

Decriminalization of Section 497 IPC

Syllabus: Salient Features Of Indian Society

In News

- The Supreme Court (SC) decriminalized the offence of adultery by holding **Section 497** of the Indian Penal Code (IPC) and **Section 198(2)** of the Code of Criminal Procedure as unconstitutional.
 - Section 497 of IPC punishes a married man for having sex with wife of another man. It was only an offence if the husband (another man) had not consented to this relation, implicitly suggesting that the wife was the property of her husband. Hence, the husband was considered to be the victim of adultery and could file a case.
 - The same recourse was however, not available to the wife. The provision exempts the wife from punishment, and states that wife should not be even treated as an abettor.
 - Section 198(2) provides that in cases of adultery only the woman's husband can be the aggrieved party or in his absence, someone who had care of the woman. The Bench also held Section 198 (2) of the CrPC, which gave the aggrieved husband the exclusive right to prosecute his wife's lover, manifestly arbitrary.
- Earlier, India was one of the few countries in the world that still considered adultery an offence. The appalling attribute of the Indian definition of this crime was that it did not punish the erring spouses, but instead punished the adulterous man or rather the outsider, for having extra-marital relations with a woman who he knows to be married.

Favouring Section 497

- **Moral wrong against matrimonial home:** The main argument for retaining the criminal provision was that the outsider should be punished for breaching the matrimonial unit and that the law should mandate punishment for such a moral wrong.
- **Crime against marriage:** This violation was seen as a crime against the institution of marriage, thus justifying it to be a breach of security and well being of society.

Court's Observations

- **Equality of spouses:** Marriage in a constitutional regime is founded on the equality of and between spouses. Each of them is entitled to the same liberty, which Part III [of the Constitution] guarantees. Therefore, not affording both parties to a marriage equal rights and opportunities would be discriminatory and a violation of their right to equality.
- Section 497 of IPC led to **commodification of women** since it treated women as a property of her husband as it was not an offence of adultery if the latter consented for his wife's adulterous relationship with another man.
- The section was **violative of Article 14** as the purported sanctity of marriage was not hurt if a married man was involved in an adulterous relationship.
- **Civil remedy already available:** The court observed that the issue of adultery between spouses was a private matter and could be a ground for divorce under civil law. It did not warrant the use of criminal sanction against any party involved.
- It also stated that if an act of adultery leads the aggrieved spouse to commit suicide, the adulterous partner could be prosecuted for **abetment of suicide under Section 306 of the IPC**.

- **Personal choice:** Moreover, no justification can be given by the state for penalizing people with imprisonment for making intimate and personal choices. Adultery is a matter of personal morality and the state should stay out of it.
- **Violation of privacy:** The Court held that even then the matter was private and anything otherwise would be a grave intrusion into the privacy of individuals. The court even relied on **K.S. Puttaswamy v. Union of India Case** to explain this deprivation of autonomy as a violation of their right to privacy and to live with dignity, thus violating their fundamental rights under **Article 21** of the Constitution.
- **Patriarchy:** The court held that Section 497, as it existed, denied women ownership of their sexuality and agency over their own relationships.
- **Relevant when bigamy was prevalent:** Previous challenges to this provision claimed that exempting women under Section 497 from prosecution and being prosecuted was protecting them and was in consonance with **Article 15(3)** of the Constitution that allowed the state to make laws for the benefit of women and children. This provision was made when bigamy was prevalent and Lord Macaulay, the drafter of the IPC, did not find it fair to punish one inconsistency of the wife when the husband was allowed to marry many others.
- **Section 306 valid in some aspect:** Following the SC intervention, adultery is now a civil matter between individuals. But a criminal residue remains *i.e.* Section 306 of the IPC will be invoked if a suicide results from adultery.

Further Analysis

- The Supreme Court judgment on adultery has put the focus back on **Section 63 of the Army Act** and its equivalent sections in Air Force Act and the Navy Act. These sections provides that charge of “violating good order and military discipline” can still be pressed against an officer for adultery. But while military courts can hear that charge, it is now likely to be overturned in higher courts after SC’s judgment in which it struck down Section 497.
- The challenge before the court is not to equalize the right to file a criminal complaint, by allowing a woman to act against her husband’s lover. It is, instead to give the IPC and the CrPC a good dusting to rid it of Victorian-era morality. It is only in a progressive legal landscape that individual rights flourish and with the decriminalization of adultery India has taken another step towards rights based social relations, instead of a state imposed moral order.
- However, it is a matter of concern that refreshing the statute books is being left to the judiciary, without any proactive role of Parliament in amending regressive laws. The shocking message here is not merely that provisions such as Section 497 or 377 remained so long in the IPC, it is also that Parliament failed in its legislative responsibility to address them.

Human Development Report

Syllabus: Poverty and Developmental Issues

In News

In the latest human development Index (HDI) released by the UNDP, India is ranked 130 out of 189 countries with the findings indicating a glaring inequality in the country though “millions have been lifted out of poverty”.

Key Findings

- Norway, Switzerland, Australia, Ireland and Germany lead the ranking.

- **Niger, the Central African Republic, South Sudan, Chad and Burundi have the lowest scores.**
- **The overall trend globally is toward continued human development improvements:** out of the 189 countries for which the HDI is calculated, 59 countries are today in the very high human development group and only 38 countries fall in the low HDI group.
- **South Asia experienced the fastest HDI growth among developing regions** with a 45.3 % increase since 1990. South Asia has the widest gap between men and women in HDI at 16.3%.

India's Ranking

- India climbed one spot to **130 out of 189 countries** in the latest rankings.
- **India's HDI value for 2017 is 0.640**, which put the country in the **medium human development category**.
- **Between 1990 and 2017**, India's HDI value increased from 0.427 to 0.640 (an increase of nearly 50%), life expectancy at birth increased by 11 years, children can expect to stay in school for 4.7 years longer and GNI/capita increased by a 266%.
- **Within South Asia, India's HDI value is above the average of 0.638 for the region**, with Bangladesh and Pakistan being ranked 136 and 150 respectively.
- **26.8 % of India's HDI value is lost on account of inequalities** -- a greater loss than for most of its South Asian neighbours.
- India performs better than its neighbours Bangladesh and Pakistan, ranking **127 out 160 countries on the Gender Inequality Index**.

Human Development Index (HDI)

The HDI is the composite measure of every country's attainment in three basic dimensions:

- (1) standard of living measured by the gross national income (GNI) per capita,
- (2) health measured by the life expectancy at birth, and
- (3) education levels calculated by mean years of education among the adult population and the expected years of schooling for children.

Human Capital Rankings

Syllabus: Poverty and Developmental Issues

In News

- According to a study published in the Lancet journal, India was ranked 158 among 195 countries on the 'human capital' score.
- The study measures **Human Capital** of 195 countries during the 1990-2016 period.
- The study was released by **University of Washington's Institute for Health Metrics and Evaluation (IHME)** which was published in the international medical journal Lancet.

Human Capital

- Human Capital can be thought of as the educational attainment, learning and functional health status of the workforce, which contributes to economic productivity.
- **Parameters:** Human capital is computed using **four key parameters:** (1) Life Expectancy, (2) Functional Health, (3) Years of Schooling and (4) Learning.
- **Score:** The Highest possible score is 45 and the lowest is 0.

- **Significance:** It is very important like other types of **economic capital** (*which includes manufactured capital, financial capital and natural resources*) because countries experiencing higher Human Capital growth also experience **faster growth in their GDP per person.**

Global Rankings

- **Finland is ranked first with 28 years of expected human capital**, followed by Iceland, Denmark, Netherlands (each with 27 years).
- **Niger, South Sudan and Chad were ranked lowest with 2 years of expected human capital.**
- **Turkey showed the most dramatic increase** in human capital between 1990 and 2016. However, US which was ranked 6th in 1990, dropped to 27th in 2016.

Indian Scenario

- India is ranked at 158 out of 195 countries in 2016, **an improvement of 4 points** from 162 in 1990.
- **At 158, India is placed behind Sudan (ranked 157th)** and ahead of Namibia (ranked 159th).
- **South Asian countries** ranked below India are Pakistan (164), Bangladesh (161) and Afghanistan (188). Sri Lanka (102), Nepal (156), Bhutan (133) and Maldives (116) fared better than India.
- Global average for the **number of years a worker can be expected to work at peak productivity** is 13.6 years. For India this value is just 6.5 years, around one-third the value of China (20 years).
- **Comment:** India is falling behind in terms of health and education of its workforce, which could potentially have long-term negative effects on the Indian economy.

MOVE: India's First Global Mobility Summit 2018

Syllabus: Urbanization, Their Problems, and Their Remedies

In News

- Niti Aayog recently organised **MOVE: India's first ever Global Mobility Summit** in New Delhi
- The Summit brought together stakeholders from across the sectors to deliberate on creating a public interest framework to revolutionize transport.
- **Need for the summit:** Affordability of public transit is crucial for low-income users and of freight for the industry. Safe, energy-efficient and low-emission systems are necessary for India to meet its international commitments on climate change.

'Transforming India's Mobility: A Perspective'

- During the Summit 'MOVE', NITI Aayog released a report titled 'Transforming India's Mobility: A Perspective' which suggests a holistic framework for a public transport to answer the twin problems of pollution and congestion.
- **The overall objectives of the framework are 3C's:**
 - (i) **Clean:** Pollution-free, leading to clean air and hence better health and living standards
 - (ii) **Convenient:** Seamless, safe, affordable, accessible for all sections including the elderly & disabled.
 - (iii) **Congestion-free:** Minimum congestion levels, and hence enhanced economic efficiency
- **Pillars** to achieve the objectives –
 - (i) Connect Bharat: it calls for **building Safe, Adequate and Holistic Infrastructure (SAHI) for all our citizens.**

- (ii) Optimize travel footprint,
 - (iii) Promote seamless, co-operative transport, and
 - (iv) Adopt green modes and technologies.
- **Enablers:** These pillars have to be well supported by a common set of enablers – Skills and employment, Intelligent Transport Systems, Public Awareness, Governance and Financing.

Mobilise Your City Programme

Syllabus: Urbanization, Their Problems, and Their Remedies

In News

- **India and France have signed an implementation agreement on “Mobilise Your City” (MYC).**
- Mobilise Your City (MYC) is an international initiative in the field of **Sustainable urban transport.**
- **Objective:** To contribute to the –
 - International climate process and
 - UN’s Agenda 2030, esp. **Sustainable Development Goal (SDG) 11: Make cities inclusive, safe, resilient and sustainable.**
- **Strategy:** Beneficiary partners – national and local govts. – will be assisted in their preparation of National Urban Mobility Policies and Investment Programs (NUMPs) and Sustainable Urban Mobility Plans (SUMPs).
- **Background:** It was launched at 21st Conference of Parties (COP21) meeting in December, 2015.
- **Agencies involved:** It is a multi-donor action, jointly co-financed by the –
 - European Commission’s Directorate-General for International Cooperation and Development (DG DEVCO),
 - French government and
 - German government.

Recent Agreement: MYC programme in India

- Urban mobility plans at local level will be implemented in three pilot cities viz. **Nagpur, Kochi and Ahmedabad** for reduction of Green House Gas (GHG) emissions related to urban transport.
- The three cities will receive grant of Euro 3.5 million through the **French funding agency Agence Francaise de Development (AFD)** for investments and technical assistance.

Constitution, Polity, And Governance**Reservation In Promotions**

Syllabus: Indian Constitution: Historical underpinnings, evolution, features, amendments, significant provisions and basic structure.

In News

Supreme Court has declined to refer its 2006 verdict on quotas in promotions for SC/ST to a seven-judge bench.

Supreme Court Verdict (September 2018)

- The Supreme Court said, its 2006 verdict putting conditions for granting benefits of quotas in job promotions for SC/ST employees need not be referred to a seven-judge bench.
- It also turned down the Centre's plea that overall population of SC/ST be considered for granting quota for them. i.e. states need not collect quantifiable data on backwardness of SC/ST for giving quota in job promotion to SC/ST employees.
- Comment: The judgement will boost efforts to provide "accelerated promotion with consequential seniority" for scheduled castes/scheduled tribes members in government services.

For details, refer topic "Promotions In Govt. Offices Should Go On: SC" in CA of June 2018.

SC/STs Can Claim Quota Only In Home State

Syllabus: Indian Constitution: Historical underpinnings, evolution, features, amendments, significant provisions and basic structure.

In News

- Supreme Court held that SC/ST status entitling a person to quotas in jobs and admissions in one state will not automatically continue in another when the person migrates, except when he goes to Delhi, as it is the national capital and a microcosm of India.
- Thus, a five-judge bench, led by Justice Ranjan Gogoi, said that when a person migrates to another state, he doesn't automatically get included in that state's list of SCs/STs.

Rationale for the Decision

- **Detrimental to local community:** Court held that this would be detrimental to the interests of local communities and hence unconstitutional. However, the central list doesn't discriminate between the reserved categories of one state from that of another. The same principle would apply to Delhi.
- **Presidential order is vis-à-vis state:** The court observed that the Presidential orders identifying such communities are only vis-à-vis a state and not the entire country. Thus, any changes in these lists can *only be made by Parliament*.
- **In consonance with GOI circular:** The ruling is in line with past Government of India circulars, according to which SCs/ STs will not lose their SC/ ST status in their state of origin and will be entitled to reservation benefits there, but not in the state to which they have migrated if their caste is not notified there.

Criticism

- **Replacement of backwardness as criteria:** The judgment would appear to be deeply flawed in replacing experienced backwardness as the factor with location for reservation.

- **Create ambiguity:** The state-specific listing of scheduled castes, sub-castes and scheduled tribes throws up ambiguities. Eg., Gurjars are a scheduled tribe in Himachal Pradesh and Jammu & Kashmir, but an Other Backward Caste elsewhere.
- **Backwardness not removed by moving to other state:** When a person grows up experiencing the deprivation and backwardness associated with his social and educational class, his moving to another state does not remove the hardship he had experienced in his state, merely because his community's standing in state to which he has moved is altogether better than that the home state.
- **Give boost to son of the soil doctrine:** The court's view would resonate and could feed demands in every locality to keep outsiders away in the quest for jobs.
- **Violates other fundamental rights:** It will also conflict with the fundamental freedom of a citizen to move freely and reside anywhere.

Law Commission's Consultation Paper On Sedition Law

Syllabus: Indian Constitution: Historical underpinnings, evolution, features, amendments, significant provisions and basic structure.

In News

- The Law Commission has come out with a consultation paper, in order to study revision of **Section 124-A (sedition)**.
- The consultation paper says that an expressions used in such thoughts might be harsh and unpleasant to some, but that does not render the actions to be branded seditious. Section 124A should be invoked only in cases where the intention behind any act is to disrupt public order or to overthrow the government with violence and illegal means.
- It also says that every irresponsible exercise of right to free speech and expression cannot be termed seditious. For merely expressing a thought that is not in consonance with the policy of the government of the day, a person should not be charged under the section. It added that Right to criticize one's own history and the right to offend are rights protected under free speech.
- Law commission also points out that, while it is essential to protect national integrity, it should not be misused as a tool to curb free speech. Dissent and criticism are essential ingredients of a robust public debate on policy issues as part of vibrant democracy. Therefore, every restriction on free speech and expression must be carefully scrutinized to avoid unwarranted restrictions.

Final Analysis

- The Section 124-A of the Indian Penal Code, enacted under colonial rule, remains on the statute book. There have been repeated instances of its misuse. Regimes at the Centre and the States have often been shown in poor light after they invoked the section against activists, detractors, writers and even cartoonists.
- Since Independence, many have seen the irony of retaining a provision that was used extensively to suppress the freedom struggle. Despite all this, Section 124-A has tenaciously survived all attempts by successive generations to reconsider it, if not repeal it altogether.
- The Law Commission, for the third time in five decades, is now in process of revisiting the section.
- The foremost objection to the provision on sedition is that its definition remains too wide. As under the present law, strong criticism against government policies and personalities, slogans voicing disapprobation of leaders and stinging depictions of an unresponsive or insensitive regime are all

likely to be treated as seditious and not merely those that overtly threaten public order or constitute actual incitement to violence.

- There can only be two ways of undoing the harm it does to citizen's fundamental rights *i.e.* it can be amended so that there is a much narrower definition of what constitutes sedition but the far better course is to do away with it altogether.

Law Panel Says Uniform Civil Code Not Desirable Now

Syllabus: Indian Constitution: Historical underpinnings, evolution, features, amendments, significant provisions and basic structure.

In News

The Law Commission of India (LCI), in its consultation paper on **Family Law Reforms**, said that a Uniform Civil Code (UCC) is neither necessary nor desirable at this stage.

Rationale Given by LCI

- **Diversity can't be compromised for uniformity:** The Commission said secularism can't contradict plurality prevalent in the country. Moreover, cultural diversity cannot be compromised to the extent that our urge for uniformity itself becomes a reason for threat to the territorial integrity of the nation.
- **Difference not equivalent to discrimination:** LCI further said that difference does not always imply discrimination in a robust democracy. Moreover, most countries are now moving towards recognition of difference and the mere existence of difference does not imply discrimination but is indicative of a robust democracy.
- **Should not lead to rule of majority:** The diversity, both religious and regional should not get subsumed under the louder voice of the majority.
- **Codification necessary rather than UCC:** It said the way forward may not be UCC, but the codification of all personal laws so that prejudices and stereotypes in every one of them would come to light and can be tested on the anvil of fundamental rights of the Constitution.
- **Equality within community more important:** The Law Commission has taken a stand in favour of equality within communities between men and women (personal law reform), rather than equality between communities (UCC).
- **Changes in Marriage and Divorce:** It suggested certain measures in marriage and divorce, which should be uniformly accepted in the personal laws of all religions.
 - These amendments in personal laws include fixing the marriageable age for boys and girls at 18 years so that they marry as equals as it simply contributes to the stereotype that wives must be younger than their husbands.
 - Introduce new grounds for 'no fault' divorce accompanied by corresponding changes to provisions on alimony and maintenance. Upon divorce, a woman should get an equal part of the property gained after marriage.
- **Abolition of HUF:** One of the most significant recommendations with regards to the Hindu personal law is the abolition of the Hindu Undivided Family, which the paper notes has been used only for tax evasion. The Commission also notes that it is high time it is understood that justifying this institution on the ground of deep-rooted sentiments at the cost of the country's revenues may not be judicious.
- **Other reforms in Hindu law:** Among other reforms suggested in Hindu laws are doing away with the provision of restitution of conjugal rights to force wives to cohabit, bringing in a new legislation to address the issue of legitimization of children born of live-in relationships and their right to inherit.

- **Under Muslim law** the paper suggests the following:

- **Nikahnamas** should make it clear that polygamy is a criminal offence and this should apply to “all communities.
- Reform inheritance law by codifying Muslim law on inheritance, but ensuring that the codified law is gender just.

- **Other general reforms:** Some of the other significant recommendations of the Commission include compulsory marriage registration, allowing transgender persons to adopt, taking best interest of child as the basis for matters of custody, and defining the rights of persons with disabilities within marriage.

Multiple lessons

Apart from its suggestions on a Uniform Civil Code, the Law Commission's consultation paper also went into questions of marriage, divorce and confessions

MARRIAGE AGE	DIVORCE	CONFESSIONS
<ul style="list-style-type: none"> • The Law Commission suggested that 18 years be the minimum legal age for men and women to get married • It said that insistence on recognising different ages of marriage between consenting adults must be abolished as "it contributes to the stereotype that wives must be younger than their husbands" 	<ul style="list-style-type: none"> • The consultation paper suggested that there is a need to recognise role of women in a household. It said a woman should get an equal part of the property gained after marriage in the event of divorce • However, this principle does not automatically translate to an 'absolute' equal split of property after divorce 	<ul style="list-style-type: none"> • In its paper on 'Reform of Family Law', the panel did not favour a ban on church confessions. The NCW had last month recommended a ban on them • The panel mooted the idea that confessions could also "eventually include nuns." This, the paper said, could be brought in through consensus building within communities



SC Backs Author’s Creative Licence

Syllabus: Indian Constitution: Historical underpinnings, evolution, features, amendments, significant provisions and basic structure.

In News

- **Introduction:** The Supreme Court held that the creative freedom of writers cannot be curbed in a democratic state and that the court will speak up for author’s right of expression even if it does not agree with their views.
- **Petition:** The ruling came on a petition that sought a ban on Malayalam novel **Meesha** for allegedly carrying disparaging remarks about women who visit temples. The petition was filed by Delhi resident N Radhakrishnan, alleged that the literary work was derogatory to temple-going women and hurt the sentiments of a particular faith/community.
- **End of creativity:** The court rejected the plea saying authors have creative licence and can write what they want within the boundaries of the law. Court also held that if books are banned on such allegations, there can be no creativity. Such interference by constitutional courts will cause the death of art. The culture of banning books directly impacts the free flow of ideas and is an affront to the freedom of speech, thought and expression. The SC bench also urged readers and admirers of literature and art to exhibit a certain degree of adherence to the unwritten codes of maturity, humanity and tolerance.

Supreme Court Verdict on Aadhaar

Syllabus: Indian Constitution: Historical underpinnings, evolution, features, amendments, significant provisions and basic structure.

In News

- Supreme Court upheld the constitutional validity of Aadhaar scheme as pro-poor and inclusionary, but scrapped provisions of the legislation that were seen as enabling surveillance by the state.
- SC held Aadhaar won’t be mandatory for opening bank accounts, getting a phone connection or school admissions.

- It also said an Aadhaar holder's data can't be disclosed on the grounds of national security.

The SC Decision

- **Public interest overweighs privacy concern:** The SC held that privacy concerns of a few must make way for larger public interest as we cannot throw the baby out with the bath water. Thus, Court held that Right to privacy has to be balanced with other rights and it cannot be extended too much that other constitutional rights get a go-by.
- **Passed triple test:** It held that the Aadhaar Act passes the triple test laid down in the Privacy judgment under which there ought to be a law, a legitimate state interest and an element of proportionality in any law that seeks to abridge the right of privacy.
- **Curtail Aadhaar Limit:** The court curtailed the broad sweep of the scheme, pegging it back to its original remit *i.e.* helping the government target services and subsidies so that they go to the deserving. As it was subsequently been expanded to include the fight against terrorism and financial fraud.
- **Act constitutional:** Aadhaar Act was constitutional on several counts — it was proportional, had rational goals, had a rational connection with the object sought to be achieved and fulfilled the necessity test. Thus, Aadhaar Act is a beneficial legislation, which is aimed at empowering millions of people in this country. The court also noted that the failure rate of the scheme was just **0.232%**.
- **Aadhaar voluntary:** The court also said Aadhaar cannot be made mandatory and was by nature voluntary. People can only be enrolled for the scheme with their informed consent. Those who gave consent in absence of a law authorizing Aadhaar can withdraw consent and exit the scheme. This consent is required to be free, informed, specific, clear and in addition, capable of being withdrawn.
- **No denial of benefit for lack of Aadhaar:** Only those who wish to avail direct benefit transfer (DBT) schemes of government — cooking gas, public distribution system, the rural jobs programme and so on, would have to enroll for Aadhaar. But no one can be denied benefits for lack of Aadhaar or if authentication fails. Alternate identity proofs can be used to claim benefits in such instances.
- **Individual or corporate can't collect Aadhaar details:** The Supreme Court has struck down Section 57 of the Aadhaar Act, which allowed private entities to use the 12-digit number to validate the identities of customers. Thus, individuals and corporates can't collect Aadhaar data and any such information collected has to be destroyed. Court also observed that private entities using Aadhaar data would have otherwise enabled commercial exploitation of biometric and demographic information by private entities.
- **Section 47:** Section 47 of the Aadhaar Act, which deprived citizens of any right to file an FIR against anyone violating his or her privacy by illegally using his or her Aadhaar number or *via* any other fraud has also been struck down. The Court also gave any victim, who believes rights have been violated, the right to file a complaint against UIDAI. Earlier, Section 47 of the Aadhaar Act allowed cognizance of offence only on a complaint made by the UIDAI or officers authorised by it.

