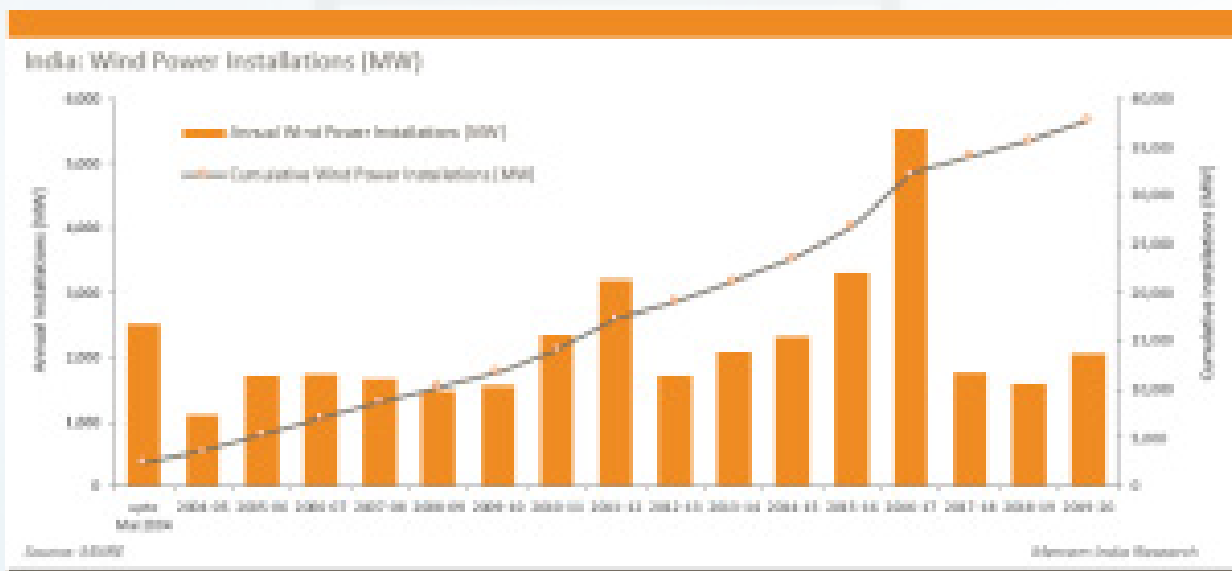
Associated benefits of Off-shore wind energy:

1. **Consistent generation:** Since wind speed over water bodies is consistent unlike land. Offshore wind farms generate more electricity.

2. **High capacity utilization factor:** Offshore wind farms have higher capacity utilization factor as compared to onshore wind farms which in turn, allows offshore wind farms to operate for long hours.

3. **Hassle-free power generation:** Owing to isolated locations, there are no physical restrictions such as hills or buildings that could block the flow.

4. **Increased energy harvest:** Since they are located far at sea, they are not intrusive in nature (encroachment of land) allowing for larger farms to be created per square mile.

Challenges associated with Offshore wind farms:

1. **Costly installation cost:** Hard to reach location, stronger-foundation results in high installation cost.

2. **Impact on marine life:** According to various reports, the marine life near offshore wind farms decreases due to interference with their habitat.

3. **Maintenance cost**: Speedy high winds during storms damages wind turbines which incurs high repairing costs implying taking care of white elephants.

Government initiative regarding wind energy:

1. **National offshore wind energy policy**: The policy was notified in 2015 with an objective to develop offshore energy in Exclusive Economic Zone along the Indian coastline of 7600km.

2. **National Wind-Solar Hybrid policy**: The policy aims to provide a framework for promotion of a large grid connected to wind-solar hybrid systems for effective and efficient utilization of solar and land resources.

India stands a great chance to leap forward in net-zero way before the set date.

The government needs to create a climate of comfort by introducing dynamic yet effective policies addressing challenges faced by industry such as high taxes, lack of sub-sea stations, inadequate infrastructure to reap the benefits of available resources such as long coastline and daylight of 12 hours in states such as Rajasthan and few pockets of Gujarat and Uttar Pradesh.

Rishabh

LVM3-M2/One Web India-1, India's heaviest space vehicle

LVM3-M2/One Web India-1

Prelims: National current affairs

Mains: GS III: Science and technology development; indigenization of technology and developing new technology.

Why in the news

- ISRO has successfully launched the **LVM3 M2/OneWeb India-1** mission.

- This rocket carried almost 6 tonnes of payload into the lower earth orbit, the heaviest ISRO mission till now.

LVM3-M2/One Web India-1

- This mission is a dedicated commercial satellite mission of New Space India Ltd (NSIL).