Out with the old, in with the new

While the Supreme Court upheld the validity of the Aadhaar Act via a majority judgment, it has also read down, clarified and struck down some provisions in the Act

Sections struck down

- **Section 33(2):** Identity and authentication data has to be disclosed if it is in the interest of national security
- **Section 47:** Courts shall not take cognizance of offence under the Act except on a complaint filed by UIDAI
- **Section 57:** Aadhaar can be used to identify individual for any purpose by state or companies

Sections read down

- **Section 33(1):** Identity, authentication records of individual have to be disclosed on the basis of court order by District Judge (or above)*

Sections upheld

- **Section 7:** Aadhaar mandatory to access social services, subsidies and other benefits
- **Section 139AA (Income Tax Act):** Aadhaar number has to be quoted in new PAN application and for filing returns

* Individual should be given chance of a hearing, rules court

The dissident voice

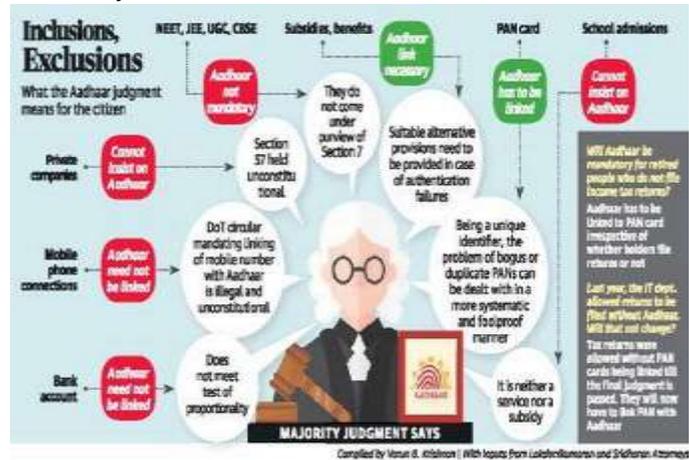
In his dissenting judgment, Justice D.Y. Chandrachud argued that...

The Aadhaar project has failed to account for and remedy the flaws in its framework and design which has led to serious instances of exclusion of eligible beneficiaries as demonstrated by the official figures from Government records including the Economic Survey of India 2016-17 and research studies

- **Section 33:** It read down **Section 33 (1)**, which allowed the disclosure of Aadhaar information on the orders of a District Judge. This cannot be done now without giving the person concerned an opportunity to be heard. The SC also struck down **Section 33(2)**, which allowed the disclosure of Aadhaar information for national security reasons on the orders of an officer not below a Joint Secretary. It suggested that this will have to be done by a more senior official, which will need to be enabled through legislation.

- **Section 59:** The court has upheld the validity of Section 59 that also validates all Aadhaar enrolment done prior to the enactment of the Aadhaar Act, 2016. The court has said that since enrolment was voluntary in nature, those who specifically refuse to give consent would be allowed to exit the Aadhaar scheme.

- **Amending the Law:** The court asked the government to change the law to prevent collation and storage of metadata. Authentication data cannot be stored for more than **six months** as opposed to **five years** now.



- **Need for Data Protection Law:** The court also asked the government to come up with a robust data protection law based on the recommendations of the **BN Srikrishna committee** report.
- **Aadhaar for children:** The Court insulated children from the Aadhaar regime. The card was not necessary for children *aged between 6 and 14* under the Sarva Shiksha Abhiyan as right to education was a fundamental right. Statutory bodies such as the CBSE and the UGC cannot ask students to produce their Aadhaar cards for examinations like the NEET and the JEE. Permission of parents and guardians was a must before enrolling children into Aadhaar. Once they attained the age of majority, children could opt out of Aadhaar.
- **Dissenting opinion:** Justice Chandrachud, in its dissenting opinion, held that the entire Aadhaar programme, since 2009, suffers from constitutional infirmities and violations of fundamental rights. The enactment of Aadhaar Act does not save the Aadhaar project. The Aadhaar Act, the Rules and Regulations framed under it, & the framework prior to the enactment of the Act are unconstitutional.

Positives

- **Prevent abuse:** The judgment scrapping of **Section 57** of the Aadhaar Act, which allowed private entities to use Aadhaar for verification purposes. Far too many people have been duped into opening accounts in mobile phone payment banks while being forced to conduct an e-KYC procedure with Aadhaar for their SIM cards. This was an ethical and legal violation and the abolition of Section 57 should stop such abuse.
- **Preventing identity theft:** Minimizing the use of Aadhaar in private sector businesses and institutions will reduce the risk of identity theft and other forms of forgeries.
- **Individual can seek redressal of grievance:** UIDAI wanted the power to file complaint for breach of Aadhaar privacy to rest solely with itself. It had also used Section 47 against journalists and ethical hackers who had demonstrated security and privacy lacunae in the Aadhaar ecosystem. Now, citizens have their democratic right to seek redressal directly for such violations.
- **Tackling threats of data breach:** Another positive move is the Supreme Court declaring the mandatory use of Aadhaar for school admissions and entry into educational entities such as

University Grant Commission (UGC) & National Eligibility-cum-Entrance Test (NEET) institutions, to be invalid. One of Aadhaar's most disturbing features has been that so many disparate institutions, including schools and universities, possessing Aadhaar data & biometry have very weak security for their IT systems. They are easy targets for hackers in search of a treasure trove of data.

- **Limiting the Aadhaar to its original purpose:** The judgment narrows the scope of Aadhaar but provides a framework within which it can work. The majority opinion has sought to limit the import of the scheme to aspects directly related to welfare benefits, subsidies and money spent from the Consolidated Fund of India.

Negative Implication

- **Delay and increased cost:** In the last few years, Banks, Fintech companies and telecom service providers have used Aadhaar based electronic know your customer (eKYC) to acquire millions of new users, but with the court ruling that private companies cannot mandate Aadhaar-based authentication. Thus, they are likely to face increased costs and a slowdown in enrolment of new subscribers after the Supreme Court struck down provisions in **Section 57** of the Aadhaar Act. The telecom industry expects the lack of eKYC will delay penetration in rural areas where tele-density is just about 60% compared to 150% in urban India, while also raising the cost of customer acquisition by **as much as ten times**.
- **Impact on Fintech firms:** Some experts said fintech startups, specifically digital lending platforms that use Aadhaar to decide on the creditworthiness of borrowers will be affected by the Supreme Court restricting storage of Aadhaar data to six months from five years earlier.
- **Impact on ease of doing business:** By striking down Section 57 of the Aadhaar Act, which allowed private entities to use the process, the Supreme Court unfortunately has done the ease of doing business a great disservice.
- **Hurt delivery of services by government:** The Supreme Court's decision to bar agencies from using Aadhaar authentication except for welfare schemes threatens also to undo the linking of a host of government services with the biometrics-based identity system for verification as well as to improve efficiency. Some of these being Passport issuance, employee provident fund, DigiLocker, among other state services as well as the government's drive to link voter identity cards and even driving licences to Aadhaar are expected to be severely affected by the verdict.
- **Grey area:** The issue of the right to be forgotten, in case of Aadhaar data that have been collected, remains a grey area. The judgment does not clearly state that entities such as banks and mobile companies will have to delete the collected information.
- **Unclear verdict:** For instance, while the SC has upheld the linkage of the Aadhaar number to PAN under the Income Tax Act, it has held that Aadhaar cannot be mandated for bank accounts, insurance products, *et al* under the *Prevention of Money-laundering (Maintenance of Records) (Second Amendment) Rules, 2017*. But it is unclear that what happens if the Centre were to simply mandate PAN for some of these products? The Court hasn't adequately answered why an Aadhaar linked-PAN is less disproportionate than simply linking one's Aadhaar number with a bank account.

Final Analysis

- In short, the judgment gives ample indication that Supreme Court expects any future use of Aadhaar must satisfy the proportionality principle, where restrictive means employed to further legitimate state interest must seek out equally effective alternatives and invade individual rights only to the minimum degree necessary.
- What the Court merely should have done is allowed Section 57 to stand and directed the Government to create a strong legal framework that would set out terms of use and protect the

privacy of individuals who provided their Aadhaar details for authentication purposes. Privacy cannot and should not be linked directly to Aadhaar enabling.

Aadhar As Money Bill

Syllabus: Indian Constitution: Historical underpinnings, evolution, features, amendments, significant provisions and basic structure.

In News

- The majority view in Aadhar judgment concluded that government was justified in the passage of the Aadhaar Act as a Money bill.
- The Court has addressed this issue by accepting government's argument that **Section 7**, which enables the use of Aadhaar to avail of any government subsidy, benefit or service for which expenditure is incurred out of the Consolidated Fund of India is the core provision in law and that this makes it a Money bill.
- In short, the majority view justified that Aadhaar was vital to ensure that government aid reached the targeted beneficiaries and hence, the Act was validly passed as a Money Bill.
- Whereas, Justice D.Y. Chandrachud in his dissent opinion, argued that the Rajya Sabha's authority has been superseded & that this constitutes a fraud on the Constitution. As a result of this debasement of a democratic institution, he held the Aadhaar Act unconstitutional.

Article 110: Definition of Money Bill---

For the purposes of this Chapter, a Bill shall be deemed to be a Money Bill if it contains only provisions dealing with all or any of the following matters, namely—

- The imposition, abolition, remission, alteration or regulation of any tax;
- The regulation of the borrowing of money or the giving of any guarantee by the Government of India, or the amendment of the law with respect to any financial obligations undertaken or to be undertaken by the Government of India;
- The custody of the consolidated Fund or the Contingency Fund of India, the payment of moneys into or the withdrawal of moneys from any such Fund.
- The appropriation of moneys out of the consolidated Fund of India;
- The declaring of any expenditure to be expenditure charged on the Consolidated Fund of India or the increasing of the amount of any such expenditure;
- The receipt of money on account of the Consolidated Fund of India or the public account of India or the custody or issue of such money or the audit of the accounts of the Union or of a State; or
- Any matter incidental to any of the matters specified in above sub clause.

Challenges

- **Wrong future precedence:** Any Bill can now be given a Consolidated Fund of India dimension and passed off as a Money Bill. This would effectively destroy the bicameral system of Parliament, which is the part of basic feature of the Constitution.
- **Strict interpretation not followed:** Under a strict interpretation of Article 110 it is a difficult position to defend it as Money bill. As the Centre's objective was seen as bypassing the Rajya Sabha, where it did not have a majority.
- **Alien to Article 110:** The various other sections of the Aadhaar Act that dealt with several aspects relating to the Aadhaar numbers were alien to the scope of **Article 110** of the Constitution, which defines a Money Bill.

Odisha Plans for Legislative Council

Syllabus: Parliament and State Legislatures- structure, functioning, conduct of business, powers & privileges and issues arising out of these.

In News

The Odisha government is expected to introduce a Bill for the creation of a Vidhan Parishad or Legislative Council, a second House of legislature. This follows a report submitted in July 2018 by a panel of MLAs of various parties, which examined the proposal.

About Second House of Assembly

- **Article 171:** India has a bicameral system of legislature, just as Parliament has two Houses, the states can, if they choose, have a Legislative Council in addition to the Legislative Assembly. The Constitution provides for this option under Article 171.
- **Article 169:** Under Article 169 a Legislative Council can be formed, if the Legislative Assembly of the State passes a resolution to that effect by a majority of the total membership of the Assembly and by a majority of not less than two-thirds of the members of the Assembly present and voting. Parliament can then pass a law to this effect.
- **Members:** Under Article 171 of the Constitution, the Legislative Council of a state shall not have more than one-third of the total number of MLAs of the state and not less than 40 members. But in Jammu & Kashmir, as per Section 50 of the state's Constitution, the Assembly has 87 members and the Legislative Council 36. As with Rajya Sabha MPs, the tenure of a Member of the Legislative Council (MLC) is six years, with one-third of the members retiring every two years.
- **Election:** One-third of the MLCs are elected by the state's MLAs, another 1/3rd by a special electorate comprising sitting members of local governments such as municipalities and district boards, 1/12th by an electorate of teachers and another 1/12th by registered graduates. The remaining members are appointed by the Governor for distinguished services in various fields.
- **States having second house:** 7 States have second house of state legislature these are Andhra Pradesh, Bihar, Jammu and Kashmir, Karnataka, Maharashtra, Telangana and Uttar Pradesh.

Arguments In Favour

- **Prevent hasty decisions:** A second House can help check hasty actions by Lower House.
- **Another chance for non-elected individuals:** It will also enable non-elected individuals to contribute to the legislative process.
- **Chance for academicians:** Upper House also provides a forum for academicians and intellectuals to contribute to the electoral politics.

Arguments Against

- **Main challenges:** a Legislative Council can be used to delay legislation and to park leaders who have not been able to win an election.
- **Limited powers:** The legislative power of Councils are limited. Unlike Rajya Sabha, which has substantial powers to shape non-financial legislation, Legislative Councils lack a constitutional mandate to do so. Assemblies can override suggestions/amendments made to a legislation by the Council. Also, unlike Rajya Sabha MP, MLC can't vote in elections for President & Vice President.
- **Lack of support:** Two Bills introduced in the Rajya Sabha in 2013 for establishing Legislative Councils in Assam and Rajasthan are still pending, indicating the lack of support for such a move.

- **Lack of real advantage:** If there was any real benefit in having a Legislative Council, all States in the country should and arguably would have a second chamber. The fact that there are only seven such Councils suggests the lack of any real advantage, apart from the absence of a broad political consensus on the issue.
- **Drain on exchequer:** The second house is also an unnecessary drain on the exchequer in form of one time cost and recurring cost.
- **Dipping educational standards:** Another issue is that graduates are no longer a rare breed as with dipping educational standards, a graduate degree is no guarantee of any real intellectual heft. And then question arises, why should graduates be privileged as people's representatives in a democracy?

Way Forward

- Parliamentary committee, that went into clearing these Bills, also struck a cautionary note. It wanted a **national policy on having an Upper House** in State legislatures to be framed by the Union government, so that a subsequent government doesn't abolish it.
- It also favoured a review of the provision in law for Councils to have seats for graduates & teachers.
- Thus, Odisha's proposal give the country at large an opportunity to evolve a national consensus on Legislative Councils.

SC Decision On Criminalization Of Politics

Syllabus: Elections and Representation of People's Act

In News

- The Supreme Court expressed its inability to make a law to check creeping criminalization of the polity, insisting Parliament must respond to public sentiment and frame a law to ensure that those charge-sheeted cannot contest.
- **Section 8** of the Representation of People Act, 1951, bans convicted politicians. But those facing trial, no matter how serious the charges are free to contest elections.

Decision of SC

- **Duty of electorate:** The constitution bench led by CJI Dipak Misra sidestepped the demand made in several PILs to lay down the law to prevent those against whom charges have been framed by any court of law from entering the poll fray. Court held it is for the electorate to ensure that suitable (not merely eligible) persons are elected to the legislature and it is for the legislature to enact or not enact a more restrictive law.
- **No ambiguity in RPA:** The court also said that it cannot do indirectly what cannot be done directly. The grounds for disqualification of members were already specified in the Representation of the Peoples' Act. The legislature has very clearly enumerated the grounds for disqualification and the language of the provision leaves no room for any new ground to be added or introduced. Therefore, directing the Election Commission to deregister a party, refuse to renew registration of a political party or to not register a party if they associated themselves with persons who were charged with offences would amount to doing indirectly what was clearly prohibited.
- **Suggestion:** Parliament ought to bring out a strong law whereby it is mandatory for parties to revoke membership of those against whom charges are framed in heinous and grievous offences and not to set up such persons in elections, both for Parliament and state Assemblies.
- **Right to know:** The top court, however said that nothing stood in the way of the elector's right to know and ordered candidates to declare their criminal records to the Election Commission in bold.

- **Wide publicity:** Political parties were charged with the task of making this information public on their websites. In addition, both the candidate and parties were mandated to publish this information in newspapers and TV at least three times after nomination papers were filed. The candidate and the political party shall issue a declaration in widely circulated newspapers in the locality about antecedents of the candidate and also give wide publicity in the electronic media.

Positive Implication

- **Focus also on cleansing political parties:** Though the Representation of the People Act disqualifies a sitting legislator or a candidate on certain grounds, there is nothing regulating the appointments to offices within the party. But the judgement, compels political parties to come clean about the criminal elements within their apparatus, is unique as it opens a new vista that the process of breaking crime-politics nexus extends much beyond purity of legislators and encompasses purity of political parties as well.
- **Informed choice:** It ensures that ordinary voters can have an informed choice about who he or she has to vote for in a country which already feels agonized when money and muscle power become the supreme power.

Issues

- **Expenditure limit:** Question arises whether the negative advertising cost should be added to a candidate's expenditure limit. As of now, the expenditure limit for a state assembly candidate is capped at **Rs. 28 lakh** while it is **Rs. 70 lakh** for candidates for general elections. All newspaper and electronic media advertisements/publicity material are included within this limit. The order could mean that even the criminal record advertising could fall in the same ambit - something that could have huge impact especially for candidates in urban centres where newspaper and TV ad pricing is high. The EC may have to therefore, factor in this and even consider keeping them out of the expenditure cap.
- **Practicality:** Another concern will be the practicality of a situation where a candidate is expected to advertise his or her own criminal antecedents before elections. It appears as unreal, artificial and divorced from reality. It reflects a rather academic viewpoint. As it will be unreal to expect the candidate through advertisements to ask people not to vote for him or her or to exhibit and spread his own unpopularity.

Final Analysis

- The Supreme Court has wisely refrained from disqualifying those charged by courts from elected office. Criminalization of politics accompanied by rising influence of money and muscle power pose a fundamental threat to democracy. But half-baked and drastic solutions like disqualifying those charged by courts as sought by the petitioners are not the answer.
- The framing of charges by a court is just an intermediate stage in criminal law procedure between the filing of charge sheet by police and commencement of trial. Conviction or acquittal follows a rigorous process of examining prosecution and defence witnesses and evidence during trial. In contrast, framing charges require judges to merely take a *prima facie* view of the charge sheet and supporting/opposing arguments to decide whether there is sufficient evidence to put a person on trial. Moreover, disqualifying at the inconclusive stage of framing charges will lead to bias and political witch hunts. The EC's proposal has safeguards against this. First, all criminal cases will not invite a ban, only the heinous offences will do. Second, the case should be registered at least six months before the elections. Third, the court must have framed the charges.
- It is to be noted that the tactic of shaming politicians and parties to reveal criminal records hasn't had much success in changing voter perception.

- The real problem lies with the slow pace of trials in India and the influence commanded by politicians conspire to give MPs and MLAs a long rope. Thus, solution lies in fast tracking the serious cases to conviction, acquittal, discharge or closure will clean up the Augean stables.

On Election Commission's Model code of Conduct

Syllabus: Elections and Representation of People's Act

In News

- **Introduction:** The Election Commission is considering passing an order shortly to ensure that the Model Code of Conduct kicks in immediately after a state dissolves its Assembly and seeks early elections. This will mean that states may be barred from taking any policy decision, which may be in the nature of influencing the electorate. The kicking in of the Model Code of Conduct may not have to wait for the Commission to announce the poll schedule as is the norm now.
- **Current practice a result of agreement:** The date of enforcement of the Model Code of Conduct has evolved over years of tussle between the Election Commission (EC) and the government. Currently, the Code kicks in the day the EC announces the poll dates. This is based on an agreement between the poll panel and the Central government reached on April 16, 2001. However, the agreement imposes a condition on the Commission that the announcement cannot be more than three weeks before the date of notification of polls. It was also agreed that the inauguration of any completed or new projects will be done by civil servants so that the MCC does not stand in the way of public interest.
- **Supreme Court decision:** The EC has relied on the Supreme Court's 1994 judgment in the **S R Bommai v. Union of India** case. In this, the apex court had ruled that once the Assembly is dissolved based on the Governor's recommendation, the caretaker government should be allowed to function. As a matter of convention, the caretaker government should merely carry on the day-to-day government and desist from taking any major policy decision, the order said.

State Finance Commission (SFC)

Syllabus: Constitutional/Statutory/Regulatory/Quasi-Judicial Bodies

In News

- The SFC is a unique institution created by the **73rd and 74th Constitutional Amendments (CAs)** to rationalize and systematize State/sub-State-level fiscal relations in India.
- **Article 243I** of the Constitution mandated the State Governor to constitute a Finance Commission within one year of the CAs (before April 24, 1994) and thereafter every five years.
- Its primary task is to rectify growing horizontal imbalances in the delivery of essential public services to citizens. But there has been inadequate appreciation of the significance of this institution by the Union, States as well as the professional community.

Problems Faced by SFC

- **Not constituted timely:** The large majority of the states have violated the mandate of the Constitution with impunity by not timely constituting the SFC.
- **Recommendation not taken seriously:** The seriousness, regularity, acceptance of recommendations and their implementations, which characterize the Union Finance Commission (UFCs) are conspicuously absent when it comes to SFCs.

- **Problems in constitution and composition:** The UFC has been widely acknowledged as a professional and quasi-judicial body when compared to the SFC. A cursory survey of the composition of SFCs would reveal the overwhelming presence of serving and/or retired bureaucrats rather than academics.
- **Availability of data:** UFCs had no data problem in reviewing the finances of the Union and States. The financial reporting system of the Union and States is well laid down. On the other hand, local governments with no proper budgetary system are in deep disarray and because of that, SFCs face a crucial problem of reliable data.
- **No handholding support:** Moreover, UFCs have failed to play a handholding role in placing decentralized governance properly in the cooperative federal map of India. As no UFC has done its homework in reading and analyzing SFC reports. And without presenting a consolidated account of the reality at the sub-State level or highlighting which report went wrong, where and how no UFC can legitimately guide States or contribute to improving the goals of constitutional amendments.

Government Sets up Lokpal Search Panel

Syllabus: Constitutional/Statutory/Regulatory/Quasi-Judicial Bodies

In News

- The government has finally constituted the search committee to recommend the names of chairman and members of anti-corruption watchdog Lokpal. The search committee will be **chaired by former Supreme Court judge Ranjana Prakash Desai** and have retired Allahabad high court judge Sakha Ram Singh Yadav, former solicitor general Ranjit Kumar, former SBI chief Arundhati Bhattacharya, Indian Space Research Organisation head AS Kiran Kumar, Prasar Bharati chairperson A Surya Prakash, former Gujarat Police DGP SS Khandwawala and retired IAS officer of Rajasthan cadre Lalit K Panwar as members.
- The Supreme Court has been repeatedly pressing the government to go ahead with the process of setting up a Lokpal. The search committee was finally constituted despite concerns raised by the Congress and its leader in the Lok Sabha, Mallikarjun Kharge, who boycotted meetings of the selection committee on five occasions since February 2018.
- The search committee was appointed by the selection committee, which comprises Prime Minister, Chief Justice of India, Lok Sabha Speaker, leader of the largest Opposition party, which in this case was Congress's Mallikarjun Kharge, and eminent jurist Mukul Rohatgi.

RBI's Internal Ombudsman Scheme, 2018

Syllabus: Constitutional/Statutory/Regulatory/Quasi-Judicial Bodies

In News

- **Purpose of the scheme:** The scheme was introduced to strengthen the internal grievance of banks and to ensure that the complaints of the customers are redressed at the level of the bank itself by an authority placed at the highest level of bank's grievance redressal mechanism so as to minimise the need for the customers to approach other fora for redressal.
- **Applicability:** The banking regulator has asked all commercial banks having **10 or more banking outlets** to have an independent internal ombudsman (IO) to review customer complaints that are either partly or fully rejected by the banks. The central bank has, however, **excluded regional rural banks (RRBs)** from appointing ombudsman.

- **Function of IO:** The IO should examine customer complaints, which are in the nature of deficiency in service on the part of the bank that are partly or wholly rejected by the bank.
- **Security of tenure:** According to bankers, the **Internal Ombudsman Scheme of 2018** mandates banks to grant a fixed term of three to five years, which cannot be renewed, to the IO. The IO can be removed only with prior approval from RBI. The remuneration would have to be decided by the customer sub-committee of the board.
- **Decision of IO:** If a complaint is not settled by agreement within a period of **one month** from the date of receipt of the complaint or such further period as the Banking Ombudsman may allow the parties, he may, after affording the parties a reasonable opportunity to present their case, pass an Award or reject the complaint.
- **Dual monitoring:** The implementation of IO Scheme, 2018 will be monitored by the bank's internal audit mechanism apart from regulatory oversight by RBI.

Setting Up Of An Independent Payments Regulatory Board (PRB)

Syllabus: Constitutional/Statutory/Regulatory/Quasi-Judicial Bodies

In News

- A government-appointed committee under **Subhash Garg** has batted for sweeping changes to the legal framework governing payments and settlements, some of which could potentially trigger a fresh row between the Reserve Bank of India and the Finance Ministry.
- The growth in the financial tech sector has enabled non-banks to play a significant role in payments. The government itself is keen to promote digital payment systems and set up a **Committee on digital payments in 2016**.
- The recommendations are aimed at revamping the **Payment and Settlement Systems Act, 2007**, which was the first dedicated law to regulate and supervise payment systems in India such as the National Electronics Funds Transfer system, the Real Time Gross Settlement System and ATM and card transactions. It allowed the RBI to constitute a board to regulate the sector and provided the legal basis for basic features of a payment system framework, *i.e.* netting and settlement finality.

Proposal Of The Panel

- **Purpose:** The updated Bill seeks to foster competition, provide consumer protection and systemic stability and resilience and establish an independent regulator for the payments sector including non-banks as significant players and to consolidate and amend the laws related to payments.
- **Overall suggestions:** This panel made a detailed case for independent regulation of payments & its separation from Central banking, management of monetary policy & operation of payment systems.
- **Creation of PRB:** The panel has proposed the creation of an **independent PRB** and suggested replacing the Central bank governor as chairperson with a person appointed by the government in consultation with RBI. This was at variance with the RBI member on the panel who suggested that the payment regulator should be with Central bank and proposed that the chairperson of PRB should be from RBI and have a casting vote.
- **Section 10 in the Bill:** The Bill provides for the PRB to be an independent payments regulator. It provides for the RBI to have significant representation on the PRB and envisages a formal mechanism for coordination between the RBI and the PRB so that the regulation of payments, insofar as it may be relevant in the context of financial stability, monetary policy and credit policy, is achieved harmoniously. The committee also said the Bill provides for the chairperson of the PRB to have experience in central banking functions.

- **Reference to the RBI:** The draft law provides that the PRB shall make a reference to the RBI when it proposes any designated payment system regulation and the Central bank can give its opinion in this regard. If PRB disagrees with the opinion of RBI and RBI does not agree with the reasons given by the PRB, the RBI can also make a reference to the central government.

RBI's View

- **Disagreement with recommendation:** The RBI disagreed with recommendations on the composition of PRB and a suggestion to provide for majority public or govt ownership of entities such as the National Payments Corporation of India and Central govt nominees on their boards.
- **Situation in other countries:** RBI highlighted that Central bank is regulator of payment systems in many countries. The committee did not disagree with this but cited the **UK and Australia** as examples of having multiple regulators with concurrent jurisdiction over payment systems.
- **RBI suggestion:** The RBI has suggested that the PRB should be with the RBI and the Chairperson of the PRB should be from the RBI and also have a casting vote. According to the RBI, this would provide the RBI with the necessary powers in the context of its monetary policy function to issue directions to the payment system provider(s).
- **Risk of regulatory arbitrage:** The RBI's also asserted that there could be an intrinsic problem in regulation of payments if they are not within the ambit of the central bank and might result in regulatory arbitrage.

First Tribal Circuit Under Swadesh Darshan

Syllabus: Government Policies and Interventions For Development In Various Sectors and issues arising out of their design and implementation.

In News

- Govt has launched country's first tribal circuit project connecting 13 tourism sites in Chhattisgarh. The project is being implemented under Tourism Ministry's Swadesh Darshan scheme.
- **Objective of Swadesh Darshan is** Development of thematic circuits in the country in a planned and prioritised manner.
- Under this, Ministry of Tourism provides **Central Financial Assistance (CFA)** to State/UT's for various tourism projects.
- **The scheme was launched in 2014 -15** and as on date the Ministry has sanctioned 70 projects for Rs.5700 Crore to 29 States/UTs under the Scheme.
- Some of the **thematic circuits identified under the scheme are:** North-East India Circuit, Himalayan Circuit, Buddhist Circuit, Ramayana Circuit, Tribal Circuit etc.

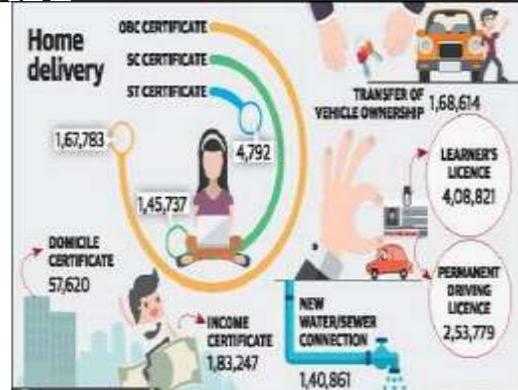
Delhi Launches Doorstep Delivery Of Government Services

Syllabus: Important aspects of governance, transparency and accountability

In News

- Delhi government has launched its ambitious project **Phone-a-sahayak scheme** to deliver public services at the doorstep of residents. From driving licences to marriage certificates, Delhiites can now apply for **40 govt documents** to be delivered at their homes for a fee of Rs. 50 per service.
- The applicant would have to call 1076 and fix an appointment with a **mobile sahayak**, who will go to their home and help with filling forms, payment of fees and collection of documents.

- The mobile sahayak would then submit the documents at the government office concerned, which would post the certificate or licence once issued.
- The project has been outsourced by the Administrative Reforms Department to **VFS Global**. The number of services to be home-delivered would be **increased to 100** within three months.
- The Delhi is not the first to try and mobilize the Right to Service Act (RSA) to greater efficacy. Only recently, Manipur govt announced a single-window services centre in Imphal, to be operational from November 2018 that will also include door-to-door delivery of government services.
- The test of government's new initiative will not be the range of services it offers. Instead, it will depend on how efficiently it guides consumers past administrative red tapes that often straitjacket such application procedures.



Government Scraps Scientific Panels

Syllabus: Important aspects of governance, transparency and accountability

In News

- The government has scrapped two Scientific Advisory Committees (SAC) for the Prime Minister and the Cabinet, and replaced them with a **nine member, Prime Minister's Science, Technology and Innovation Advisory Council (PM-STIAC)**.
- Unlike in the earlier SACs, secretaries of various scientific Ministries such as education, environment and health would be special invitees to the council meetings. The PM-STIAC will be chaired by the government's Principal Scientific Advisor, **Dr. K. Vijay Raghavan**. This is so that members are allowed free discussions outside the comfort zone of officials.
- The newly constituted body is expected to act as a high level advisory body to several ministries and execute mission-oriented programmes. The office of the PSA was earlier led by **R. Chidambaram**, who played a key role in shaping India's nuclear programme.

Social Justice

Supreme Court Extends NALSA Scheme To Minors

Syllabus: Welfare schemes for vulnerable sections of the population by the Centre and States

In News

- Supreme court has extended the National Legal Services Authority's (NALSA) compensation scheme for women rape & sexual assault survivors to minor children.
- The NALSA scheme would be made applicable to minor victims from October 2 until the Centre frames compensation guidelines under the **Protection of Children from Sexual Offences (POCSO) Act**.
- The scheme provides a uniform payment of Rs. 5 lakh to a maximum Rs. 10 lakh for "loss of life" and to gang rape survivors in any part of the country. Similar provisions with varying compensations also exist for victims of victims of acid attack.

NALSA

- NALSA was formed in 1995 under the authority of the **Legal Services Authorities Act 1987**.
- It's mandate is to provide free legal services to the weaker sections, to organize Lok Adalats for amicable settlement of disputes and to spread legal literacy.
- **The Chief Justice of India is patron-in-chief** of NALSA while second senior most judge of Supreme Court of India is the **Executive-Chairman**.

Swadhar Scheme

Syllabus: Welfare schemes for vulnerable sections of the population by the Centre and States

In News

- **The Union Minister for Women & Child Development inaugurated the widows' home 'Krishna Kutir' at Vrindavan, Mathura, Uttar Pradesh. It is a special home for 1000 widows set up under Swadhar scheme.**
- It was launched in **2002** by Union Ministry of Women and Child Development with the objective of **Rehabilitation of women in difficult circumstances**.
- The scheme provides shelter, food, clothing and care to the marginalized women in need. There are more than 300 Swadhar Homes across the country under the scheme.
- Under it, funds are released to the implementing agencies (which are mainly NGOs).
- **Beneficiaries are** Widows deserted by their families and relatives; survivors of natural disasters; prisoners released from jail and without family support and victims of terrorist/extremist violence etc.

Swayangsiddha Initiative

Syllabus: Welfare schemes for vulnerable sections of the population by the Centre and States

In News

- **In an attempt to combat human trafficking, the West Bengal government** has rolled out a scheme, Swayangsiddha, in different districts of the State.
- Swayangsiddha, which means self-reliance, will be executed by the West Bengal Police.
- It is based on the **two-pronged strategy** — awareness building at the grassroots level and encouraging youth and student-led action against traffickers and child marriage in villages, including the most remote ones.
- As per NCRB data, **West Bengal has highest recorded case of trafficking among the States**.

Sexual Assault Evidence Collection Kits (SAECK)

Syllabus: Mechanisms, laws, institutions and Bodies constituted for the protection and betterment of these vulnerable sections

In News

- Police stations in India will be soon distributed "Sexual Assault Evidence Collection Kits (SAECK)" to carry out immediate investigation into sexual assault cases.
- **SAECK or 'rape investigation kits'** are designed to carry out immediate medico-legal investigation and aid in furnishing evidence in sexual assault cases.

- Using these, police can collect blood and semen samples, besides other evidence, to carry out immediate investigation into sexual assault cases.
- **The Home Ministry**, as part of a pilot project, will initially procure 3,960 rape investigation kits and 100 such kits will be given to each State and U.T.

Welfare Committees Can't Evaluate Dowry Complaints

Syllabus: Mechanisms, laws, institutions and Bodies constituted for the protection and betterment of these vulnerable sections

In News

The Supreme Court scrapped its earlier direction to set up **district-level family welfare committees (FWCs)** to look into dowry harassment complaints before making arrests.

Earlier order

- There is a growing concern that most dowry harassment cases filed under Section 498A of IPC are false and are filed to harass the husband and his family.
- According to NCRB, in 2013, out of 4.66 lakh dowry harassment cases 38,165 cases ended up in acquittal and only 7,258 convictions.
- In this background, in 2017, the Supreme court ordered to setup **family welfare committees** in the districts. The FWCs were to be drawn from para-legal volunteers, social workers, wives of working officers or other willing citizens.
- Every complaint under Section 498A was to be looked into by the FWC and **no arrests could be made till the report of the committee was received. The police could register an FIR only after the committee cleared the complaint as valid.**
- The directive was criticized for curtailing the rights of the women who are harassed under Section 498A of the IPC.

Current Judgement

- Supreme Court has restored to the police their power to immediately register an FIR and act on a dowry harassment complaint filed by a married woman.
- However, the officers investigating the cases of offences under Section 498-A IPC should be **imparted rigorous training w.r.t.** so as to avoid arresting the innocents.
- The bench found the earlier order **ventured into the legislative domain.**

Portals to Strengthen Women Safety Launched

Syllabus: Mechanisms, laws, institutions and Bodies constituted for the protection and betterment of these vulnerable sections

In News

- Union Home Minister launched two separate portals – CCPWC and NDSO – to strengthen Women & Children Safety.
- The portal “**cybercrime.gov.in**” will help in checking objectionable online content.
- The portal will receive complaints from citizens on **objectionable online content (related to child pornography, sexually explicit material such as rape and gang rape)** to assist in the investigation by the State Police.

- The National Crime Records Bureau (NCRB) will proactively identify such objectionable content and take up with intermediaries for its removal. For this **NCRB has already been notified as the Government of India agency to issue notices under Section 79(3)b of IT Act.**
- The portal is user friendly as it enables complainants in reporting cases without disclosing their identity.

National Database on Sexual Offenders (NDSO)

- It is a central **database of “sexual offenders”** in the country which will assist in effectively tracking and investigating cases of sexual offences.
- It will be maintained by the **National Crime Records Bureau (NCRB)** and is accessible only to the law enforcement agencies (like state police) for investigation and monitoring purpose.
- The database will include offenders convicted under charges of **rape, gang rape, POCSO and eve teasing.** At present the database contains 4.4 lakh entries and the State Police have been requested to update the database from 2005 onwards.
- The database includes name, address, photograph and fingerprint details for each entry without compromising any individual’s privacy.
- The data will be stored for **(a) 15 years** for those posing low danger, **(b) 25 years** for those posing moderate danger and **(c) lifetime** for habitual offenders involved in violent crimes like gang-rapes.
- **U.S., U.K., Canada, Australia, South Africa and Trinidad & Tobago** are some of the other countries having similar databases.

Talaq-E-Biddat

Syllabus: Mechanisms, laws, institutions and Bodies constituted for the protection and betterment of these vulnerable sections

In News

- Union Cabinet approved an ordinance making talaq-e-biddat or instant triple talaq a punishable offence with a maximum three-year jail term.
- According to government, there was a compelling necessity to bring the ordinance as the practice continued unabated in spite of the **Supreme Court having annulled it in August 2017 and the Lok Sabha having passed a Bill that is pending in the Rajya Sabha.**
- 201 cases had been reported from across the country after the Supreme Court banned triple talaq last year. Since January 2017, 430 cases had been reported until September 13, 2018.

For details, please read Triple Talaq Bill discussed in CA of August 2018.

Live-in Couples Can Adopt Children

Syllabus: Mechanisms, laws, institutions and Bodies constituted for the protection and betterment of these vulnerable sections

In News

- The Child Adoption Regulatory Authority (CARA), has allowed Individuals in a live-in relationship to once again adopt children from and within India.
- In May 2018, CARA issued a circular barring applicant in a live-in relationship from adopting a child on the ground that a live-in relationship cannot be considered as stable family.

- However, now it has decided to withdraw the circular and applications from prospective adoptive parents will be examined on a case-by-case basis.

Child Adoption Regulatory Authority (CARA)

- CARA is the **nodal body for adoption of Indian children**. It regulates in-country and inter-country adoptions (*in accordance with the provisions of **The Hague Convention on Inter-Country Adoption, 1993***)
- It is an autonomous body of the Union Ministry of Women and Child Development.

Inter-Generational Mobility

Syllabus: Mechanisms, laws, institutions and Bodies constituted for the protection and betterment of these vulnerable sections

In News

- According to a new study on the Inter-Generational Mobility in India, Muslims are now the least upwardly mobile group in India.
- The study has been authored by Sam Asher (World Bank), Paul Novosad (Dartmouth College) and Charlie Rafkin (MIT).
- It **analyses data from the India Human Development Survey (for education distribution) and the Socio-economic and Caste Census (geographic)**.

Key Findings on Inter-Generational Mobility

- **Geographical variation:**
 - Upward mobility is consistently highest in Tamil Nadu and Kerala and also noticeably high in the hilly states of the North.
 - Bihar and the Northeast are among the lowest mobility parts of India.
- **Community Variation:**
 - **Muslims are now the least upwardly mobile group in India.**
 - Schedule Castes (SCs) born in the bottom half of the parent distribution in the 1950s could expect to obtain between the 30th and 34th percentile; the comparable group in the 1980s obtains the 38th percentile.
 - Upward mobility for STs rises from 25-29 to 32 over the same period.
- Also, **a child's chances of moving up on education ranks**, relative to his/her parents are basically **unchanged since before liberalisation**.

Section 377 Struck Down

Syllabus: Mechanisms, laws, institutions and Bodies constituted for the protection and betterment of these vulnerable sections

In News

- The Supreme Court, in **Navtej Johar vs Union of India**, has **decriminalised same sex relations between consenting adults** in private under Section 377.
- The court, however, held that the **“unnatural” sexual acts like bestiality and sexual act without consent continues to be a crime under Section 377**.

- **Section 377 of IPC** defines unnatural sexual offences. According to it, “Whoever voluntarily has carnal intercourse against the order of nature with any man, woman or animal, shall be imprisoned and shall also be liable to fine.

Background

- The Delhi High Court, in **Naz Foundation (2009)**, pronounced the decriminalisation of sex between consenting adults in private.
- However, the Supreme Court in **Suresh Kumar Koushal vs Naz Foundation (2013)** overruled the Delhi HC verdict. The judges said changing social mores couldn't be grounds for the courts to try and amend laws and best be left to Parliament.
- In the intervening years, two landmark judgments took forward the law on sexual orientation and privacy and formed the jurisprudential basis for the latest judgment.
- In **National Legal Services Authority (2014)**, a case concerning rights of transgender people, the court ruled that there could be no discrimination on the basis of sexual orientation & gender identity.
- In **Justice K.S. Puttaswamy (2017)**, or the **privacy case**, a nine-judge Bench ruled that sexual orientation is a facet of privacy, and constitutionally protected.

Court's Observations

- The LGBT communities possess the same human, fundamental and constitutional rights as other citizens do. It called the law “Macaulay's legacy,” which continued for 68 years despite a liberal Constitution because of the manifest lethargy of the lawmakers.
- Fundamental Rights under **Articles 14, 15, 19 and 21** of the Constitution have all been transgressed without any legitimate state rationale to uphold such a provision.
- State has no business to intrude into personal matters like the choice of a partner, the desire for personal intimacy and the yearning to find love.
- According to scientific research, the behaviour is as much ingrained, inherent and innate as heterosexuality.
- The bench observed that the guarantee of equality at its heart is the guarantee of equal citizenship. Section 377 violated this guarantee as it singles out people, by their private choices and marks them as less than citizens — or less than human.
- The section **encoded a stereotypical morality and perpetuates a culture based on homophobic attitudes.**
- **Constitutional rights cannot be held hostage to majoritarian consensus** and popular morality and the natural identity of an individual should be treated to be absolutely essential to his being.
- The five-judge Constitution Bench also introduced the **Doctrine of Progressive Realisation of Rights** to guard against future attempts to reintroduce that part of Section 377 which had made the entire LGBTQ community unconvicted felons without the basic rights of a citizen for over a century. Using this legal doctrine, SC has held that once a right is recognized and given to the public, it cannot be taken back by the state at a later date (**doctrine of non-retrogression**). Thus, once a step is taken forward, there is no going back. This doctrine of progressive realisation of rights mandates that the laws of a country should be in consonance with its modern ethos, it should be sensible and easy to apply.
- **International experience:** The judgment refers to the 2017 annual report of the International Lesbian, Gay, Bisexual, Trans and Intersex Association on how 124 countries have stopped

penalizing homosexuality, 24 countries allow same sex couples to marry and 28 countries recognize partnerships between same sex couples.

Challenges

- **Require array of amendments:** The judgement has thrown open the possibility of the LGBT community now staking its claim to other constitutional rights such as those to property, employment and other personal rights such as those to adopt, marry and have a family. But these rights will not automatically to the community but requires host of changes in law that are skewed against them.
- The judgement has only decriminalised homosexuality, however there are other legal impediments which prevent same sex partners from living an enabling life.
- Marriages between same sex partners are still not recognised in the country. Gay couples are prohibited from adopting a child.
- A same sex partner cannot inherit the property left behind by his/her partner unless a will is drawn in favour of that person.
- Legislators may frame laws and courts may deliver judgments, but **social attitudes towards homosexuality will not change overnight.**

Conclusion And Way Ahead

- The dilution of Section 377 is a big step towards a new inclusive India. It is common knowledge that court judgments or laws cannot remove social prejudices on their own. However, this verdict will certainly help in removing the burden on sexual minorities. It will usher in **choice jurisprudence** in India; religious minorities will be well within their rights to assert their choices.
- Now the government needs to give wide publicity to the judgment and conduct **sensitisation and awareness training** for government officials and in particular police officials in the light of observations contained in the judgment.

International Day Of Sign Languages

Syllabus: Mechanisms, laws, institutions and Bodies constituted for the protection and betterment of these vulnerable sections

In News

- “International Day of Sign Languages” was celebrated by Indian Sign Language Research and Training Centre (ISLRTC).
- International Day of Sign Languages is celebrated annually across the world on **23 September** every year along with International Week of the Deaf.
- It is celebrated on 23 September as **WFD was established on this date in 1951.**
- This year’s theme is **“With Sign Language, everyone is Included!”**

Indian Sign Language Research and Training Centre (ISLRTC)

- ISLRTC is an **autonomous organization** under the administrative control of **Department of Empowerment of Persons with Disabilities (Divyangjan) Ministry of Social Justice & Empowerment, Government of India.**
- It was established in **2015** in accordance with the provisions of **Societies Registration Act, 1860.**

World Federation of the Deaf (WFD)

- **World Federation of the Deaf (WFD)** is an international **non-governmental organization** that aims to promote the Human Rights of Deaf people worldwide, by working closely with the United Nations (with which it has consultative status)
- It was established in **1951** and is based in **Helsinki, Finland**.

Trust Status For Bharat Ke Veer

Syllabus: Mechanisms, laws, institutions and Bodies constituted for the protection and betterment of these vulnerable sections

In News

- Union Government has been granted the status of a **registered trust to ‘Bharat ke Veer’ by making it exempt from income tax under form 80 (g)**,
- Bharat Ke Veer portal was launched by the **Union Home Ministry in 2017**.
- It facilitates **online donation**
 - **directly to the families of Central Armed Police Force (CAPF) martyrs** who sacrificed their lives for the country in line of duty from January 1, 2016
 - **or towards the “Bharat Ke Veer” corpus** which would be used to decide to disburse the fund equitably to the Braveheart’s family on need basis.
- To ensure maximum coverage, a cap of 15 lakh rupees is imposed, so that they can choose to divert part of the donation to another Braveheart account or to the **“Bharat Ke Veer” corpus**.

Child Mortality Estimates

Syllabus: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

In News

- Acc. to the new mortality estimates released by UNICEF, a child under 15 dies every 5 seconds around the world.
- This data reflect the progress as now fewer children are dying each year worldwide. The number of children dying under-5 has fallen dramatically from 12.6 million in 1990 to 5.4 million in 2017.
- The number of deaths in children aged between 5 to 14 years dropped from 1.7 million to under a million in the same period.

Concerns

- Under-5 mortality rates among children in rural areas are 50% higher than among children in urban areas.
- **Those born to uneducated mothers are more than twice as likely to die before turning five than those born to mothers with a secondary or higher education.**
- Globally, in 2017, **half of all deaths under five years of age took place in sub-Saharan Africa**, and another 30% in Southern Asia.
- An estimated 6.3 million children under 15 years of age died in 2017, or 1 every 5 seconds, mostly of preventable causes.

- For children's, the most risky period of life is the first month. In 2017, 2.5 million newborns died in their first month.
- **Most children under 5 die due to preventable causes** (such as diarrhoea, birth complications, etc). **By comparison, children between 5 and 14 years of age die mainly because of injuries** especially from drowning and road traffic.

India State-Level Disease Burden Initiative

Syllabus: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

In News

- According to the 'India State-level Disease Burden Initiative' report released, Indians have registered a 50% increase in the prevalence of ischemic heart disease and stroke over the period from 1990 to 2016.
- The report is a joint initiative of the Indian Council of Medical Research (ICMR), the Public Health Foundation of India (PHFI) and the Institute for Health Metrics and Evaluation (IHME) in collaboration with the Ministry of Health and Family Welfare.
- It is a comprehensive analysis of several major **non-communicable diseases (NCDs)**.