- This mission is a Central Public Sector Enterprise (CPSE) under the Department of Space, Government of India.

- OneWeb is a joint venture between the UK government and India's Bharti Global.

- Lift vehicle–GSLV MkIII was renamed for this mission as Launch Vehicle Mark-3 (LVM3-M2).

- It is a three-stage rocket with the

 1st stage fired by solid fuel,

 Followed by 2nd stage of liquid fuel

 The 3rd stage is the cryogenic engine.

- **LVM3-M2 OneWeb India-1 Mission** of 36 satellites belonging to Network Access Associated Ltd (OneWeb).

- The mission includes the separation of all 36 satellites into 601 km orbit with a minimum 137 m distance between any payload satellites.

- It is the 1st Indian rocket with a six-ton payload.

- It is the 1st launch of LVM3 to LEO.

Advantages:

- This mission will make the company cable start offering satellite broadband services across the country by 2023.

- This mission will provide high-speed internet services in remote areas also, where terrestrial networks are difficult to set up, including the middle of the ocean, the Himalayas (even on top of Mount Everest)

Technological achievement

- It will be capable of handling multiple satellite separation events.

- It will increase the nominal mission duration.

- It will also ensure a safe separation distance through C25 (Cyro) stage re-orientation and will increase the velocity.

- It will also check the data availability data duration of the entire mission.

- Recognition of new payload adaptor and interface ring for the satellites dispenser

OneWeb Constellation

- It operates in LEO Polar Orbit Satellites; these satellites are arranged in 12 rings (Orbital planes)

with 49 satellites in each plane.

- The one web constellation orbital planes are inclined to be near polar (87.9 Deg.)

- These orbital planes will be 1200 km above the Earth.

- Each and every satellite completes a full trip around the earth every 109 minutes.
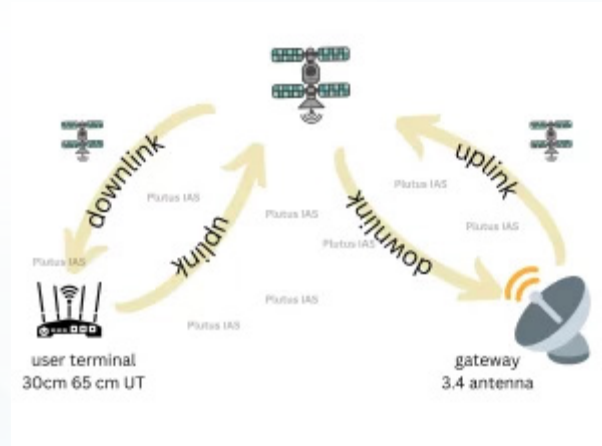
About NewSpace India Ltd (NSIL):

- It is Headquartered in Bengaluru

- It is a Central Public Sector Enterprise of the Indian government.

- Under the administrative control of the Department of Space, it was set up in 2019.

- This is considered the commercial arm of the Indian Space Research Organization (ISRO) with the chief responsibility to empower Indian industries to take up high-technology space-related activities.

- The objectives

- Owning satellites for Earth Observation and Communication applications and providing space-based services

- Contractions of satellites and launching them as per customer.

- Accommodating the Launch Services for satellites belonging to the customer.

- Constructing the launches vehicles through Indian Industry and launching as per the requirement of the satellite customer

- It will provide space-related Services which are related to Earth Observation and Communication satellites on a commercial basis.

- It will construct the satellite through Indian Industry

- Technology will transfer to Indian Industry

Other Launch Vehicles Developed by ISRO

Satellite Launch Vehicle (SLV):

- The 1st rocket was developed by ISRO.

- It was simply named an SLV, or Satellite Launch Vehicle.

Augmented Satellite Launch Vehicle (ASLV):

- ASLV and SLV both can carry small satellites, measuring weight up to 150 kg, to lower earth orbits.

- Till the 1900s ASLV operated before PSLV came into operation.

Polar Satellite Launch Vehicle (PSLV):

- It was 1st launched in 1994, and since then it is ISRO's main rocket.

- At present PSLV, it is improved in many ways and is many times more powerful than the ones used in the 1990s.

- It is the 1st Indian launch vehicle to be equipped with liquid stages.

- It is considered the most reliable rocket used by ISRO till now, with 52 of its 54 flights being successful.

- It successfully launched two spacecraft – Chandrayaan-1 in 2008 and Mars Orbiter Spacecraft in 2013 – that later travelled to Moon and Mars respectively.