Key Findings During The Period of 1990 to 2016:

- Indians have registered a 50% increase in the prevalence of ischemic heart disease and stroke.
- Number of *diabetes* cases have climbed up from 26 million to 65 million.
- Number of people ailing from *chronic obstructive lung disease* went up from 28 million to 55 million
- The proportional contribution of **cancers** to the total loss of health in India has doubled from 1990 to 2016, but the incidence of different types of cancers varies widely between the States.
- **State-wise Disease Burden**
 - **Punjab** has been ranked at the top for the burden of ischemic heart disease, followed by Tamil Nadu, and vice-versa for diabetes.
 - **West Bengal** topped with the largest number of stroke cases followed by Odisha.
 - **Kerala** was ranked at the top for the burden of cancer, followed by Assam.
 - **Being overweight** was found to be a major risk factor for diabetes doubled in every State of India from 1990 to 2016.

Suicide

Syllabus: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

In News

- According to the data released by the India State-level Disease Burden Initiative, Suicide is the leading cause of death in the 15-39 years age group in India.
- **Suicide was the leading cause of death in India in 2016 for those aged 15-39 years; 71.2% of the suicide deaths among women and 57.7% among men were in this age group.**
- **The suicide rate among the elderly has increased** over the past quarter century.

- **Suicide Death Rate (SDR) in India is higher especially for women.** India's proportional contribution to global suicide deaths is high and increasing. **37% of such deaths among women globally occur in India.**
- The highest age-specific SDR among women in 2016 was for ages 15-29 years.
- **India's contribution to global suicide deaths increased** from 25.3% in 1990 to 36.6% in 2016 among women, and from 18.7% to 24.3% among men.
- **Andhra Pradesh, Karnataka, Tamil Nadu, and Telangana,** consistently had a higher SDR for both men and women.

Government Bans Fixed Dose Combination (FDC) Drugs

Syllabus: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

In News

- The central government has banned 328 combination drugs in the background of growing antibiotic resistance due to the misuse of medicines.
- **Fixed Dose Combination (FDC) drugs** includes two or more active pharmaceutical ingredients (APIs) combined in a single dosage form, which is manufactured and distributed in fixed doses.
- **Common examples of FDCs:** Cough syrups Phensedyl and Corex, Vicks Action 500.

Advantages of FDCs

- Burden of keeping track of several medications, understanding their various instructions, etc. is reduced which improves patient compliance and therefore improves treatment outcomes.
- The FDCs are more economic than single ingredient drugs.
- The manufacturing cost is quite low as compared to the cost of producing separate products
- Then there is Simpler logistics of distribution.

Disadvantages of FDCs

- FDCs are used to **circumvent price control.** Companies prefer to market FDCs that are not under price control rather than single-ingredient drugs under price control.
- If an adverse drug reaction occurs from using an FDC, it may be difficult to identify the active ingredient responsible for causing the reaction.
- If the drugs combination is not appropriate, then it can lead to some patients getting too much of an ingredient and others getting too little. FDCs *"limit clinicians' ability to customize dosing regimens."*

Draft Charter of Patients' Rights

Syllabus: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

In News

- A draft Charter of Patients' Rights has been released by the Union Health Ministry which proposes to grant patients the right to emergency medical care and informed consent.
- The draft, prepared by the National Human Rights Commission (NHRC), has been put up on the Health Ministry's website for comments and suggestions.

- **Patients will have the right to:**
 - Emergency medical care,
 - informed consent,
 - non-discrimination,
 - seek a second opinion and
 - choose alternative treatment options.
- **Patient's responsibilities:** Patients should also follow their responsibilities so that hospitals and doctors can perform their work satisfactorily. Some of these are
 - Providing all required health related information to their doctor,
 - Respecting the dignity of the doctor and other hospital staff; not resorting to violence in any form whatever the grievance may be
- **Implementation mechanism:** The Ministry plans to implement the Charter of Patients' Rights through State governments for provision of proper health care by clinical establishments.
- **Significance:** Although some States have adopted the national Clinical Establishments Act 2010 and others have enacted their own laws to regulate hospitals, there is no consolidated document on patients' rights that can be followed by all States uniformly.

Draft Rules for E Pharmacies

Syllabus: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

In News

The Union Ministry of Health has published a set of **draft rules on the sale of drugs by e-pharmacies** with an aim to regulate the online medicines market and provide patients accessibility to genuine drugs from authentic online portals.

Draft Rules

- E-pharmacies have to be registered with the **Central Drugs Standard Control Organisation (CDSO)** and obtain a trade licence to exhibit, stock and sell drugs.
- e-pharmacies also have to **obtain a license from any one State** government, post which they will be eligible to sell drugs online all over the country.
- E-pharmacies are allowed to **sell the medicines only against a prescription**, a copy of which they will have to maintain.
- Sale of **psychotropic & habit forming drugs and narcotics** have been prohibited.
- No e-pharmacy shall advertise any drug on radio or television or internet or print or any other media for any purpose.
- In case of drugs being sub-standard, the buyer can make **complaints to the State Drugs Controller** and seek relief under the Consumer Protection Act, 1986.
- It would be binding on the e-pharmacies to **deliver the drugs in the specific time** that will be told to the patient during the time of purchase.
- **Regular inspections** will be conducted every two years on the premises of operation by the central licensing authority.

- To maintain data privacy, the details of patient shall be kept confidential and shall not be disclosed to any person other than the government.

Significance

- As per the estimates, the total e-pharma industry is less than 0.5% of the retail pharmacy landscape currently, but is growing at more than 100% rate.
- After the rules are finalised, people will be able to get **genuine drugs** through these online pharmacies. As the e-pharmacies procure directly from the manufacturers, the **price may come down by 20 to 30 per cent**, thus benefiting the patients.

All India Institute Of Ayurveda (AIIA)

Syllabus: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

In News

Minister of State for AYUSH Shri Shripad Naik laid the foundation stone of second phase of All India Institute of Ayurveda (AIIA).

About

- **Parent ministry:** AIIA is an autonomous institute under the **Ministry of AYUSH**.
- It is the first medical institute under Ministry of AYUSH to hold the status of **NABH accreditation**.
- **Functions:** It is setup along the lines of AIIMS. Its key functions are –
 - To bring synergy between the traditional wisdom of Ayurveda and modern diagnostic tools and technology.
 - The hospital will provide outpatient services and free medicines.
 - It will also house a panchakarma clinic, kriya kalpa, diabetic retinopathy clinic, kshara evum anushastra karma and an infertility clinic.
- **Location:** New Delhi.
- **Establishment:** The Institute was dedicated to the Nation by PM Modi in October, 2017.
- **Some of the salient features of Phase II construction are** AYUSH Sports Complex, Pharmacy Unit, Central Library, Panchakarma Wing, International Guest House, Residential Complex, Boy's and girl's hostel etc.

Indian Medical Council (Amendment) Ordinance, 2018

Syllabus: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

In News

Indian Medical Council (Amendment) Ordinance, 2018 was promulgated which dissolves the Medical Council of India (MCI) and replaces it with a seven-member Board of Governors.

Salient Features

- **Objective** of the ordinance is to enhance governance and quality of medical education.
- The ordinance dissolves the Medical Council of India (MCI) and replacing it with a seven-member **Board of Governors (BoG) led by NITI Aayog Member Dr. V.K. Paul**. The BoG will continue to perform till a council is constituted.

- The National Medical Commission (NMC) Bill, 2017 is still pending in parliament.

National Medical Commission (NMC) Bill, 2017

- The bill would replace the existing apex medical education regulator Medical Council of India (MCI) with a new body named National Medical Commission.
- **Structure of commission:** The commission will have government nominated chairman and members. A search committee under the Cabinet Secretary will select the board members. There will be five elected and 12 ex-officio members in the commission.
- It provides for the constitution of Four **autonomous boards** under the National Medical Commission which would be entrusted with conducting undergraduate and postgraduate education, assessment and accreditation of medical institutions and registration of practitioners.
- To get practicing licences all medical graduates will have to clear a **common entrance exam and licentiate exam**.
- No permission would be required to add new seats or to start postgraduate courses.
- The deterrence for non-compliance with maintenance of standards is in terms of *monetary penalty*.

Need of Ordinance

- The Centre took the ordinance route as it failed to get the National Medical Commission Bill passed in the Monsoon Session of Parliament despite it being listed.
- The government is of the view that the country's march to achieving the Universal Health Coverage is constrained on account of slow pace of commensurate reforms in medical education.

Alcohol Addiction

Syllabus: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

In News

According to a report by the World Health Organisation (WHO), **per capita alcohol consumption in India has more than doubled from 2005 to 2016.**

Key Findings

- **Total alcohol per capita consumption has increased globally** after a relatively stable phase between 2000 and 2005.
- The per capita liquor consumption in India increased from 2.4 litres in 2005 to 5.7 litres in 2016 with 4.2 litres being consumed by men and 1.5 litre by women.
- The total alcohol per capita consumption (15+ years) is expected to **increase in half of the WHO regions by 2025** and the **highest increase is expected in the South-East Asia Region**.
- An increase of 2.2 litres is expected in India alone which represents a large proportion of the total population in this region.
- Globally more than a **quarter (26.5%) of all 15-19-year-olds i.e. adolescents** are current drinkers.
- In 2016, the harmful use of alcohol resulted in some **three million deaths (5.3% of all deaths) worldwide. Mortality resulting from alcohol consumption is higher than that caused by diseases such as tuberculosis, HIV/AIDS and diabetes.**

New Genetic Disorder

Syllabus: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

In News

In a first, researchers in the U.S. have identified in a human patient a genetic disorder only previously described in animal models.

About

- The disorder is caused by mutations in a gene known as **ornithine decarboxylase 1 (ODC1)** and is defined by a number of clinical features including large birth weight, enlarged head size, hair loss, and developmental delays.
- *The **ornithine decarboxylase 1 (ODC1)** gene plays an important role in a number of physiological and cell developmental processes including embryo and organ development.*
- The disorder has **still to be named** and its long-term effects, which include impacts on the neurological system, are not completely known.
- The disorder was first described by researchers in a *transgenic mouse model* more than 20 years ago.

Kayakalp Scheme

Syllabus: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

In News

- Encouraged by the achievements of Kayakalp Scheme, NABH has decided to consider assessment of healthcare facilities in the private sector on the lines of parameters of Kayakalp Scheme.
- Kayakalp awards were launched by Union Health Ministry in 2015 to **felicitate Public Health Facilities (PHCs) for maintaining high standards of sanitation and hygiene.**
- **Objective is** to inculcate culture of cleanliness for gaining the trust and confidence of community in these facilities.
- The Union Health Ministry grants the awards through the **National Health Mission.**

National Accreditation Board for Hospitals & Healthcare Providers (NABH)

- **NABH** is a constituent board of **Quality Council of India Certification**, set up to establish and operate accreditation programme for healthcare organizations.
- NABH was established in year **2006.**

Hepatitis E Virus

Syllabus: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

In News

- The World's first human case of Rat Hepatitis E has been detected in Hong Kong.
- Hepatitis E is a liver disease caused by the **hepatitis E virus (HEV): a small virus, with a positive-sense, single-stranded ribonucleic acid (RNA) genome.**
- **The virus has at least 4 different types:** genotypes 1, 2, 3 and 4.

- **Genotypes 1 and 2** have been found only in humans.
- **Genotype 3 and 4** viruses circulate in several animals (including pigs and deer) without causing any disease, and occasionally infect humans.
- The virus is shed in the stools of infected persons, and enters the human body through the intestine. It is transmitted mainly through contaminated drinking water.
- Usually the infection is self-limiting and resolves within 2–6 weeks. Occasionally a serious disease, known as **fulminant hepatitis (acute liver failure) develops**, and a proportion of people with this disease can die.

Recent Discovery

- According to University of Hong Kong (HKU) researchers, **a Hong Kong man has developed the world's first ever human case of the rat version of the hepatitis E virus.**
- There had previously been no evidence that the rat HEV disease can infect humans to cause clinical infection. This discovery has “major public health significance”.

Nikshay 2.0

Syllabus: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

In News

- Union Health Ministry launched Nikshay Version 2.0, the web-based application of RNTCP. It is an upgraded version of earlier application with better user interface and data structures.
- **Nikshay Aushadi Portal** is a web-based application for the management of Anti-Tuberculosis (TB) Drugs and other commodities under **Revised National Tuberculosis Control Program (RNTCP)**.
- It has been developed by **Central TB Division**.

Revised National Tuberculosis Control Program (RNTCP)

- **RNTCP** was launched as a national program in **1997**.
- It is based on *DOTS (Directly Observed Treatment, Short Course) strategy* recommended by WHO. Its vision is to achieve a "TB free India" by achieving Universal Access to TB control services.

Zika Virus

Syllabus: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

In News

- A woman in Jaipur tested positive for mosquito-borne Zika virus, making it first such case in Rajasthan.
- **Transmission:** Zika virus is primarily transmitted to people through the bite of an infected mosquito from the *Aedes* genus, mainly ***Aedes aegypti*** in tropical regions. Sexual transmission of Zika virus is also possible.
- **Symptom:** Symptoms are similar to dengue and include fever, skin rashes, conjunctivitis, muscle and joint pain, malaise, and headache. These symptoms are usually mild and last for 2-7 days.
- **Complications of Zika virus disease:** There is scientific consensus that Zika virus is a cause of **microcephaly and Guillain-Barré syndrome**. Links to other neurological complications are also being investigated.

Microcephaly

- It is a condition where a baby is born with a small head or the head stops growing after birth.
- **Causes:** Infections during pregnancy: rubella, HIV and Zika; genetic abnormalities such as Down syndrome; exposure to toxic chemicals like alcohol intake & smoking etc.

Guillain-Barre syndrome

- In **Guillain-Barre syndrome**, the body's immune system attacks part of the peripheral nervous system. This can result in muscle weakness and loss of sensation in the legs and/or arms. People of all ages can be affected, but it is more common in **adults and in males**.
- **Causes:** Guillain-Barre syndrome is often preceded by a bacterial or viral infection.

Sputum Sample Transportation Project

Syllabus: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

In News

- A pilot project for utilising services of the postal department for transport of sputum specimen for diagnosis of tuberculosis in Delhi has been launched recently.
- A significant number of TB patients can't get their sputum – *a mixture of saliva and mucus coughed up from the respiratory tract* – tested due to non-availability of specimen transport mechanisms.
- A proper transport mechanism for collected specimen will enable appropriate management of tuberculosis patients and reduced disease transmission.
- If the pilot project is successful then it will be adopted across the country.

Severe Acute Malnutrition (SAM)

Syllabus: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

In News

- The National Technical Board on Nutrition (NTBN) has approved country's first-ever guidelines – proposed by Ministry of women and child development (WCD) – for SAM.
- The government had, till now, only put in place guidelines for the hospitalisation of severely wasted children who develop medical complications.

Severe Acute Malnutrition (SAM)

- It is the most extreme and visible form of undernutrition and is a major cause of death in children under 5.
- Children suffering from Severe Acute Malnutrition (SAM) have:
 - very low weight-for-height (below-3z scores of the WHO median growth standard),
 - visible wasting,
 - nutritional oedema or mid-upper arm circumference of less than 115 millimetres (in children 6–59 months).
- Across the globe, an estimated 16 million children under the age of 5 are affected by severe acute malnutrition. About two thirds of these children live in Asia and almost one third live in Africa.

Recent Guidelines

- Anganwadi workers and auxiliary nurse midwives (ANMs) have a role to identify severely wasted children, segregating those with oedema or medical complications and sending them to the **nearest health facility or nutrition rehabilitation centres**.
- The remaining children are enrolled into “*community-based management*”, which includes provision of nutrition, continuous monitoring of growth as well as imparting of nutrition & health education.
- SAM children must be **fed freshly cooked food prepared from locally available** cereals, pulses and vegetables, and **distributed by anganwadi centres**.
- Government has also **revised the method to be used to measure wasting** and advised calculating weight based on the height of children instead of the mid-upper arm circumference.
- *According to the National Family Health Survey-4, 7.5% or 8 million children aged under five years have severe wasting.*

Middle East Respiratory Syndrome(MERS)

Syllabus: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

In News

- An Emirates flight from Dubai was held in quarantine in New York as it was suspected that its passengers have contracted Middle East Respiratory Syndrome (MERS). Although it was later found that this was not the case.
- Middle East respiratory syndrome (MERS) is a **viral respiratory disease**.
- **Symptoms:** Fever, cough and shortness of breath. Around 35% of reported patients with MERS have died.
- **Cause:**
 - It is caused by a **novel coronavirus** (Middle East respiratory syndrome coronavirus, or MERS-CoV) that was first identified in Saudi Arabia in 2012.
 - Coronaviruses are a large family of viruses that can cause diseases ranging from the common cold to Severe Acute Respiratory Syndrome (SARS).
- **Transmission**
 - **Non-human to human transmission:** MERS-CoV is a zoonotic virus, which means it is a virus that is transmitted between animals and people. **Dromedary camels** are a major reservoir host for MERS-CoV and an animal source of infection in humans.
 - **Human-to-human transmission:** The virus does not pass easily from person to person unless there is close contact, such as providing unprotected care to an infected patient.
- **Prevention and Treatment**
 - No vaccine or specific treatment is currently available.
 - As a general precaution, anyone visiting farms or places where dromedary camels are present should practice regular hand washing and avoid contact with sick animals.
- **Affected Regions:** Health care associated outbreaks have occurred in several countries, with the largest outbreaks seen in Saudi Arabia, United Arab Emirates, and the Republic of Korea.

HIV Estimations 2017

Syllabus: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

In News

- **National AIDS Control Organisation (NACO) released the report HIV Estimations 2017.**
- NACO undertakes HIV estimations biennially in collaboration with the Indian Council of Medical Research (ICMR) - National Institute of Medical Statistics (NIMS).
- The first round of HIV estimation in India was done in 1998, while the last round was done in 2015. The HIV Estimations 2017 is the 14th round in the series of HIV Estimations under National AIDS Control Programme (NACP).

Key Findings of The Report

- India had around **21 lakh people living with HIV (PLHIV) with adult prevalence of 0.22%.**
- Around **87000 new HIV infections** and **69000 AIDS related deaths** happened in 2017.
- **22,675 mothers needed Antiretroviral Therapy (ART)** for prevention of mother to child transmission of HIV.
- Overall, the impact of the NACP has been significant with more than **80% decline in estimated new infection** from peak of epidemic in 1995. Similarly, **estimated AIDS related death declined by 71% since its peak in 2005.**
- But there is no place for complacency as country move forward on ambitious goal of attaining the 'End of AIDS' by 2030.

HIV/AIDS Act, 2017

Syllabus: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

In News

- The government has notified the Human Immunodeficiency Virus and Acquired Immune Deficiency Syndrome (Prevention and Control) Act, 2017 and it came into force on the 10th September 2018.
- It empowers a person living with HIV to **report discrimination** meted out against them in fields of employment, health care services, educational services, public facilities, property rights, holding public office, and insurance.
- It **penalises "propagation of hatred" against the protected person.** Violator could be punished with a minimum jail term of 3 months to a maximum of 2 years and can be fined up to Rs 100000.
- It **makes Anti-Retroviral Treatment (ART) a legal right** for all HIV/AIDS patients. It has also adopted "**test and treat**" policy which means any person testing positive will be entitled for free treatment by the state and central government.
- It provides for **confidentiality of HIV-related information** and makes it necessary to get **informed consent for undertaking** HIV tests, medical treatment and research.
- It is mandatory for state governments to **appoint an Ombudsman** to inquire into complaints related to the violation of the Act and the provision of health care services. Failure to comply with any order given by the Ombudsman could lead to a fine a maximum of Rs 10,000.

- It safeguards the property rights of HIV positive people. Every HIV infected person below the age of 18 years has the right to reside in a shared household and enjoy the facilities of the household.

Leptospirosis

Syllabus: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

In News

- **Cases of leptospirosis have been reported in Kerala in the aftermath of Flooding of the state.**
- It is an infectious disease **caused by bacteria** belonging to the genus *Leptospira*.
- **Transmission:**
 - It can be transmitted to humans through **cuts and abrasions of the skin, or through the mucous membranes of the eyes, nose and mouth with water contaminated with the urine of infected animals.**
 - Although, all wild and domestic mammals can harbour the bacteria that cause leptospirosis, but **Rodents are the primary source of infection to human beings.**
 - **Human-to-human transmission occurs only very rarely.**
- **Regions of occurrence:** Leptospirosis occurs worldwide, but is **most prevalent in tropical and subtropical regions.** Outbreaks of leptospirosis are **common when flooding occurs**, because of exposure to contaminated water.
- **Main occupational groups at risk:** Agricultural workers; pet shop workers; meat handlers; sewer workers; survivors of natural disasters (e.g., flooding); people engaging in swimming, etc.
- **Signs and symptoms:** The incubation period of leptospirosis is usually 5–14 days, with symptoms varying from a mild 'flu'-like illness to a serious and sometimes fatal disease. This bacterial disease that affects both humans and animals.
- **Treatment:** Leptospirosis can be treated with antibiotics.

Staphylococcus Epidermidis

Syllabus: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

In News

- According to Australian scientists, *Staphylococcus epidermidis*, a superbug resistant to all known antibiotics is spreading undetected through hospital wards across the world.
- *Staphylococcus epidermidis* is a **bacterium** related to the better-known and deadlier **MRSA superbug**. It's found naturally on **human skin**.
- Patients with compromised immune systems are at risk of developing infection. It **commonly infects the elderly or patients who have had prosthetic materials implanted**, such as catheters and joint replacements. It can **cause 'severe' infections or even death.**

Superbugs

Antimicrobial resistance occurs when microorganisms (bacteria, viruses) change in ways that make the antibiotics to cure the infection caused by them ineffective. When the microorganisms become resistant to most antimicrobials they are often referred to as **"superbugs"**.

Antibiotics Resistance

- Antibiotics, also known as antimicrobial drugs, are drugs that fight infections caused by bacteria. They do so either by killing the bacteria or making it difficult for the bacteria to grow and multiply. Antibiotics can only treat certain bacterial infections and do not have any effect on viruses.
- Antibiotic resistance occurs when bacteria develops ability to defeat drugs designed to kill them.
- **Overuse and misuse of antibiotics** allows the development of antibiotic-resistant bacteria. Every time a person takes antibiotics, sensitive bacteria (bacteria that antibiotics can still attack) are killed, but resistant bacteria are left to grow and multiply. This is how repeated use of antibiotics can increase the number of drug-resistant bacteria.
- Antibiotics are not effective against viral infections like the common cold, flu, most sore throats, bronchitis, and many sinus and ear infections. Widespread use of antibiotics for these illnesses is an example of how overuse of antibiotics can promote the spread of antibiotic resistance.
- Smart and appropriate use of antibiotics is the key to controlling the spread of resistance.

Leprosy

Syllabus: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

In News

The Supreme Court has come out with a number of directions to end discrimination against leprosy-afflicted persons, while hearing a PIL, which alleged that the government was not taking enough steps to eradicate the disease.

Recent Directions by Supreme Court to Centre and States

- Conduct **Periodic National Surveys** to determine the prevalence rate.
- Formulate a comprehensive **community-based rehabilitation scheme** which shall cater to all basic needs of the leprosy-afflicted persons and their families.
- **Integrate treatment of leprosy into general health care**, which will usher in a no-isolation method in general wards and OPD services.
- Give wide publicity to the activities of the **National Leprosy Eradication Programme (NLEP)**.
- Discontinue using “frightening images” of people afflicted with leprosy in the awareness programmes and instead use “positive images of cured persons sharing their experiences of being cured of leprosy”.
- Ensure that drugs for management of leprosy and its complications are available free of cost and that they do not go out of stock in Primary Health Centres (PHCs).

Asha and Anganwadi Workers

Syllabus: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

In News

- **Prime Minister Narendra Modi announced an increase in remuneration for ASHA and Anganwadi workers.** The remuneration hike will be effective from next month.

- Under **National Rural Health Mission (NRHM)**, every village in the country is provided with a trained female community health activist **ASHA (Accredited Social Health Activist)**, selected from the village itself, to work as an interface between the community and the public health system.
- Under the **Integrated Child Development Service (ICDS) scheme**, one trained person – an **Anganwadi worker** – is allotted to a population of 1000, to focus on the health and educational needs of children aged 0-6 years.

Hike for ASHA Workers

- Routine incentives given by the Union Government to ASHA workers are being doubled.
- In addition, all ASHA workers and their helpers would be provided free insurance cover under **Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY)** and **Prime Minister Suraksha Bima Yojana (PMSBY)**.

Hike for Anganwadi Workers

- **Anganwadi workers** receiving honorarium of Rs. 3000, would now receive Rs. 4500. Similarly those receiving Rs. 2200, would now get Rs. 3500.
- Honorarium for **Anganwadi helpers** has also been increased from Rs. 1500 to Rs. 2250. Anganwadi workers and helpers using techniques such as **Common Application Software (ICDS-CAS)**, would get additional incentives ranging from Rs. 250 to Rs. 500.

Ready-To-Use Therapeutic Food (RUTF)

Syllabus: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

In News

NITI Aayog has approved the supplementary nutrition guidelines, prepared by the Ministry for Women and Child Development (WCD), while rejecting proposal made by Minister for WCD Maneka Gandhi.

RUTF / EDNF

- Ready-to-use therapeutic food (RUTF) is also referred as Energy Dense Nutritious Food (EDNF).
- It is a medical intervention to improve the nutrition intake of children suffering from **Severe Acute Malnutrition (SAM)**.
- RUTF is a packaged paste of peanuts, oil, sugar, vitamins, milk powder and mineral supplements, which contains 520-550 kilocalories of energy per 100 g. The paste is given to children aged between six months and six years.
- RUTF use is common in Africa, where the incidence of malnutrition among children is high. In India, pilot projects have been taken up in the states of Maharashtra, UP, Bihar and Jharkhand.
- **Arguments against RUTF:**
 - **Wrong food habit:** Children who are given RUTF find it too heavy to eat anything else afterward. Thus, RUTF may replace appropriate food habits.
 - **Not a one-stop solution:** RUTF is not a panacea for all forms of severe acute malnutrition in children. They also require inpatient treatment and round the-clock medical care.
 - **Need more study:** There is no largescale study of post-RUTF treated children in India so far vis-a-vis other interventions for the management of SAM.

Recent Controversy

The disagreement centred around the what kind of food and how it is to be procured under the Integrated Child Development Scheme (ICDS). Key differences between the two are –

Minister of WCD (Maneka Gandhi)	Officials of Ministry of WCD
Take home rations to be sourced from anganwadis with manufacturing facilities or through government or private undertakings.	Procurement for take-home ration should be done only from self-help groups.
Meals should be presented in the form of ready to eat mixes (RUTF) as anganwadi workers steal the money provided for procuring raw materials.	Emphasis on local procurement for hot-cooked meals instead of ready-to-eat-mixes.
Recommended soya milk .	Didn't recommended soya milk.

#LooReview Campaign

Syllabus: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

In News

- **The Ministry of Housing and Urban Affairs**, under the aegis of Swachh Bharat Mission – Urban (SBM – U), has partnered with **Google** to launch the Loo Review campaign.
- **Objective of the joint campaign – to be run throughout October and November 2018** – is to increase the awareness and ease of locating public toilets across India.
- The campaign aims to encourage **Local Guides in India** to rate and review public toilets on Google Maps, and use the hashtag #LooReview for the chance to be featured on Google Local Guides' social channels. *Local Guides are people who share reviews, photos, and knowledge on Google Maps to help people explore the world.*
- The feedback provide by local guides through the Loo Review campaign will press upon the Urban Local Bodies to take proactive steps to improve public toilet facilities across the country.”
- 500+ cities in India with more than 30,000 toilets with the name of “SBM Toilet” are currently live on Google Maps.

Swachh Vidyalaya Puraskar

Syllabus: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

In News

- The Union Minister for Human Resource Development (HRD), conferred the Swachh Vidyalaya Puraskar 2017 – 18.
- It was instituted in 2016 by Ministry of Human Resource Development.
- **Objective:** To honor schools that have done exemplary work in field of water, sanitation & hygiene.
- **Coverage:** This year, first time the awards have also been extended to private schools besides government and government aided schools.

Swachhata Hi Seva

Syllabus: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

In News

- PM Narendra Modi launched the “Swachhata Hi Seva” (“cleanliness is service”) campaign.
- The campaign has been launched to push for greater public participation in Swachh Bharat Abhiyan which was launched on October 2, 2015.
- It is being organized in run up to 4th anniversary of the Swachh Bharat Mission, on October 2nd, 2018, which will also mark the commencement of the 150th year celebrations of Mahatma Gandhi.

Atal Ranking of Institutions on Innovation Achievements

Syllabus: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

In News

- The HRD Ministry announced the Atal Ranking of Institutions on Innovation Achievements (ARIIA) to rank education institutions on innovation related indicators. It is an annual ranking of higher educational institutions based on **how they fare in terms of innovation**.

- **Indicators:** ARIIA will primarily focus on 5 main parameters:

- **Timeline:** The new ranking will be formally launched on October 15, the birth anniversary of former President APJ Abdul Kalam. The first results will be declared on February 28, 2019, which is also Science Day.

- **ARIIA and NIRF:**

- **ARIIA, which focuses on innovation**, will work parallel to the ranking of institutions captured by the annual **National Institutional Ranking Framework (NIRF) which focuses on research**.

- According to government the two differs as **Research** produces new knowledge, while ‘**innovation**’ puts that knowledge to use.

Indicators	Weightage
Budget Expenses and Revenue generated through Innovation and entrepreneurship development	20
Facilitating access to advance centres / facilities and entrepreneurial support system	10
Idea to Entrepreneurship	54
Development of Innovation Ecosystems Supported through Teaching & Learning	10
Best innovative solutions Developed In-house for Improving Governance of Your Institution	6
Total	100

Program for International Student Assessment (PISA)

Syllabus: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

In News

- **Union HRD Ministry has decided to participate in PISA– an international assessment of student ability – in 2021 after a gap of 10 years.**
- Coordinated by the **Organization for Economic Cooperation and Development (OECD)**, it is a **triennial** international survey which was first administered in **2000**.

- **Objective:** It assesses the quality of education systems across the world by evaluating students in science, mathematics and reading.
- **Criteria:**
 - The two-hour computer-based test focuses on **15-year-old students** as they have either completed or are near the end of their compulsory education in most countries.
 - PISA requires the examinees to have finished at **least six years of formal schooling**.
- **Participation in PISA:**
 - About 5.5 lakh students in 72 countries took the test in 2015.
 - However, many non-OECD members including all SAARC nations, Greenland, Argentina and the entire African continent (except Algeria and Tunisia) either don't regularly participate or haven't participated at all in PISA.
 - **Till date, India has participated only once in PISA in 2009.**

MHRD Innovation Cell (MIC)

Syllabus: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

In News

- **Union Minister for HRD launched the Innovation Cell at AICTE, New Delhi.**
- Innovation cell is an initiative of **Ministry of Human Resource Development (MHRD)**. It has been established at **All India Council for Technical Education (AICTE)** premises.
- **Objective:** To foster culture of innovation in all Higher Education Institutions across the country.
- **Mandate:** To encourage and nurture young students by exposing them to new ideas resulting in innovative activities in their formative years fostered through **Network of Innovation clubs (NIC)** in Higher Educational Institutions.
- **Composition:** The Innovation Cell would be **headed by a scientist** and would be comprised of a senior ministry official and young professionals.
- The move comes after India's ranking in the **Global Innovation Index ranking moved slightly up to 60 in 2017 from 66 in 2016, out of 127 countries.**

Gandhiji's Nai Talim

Syllabus: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

In News

- **Union Human Resource Development (HRD) Minister has released a book titled "Experiential Learning – Gandhiji's Nai Talim."**
- The book contains: (1) basic principles of Gandhiji's Nai Talim and (2) Work and Education curriculum for Schools, D.Ed, B.Ed and Faculty Development Programmes for teachers.
- This book and this project are a joint effort of **Mahatma Gandhi National Council of Rural Education (MGNCRE), State Councils of Educational Research and Training (SCERTs)** along with the universities in the country.

- **MGNCRE** was established in **1995** under the **Ministry of HRD** to advise **Universities on higher education programmes** with special focus on **Rural Development, Rural Management etc.**
- This curriculum was brought out simultaneously in **13 languages** i.e., Assamese, Tamil, Bengali, Odiya, Kannada, Malayalam, Punjabi, Marathi, Telugu, Gujarati, Urdu, Hindi and English.

Nai Talim

- Nai Talim is a principle promoted by Mahatma Gandhi which states that knowledge and work are not separate. Rather experiential learning or learning by doing is one the most effective methods.
- Acc. to him, it is a holistic approach of developing body, mind and soul (hand, head and heart), by making a productive art, craft or community engagement activity as the centre of learning.
- This was similar to what Confucius had said, **“I hear and I forget. I see and I remember. I do and I understand”**.

National Awards For Teachers

Syllabus: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

In News

- **On the occasion of Teachers’ day (5th September), Vice President of India presented National Awards for Teachers 2017 to 45 teachers from across the country.**
- The award is given as public recognition to meritorious teachers working in **primary, middle and secondary schools.**
- The award carries a **Silver Medal, Certificate and Rs. 50,000/- as award money.**

Revised Guidelines

This year, the HRD Ministry has revised the guidelines for the selection of Teachers for National Awards (2017). The features of the new guidelines are:

- All regular teachers will be eligible to apply and **no minimum years of service is required** (Earlier, only teachers with minimum 15 years of service were eligible).
- All teachers could directly apply and **nominate themselves** for the award (this feature did not exist in the earlier scheme).
- Self-nominations from teachers were **invited online** on www.mhrd.gov.in (it is for the first time that online applications have been invited for these awards).
- The number of awards has been rationalized to **45** (Earlier, number of awardees had crossed 300).
- The final selection was done by an **independent Jury**. The criteria adopted was to select those teachers who had shown innovation in their work and had added value to their school and students.

International Relations

China-Maldives Friendship Bridge

Syllabus: India and its neighbourhood- relations.

In News

- China-Maldives Friendship Bridge, the first cross-sea bridge in the Maldives, has opened for traffic.
- This bridge is an embodiment of the growing relations between the Maldives and China.

Key Highlights

- This bridge was China's flagship infrastructure project in Maldives. It is being termed as iconic project of China and Maldives cooperation towards building 21st Century Maritime Silk Road.
- It is a 2.2 km long bridge which connects Maldives capital city Male and neighbouring Hulhule island where island country's main international airport is located.
- China extended support in the form of grant and loan to Maldives for the completion of this project.
- The bridge makes it possible for locals and tourists to transfer between the two islands on land within five minutes.

Growing China – Maldives Relationship

- Maldives has entered into a Free Trade Agreement with China in December 2017. The FTA, which was signed during Maldivian President Abdulla Yameen's four-day visit to Beijing, is Maldives' first with any country.
- Maldives has become the second South Asian country after Pakistan to sign an FTA with China.
- In addition to the FTA, Maldives signed a Memorandum of Understanding that brings it into the Maritime Silk Road, a component of China's ambitious Belt and Road Initiative (BRI).
- Other pacts that were signed during Yameen's trip will deepen bilateral cooperation in an array of fields, including health, tourism, technology, and climate change.
- Until 2011, Maldives was not a priority in China's foreign policy; Beijing did not even have an embassy in Male.
- However, Sino-Maldivian relations have grown remarkably since Chinese President Xi Jinping visited the archipelago in September 2014. China's presence, especially in Maldives' tourism sector and infrastructure building, has expanded.
- It has replaced Europe as Maldives' largest source of tourists. China is funding and building mega infrastructure projects, including the Friendship Bridge linking Male to Hulhule Island and a 1,000-apartment housing project on Hulhumale, a suburb built on reclaimed land.

Significance Of Maldives

- An archipelago of around 1,200 islands in the Indian Ocean, Maldives' strategic significance stems from its proximity to international sea lanes through which two-thirds of the world's oil and half its container shipments pass.
- Maldives is also located just 700 km from India's Lakshadweep island chain and around 1,200 km from the Indian mainland.

Analysis

- The FTA and BRI will increase the Chinese role in the Maldivian economy. Although the country will lose \$4 million in import duty revenue in 2018 because of a tariff waiver on Chinese goods, it will earn higher revenue from the goods and services tax due to "trade creation" and "trade expansion" once the FTA comes into force.
- However, the FTA with China and the manner in which Yameen rushed it through parliament has come in for sharp criticism in Maldives.
- The FTA's opponents are also warning of a looming Chinese debt trap. Already over 70 percent of Maldives' current foreign debt is owed to China, on which the loan interest alone "is more than 20 percent of Maldives' budget."

- The FTA can be expected to draw Maldives deeper into Chinese debt, giving Beijing “huge leverage” over Maldives, undermining the country’s sovereignty and independence.
- This has been the experience of Sri Lanka, for instance. China extended loans totaling billions of dollars for infrastructure projects in Sri Lanka.
- With some of these projects, such as the strategically located Hambantota port and an airport nearby, not attracting enough business and unable to repay the roughly \$8 billion owed China, the cash-strapped Sri Lankan government agreed to hand over Hambantota port to China on a 99-year lease as a way of paying down some of that debt.
- Maldivian Parliament, in 2015, enacted a law that allows foreigners to own land in Maldives provided they invest over \$1 billion in a project and 70 % of the project site is on reclaimed land.
- Although this law is not China-specific and is applicable to all foreigners, China is expected to be the main beneficiary as it has the financial capacity to make large investments.
- This law could ease the way for China to buy Maldivian land to set up a base, if not a listening post on a Maldivian island.

Nepal Gets Access to Four Chinese Ports

Syllabus: India and its neighbourhood- relations.

In News

- Kathmandu and China have finalised a much-awaited transit protocol and transportation agreement that will allow Nepal to use Chinese ports for third-country trade.
- With this agreement, Nepal’s dependence on India for third-country trading would end, resulting in Nepal facilitating its trade through Chinese seas and land ports.

Key Highlights

- In the protocol agreed during 3rd senior official-level meeting held in Kathmandu, China has agreed to grant access to Nepal to its four seaports and three dry-ports for trading with third countries.
- China has agreed to let Nepal use Tianjin, Shenzhen, Lianyungang and Zhanjiang open seaports and Lanzhou, Lhasa and Xigatse dry ports for trading with third countries.
- Wedged between China and India, Nepal depends heavily on India for the supply of essential goods including fuel and the use of its ports for trade with other countries.
- Kathmandu has sought access to Chinese ports to reduce dependence on India since a prolonged blockade of its border crossings with India in 2015 and 2016 left the country short of fuel and medicine for several months.

Benefits

- Getting access to four Chinese ports in addition to two ports in India will boost the connectivity of Nepal. It will also help in generating more trade activities in the region.
- Nepali cargo from Japan, South Korea and other north Asian countries could be routed through China which would cut shipping time and costs.
- Overland trade is now routed mainly through the East Indian port of Kolkata which takes up to three months. New Delhi has also opened the southern port at Vishakhapatnam for Nepali trade.
- However, traders say the plan to connect the country with China could face issues due to a lack of proper roads and customs infrastructure on the Nepalese side of the border.

- The nearest Chinese port is also located more than 2,600 km from its border.
- China is also making fast inroads into Nepal with aid and development. The two countries are also in talks for building a railway link into Nepal, constructing an electric transmission line and are conducting a feasibility study for a free trade agreement.

Transit Negotiations with India

- Nepal's negotiations with India for transit rights have had mixed results. The 1978 treaty of trade and transit expired on March 23, 1989 due to differences over political and security issues as well as Nepal's demand for a separate transit treaty in accordance with the UN charter.
- As a stop gap measure, India allotted Nepal four out of the 21 until then used trading posts for both transit (Jogbani and Raxaul) and bilateral trade purposes.
- It may be noted that Nepal is entitled to one transit route as per international law. This restriction of the number of posts adversely affected, transit trade and consequently the economy.
- In December 1991, the two countries signed two separate transit and trade agreements. But Nepal continued to demand more and better transit facilities in addition to the Kolkata sea port.
- Accordingly, the treaty was revised in December 2013.
- Again at the Nepal-India Inter-Governmental Committee (ICG) meeting in Kathmandu in April 2018, the two countries discussed how to improve both bilateral and transit trade.
- Despite periodic revision and updating of the treaty that accommodated Nepali demands, it has remained a major electoral issue in Nepal and one of the contentious issues in India-Nepal bilateral relations.

Mt Everest Friendship Exercise

- Just days after backing out from the week-long military exercise of Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) countries in India, Nepal has reportedly taken part in a 12-day long military exercise with China, mainly focused on anti-terrorism activities and disaster management training.
- The second edition of Nepal-China joint military exercise was named as Mt Everest Friendship Exercise-2018. Also known as Sagarmatha Friendship-2018, the exercise was held in China's southwestern Sichuan province.
- This was the second time that the Nepal Army participated in a joint military drill with People's Liberation Army. The first such exercise was held in April 2017.
- India has expressed its displeasure with Nepal over its decision to not join the BIMSTEC exercise and has told Kathmandu that its decision is not appropriate.

China's Growing Ties With Nepal

- The prolonged political turmoil in Nepal (nine Prime Ministers in the last 10 years) has unnerved China about threats from Tibetan separatists. In the absence of a reliable and trustworthy government in Kathmandu, China has expanded its engagement from the earlier state-to-state level to institutional as well as people-to-people levels.
- Under the institutional level, to ensure quick and effective responses to control anti-China activities, China has targeted the bureaucracy and the Armed Police Force (APF) which guards the Nepal-China border.
- In this regard, in June 2013, China pledged to provide NPR 3.6 billion in assistance for the construction of the APF training academy at Matatirtha in Kathmandu. It has also supported joint

exercises with the Nepal Armed police in Tibet.

- In the second phase, under the comprehensive strategic partnership programme, China attempted to deepen military cooperation with the Nepal Army (NA), which has been traditionally close to the Indian and US Armies.
- Most importantly, due to the prolonged political transition, there is a growing perception among common Nepalese that the NA could save Nepal from the present political crisis. Certain sections in Kathmandu argue in favour of adopting the 'Bangladesh model' to restore political stability. As a result, the NA has become an attractive institution for external powers.
- Nepal has expressed its support for OBOR only in principle. China has been an important source of foreign direct investment (FDI) in Nepal since 2013 and has offered the second largest official development assistance (ODA) to Nepal after Britain during the same period.
- China also recently declared an investment of USD 8.3 billion at the Nepal Investment Conclave 2017 held in Kathmandu.
- Chinese soft power components like culture, polity, higher education and technology have also become popular in SAARC countries. For example, in Nepal, Chinese Confucianism and language have been gaining in popularity amongst the youth. China has established Confucius institutions and China Study centres in universities, colleges and schools.
- More than 100 Nepali schools offer free Chinese language courses. Chinese language tattoos and mobiles are very popular amongst the Nepali youth.
- In terms of foreign policy, a large number of Nepalis view China as a benign neighbour that does not interfere in Nepal's internal affairs.
- The favourable view of China has only increased due to Nepal's admission as a member of AIIB and grant of dialogue partner status in the Shanghai Cooperation Organisation.
- There is also a perception that China, a permanent member of the UN Security Council, could support the interests of a small and landlocked country like Nepal.

Power Shift in Bhutan

Syllabus: India and its neighbourhood- relations.

In News

- On 15 September 2018, the party of the incumbent Prime Minister, Tshering Tobgay, the People's Democratic Party, lost in the primary round of the elections in Bhutan.
- The final round of elections between the top two polling parties, the Druk Nyamrup Tshogpa (DNT) and the Druk Phuensum Tshogpa (DPT), will be held on 18 October 2018 to determine the next government in the country.

Background

In 2008, Bhutan switched from an absolute monarchy to a constitutional monarchy with a parliamentary form of government. The first democratically-elected government of the country was that of Jigme Yozzer Thinley (2008-2013) of the Druk Phuensum Tshogpa (DPT) party. In 2013 elections, the People's Democratic Party (PDP), led by Tshering Tobgay, came into power.

Electoral Process Of Bhutan

- In Bhutan, the executive power lies with Lhengye Zhungthog (Council of Ministers) headed by the Prime Minister.

- In 2008, the country adopted a new constitution which accepted the functioning of a democratic multi-party system.
- It has a National Assembly (Lower House) whose members are elected by the people for five years.
- According to the Constitution of Bhutan:
 - There shall be a primary round of elections in which the registered political parties whose Letter of Intent is found to be in order in all respects and accordingly accepted by the Election Commission of Bhutan shall contest in all the 20 Dzongkhags (districts).
 - The two parties securing the highest and second highest total number of votes polled in the 20 Dzongkhags shall be invited by the Election Commission to nominate one candidate each to contest the General Elections in each of the 47 National Assembly Demkhongs (constituencies).

Implications for India

- Tobgay was considered as friend of India. After being elected prime minister in 2013, Tobgay's first official visit was to India.
- Even before Tobgay became the prime minister, there was generally strong and regular engagement between India and Bhutan.
- However, there were several hiccups in their bilateral relationships then. During Jigme Thinley's leadership, for example, Bhutan tried to establish links with China. This infuriated India which cut fuel subsidies to Bhutan in 2013.
- Politically, Tobgay's loss is not likely to significantly affect India-Bhutan bilateral relationships. The nature of their relationship is such that, regardless of the party in power, the prime minister generally would take steps to enhance the country's ties with India.
- This is because of Bhutan's geographical location and its traditional relationships with India. As a landlocked country, the country depends on Kolkata riverine port in India for its trade. Also, it relies on India's assistance to develop its infrastructure and pursue growth.
- Some Indian commentators have interpreted Tobgay's defeat as a "surprise" for India. However the Bhutanese had seen it coming, given the anti-incumbency sentiments in the country.
- Regardless of the leadership change, the Bhutanese leadership will pursue a friendly foreign policy towards India. On its part, India will need to make the effort to show the Bhutanese that it is also keen in maintaining strong ties with the tiny Himalayan kingdom.

Presidential Elections in the Maldives

Syllabus: Effect of policies and politics of developed and developing countries on India's interests

In News

- Presidential Elections in the Maldives were held on September 23, 2018.
- The incumbent Abdulla Yaameen was defeated and **Ibrahim Mohamed Solih**, a joint opposition candidate from the Maldivian Democratic Party (MDP) was elected as the President.

Electoral Process in Maldives

- Maldives elects on national level a head of state, the president, and a legislature. The president is elected directly for a five-year term by the people.
- The Assembly (Majlis) has 88 members . All members are elected directly for a term of five years from 88 single-member constituencies.

- The President of the Maldives is elected using the two-round system. If no candidate wins more than 50% of the votes, then a second round, or run-off, is held.
- However, as there were only 2 candidates, the 2018 election was a simple one-round majority vote.
- Maldives saw its first multi-party presidential elections in 2008, before which it was ruled for 30 years by Maumoon Abdul Gayoom.

Key Highlight

- After polling, Election Commission of the *Indian Ocean archipelago nation* declared Solih of the MDP the winner with 58.3 % of the votes, compared to 41.5 % secured by incumbent President Yameen Abdul Gayoom, backed by the *Progressive Party of Maldives*.
- Solih will be sworn in on November 17 and his term is expected to continue until 2023.