Geosynchronous Satellite Launch Vehicle (GSLV):

- This rocket of ISRO is substantially more powerful, it is designed to carry heavier satellites much deeper into space. Till today, GSLV rockets have carried out 18 missions, of which only 4 were failures.

- It is considered taking 10,000 kg of satellites to lower the earth's orbits.

- India's own developed Cryogenic Upper Stage (CUS), forms the 3rd stage of GSLV Mk II.

- Mk-III versions empowered ISRO to launch its satellites self-sufficiently.

- Prior to this, India used to depend on the European Arianne launch vehicle, to carry its heavier satellites into space.

- Chandrayaan -2 mission to the moon in 2019 was carried out in the GSLV Mark-III, it was the 1st operational flight of the rocket

- ISRO changed the name of GSLV Mark-III to Launch Vehicle Mark-III.

- A GSLV for the Geostationary Orbit (GEO) will continue to be called so.

- The LVM3 will go everywhere such as GEO, Medium Earth orbit (MEO), LEO, and missions to the moon, and sun.

Farhin

Genetic Modified Crops

Context: The Genetic Engineering Appraisal Committee has given a green signal for commercial cultivation of Genetically Modified (GM) Mustard also known as DMH-11 (Dhara Mustard).

About Genetic Modified Crops:

- They are crops whose DNA is modified artificially by inserting genetic material from other living organisms to amplify its structural existence, adaptability, growth yield, tolerance to pesticides and herbicides or ultimately improve nutritional content.

- Currently, there is no edible (eatable/consumable) GM crop that is commercially cultivated in India. *Only one* GM crop is approved by regulatory authorities, Bt Cotton (Bt stands for Bacillus thuringiensis). However, there are many crops which are being approved for pilot field trials but not allowed for commercial cultivation.

Status of Genetic Modified Crops in India:

- In 2002, GEAC (Genetic Engineering Appraisal Committee) allowed for commercial cultivation of bt cotton. This was the first attempt by government to introduce GM crops in the Indian market.

- Genetic Engineered food crops in India are regulated by a statutory body (GEAC) which functions under the Environment Protection Act, 1986. It functions under the Ministry of Environment, Forest and Climate Change.

- GEAC is responsible for granting permits to conduct experiments and large scale open field trials and grant approval for commercial release of biotech crops.
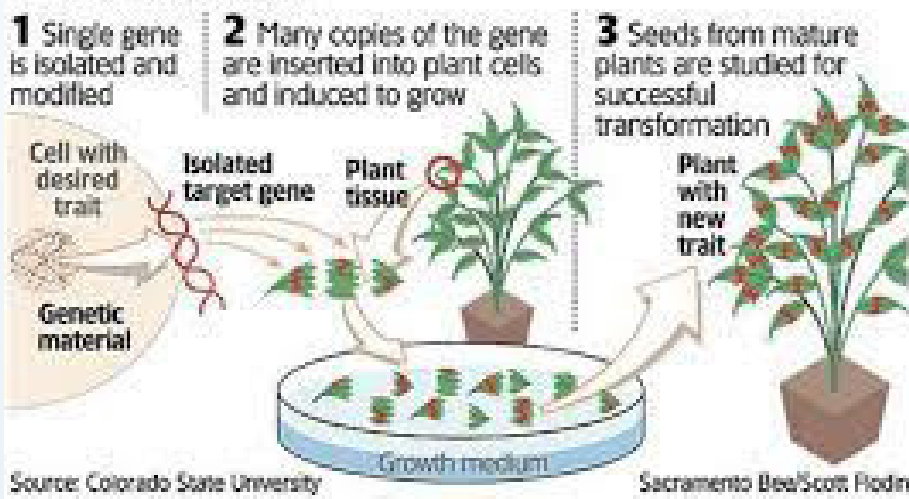
About DMH-11 (Dhara-Mustard-Hybrid):

- Mustard-a self-pollinating plant is quite difficult to hybridize as it contains both male and female reproductive organs *(Pistil and stamen).*

- By using the *Barnese* method, Mustard will be better suited to hybridization.

- The DMH-11 contains 3 genes which are *Barnese, Bastar and Barnese* which are obtained from soil bacterium.

Need of DMH-11

India spends more than 60,000 core in importing edible oils from Malaysia and Indonesia which results in excessive flow of dollars. DMH-11 will increase the yield of Mustard which will reduce the need to import edible oils.

Concerns associated with DMH-11:

Detrimental to health: Due to the presence of Bar gene, which makes DMH-11, a herbicide-tolerant plant, which could prove fatal for the health of individuals.