Analysis

- The presidential election was highlighted as a contest between Yameen's pledge to bring about a transformational change with mega-projects and Solih's pledge to end presidential tyranny, injustice and corruption by bringing changes to the constitution and implementing institutional reforms.
- In the lead up to the elections, there were a number of political obstacles placed by Yaameen's government. These included the amendment of electoral laws in June 2018 to stop former president, Mohamed Nasheed, from contesting the polls and the imprisonment of a number of political opponents, among others.
- With a number of prominent opposition figures of the country put behind bars, former President Mohamed Nasheed living in exile, a defunct parliament and a crippled judiciary, there was a big question mark over a free and fair election in the country.
- The crisis in the Maldives began in February this year when President Gayoom declared a state of Emergency. The security forces had stormed the Supreme Court and arrested two of its five sitting judges, sealed parliament house and detained prominent opposition leaders.
- Solih had backing of a united opposition trying to oust Yameen, but struggled for visibility with the electorate, with local media fearful of falling afoul of heavy-handed decrees & reporting restrictions.
- Despite a win, Solih is expected to face a number of challenges in running the govt. The joint opposition parties came together due to their common opposition to Yaameen's high handedness. Apart from this, they have little in common and they disagree on several important issues.
- For example, MDP in its manifesto called for a change in the form of governance from a presidential to a parliamentary system. On the other hand, the JP's (Jumhooree Party) manifesto stated that it will follow the current presidential form of governance.
- Solih was nominated by the MDP and accepted by the other political parties, mainly
- because of the Elections (General) Act and Presidential Elections Act passed by Yaameen's government in June 2018. These amended acts barred Maldivians who had sought asylum overseas or relinquished dual citizenship from running for the office of president for 10 years.
- As a result, Nasheed had to relinquish his candidature as he had gone to the United Kingdom to seek asylum. It would be interesting to observe the political relationship between Nasheed and Solih in the coming days.

Reactions From India

- India was the first country to send its best wishes to Solih. It congratulated Maldivian government the successful completion of the third presidential election process.

- Traditionally, the Maldives has been close to India. However, this started to change after Nasheed was forced to quit office in February 2012. During Yaameen's tenure (2013-2018), the Maldives deepened its relationships with China at the expense of India.
- This drift towards China was an effort to find support for his regime against Nasheed who had India's backing. Also, the Maldives needed Chinese capital for its infrastructure development.
- Maldives home to around 22,000 Indians, is of strategic importance to India and its growing proximity with China is a cause for concern for New Delhi. In this context, the result of current election has been hailed by many analysts.

India-US 2+2 Dialogue

Syllabus: Effect of policies and politics of developed and developing countries on India's interests

In News

- India hosted inaugural 2+2 Dialogue with United States in New Delhi.
- As part of dialogue, US defence secretary Jim Mattis and secretary of state Mike held talk with Indian Foreign minister and defence minister.

Key Highlights

- Already cancelled twice this year, it was the highest level of dialogue between the two countries and was agreed upon by US president and Prime Minister Modi last year.
- During the dialogue, COMCASA (the India-specific formulation of CISMOA) was signed.
- The two side also discussed the progress of a Basic Exchange and Cooperation Agreement (BECA) which is in negotiating stage. BECA would enable them to share advance satellite data for navigation and missile targeting.
- The two sides also discussed issues ranged from the Indian purchase of the S-400 from Russia, the sanctions this action may attract under CAATSA, and whether the U.S. President will grant India a waiver; and whether India will get a waiver from another set of US sanctions if it does not reduce oil imports from Iran to Zero by November 4.
- While COMCASA was signed during the meeting, there was no positive or definite commitment from the U.S. on any of the other issues.

What Is COMCASA and BECA

Please refer CA of June 2018.

Analysis

- There is a need for interoperability between the Indian and U.S. defence forces.
- India needs to have an as strong as possible situational awareness of/in Indo-Pacific region, given the growing strength and presence of Chinese Navy and especially its submarines in these waters.
- While India has some resources for such monitoring, with the induction of P-8is (which are the most potent resource for ocean monitoring and which cause great discomfort to the Chinese Navy), it is nowhere near the levels necessary and needed for the Indian Navy, and Indian security, to ensure a high degree of situational awareness in the Indo-Pacific region.
- The US too is interested in monitoring the Chinese Navy's forays in international waters. It has brought to bear its immense resources to monitor such activities. This monitoring is done by various means such as satellite monitoring, P-8s, etc.

- It would be in the interest of both countries to share their Indo-Pacific environmental monitoring data. In addition, a number of other countries with close strategic relations with the U.S. (Australia and Singapore, for example) have P-8s and are monitoring the Indo-Pacific waters in their respective domains of interest.
- Unfortunately the U.S. gathers and stores such information through its COMSEC network. For India to be able to share this information it would have to field some compatible COMSEC equipment. Hence the need for a U.S. compatible and secure communication system. And hence the imperative for a COMCASA.
- There have been suggestions that CISMOA/COMCASA will enable India to access high technology. This needs to be clarified. An agreement of this sort has no technology transfer and high technology access provision.
- What it would enable India to do is procure high technology munitions items that have built-in COMSEC equipment such as the Sea Guardian drones.
- There are many who believe that it is a ploy of US to take advantage of India's defence market and the signing of COMCASA will not be very helpful for India.
- Without the agreement, which secures the integrity of US manufactured defence equipment, US cannot sell platforms with the capability that India desires. The purpose of the United States is to make sure that its military technologies are not leaked to a third party.
- The critics also claim that the agreement can kill the fledgling Indian defence industry. The FMS route, which the US often prefers, discourages technology transfer and even offsets. In any case, the US does not part with its technology easily.

State Visit of President to Cyprus, Bulgaria and Czech Republic

Syllabus: Effect of policies and politics of developed and developing countries on India's interests

In News

President of India paid a State Visit to Cyprus, Bulgaria and Czech Republic from September 2-9, 2018. The purpose of the visit was to hold talks with the leadership of the three European countries to deepen ties, particularly in the economic sphere.

A. Cyprus

- On the first leg of his three-nation tour, President visited Cyprus from 2-4 September, 2018.
- MOU between Financial Intelligence Unit, India and Unit for Combating Money Laundering of Cyprus was signed
- Both countries signed an MOU on Cooperation in the areas of Environment between the Ministry of Environment, Forest and Climate Change of India and the Ministry of Agriculture, Rural Development and Environment of Cyprus.

Background:

- The close alignment in world views of our founding fathers and great leaders, Mahatma Gandhi and President Archbishop Makarios III laid the foundations for the close relationship between India and Cyprus.
- Cumulative investment from Cyprus to India amounts to USD 9.2 billion, making it the 8th largest investor in India.
- There have been regular high-level exchanges between the two countries. The last visit from India at the

level of Head of State was in 2009. The President of Cyprus came on a State Visit to India in April 2017.

B. Bulgaria

- Indian President visited Bulgaria from 4-6 September, 2018.
- During the visit, the two Presidents witnessed the signing of the following documents :
 - i. A Programme of Cooperation between India and Bulgaria in the field of Science & Technology for the period 2018-2021;
 - ii. Memorandum of Understanding between India and Bulgaria on Cooperation in Tourism;
 - iii. Memorandum of Understanding between Indian Council for Cultural Relations (ICCR) and Sofia University on establishment of ICCR Chair for Hindi Language; and
 - iv. Memorandum of Understanding between Invest India and Invest Bulgaria.
 - v. An MOU on Cooperation between the Global Centre for Nuclear Energy (GCNEP) of India and the Institute for Nuclear Research and Nuclear Energy of the Bulgarian Academy of Sciences.

Background

- India and Bulgaria have close historical and cultural ties dating back to 8th century A.D. There are similarities between the old Indian script Brahmi and the ancient Bulgarian script Glagolitsa.
- 19th century Bulgarian Revolutionary Georgi Stoikov Rakovski was a great Indologist. Nobel Laureate Rabindranath Tagore visited Bulgaria in 1926.
- In modern times, the popularity of Yoga, Ayurveda and Indian films in Bulgaria, as well as the experience of students of Indology at Sofia University have strengthened our bonds.
- India-Bulgaria annual trade stands at USD 315 million and a number of Indian companies are present in Bulgaria and vice-versa.
- The last visit from India at the level of Head of State was in 2003. Bulgarian Prime Minister visited India in 2007.
- Bulgaria held the rotating Presidency of the Council of the European Union from January to June 2018.

C. Czech Republic

- The president visit Czech Republic from 6-9 September, 2018. The visit coincided with 25th Anniversary of foundation of Czech Republic.
- The president visited the Extreme Light Infrastructure (ELI) Beamlines – International Laser Research Centre, address the Czech Republic - India Business Forum and interact with Czech Indologists at the Charles University.
- Both leaders welcomed the ongoing discussion to establish cooperation between the Global Centre for Nuclear Energy Partnership (GCNEP) of India with a relevant institution in the Czech Republic.
- The two Presidents welcomed signing of the **Work Plan for Support of Czech-Indian Projects for the Years 2019-2022** between the Ministry of Education, Youth and Sports of the Czech Republic and Department of Science and Technology, Ministry of Science and Technology of India.
- They also welcomed the signing of MoU on Scientific and Technological Cooperation between Academy of Sciences of Czech Republic and Council of Scientific and Industrial Research of India.

Background

- Indo-Czech relations are warm and friendly and pre-date India's independence.

- Kingdom of Bohemia and Moravia traded with India in 9-10 century A.D. Netaji Subhash Chandra Bose founded the Indo-Czech Association in Prague in 1934.
- Charles University had a Sanskrit Chair in 1850.
- In modern times, diplomatic relations were established in 1947, which has led to development of our multifaceted bilateral ties. India has substantial economic linkages with the Czech Republic.
- Our annual trade of over USD 1 billion and investment of around 60 Czech companies in India is testimony of our vibrant economic ties. Substantial investment has been announced by a Czech majors in automotive sector in 'Make in India'.
- The last visit from India at the level of Head of State was in 1996. Czech President was on a State visit to India in 2005 and Czech Prime Minister visited India in 2006.

External Affairs Minister Visit to Moscow

Syllabus: Effect of policies and politics of developed and developing countries on India's interests

In News

- External Affairs Minister (EAM) Sushma Swaraj paid a two-day state visit to Moscow, Russia.
- During her visit, she attended the 23rd India-Russia Inter-Governmental Commission on Technical and Economic Cooperation (IRIGC-TEC) which was co-chaired by Swaraj and Yuri Borisov, Deputy Prime Minister of the Russian Federation.

Key Highlights

- IRIGC-TEC is a standing body which annually meets and reviews ongoing activities of bilateral cooperation in the fields of bilateral trade and investment, science and technology, culture and other issues of mutual interest.
- Last meeting of the Commission was held in New Delhi in December 2017.
- The commission has met in the run up to the 19th India-Russia Annual Summit which is expected to be held in India in October. President Putin is expected to visit India for the summit with PM Modi.
- The two sides discussed ways to enhance bilateral trade which in 2017 reached USD 10.17 billion.
- Two-way investments between these two countries have already crossed the USD 30 billion target, which was a target set for 2025. Both countries, therefore, proposed to enhance this figure to USD 50 billion by 2025.

Chabahar Port

Syllabus: Effect of policies and politics of developed and developing countries on India's interests

In News

- Iran will handover the strategic Chabahar port to Indian company within a month for operation as per an interim pact.
- Earlier India and Iran had signed an agreement. Under this agreement, India is to equip and operate two berths in Chabahar Port Phase-I with capital investment of \$85.21 million and annual revenue expenditure of \$22.95 million on a 10-year lease.
- The Chabahar port is located in Gulf of Oman (in the Sistan-Balochistan province of Iran) and is easily accessible from



India's western coast.

Importance of Gwadar Port for India

- It is easily accessible from India's western coast and is increasingly seen as a **counter to Pakistan's Gwadar Port** located at distance of around 80 kms from Chabahar.
- It is being considered as a gateway to golden opportunities for trade by India, Iran and Afghanistan with central Asian countries in the wake of Pakistan denying transit access to New Delhi.
- From Chabahar, the existing Iranian road network can link up to Zaranj in Afghanistan. The Zaranj-Delaram road constructed by India can give access to Afghanistan's Garland highway.
- India's **trade relations and economic relations with Central Asian region** in future depends a lot on the utilisation of Chabahar Port because it provides direct sea-land route access for India to reach Central Asia via Iran. The distance between India's Kandla Port and Chabahar Port is quite short, thereby reducing the transportation costs of the goods. Hence, utilization of this route would **increase the competitiveness** of Indian goods in Central Asian region and beyond.
- When **linked with the International North South Transport Corridor**, it would touch South Asia at one end and Europe at another. Strategically, the Chabahar deal would also help in **countering the China's string of Pearl** of strategy against India.
- Chabahar is turning out to be a **success story in the India-Iran relationship**. With the operationalization of the port, it is witnessing high activity, and there are unconfirmed reports of traffic being diverted from Karachi to Chabahar.
- Not only that, in an attempt to circumvent the banking problems caused by western sanctions on Iran, India will for the first time allow investment in Iran. This is a special arrangement, which is only allowed for Nepal and Bhutan.

Challenges

- First, progress in Chabahar may depend on which way relations develop between Iran and United States. It is important to note here that India needs Washington's support on the international stage especially on issues like its membership bid in the NSG (Nuclear Suppliers' Group).
- While Washington has asked it to **reduce oil imports from Iran**, doing so may impinge on its ties with Iran. Though it is likely that New Delhi may not completely cut down on oil imports from Iran, it may reduce them in the light of its growing ties with the United States. It is noteworthy that Iran is the third biggest supplier of oil to New Delhi after Iraq and Saudi Arabia.
- Relations with Iran will also require a **delicate balancing act** on the part of India given its own relations with countries like the United Arab Emirates and Saudi Arabia—also with countries like Israel, which has a fraught history with Iran.
- **Iran's recent stand on Muslims being oppressed** in Kashmir, put out by its supreme leader Ayatollah Khamenei in his Eid-ul-Fitr address, raises some serious questions.
- While prime reason for it could be India's growing closeness with Iran's worst enemies Israel and Saudi Arabia, it raises questions on efficacy and durability of the bond between the two countries.
- Going by the evidences, **Iran supports Shia militias as well as some allied Sunni militant groups** that engage in terrorist acts. Adding to the woes for India is the kidnap of alleged Indian spy Kulbhushan Jadhav, currently on death row in Pakistan, from Iran.

Conclusion

- Given its growing profile on the international stage, New Delhi will be called upon to take a decision on issues like its ties with Iran and it can no longer afford to sit on the fence.

- India must analyse the situation and act accordingly to promote its national interests.

Referendum On Greater Catalan Autonomy

Syllabus: Effect of policies and politics of developed and developing countries on India's interests

In News

- Spain's prime minister Pedro Sánchez has proposed a referendum on whether Catalonia should be given greater autonomy.
- This proposal came in a bid to dampen tensions between Madrid and Barcelona.

Key Highlights

- The proposal is only for holding a referendum on greater autonomy for Catalonia and ruled out allowing a vote on independence. However, the proposal did not give a timeline for any vote.
- Catalonia already has a large degree of autonomy, for example controlling its own police service and education system. But many in the region want even more, particularly over financial issues such as tax collection.
- Catalonia, which has its own distinct language, was granted autonomy under Spain's 1978 constitution adopted three years after the death of longtime dictator Francisco Franco.
- In 2006, a statute granting greater powers to the region was approved by Spanish and Catalan Parliaments. In a referendum at the time, more than 70 % of voters in Catalonia approved the deal.
- However, in 2010 Spain's Constitutional Court struck down several parts of statute, a move that led to a rise in support for independence in Catalonia, which is home to some 7.5 million people & accounts for about 20% of Spanish economy.

G-4 Summit

Syllabus: Bilateral, regional and global groupings and agreements.

In News

India hosted summit meeting of the G-4 nations at India's Permanent Mission to the UN on the margins of the 73rd session of the United Nations General Assembly. The summit took place on 26th Sept and was aimed at pushing for early UN Security Council reforms.

Key Highlights

- **Brazil, Germany, India and Japan** – also known as the **G4** – have reiterated the compelling need for a protracted reform of the United Nations Security Council.
- They restated their support for **Africa's appropriate representation** in a reformed and expanded Council, which under the UN Charter bears primary responsibility for the maintenance of international peace and security.

Fact

In 2015, the 193-member General Assembly had adopted by consensus a negotiating text that encapsulates all proposals made by various UN members include UNSC reform, the veto and number of new permanent and non-permanent members in a reformed Council.

- Leaders of these countries reaffirmed the need for **expansion of both permanent and non-permanent categories** of membership to enhance its legitimacy, effectiveness and representativeness.

- They stated that the need for the reform is underlined by the fact that "the current composition of the Council *does not reflect the changed global realities* and they stressed that Security Council reform is essential to address today's complex challenges.
- The G4 Ministers stressed that adapting the United Nations to the contemporary needs of the 21st century necessarily required reforming the Security Council. They reviewed progress towards this goal at **Intergovernmental Negotiations (IGN)** and discussed pathways to reform of the Council.
- The G4, which aspire to become additional permanent members of a reformed Council, reiterated their **commitment to multilateralism**, vowing to work "to strengthen the functioning of the UN and the global multilateral order as well as their support for each other's candidatures.
- The summit highlighted that next year would mark 40 years since the inscription of the item "*Question of equitable representation on and increase in the membership of the Security Council and other matters related to the Security Council*" on the **agenda of the General Assembly in 1979** and yet substantial progress had not yet been achieved.
- The Ministers welcomed the compendium **published by the L.69** compiling 25 years of deliberations on the issue of Security Council Reform.

Intergovernmental Negotiations (IGN)

- The Intergovernmental Negotiations framework or IGN is a group of nation-states working within the United Nations to further reform of the United Nations Security Council (UNSC).
- It is composed of several different international organizations, including the African Union; the G4 nations; the Uniting for Consensus Group (UfC), also known as the "Coffee Club"; the L.69 Group of Developing Countries; the Arab League and the Caribbean Community (CARICOM).
- The **five key issues** under consideration in these negotiations are: **1)** categories of membership to the Council (i.e. permanent, non-permanent, or a third option), **2)** the question of the veto, **3)** regional representation, **4)** size of an enlarged council and working methods, and **5)** the relationship between the Council and the General Assembly.

East Asia Summit and India-ASEAN- Economic Ministers' Meeting

Syllabus: Bilateral, regional and global groupings and agreements.

In News

- Indian Commerce & Industry Minister attended the *6th East Asia Summit- Economic Ministers' Meeting (EAS-EMM)* and *15th India-ASEAN Economic Ministers' Meeting (AEM)* in Singapore.
- Singapore is currently holding the Chair of ASEAN.

Key Highlights

- 6th East Asia Summit- Economic Ministers' Meeting (EAS-EMM) –
 - The participants welcomed the *higher global economic growth forecast for 2018* and took note of the increasing importance of trade and investment relations among the EAS economies.
 - The Ministers agreed to the *importance of keeping markets open and fair* as well as improving transparency and predictability of the business environment.
- 15th India-ASEAN Economic Ministers' Meeting (AEM) –
 - The ministers took stock of the current level of trade and economic engagement between India and ASEAN and reaffirmed the commitment to further strengthen ASEAN-India economic relations.

- ASEAN has emerged as the **second largest trade partner** of India in 2017-18 with bilateral trade valued at USD 81.33 billion, comprising 10.58% of India's total trade with the world.
- ASEAN Ministers also appreciated the outcomes of the ASEAN-India Business and Investment Meet and Expo held on 22–23 January 2018 in New Delhi.
- Issues related to promoting connectivity, collaboration on Small and Medium Enterprises (SME) development, blue economy, healthcare, and tourism as well as women and youth economic empowerment were also discussed.

India-ASEAN

- The Association of South-East Asian Nations (ASEAN) comprises of Indonesia, Singapore, Philippines, Malaysia, Brunei, Thailand, Cambodia, Lao PDR, Myanmar and Vietnam.
- India's focus on a strengthened and multi-faceted relationship with ASEAN is an outcome of the *significant changes in the world's political and economic scenario since the early 1990s and India's own march towards economic liberalisation.*
- India's search for economic space resulted in the 'Look East Policy'. The Look East Policy has today matured into a dynamic and action oriented '**Act East Policy**'. India's relationship with ASEAN is a key pillar of our foreign policy and the foundation of our Act East Policy.
- India-ASEAN relations stepped up a notch towards the end of 1990s and the beginning of 2000. In 1998 the then Indian Prime Minister, Mr. Atal Bihari Vajpayee intended to accelerate India's Look East Policy.
- Given its size, geographical location, trade links and the EEZ (Exclusive Economic Zone) India's security environment faces many challenges. Therefore potential concerns range from the Persian Gulf to the Straits of Malacca in the West, South and East, Central Asia in the Northwest, China in the Northeast and South Asia.
- Thus, India is looking to develop associations with countries beyond its immediate neighbourhood perceiving countries in East and Northeast Asia as its far eastern neighbours and the ASEAN countries as its near eastern neighbours.
- One of the first concrete steps taken by India was the setting up of the **Mekong Ganga Cooperation Project in 2000** which includes India and the five ASEAN countries (including the four newer ASEAN members – Vietnam, Lao, Cambodia, Myanmar and Thailand).
- The **up-gradation of the relationship into a Strategic Partnership in 2012** was a natural progression to the ground covered since India became a **Sectoral Partner** of the ASEAN in 1992, **Dialogue Partner** in 1996 and **Summit Level Partner** in 2002.

ASEAN-India Centre (AIC)

- At the Commemorative Summit held in 2012, the Heads of the Government recommended establishment of ASEAN-India Centre (AIC) to undertake policy research, advocacy and networking activities with organizations and think-tanks in India and ASEAN with the aim to promote the ASEAN-India Strategic Partnership.
- The AIC has been serving as a resource centre for ASEAN Member States and India since its establishment in 2013 for strengthening ASEAN-India strategic partnership and promoting India-ASEAN dialogue and cooperation in the areas of mutual interests.

Security Cooperation

- The main forum for ASEAN security dialogue is the **ASEAN Regional Forum (ARF--** It was set up in 1993 as a regional security cooperation and dialogue platform). India has been attending

annual meetings of this forum since 1996 and has actively participated in its various activities.

- The **ASEAN Defence Ministers' Meeting (ADMM)** is the highest defence consultative and cooperative mechanism in ASEAN. The **ADMM+** brings together Defence Ministers from the *10 ASEAN nations plus Australia, China, India, Japan, New Zealand, Republic of Korea, Russia, and the United States* on a biannual basis.
- **Expanded ASEAN Maritime Forum (EAMF)** is an avenue for **track 1.5 diplomacy** (a diplomacy channel in which official and non-official actors work together to resolve conflicts) focusing on cross cutting maritime issues of common concern. India regularly participates in this forum.

Trade and Investment

- India-ASEAN trade and investment relations have been growing steadily with ASEAN being India's fourth largest trading partner.
- The annual trade between India and ASEAN stood at approximately US\$ 76.53 billion in 2014-15. It declined to US\$ 65.04 billion in 2015-16 essentially due to declining commodity prices amidst a general slowing down of the global economy.
- Investment flows are also substantial both ways, with ASEAN accounting for approximately 12.5% of investment flows into India since 2000.
- The **ASEAN-India Free Trade Area** has been completed with the entering into force of the ASEAN-India Agreements on Trade in Service and Investments on 1 July 2015.
- ASEAN and India have been also working on enhancing private sector engagement. **ASEAN India-Business Council (AIBC)** was set up in March 2003 in Kuala Lumpur as a forum to bring key private sector players from India and the ASEAN countries on a single platform for business networking and sharing of ideas.

Connectivity

- ASEAN-India connectivity is a matter of strategic priority for India as also the ASEAN countries. In 2013, India became the **third dialogue partner** of ASEAN to initiate an **ASEAN Connectivity Coordinating Committee-India Meeting**.
- While India has made considerable progress in implementing the **India-Myanmar-Thailand Trilateral Highway and the Kaladan Multimodal Project**, issues related to increasing the maritime and air connectivity between ASEAN and India and transforming the corridors of connectivity into economic corridors are under discussion.
- A possible extension to India-Myanmar-Thailand Trilateral Highway to Cambodia, Lao PDR and Viet Nam is also under consideration.

Cultural Relations

- Existing archaeological evidence shows ancient ties between India and Southeast Asia, including ceramic and boat-building traditions and marine links.
- The presence of the Shivalinga has been found in Vietnam which was the stage for many scenes of the Indian epic Mahabharata within the 12th-century temples of Angkor Wat in Cambodia are further proof of the deep cultural bonds between South East Asia and India.
- Indian merchants had facilitated the spread of religion and culture in different parts of the region. Indian and Southeast Asian languages have common sources like Sanskrit and Pali, and traditional dance and other art forms of the two regions also exhibit many similarities.
- The Indian epics, Ramayana and Mahabharata, are hugely popular in Thailand and Indonesia

and have had influence on popular art forms in those countries such as shadow puppetry.

- The Arjuna statue near the National Monument in the heart of Jakarta is also a striking symbol of a common cultural heritage. Indian film stars are also quite popular in many ASEAN countries. In fact, most Indonesian television channels regularly show Hindi-language films.

People To People Contact

- The large Indian diaspora in many of the Southeast Asian countries, especially Malaysia and Singapore, help strengthen diplomatic, economic and security relations between India and ASEAN as they have contributed to a deepening of bonds.
- The Indian diaspora comprise an important instrument of India's soft power and they help congeal a highly organic relationship between the two regions.

Initiative to Stop Terrorist Travel Launched

Syllabus: Bilateral, regional and global groupings and agreements.

In News

- The United States and Morocco launched the *Global Counter-Terrorism Forum's (GCTF) Terrorist Travel Initiative*.
- The initiative will bring together stakeholders to share expertise on how to develop and implement effective counterterrorism watchlisting and screening tools.

Key Highlights

- It was launched on the sidelines of the United Nations General Assembly (UNGA).
- The initiative will hold four regional workshops in 2018 and 2019 to develop a document that shall be endorsed at the 2019 GCTF ministerial meeting.
- Reinforcing Resolution 2396, which was unanimously adopted by Security Council in Dec' 2017, the resulting document will reinforce methods for countries and organisations to stop terrorist travel.
- Terrorist travel is being curbed at the moment through *Advanced Passenger Information (API)*, *Passenger Name Record (PNR)*, and biometrics that have been prescribed in Resolution 2396.
- The new initiative will strengthen this resolution while aiming to stop terrorist travel altogether.

About Global Counter-Terrorism Forum

- The GCTF is an international forum of 29 countries and the European Union. It was launched in 2011. The GCTF is Co-Chaired by Morocco and the Netherlands.
- Its overarching mission is to reduce vulnerability of people worldwide to terrorism by preventing, combating, & prosecuting terrorist acts and countering incitement & recruitment to terrorism.
- One of the important goals of the Forum is to support and catalyze implementation of the United Nations (UN) Global Counter-Terrorism Strategy.

Saudi Arabia To Join CPEC Project

Syllabus: Bilateral, regional and global groupings and agreements.

In News

- Saudi Arabia is set to join the multibillion-dollar project China Pakistan Economic Corridor (CPEC) as a third major economic partner.

- Earlier, Pakistan had, in alliance with China, invited Saudi Arabia to join CPEC as 3rd strategic partner.

Key Highlight

- Saudi Arabia's decision to invest in the project came days after Pakistan Prime Minister Imran Khan visited Saudi and United Arab Emirates in his first foreign visit since assuming office.
- Saudi's addition to the project is aimed at recovering Pakistani government from the financial crunch faced by the country.
- Recently, debt levels have risen in Pakistan, especially due to unsustainable loans from China for CPEC projects, compromising cash-strapped Pakistan's sovereignty.

About CPEC

- The \$46-billion China Pakistan Economic Corridor (CPEC) project focuses on road building and energy infrastructure to end chronic power shortages in Pakistan and to link China's landlocked north-west with the deep-water port Gwadar on the Arabian Sea.
- The ambitious project is a part of China's "One Belt and One Road" or new Silk Road project. It is being built from the restive Xinjiang province in China to Gwadar in southwestern Pakistan.
- The corridor passes through Gilgit-Baltistan in Pakistan-administered Kashmir - a territory claimed by India. The fact that the route passes through the disputed Kashmir region seems to have worried India.

Four More Nuclear Facilities under IAEA Safeguards

Syllabus: Bilateral, regional and global groupings and agreements.

In News

- India has decided to place four more reactors under the IAEA safeguards.
- It was announced by India at the 62nd General Conference of IAEA Vienna, Austria.

Key Highlights

- The four reactors included under IAEA are - two Russian-designed Pressurised Light Water Reactors and two Pressurised Heavy Reactors being built with Indian technology.
- With this, a total of 26 Indian nuclear facilities will be under international nuclear energy watchdog.

Facts about Nuclear Programme

- India plans to build 21 reactors by 2030 for power generation as well as to promote Cancer research.
- The indigenously developed prototype fast breeder reactor of 500 MWe is undergoing sodium commissioning and criticality is expected next year.
- In power generation, a notable achievement was one of the longest run of reactor Unit-1 of Kaiga plant.
- By reaching 859 days of continuous operation, it has become the third longest running plant in the world. Four other reactors also continue to operate for 450 days and above.
- These achievements establish the soundness of technology and efficiency in operation and maintenance.

About IAEA

- The International Atomic Energy Agency is the world's central intergovernmental forum for scientific and technical co-operation in the nuclear field.
- It works for the safe, secure and peaceful uses of nuclear science and technology, contributing to international peace and security and the United Nations' Sustainable Development Goals.

- It is headquartered in Vienna, Austria. It serves as international nuclear energy watchdog, independent of United Nations but reports to both UNGA and UNSC.

IAEA Safeguards

- The objective of IAEA Safeguards is to deter the spread of nuclear weapons by the early detection of the misuse of nuclear material or technology.
- This provides credible assurances that States are honouring their legal obligations that nuclear material is being used only for peaceful purposes.
- Safeguards are a set of technical measures applied by the IAEA on nuclear material and activities, through which the Agency seeks to independently verify that nuclear facilities are not misused and nuclear material not diverted from peaceful uses. States accept these measures through the conclusion of safeguards agreements.
- IAEA safeguards are an essential component of the international security system. The Treaty on the Non-Proliferation of Nuclear Weapons (NPT) is the centrepiece of global efforts to prevent the further spread of nuclear weapons.
- Under the Treaty's Article 3, each Non-Nuclear Weapon State is required to conclude a safeguards agreement with the IAEA.
- Today, IAEA safeguards nuclear material & activities under agreements with more than 140 States.

What Is The Additional Protocol To Safeguards Agreements

- The Additional Protocol is a legal document granting the IAEA complementary inspection authority to that provided in underlying safeguards agreements.
- Its principal aim is to enable the IAEA inspectorate to provide assurance about both declared and possible undeclared activities. Under the Protocol, the IAEA is granted expanded rights of access to information and sites.

World Summit on Accreditation

Syllabus: Important International institutions, agencies and fora- their structure, mandate.

In News

- The fourth World Summit on Accreditation (WOSA 2018) was held in New Delhi from 7th-9th Sept.
- The theme of WOSA 2018 was '**challenges and opportunities in outcome-based accreditation**'.
- WOSA 2018 aimed to bring about new ideas and help in establishing new trends of identifying opportunities and challenges in professional and technical education worldwide.
- It is a biennial Summit organised by National Board of Accreditation (NBA), which provides a platform to stakeholders to share their knowledge and information on accreditation.
- NBA has already organised three Summits in 2012, 2014 and 2016 with the themes "Achieving Excellence through Accreditation", "International Recognition of Education Qualifications" and "Quality Assurance through Outcome Based Accreditation" respectively.

About NBA:

- The National Board of Accreditation (NBA) is an autonomous organisation under Ministry of Human Resource Development engaged in quality assurance of the programs offered by the professional and technical institutions in India through accreditation.
- NBA has been accorded Permanent Signatory Status of Washington Accord since June, 2014.

- It has adopted internationally implemented outcome based assessment and accreditation, to ensure that the graduates of the NBA accredited programs are globally competent and relevant.

UNWTO Global Summit

Syllabus: Important International institutions, agencies and fora- their structure, mandate.

In News

- The 7th UN World Tourism Organization (UNWTO) Global Summit on Urban Tourism was held in Seoul, South Korea.
- Theme of this summit was - '**A 2030 Vision for Urban Tourism**'.

Key Highlights

- The summit was aimed to encourage new strategic approaches to the challenge of a growing tourism sector and its impact on urban destinations through sharing of innovative ideas & experiences.
- Among the topics discussed were innovative approaches to: competitiveness in urban destinations; impacts of technology on urban tourism; rejuvenation of cities; and increasing inclusion in city development.

United Nations World Tourism Organization (UNWTO)

- The World Tourism Organization is the **United Nations agency** responsible for the promotion of responsible, sustainable and universally accessible tourism.
- It serves as a global forum for tourism policy issues & a practical source of tourism know-how.
- It encourages the **implementation of the Global Code of Ethics** for Tourism to maximize the contribution of tourism to socio-economic development, while minimizing its possible negative impacts, and is committed to promoting tourism as an instrument in achieving the United Nations Sustainable Development Goals (SDGs), geared towards eliminating poverty and fostering sustainable development and peace worldwide.
- With its **headquarters in Madrid**, WTO is an inter-governmental body entrusted by the United Nations with the promotion and development of tourism.

World Maritime Day 2018

Syllabus: Important International institutions, agencies and fora- their structure, mandate.

In News

- The United Nations (UN), via the **International Maritime Organization (IMO)**, created World Maritime Day to celebrate the international maritime industry's contribution towards the world's economy, especially in shipping.
- The event's date varies by year but it is always observed on the **last Thursday** of September.
- In 2018, it was observed on **27th September**. The World Maritime Day theme for the year is "**IMO 70: Our Heritage – Better Shipping for a Better Future**".
- In 2018, IMO celebrates 70 years since the Convention establishing the Organization was adopted.

About IMO

- IMO – the International Maritime Organization – is the United Nations specialized agency with responsibility for the safety and security of shipping and the prevention of marine and atmospheric pollution by ships.

- IMO's work supports the UN SDGs. Its main role is to create a regulatory framework for the shipping industry that is fair and effective, universally adopted and universally implemented.
- It is headquartered at London and has 171 member states and 3 associate members.
- India had joined this organisation as member-state in 1959.

International Ayurveda Congress

Syllabus: Important International institutions, agencies and fora- their structure, mandate.

In News

- The 4th International Ayurveda Congress was held at **Leiden, The Netherlands**.
- The congress was organized jointly by The International Maharishi AyurVeda Foundation, The Netherlands; the All India Ayurvedic Congress, New Delhi; and the International Academy of Ayurveda, Pune.
- These International Congresses are held regularly, at least once in two years.
- Aim of the congress was to establish Ayurveda as the most ancient, scientific and holistic health care system, which is capable of leading the world towards an increasingly disease-free society.
- Since Ayurveda is cost effective and easy to implement, it is capable of bringing about self-sufficiency in health care in every nation.
- On sidelines of this congress, Indian Embassy also had organized special seminar titled "India-Netherlands collaboration in Healthcare, including Ayurveda."

International Aviation Summit

Syllabus: Important International institutions, agencies and fora- their structure, mandate.

In News

- The International Aviation Summit was held in New Delhi on September 4, 2018.
- It was jointly organised by the Airports Authority of India, Ministry of Civil Aviation and International Air Transport Association (IATA).

Key Highlights

- The summit discussed the aviation operating environment in India and the opportunities that exist for the market to become the third largest globally by 2025.
- At the summit, Union Minister for Civil Aviation Suresh Prabhu revealed that the Civil Aviation Ministry is coming up with **Vision 2035** under which it plans to build 100 new airports across India in the next 10-15 years with an investment of USD 60 billion.
- He also revealed that the Government is working on a cargo policy and is planning to have a cargo hub in India.

About IATA

- The International Air Transport Association (IATA) is the trade association for the world's airlines, representing some 290 airlines or 82% of total air traffic.
- IATA supports airline activity and helps formulate industry policy and standards. It is headquartered in **Montreal, Quebec, Canada** with Executive Offices in Geneva, Switzerland.

Exporting Corruption - Progress Report 2018

Syllabus: Important International institutions, agencies and fora- their structure, mandate.

In News

- Anti-corruption organisation Transparency International has released the 2018 edition of the '**Exporting Corruption Report**'.
- The classification of enforcement in tis report is based on the convention countries' enforcement actions in the period 2014-2017.

Key Highlights

- The countries has been classified according to the enforcement categories (Active, Moderate, Limited, Little or No) which in turn show the level of enforcement efforts against foreign bribery.
- A country that is an "Active enforcer" initiates many investigations into foreign bribery offences; these investigations reach the courts; the authorities press charges and courts convict individuals and/or companies both in ordinary cases and in major cases in which bribers are convicted and receive substantial sanctions.
- "Moderate Enforcement" and "Limited Enforcement" indicate stages of progress, but are considered insufficient deterrence. Where there is "Little or No Enforcement", there is no deterrence.
- According to the report, only about a quarter of world exports come from countries with active law enforcement against companies bribing abroad.
- There are 7 countries with 27% of global exports which have been kept in active enforcement category. These are – US, Germany, United Kingdom, Italy, Switzerland, Norway, and Israel.
- There are 4 countries with 3.8% global exports in the moderate category. These are - Australia, Sweden, Brazil, Portugal.
- 11 countries with 12.3% global exports have been kept in limited enforcement category. These are - France, Netherlands, Canada, Austria, Hungary, South Africa, Chile, Greece, Argentina, New Zealand, Lithuania.
- 22 countries with 39.6% global exports have Little or No Enforcement. These are - China, Japan, South Korea, Hong Kong, Singapore, **India**, Spain, Mexico, Russia, Belgium, Ireland, Poland, Turkey, Denmark, Czech Republic, Luxembourg, Slovakia, Finland, Colombia, Slovenia, Bulgaria, Estonia.
- There have been improvements in eight countries, with three (Israel, Italy and Norway) moving into the Active category, three (Brazil, Portugal and Sweden) joining the Moderate category and two (Argentina and Chile) entering the Limited category.
- The two biggest improvers are Israel (from Little or No Enforcement to Active Enforcement) and Brazil (from Little or No Enforcement to Moderate Enforcement).

India Specific Observation

- In this 2018 report, China, Hong Kong,7 India and Singapore – all with 2 per cent or more of world exports, but not parties8 to the OECD Convention – are classified for the first time and all fall into the lowest level (Little or No Enforcement).
- This poor performance argues for these countries' accession to the OECD Anti- Bribery Convention.
- The report further highlights that if these countries do not enforce hard-won international standards for conducting business, competitors from countries that do enforce will find themselves disadvantaged. This may lead to a reduction in enforcement, destabilising the global marketplace

- Citing cases of alleged bribery by foreign firms including in a deal of 12 helicopters by Italy-based firm AgustaWestland, it asked India to criminalise foreign bribery and introduce effective legislation to protect whistleblowers in the private sector.
- The report said that the Indian government does not publish statistics on its foreign bribery enforcement and does not disclose such statistics on request.
- The report said in July 2018, the Indian Parliament passed a bill amending the present **Prevention of Corruption Act**, which covers bribe payers for the first time. It further said that the bill also covers agents, subsidiaries and subcontractors of foreign firms working in India or doing business with Indian entities.
- However, foreign bribery is not yet criminalised in India, as a result the adequacy of the enforcement system in relation to this specific offence cannot be assessed.
- It also highlights that while the Indian Penal Code and Prevention of Corruption Act prescribe criminal and civil liability for domestic corruption, the reality is that actions taken against the perpetrators have been few.
- The report cited inadequacies in implementation of Mutual Legal Assistance (MLA) Treaty. So far India has signed mutual legal assistance (MLA) treaties with 39 countries and the Ministry of Home Affairs is the central authority for seeking and providing MLA in criminal law matters.
- However, according to the report, the translation of documents into foreign languages is a major factor slowing down the MLA process.
- The report cited several cases of alleged bribery or attempts to bribe Indian government officials by foreign firms including France-based Airbus, saying India was among 16 countries targeted by alleged bribery.
- The report also highlighted an example whereby, in 2017, the Ontario Court of Appeal upheld the 2013 conviction of a Canadian man for conspiring to bribe Indian public officials, including a minister, in a failed bid to win a major contract for Cryptometrics Canada (a firm) to supply security-screening equipment to Air India.

Key Overall Recommendations

- Countries party to the Convention and other major exporters should scale up their foreign bribery enforcement by addressing address weaknesses in their legal frameworks and enforcement systems.
- The OECD Working Group On Bribery (WGB) should make public its dissatisfaction when countries party to the Convention fail to enforce against foreign bribery, related money laundering offences and false accounting violations.
- Countries party to the Convention, other major exporters and the OECD WGB should increase efforts to improve mutual legal assistance, in cooperation with other relevant anti-corruption review bodies.
- China, Hong Kong, India and Singapore should enforce against foreign bribery and accede to the OECD Anti-Bribery Convention. The OECD WGB should continue to encourage them to do so.

About The Report

- Transparency International's 2018 Progress Report is an independent assessment of the enforcement of the Organisation for Economic Co-operation and Development (OECD) Anti-Bribery Convention, which requires parties to criminalise bribery of foreign public officials and introduce related measures.

- The Convention is a key instrument for curbing global corruption because the 44 signatory countries are responsible for approximately 65 per cent of world exports and more than 75 per cent of total foreign direct investment outflows.
- This was the 12th such report which also assesses enforcement in China, Hong Kong Special Administrative Region of China, India and Singapore, which are not parties to the OECD Convention but are major exporters, accounting for 18 per cent of world exports.
- The report has been prepared by Transparency International, with contributions from its national chapters and experts in 41 OECD Convention countries, as well as in China, Hong Kong, India and Singapore.

OECD Anti-Bribery Convention

The OECD Anti-Bribery Convention was adopted in 1997 to address the supply side of international corruption. There are now 44 parties to the convention, 36 of them members of the OECD (Organisation for Economic Cooperation and Development).

Economic Growth and Development

Bank of Baroda, Vijaya Bank & Dena Bank To Be Merged

Syllabus: Indian Economy and Issues relating to mobilization of resources

In News

- The government has proposed the merger of three banks i.e. Bank of Baroda, Vijaya Bank and Dena Bank aimed at creating the country's third biggest lender.
- This is also seen as preparing the ground for consolidation among the remaining 17 state-owned lenders that have been a drain on the exchequer and marking the next big move in banking reforms.
- The combined entity will have a strong presence across the nation with more than 34% of low-cost deposits, a capital buffer of nearly 12% and a business book of Rs. 14.82 lakh crore. The Bank of Baroda is the biggest of the three with Rs. 10.29 lakh crore of total business, followed by Vijaya Bank at Rs. 2.79 lakh crore and Dena Bank at Rs.1.72 lakh crore.
- Previously, the govt had pushed through consolidation of the State Bank of India group, with SBI absorbing five associate banks and Bharatiya Mahila Bank. That process was completed last year.



Benefits

- **Overall benefits:** The consolidation will help create a strong global competitive bank with economies of scale and enable realisation of wide-ranging synergies.
- **Increased lending capacity:** The merger gives more room to lend to the top companies and makes capital requirements simpler.
- **Reduced capital requirement under Basel-III:** The amalgamation will mitigate the pressure on government to set aside money to meet recapitalization needs of Basel III norms. Since April 2017, government has already set aside Rs 99,476 crore for recapitalization.
- **Geographical synergy:** The Vijaya Bank and Dena Bank have reasonable presence in the southern and western regions, respectively, which should complement the more pan-Indian spread of Bank of Baroda.
- **Moving to a sensible strategy:** For long, it has been recognised that having several banks that are majority-owned by the government, virtually doing the same business and competing for the same pie of customers wasn't a sensible strategy.
- **Other advantages:** Rationalization of branches, re-deployment of manpower and cost-reduction, efficiency in its treasury operations, enhanced customer base and market reach and lower operating costs are seen as main advantages.

Challenges

- **Imposition from above:** The amalgamation of the three PSBs has been decided through the Alternative Mechanism for consolidation of public sector banks constituted in November 2017, comprising three cabinet ministers. As per the provisions of *Banking Companies (Acquisition and Transfer of Undertakings) Act, 1970*, the Central government must consult with the RBI while

formulating such amalgamation schemes for the banks and place them before both Houses of the Parliament for their endorsement. The final power to decide on the merger/amalgamation scheme rests with Parliament. Decision-making on bank mergers through the ministerial mechanism amounts to an imposition from above. This attenuates the functional autonomy of the bank boards and could adversely impact the concerned bank's business operations, financial health, morale of the officers and employees and the confidence of the customers.

- **Penalization for better performing bank:** The Union Government seems to be penalizing Vijaya Bank for its better performance in terms of better managed NPA, profit *etc.* by terminating its independent existence through the amalgamation proposal.
- **NPAs remain the same:** The amalgamation of the balance sheets of the three PSBs will only alter the NPA and capital adequacy ratios through financial engineering, without helping in the process of actual NPA recovery.
- **Shifting focus away from NPA issue:** The bank merger proposal is more of a digression, which seeks to turn attention away from the core issue of NPA recovery, in which the govt has floundered.
- **Human resource issue:** The combined entity will have a total of 85,675 employees, thus handling the human resources will be a challenge.
- **Reduction of bank branches in hinterland:** Bank branch penetration continues to remain low in India compared to our developing country peers, which warrants an expansion of bank branches and activities. M&As, on the other hand would cause greater concentration in banking, which will curb domestic competition and lead to reduction in bank branches.
- **Other banking activities of banks will suffer:** The organizational disruption caused in these PSBs through the merger would relegate every other activity to the backstage. The banks concerned will have to do fire-fighting for the next few years, adversely affecting other banking activities, merely in order to integrate people, processes and procedures.
- **Decision not based on efficiency:** The Centre's big bang bank merger plan has not been driven by complementarities, growth potential or cost efficiency. Instead, the weak state of small PSBs and the Centre's tight finances that deter massive capital infusion, appear to have triggered off the hasty amalgamation of the three PSU banks.
- **Creation of systemic risk:** Gigantism will add to systemic risks, harming the economy and the industry. The goal should be to keep banking competitive and to prevent the creation of banks that are too big to fail.
- **Need banks of varying size:** A few big banks are fine, but we need new banks of varying sizes that can compete for custom and achieve functional financial inclusion.

Way forward

- Creating a large bank via forced mergers is simple. Ensuring that it is globally competitive and ring-fenced from political interference is the real challenge.
- The government's decision to merge Bank of Baroda, Dena Bank and Vijaya Bank will yield the desired results only if these lenders rationalized their branches, looked to reduce costs and handled people issues well.
- An amalgamation may partially offset some immediate problems. But as long as the incentive structure for bankers remains similar to what existed in the past, banks will remain vulnerable.
- Moreover, the visible impact of this move will take time to fructify but the ultimate test will be how they scale up business and fasten credit growth, which has been an issue with banks.

- Even if one concedes that consolidation is possibly the only way to handhold weaker PSU banks, the Centre should have also hastened governance reforms.
- There is a need for taking concrete action on creating autonomous boards, for which government needs to dilute its stake to below 51 per cent, is imperative. Other constraints such as dual regulation and board constitution have to be dealt with.

Post Payment Bank

Syllabus: Indian Economy and Issues relating to mobilization of resources

In News

Prime Minister recently launched the **India Post Payments Bank (IPPB)**, a financial service provider that will operate under the country's postal department.

About Payment Bank

- **Can accept deposit only:** The government-owned payments bank will be able to accept *deposits of up to Rs. 1 lakh* from customers but cannot lend these funds to advance risky loans at higher interest rates.
- **Provider of other services:** It, however, plans to offer a variety of other financial services to people, including the holders of postal savings accounts that are worth over Rs. 85,000 crore.