Affects Biodiversity: The spray of herbicides does not affect the well-being of plants but affects the surrounding environment and biodiversity.

Water-Guzzler: DMH-11 requires a huge amount of water and fertilizers which is not environmentally sustainable.

Potential Negative effects: Due to lack of scientific studies, the negative health effects could not be discounted.

Given the increased pace of climate change, frequency of natural disasters, declining groundwater table, GM crops are sustainable and potent weapon to address hunger and malnutrition issues.

UPSC Previous Year Question : (2018)

Q1- With reference to the Genetically Modified mustard (GM mustard) developed in India, consider the following statements :

1. GM mustard has the genes of a soil bacterium that give the plant the property of pest-resistance to a wide variety of pests.

2. GM mustard has the genes that allow the plant cross-pollination and hybridization.

3. GM mustard has been developed jointly by the IARI and Punjab Agricultural University.

Which of the statements given above is/are correct ?

A. 1 and 3 only

B. **2 only**

C. 2 and 3 only

D. 1, 2 and 3

Rishabh

Blue Flag Certification

Context: Recently, the globally recognized and coveted eco-label *"blue ag"* has been accorded to two Indian beaches- Minicoy Thundi and Kadmat-both in Lakshadweep.

The total number of beaches which has been given *Blue Flag Certification*, stands at **12**.

About Blue Flag Certification:

It is a global recognized eco-label which is accorded to a beach on fulfillment of 33 criterias. These criterias are further divided under **4 headings**, namely:

1. Bathing water quality

2. Environment education and information

3. Environmental Management

4. Conservation and safety services in the beaches

The Blue Flag is being given by jury members composed of Foundation for Environmental Education (FEE), International Union for Conservation of Nature (IUCN), United Nation Environment Program (UNEP), United Nations World Tourism Organization (UNWTO).

They are characterized as cleanest beaches on world. The Blue Flag tag also boost promotes tourism which promote sustainable development of the area.

About Certified beaches:

The Thundi Beach is one of the most pristine and picturesque beaches in the Lakshadweep archipelago where white sand is lined by the turquoise-blue water of the lagoon. It is a paradise for swimmers and tourists alike.

The Kadmat Beach is especially popular with cruise tourists who visit the island for water sports. It is a paradise for nature lovers with its pearl white sand, blue lagoon waters, its moderate climate and friendly locals.

The other Indian beaches in the blue list are Shivrajpur-Gujarat, Ghoghla-Diu, Kasarkod and Padubidri-Karnataka, Kappad-Kerala, Rushikonda- Andhra Pradesh, Golden-Odisha, Radhanagar- Andaman and Nicobar, Kovalam in Tamil Nadu and Eden in Puducherry beaches.

In order to qualify for this prestigious award, a series of stringent environmental, educational, safety-related and access-related criteria must be met and maintained. The mission of Blue Flag is to promote sustainability in the tourism sector, through environmental education, environmental protection and other sustainable development practices. (ANI)

Rishabh

General Studies - 4

(Ethics, Integrity & Aptitude)

Karamyogi, and Empathy

Prelims: social and economic development, Poverty, Inclusion, Demographics, Social Sector Initiatives, etc.

Mains GS II: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

GS IV: Public/Civil service values and Ethics in Public Administration

What's the ongoing story-

Praveen Pardeshi writes: Mission Karmayogi is about creating a civil service with domain, technological competencies and empathy.

What is the mission of Karamyogi?

- About Mission Karmayogi:

- "Mission Karmayogi " a new capacity-building program was launched by the central government of India in 2020.

- It is a New National Architecture for Civil Services Capacity Building.

- This is a National Programme for Civil Services Capacity Building (NPCSCB) scheme for 46 lakhs of civil servants including officers and employees at all levels.

- The goal of this scheme is to make a future-ready civil service with the right attitude, skills and knowledge, aligned with the vision of New India.

Mission Karmayogi have the following six pillars:

- Policy Framework,

- Institutional Framework,

- Competency Framework,

- Digital Learning Framework (Integrated Government Online Training Karmayogi Platform (iG-OT-Karmayogi),

- electronic Human Resource Management System (e-HRMS), and

- Monitoring and Evaluation Framework.

The idea behind the scheme

- Civil services play a very important role in the Indian administration.

- Any change that has been taken to improve the capacity building of the civil services will be a step towards a better governance.

Steps to be taken to build the capacity of civil services:

- Associating the transformation of work culture

- Strengthening public institutions

- Inclusion of modern technology

The governing body of the mission

The Public Human Resource Council under the chairmanship of the Prime Minister of India is the governing body of the Mission Karmayogi.

The council also included other members as follows :

- Union Ministers

- Chief Ministers

- Eminent public HR practitioners

- Thinkers

- Global thought leaders and

- Public Service functionaries

The institutions which help in implementing the Mission Karmayogi:

1. Prime Minister's Public Human Resources (HR) Council

2. Capacity Building Commission

3. Special Purpose Vehicle for owning and operating the digital assets and the technological platform for online training

4. Coordination Unit headed by the Cabinet Secretary

What will be the functions of various proposed bodies:

Capacity Building Commission:

- To aid the PM Public Human Resources Council in rectifying the Annual Capacity Building Plans.

- To operate functional supervision over all Central Training Institutions working with civil services capacity building.

- To set up shared learning resources, comprising internal and external faculty and resource centers.

- Organize and supervise the implementation of the Capacity Building Plans with the stakeholder Departments.

- To lay down the norms for common mid-career training programs across all civil services.

A wholly owned Special Purpose Vehicle (SPV):

- It comes under Section 8 of the Companies Act, 2013.

- It is a "not-for-profit" company.

- The iGOT-Karmayogi platform will own and manage it.

The SPV is to create and engage the content, market place and manage key business services of the iGOT-Karmayogi platform, relating to content validation, independent proctored assessments and measuring the data availability.

- It has all Intellectual Property Rights on behalf of the Government of India.

Public Human Resources Council:

- It consists of some selected Union Ministers, Chief Ministers, eminent public HR practitioners, thinkers, global thought leaders and Public Service functionaries under the chairmanship of the Prime Minister.

- It acts as the apex body for providing tactical direction to the quest for Civil Services Reform and capacity building.

How does iGOT-Karmayogi work?

- This capacity-building program was delivered through an Integrated Government Online Training or iGOT-Karmayogi digital platform,

- The digital platform will be equipped with content to learn from global best practices rooted in "Indian ethos"

- This platform will work as a launchpad for the National Programme for NPCSCB, which will empower a "comprehensive reform of the capacity building apparatus at the individual, institutional and process levels for efficient public service delivery".

- The officers will be assessed on the basis of the course they have opted for throughout their careers to improve their skills.

- An online database will be maintained on what courses they have completed, their performance, an area where their expertise lies etc.

- For any future vacancy or an officer has been considered by an appointing authority, then the authority can simply go through their training maintained database.

What are the challenges?

- The visible poor interest in existing civil services training programmers' has disturbed the administrative reform committees over the past years.

- The out-of-the-date rules and procedures restrict civil servants from performing effectively

- Lack of adequate transparency and accountability procedures

Way forward

- With time, when democracies mature, elected representatives tend to play a more proactive role in policymaking.

  o It is, therefore, required that elected representatives are able to understand the nuances of policymaking.

- The programme is to build the capability to visualize the future and work towards realizing it.

Conclusion

- Though it was a new move by the government, it is also a fact that bureaucratic sloth is only one side of the coin.

- The political leaders, who are equally guilty have manifested themselves in transfers which must be addressed too.

What is Empathy?

- It is the ability of a person to be aware of, understand and appreciate the feelings and thoughts of another person.

- It means, being empathic, is being able to "emotionally read " another person

- It is an ability to empathize that is directly dependent on one's ability to feel another person's feelings and identify them.

How empathy is different from sympathy?

Sympathy

- When a person is having sympathy that implies that the person is being aware of another person's emotional struggles and offering support and reassurance.

- A sympatric feeling is a statement of care for another person.

- In other words, sympathy implies a deeper, more intimate level of concern than pity, a straightforward expression of grief.

- Sympathy puts one's attention on awareness, empathy on experience, and compassion on actions.

Empathy,

- However, empathy implies understanding how others are feeling .

Why empathy is important for a Civil servant

- Empathy is a sense of kinship and concern for others which is why it empowers civil servants to feel connected and relatable to their problems.

- This is so because of the empathy and concern that civil servants portrays their character as it is all about showing interest in the welfare of human beings.

- Sometimes it becomes difficult for a civil servant to survive in absence of empathy because an empathetic character brings outs some sort of belongingness in the citizens.

Farhin

PLUTUS IAS

Courses at Plutus IAS are designed to cater the needs of civil services aspirants so that they can tackle each and every challenge thrown by the civil services exam with confidence and clarity. Vision of Plutus IAS is to make aspirants capable of radiating knowledge.

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Though it is very important to know about the major news and important events happening around the world but also more important is to be able to critically analyze the news, examine the facts and judge it from different points of view and form an independent opinion, while preparing for Civil Services.

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