Purpose

- **Financial inclusion:** The primary rationale behind the public payments bank idea is to help in the government's goal of achieving financial inclusion by providing savings, remittance, and payments services to the rural and unorganised sectors of the economy.
- **Reinvigorate postal system:** It is also hoped that the payments bank idea will help reinvigorate the postal system, which has a wide network of branches across India. All the 155000 post offices in the country are expected to be linked to the IPPB system by December 2018.

Challenges

- **Viability:** A big challenge facing the new public payments bank is whether it can manage to earn the profits required to survive as a standalone business entity. Given the severe restrictions imposed by the Reserve Bank of India on how payments banks in general can employ their funds, the odds seem to be stacked against the IPPB at the moment.
- **Competition from private sector:** The IPPB is also likely to face stiff competition from private companies, which are generally more nimble in adapting to business realities and far more customer-friendly compared to the government-owned behemoths. And with increasing competition, the IPPB's revenues and margins are also likely to come under pressure.

Mudra Loans Credit Risks

Syllabus: Indian Economy and Issues relating to mobilization of resources.

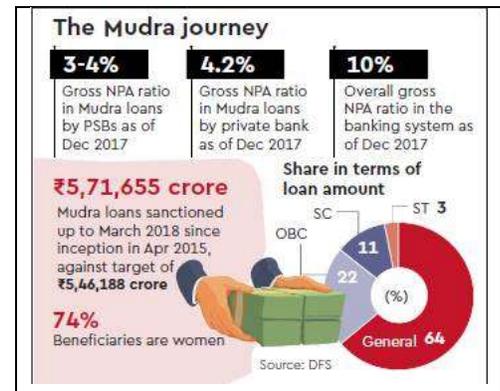
In News

- Former RBI Governor Raghuram Rajan, in his report to Parliament recently, said that while non-performing assets (NPA) stemming from corporate loans are a current problem, the government should focus on sources of the next crisis. In particular, he warned the government should refrain from setting ambitious credit targets or waiving loans. He called out Mudra loans as those with potential credit risks.

- He particularly flagged the culture of meeting credit targets, which are sometimes achieved by abandoning appropriate due diligence, creating the environment for future NPAs. Both Mudra loans as well as the Kisan Credit Card, while being popular have to be examined more closely for potential risk.

About Mudra

- **Aim:** The Micro Units Development & Refinance Agency Ltd. (Mudra) was set up in 2015 under the **Pradhan Mantri Mudra Yojana (PMMY)** to help develop and refinance the non-corporate business sector by supporting finance institutions that lend to micro/small business entities engaged in manufacturing, trading and service activities.
- **Focus on microfinance:** It is aimed at using micro finance as an economic development tool that helps to provide income-generating opportunities to the people at the bottom of the pyramid, targeting small manufacturing units, shopkeepers, fruits and vegetable vendors, truck and taxi operators, food-service units, repair shops, machine operators, artisans and food processors.



Challenges

- **Neglecting the best practices:** Critics of the scheme say that too many best practices in loan origination have been neglected, while authorizing and disbursing loans. Earlier this year, the CBI registered a case against a former official of Punjab National Bank for alleged abuse of official position in sanctioning and disbursing 26 Mudra loans amounting to Rs. 65 lakh.
- **Lack of collateral:** Even, if loans are sought by business owners genuinely seeking growth and bankers disburse them with an eye on economic development, ensuring repayment is still a challenge. As these loans are unsecured, thus a collateral that could protect the interests of the bank is not required, unless an asset that is purchased can itself serve as collateral.
- **Volatility in business:** The scheme is meant for those who need small amounts, but do not have access to such funds, but the very nature of the business of such borrowers is susceptible to volatility and annual cycles, not to mention the itinerant ways of some business owners, such as vegetable vendors. They may choose one location for their place of business on a day and another elsewhere in their city the next day.
- **Banks understaffed to monitor:** Further, the public banking system may not be staffed for work this may entail. When it comes to collection, bank staff may choose to go after one loan with outstanding of Rs. 10 lakh, for example, rather than 10 loans of Rs. 1,00,000 each.

Corporate Social Responsibility

Syllabus: Indian Economy and Issues relating to mobilization of resources.

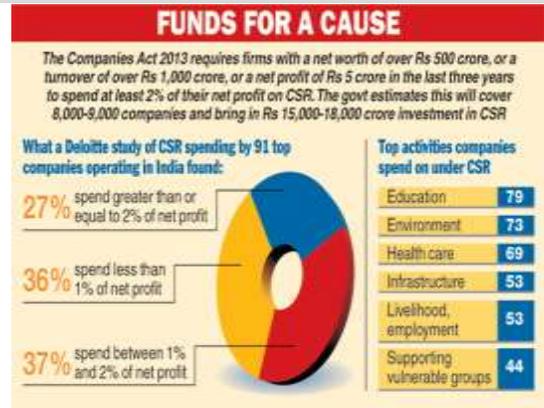
Introduction

- Indian Companies Act (2013) under **Section 135** mandates that Indian corporates, public and private, must allocate at **least 2 per cent of their net profits** for CSR (Corporate Social Responsibility).
- The Act defines broadly the social framework within which companies should spend their CSR funds but beyond that, companies have the freedom to identify the projects and determine the modalities of implementation.

- The Act was gazetted in 2014 and since then, according to the Ministry of Corporate Affairs (MCA), companies have spent Rs 5922 crore, Rs 7549 crore and Rs 8446 crore in 2014, 2015 and 2016 respectively on eligible CSR activities.

Problems Faced In Implementing CSR

- **Limited experience:** The corporates have limited experience and expertise in addressing the complexities of social development.
- **Concentration of funds in few sectors:** The MCA data shows that the bulk of the CSR money (*almost 75 per cent*) is allocated to just three sectors *i.e.* education, health (including sanitation and water) and rural poverty.
- **Skewed distribution of funds:** The MCA data also reveals a skew in the distribution of the CSR funds. *Almost 40 per cent* of the money goes to just a few relatively well-developed states such as Maharashtra, Gujarat, Karnataka, Tamil Nadu, Andhra Pradesh and Telangana. Thus, this model in short aggravates rather than alleviates existing regional and social disparities.



Way Forward

- Thus the above issues have raised the need for a different model for CSR expenditure such as corporates pool their CSR funds into a common *CSR trust* and allow an autonomous body to manage and disburse the funds. This body should be a confederation of corporates, NGOs, domain experts and government. Its role should be to define the CSR agenda, identify the CSR projects, select the local partners, allocate the resources and oversee implementation. Such a collaborative model would be an improvement on the present individualistic approach.
- This will also enable the pooling of knowledge and experience, the sharing of best practice and the leveraging of scale economies. Moreover, it would provide a forum for learning from the grassroots experience of NGOs and the local community and facilitate back-office synergies & reduce duplication of efforts.
- The government is responsible for social development. Corporates cannot replace them in this role. But governments need help. Corporates can make a meaningful contribution especially if there is a platform that allows them to offer the totality of their skills, technology and resources.

Commerce Ministry Carries Out Fresh Review Of Free Trade Pacts

Syllabus: Indian Economy and Issues relating to mobilization of resources.

In News

- The Commerce Ministry is carrying out a fresh review of all free trade agreements entered into by the country so far to analyze the impact of such agreements on various sectors.
- The idea is to examine each FTA and see where the Indian industry has gained and what challenges have cropped up due to the pacts.
- The review is being carried out at a time when the government is struggling to figure out whether India will benefit from the ambitious Regional Comprehensive Economic Partnership (RCEP) being negotiated between 16 nations, including India, China and the 10 members of ASEAN countries.

The Analysis

- **Dual impact:** The Indian industry and farmers have always been wary of free trade pacts. There have been complaints of cheap imports from countries with which India has signed FTAs rendering the domestic products uncompetitive. However, there are also instances where Indian exports have increased due to import duties lowered by FTA partner countries.
- **Issues of different sector:** Different sectors have had issues with different FTAs. **For instance**, the textile industry is not happy with concessions given to South Asia, especially Bangladesh; the electronic goods industry is not happy with concessions to South East Asia, Japan and South Korea; the spices sector is concerned about imports from Sri Lanka, while the vanaspati industry has problems with concessions to Malaysia and Indonesia.
- **Lower utilization rate:** The bigger issue with India is that utilisation of FTA by Indian exporters to send their goods to partner countries is very low. In fact, estimates made by the Asian Development Bank, places the utilisation rate of **India's FTAs between 5 per cent and 25 per cent**, which is one of the lowest in Asia.

India Moving Towards Tax-Compliant Society

Syllabus: Indian Economy and Issues relating to mobilization of resources.

In News

- **Increase of 70%:** The total number of income tax returns (ITRs) e-filed up to August 31, 2018, was 5.42 crore as against 3.17 crore up to August 31, 2017, marking an increase of 70.86%. A remarkable increase was seen in the number of ITRs filed by salaried individuals and also those availing the benefit of the Presumptive Taxation Scheme.
- **Presumptive income scheme:** The government had Liberalised the presumptive income scheme for small traders and entrepreneurs with **annual turnover of less than Rs. 2 crore** and introduced a similar scheme for professionals with annual turnover of **less than Rs. 50 lakh**, with the hope that there would be significant increase in compliance.
- **Analysis:** This is indicative of an India moving steadily towards a more tax compliant society, and reflects the impact of continuous leveraging of technology to improve taxpayer service delivery.

WEF Future of Jobs Report

Syllabus: Indian Economy and Issues related to employment.

In News

- According to a 'Future of Jobs' report released by the World Economic Forum (WEF), by 2025, machines are projected to overtake humans in workplace task hours in 12 key industry sectors.
- Technological changes such as **Fourth Industrial Revolution, high-speed mobile Internet and cloud technology, artificial intelligence, robots and automation** will bring a significant shift to existing work tasks.
- In 2018, humans performed an average of 71% of total task hours across the 12 industries spanning manufacturing, services and high tech. **By 2025, that will drop to just 48%, Machines will perform the remaining 52%.**
- Jobs expected to become redundant include routine-based white-collar roles, such as data entry clerks, accounting and payroll clerks.

- However, if sufficient reskilling is done, new jobs will still lead to a net gain in employment opportunities. In India, 54% of employees in these sectors will need reskilling by 2022.

Atal Bimit Vyakti Kalyan Yojana

Syllabus: Indian Economy and Issues related to employment.

In News

- The Employee's State Insurance Corporation (ESIC) has launched **Atal Bimit Vyakti Kalyan Yojana** for Insured Persons (IP) covered under the Employees' State Insurance Act, 1948.
- It has been launched considering the change in employment pattern which has transformed from a long term employment to fixed short term engagement in the form of contract and temporary jobs.
- This scheme is a **relief payable in cash directly to the bank account in case of unemployment** and while they search for new engagement.
- The cash benefit given to the unemployed persons searching for new employment will be 25 percent of his average earning of 90 days.
- For super specialty treatment, the ESIC has reduced the requirement of insurable employment of two years to six months with contribution requirement of only 78 days.

ESI

- ESI is a self-financing social security and health insurance scheme for Indian workers.
- It is managed by the **Employees' State Insurance Corporation (ESIC)** which is an autonomous body under Ministry of Labour and Employment.
- It was established in **1952 as a statutory organisation under the Employee State Insurance Act, 1948.**
- ESIC is for establishments having more than 10 workers with monthly wage ceiling of Rs. 21,000.

Punch Tantra

Syllabus: Indian Economy and Issues relating to employment.

In News

- Union Minister for Tribal Affairs introduced the World Boxing Champion Ms. Mary Kom as the Brand Ambassador of "Tribes India" and also launched the "Punch Tantra" Diwali collection.
- **The Punch Tantra range of tribal artefacts** includes handlooms and handicrafts specially introduced for the coming Diwali and festival season.
- These are inspired and promoted by the **World Boxing Champion Mary Kom. The "punch" of Mary Kom represents the hard work and dedication of the tribal master craftpersons in creating such master prices of art and craft.**

Tribes India

- In **March 2018**, Union Ministry for Tribal Affairs launched '**e-Tribes: Tribes India**' as an initiative for digital commerce for Tribals. This includes **e-commerce portal of TRIFED, www.tribesindia.com and M-commerce, android app 'Tribes India'**.
- The launch of **e-commerce site will help to eliminate intermediaries & bring artisans directly in touch with buyers.**

Jan Dhan Yojana Extended Indefinitely

Syllabus: Inclusive growth and issues arising from it.

In News

- The Union government has transformed the Pradhan Mantri Jan Dhan Yojana (PMJDY) into a **open-ended scheme** by approving its **indefinite continuation** to ensure all citizens have the same access to banking and financial instruments.
- Launched in 2014, the scheme aims at **improving access to financial services**, especially in the rural areas and among lower-income households, in a **mission for financial inclusion**.
- The scheme offers awareness and instruments of insurance, pension, and bank accounts.

Amendments

- In its new avatar, the Jan Dhan Yojana will now have a **relaxed age limit of 18-65 years** for availing overdraft facility as against the earlier 60 years upper limit.
- Further, the overdraft facility has been extended from Rs 5,000 to Rs 10,000 and there will be no conditions attached for an overdraft up to Rs 2,000.
- Under the **expanded coverage from 'every household to every adult'**, the new accidental insurance cover for new RuPay cardholders stands at Rs.2 lakh instead of 1 lakh, for PMJDY accounts opened after August 28, 2018.

Mauritius Tops India's FDI Chart

Syllabus: Effects of liberalization on economy

In News

- **Introduction:** Mauritius remained the top source of foreign direct investment (FDI) into India in 2017-18 followed by Singapore, whereas **total FDI stood at \$37.36 billion** in the financial year, a marginal rise over the \$36.31 billion recorded in the previous fiscal, according to RBI data.
- **Country wise FDI:** While FDI from Mauritius totalled \$13.41 billion as against \$13.38 billion in the previous year, inflows from Singapore rose to \$9.27 billion from \$6.52 billion. FDI from the Netherlands declined marginally to \$2.67 billion as against \$3.23 billion a year earlier.
- **Sector wise FDI:** Provisional data for the fiscal ended March revealed that FDI into the manufacturing sector witnessed a substantial decline to \$7.06 billion, as against \$11.97 billion a year earlier. However, FDI into communication services rose to \$8.8 billion in FY18 from \$5.8 billion. The inflows into retail and wholesale trade also shot up to \$4.47 billion as against \$2.77 billion, while financial services too saw a rise to \$4.07 billion from \$3.73 billion in the previous year. The fact that these sectors accounted for more than 50% of total FDI of \$37.36 billion in 2017-18 reflects the global interest in new areas, including online marketplaces and financial technologies.

SEBI's FPI Circular

Syllabus: Effects of liberalization on economy

In News

- A fresh row broke out with Foreign Portfolio Investors (FPI) protesting over the provisions in SEBI's circular of April 10 2018, alleging implementation of the rules could lead to around **\$75 billion** of funds flowing out of the country.

- SEBI has asked the working group headed by **Harun R. Khan** to look into the concerns expressed by the FPIs and give suggestions.

The Issue

- April 10 Circular:** SEBI issued a circular directing certain categories of FPIs such as trusts, banks, mutual funds, and investment managers to disclose their beneficial owners within six months. A beneficial owner is a person who, directly or indirectly, derives the benefits of ownership. The circular said that Non Resident Indians (NRIs), Persons of Indian Origin (PIOs), Overseas Citizens of India (OCIs) and Resident Indians (RIs) couldn't be beneficial owners of a fund investing in India. The regulator also asked FPIs to disclose names and addresses of beneficial owners; whether they were acting alone or together through one or more natural persons as a group; tax residency jurisdiction and beneficial owner group's percentage shareholding capital or profit ownership in the FPI.
- OCI/NRI ownership of FPI entities:** The April 10 circular clearly states that NRIs and OCIs could own FPI entities that managed foreign money, as a strictly non-investing entity. The circular also says that if an FPI is Category II investment manager of other FPIs and is a non-investing entity, it may be promoted by NRIs/ OCIs. The April circular was in fact, only repeating the rules in the FPI regulations framed in 2014. These permitted entities owned by NRIs and resident Indians to be registered as non-investing FPIs for the purpose of acting as an investment manager for other FPIs. In other words, SEBI never had an objection to NRIs and RIs managing FPI funds, provided they did not invest their own funds through such entities.
- NRIs as beneficial owners:** Another grouse of the FPIs with the April circular was that it laid down that NRIs and OCIs couldn't be beneficial owners in FPIs. The circular says that any structure that has these entities as beneficial owners has to be wound down or liquidated. SEBI is not wrong in asking these entities not to hold significant stake in FPI structures. According to FPI regulations 2014, NRIs and OCIs cannot register as FPIs with SEBI. Allowing these investors to hold substantial stake in FPIs would be akin to allowing them a back-door entry into Indian markets.
- Entry not totally disallowed:** The maximum permissible ceiling for investment in a stock is also different for FPIs and NRIs *i.e.* the limit is **24 %** of the paid-up capital of the Indian company for FPIs and **10 %** for NRIs. It needs to be noted that NRIs and OCIs can invest in Indian markets through FPIs, provided their investment does not cross a specified threshold. Hence, the perception in many sections that the SEBI circular barred FPI entities with NRI investments is also not correct.
- Identifying beneficial owners:** The RBI and the SEBI are worried about money round tripping through multi-layered FPI entities, where the ultimate beneficiary is not identifiable. The primary intention of the April 10 circular was to identify a natural person, which means a human as the ultimate owner of each FPI. The owner's details such as passport number, address, ID proof and so on were to be disclosed. Thus, the regulator wanted to tighten KYC norms to prevent money laundering and round tripping of funds, especially if an investment is made *via* a **high-risk jurisdiction**. Typically, countries with a known history of money laundering and funding terrorism activities are considered as high-risk jurisdictions.
- Circular was implementing PMLA:** The April circular tried to pin the beneficial owner (BO) of each FPI by using the rules laid down in the Prevention of Money Laundering Act (PMLA) that says, the



BO is a person/persons owning or controlling **25 %** of the FPI if the investor is a company and **15 %** if the investor is a partnership firm, trust and unincorporated association of persons.

- **Other view:** The move to characterize fund managers as beneficial owners of FPIs where their actual owners aren't identifiable, can be avoided because most offshore funds investing in India are bound to hire locals or persons of Indian origin to oversee their portfolios. Given that high-risk jurisdictions haven't been defined, this categorization can be dropped.

Suggestion of HR Khan Committee

- **Threshold limit:** The working group has acknowledged that it might not be right to use the PMLA rules for identifying beneficial ownership. It has, therefore, recommended that the threshold for identifying BOs can be **25 per cent** of the assets under management in case of a single NRI/OCI/RI. Aggregate holdings of these entities should be below **50 per cent** of the AUM. The increased threshold appears reasonable enough. In case these entities hold more than the prescribed limit, all they would have to do is to liquidate the portion of assets exceeding the limit or transfer it to someone else.
- **Other suggestions:** The Khan committee has also proposed that NRIs, OCIs and RIs should be allowed to hold a non-controlling stake in FPIs and no restrictions should be imposed on them to manage non-investing FPIs or SEBI registered offshore funds. It has recommended that erstwhile PIOs should not be subjected to any restrictions and clubbing of investment limits should be allowed for well regulated and publicly held FPIs that have common control.
- **New Timelines:** The panel has suggested that the time for compliance with the new norms should be extended by **six months**, after they are finalized and non-compliant investors should be given another **180 days** to wind down their existing positions.
- **KYC Norms:** It has also asked Sebi to do away with additional KYC requirements for beneficial owners in case of government-related FPIs.
- **Creation of parity:** The committee has recommended changes in the norms pertaining to the identification of senior managing officials of FPIs and for beneficial owners of listed entities. It has suggested changes in the disclosure of personal information of beneficial owners. It has said however, that all new rules should apply equally to investors using participatory notes (P-Notes).

Way Forward

- This controversy could not have broken out at a worse time for the economy. With a sinking Rupee, tightening global liquidity and skyrocketing oil prices, India badly needs foreign fund flows at this juncture to bridge its runaway trade deficit.
- Overall, this controversy clearly underlines the need for regulators to engage in a public consultation process and clearly spell out their rationale, whenever they attempt a substantial overhaul of their ground-rules for the Indian markets.
- In respect of above controversy, recently SEBI announced that an NRI can now **hold up to 25%** of a foreign fund's assets; while collectively, their holdings should be **below 50%** of the corpus. NRIs can bring down their holdings in a foreign fund to these levels **within two years**. Moreover, there will be no restrictions even beyond 2 years if the FPI invests only in Indian mutual funds. The regulator also said FPIs can be controlled by investment managers owned by an NRI or OCI as long as the investment manager is regulated in its home jurisdiction and registers itself with SEBI as non-investing FPI. Else, it should be registered with SEBI.

Centre Plans Minimum Import Price Among Options to Curb Non-essential Goods

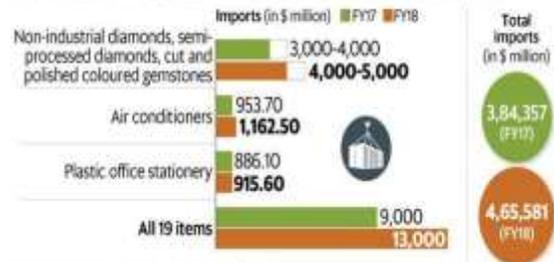
Syllabus: Effects of liberalization on economy

In News

- The Center has recently decided to increase the custom duty on 19 non-essentials item including air-conditioners, refrigerators, washing machines, footwear, jewellery, furniture fittings and tableware besides imposing it on aviation turbine fuel (ATF). Moreover, it is also looking at imposing minimum import prices (MIP) or safeguard duties on some goods as it attempts to cut non-essential imports and compress the current account deficit to halt rupee depreciation. Restricting entry of some goods to certain ports and selective duty increases could also be considered.
- India’s current account deficit deteriorated to 1.9% of GDP in FY18 from 0.6% in the year before and is forecast to rise to around 2.8% in the current year. The trade deficit has widened to \$80.4 billion in the first 5 months of the current fiscal year from \$67.3 billion in the same period last year.
- On import substitution, it is an irony that despite the abundance of coal reserves, thermal coal is one of India’s fastest-growing imports. This is a consequence of under-investment in modernizing the entire coal production and utilisation chain and must be addressed expeditiously.

Smaller share of the pie

To contain the rupee’s fall, import duties on 19 non-essential items have been hiked. However, these form a smaller share of overall imports.



Benefits

- **Encourage domestic investment:** This could have salutary effect of fostering greater investment in the domestic production of some of these goods.
- **Checking forex drain:** The significant increases in customs duties of selective items, which the government perceives to be non-essential imports appears to be aimed at reducing the drain of currency reserves and boost domestic demand.
- **Revenue generation:** The increased duty is likely to yield about Rs 4,000 crore in revenue.
- **Protectionism rising everywhere:** Some policymakers within the government feel that when protectionism is on the rise globally, India should not hesitate in providing some assurance to its domestic industry while also cutting imports of non-essential goods.
- **Avoid goods routed through FTA Countries:** MIP measures have been seen to be more effective than simply raising duties, which lead to goods being routed via countries with which India has free trade agreements (FTAs).

Challenges

- **Little impact:** The aggregate value of these imported items in the last fiscal year was just Rs. 86,000 crore. At that level, these imports constituted a little less than 3% of the country’s merchandise import bill in 2017-18. Thus, the impact of this tariff increase in paring the import bill and thus containing the CAD is at best going to be short-term and marginal.
- **Dampen consumption based growth:** On the other hand, the decision to double import duties on a clutch of consumer durables to 20% could dampen consumption of these products, especially at a time when the rupee’s slide against the dollar is already likely to have made these goods costlier.

- **Difficult to justify the action at WTO:** India will find it difficult to substantiate reasons for the measures it takes to restrict imports of certain products at the World Trade Organization (WTO). New Delhi has the option of invoking the clauses that relate to protecting national security, public morals or safeguarding human, animal and plant life or health and conservation of exhaustible natural resources to stop some imports. As per WTO norms, the measures can't be arbitrary or mean unjustifiable discrimination between countries or constitute disguised restriction on international trade. Further, the outright bans run afoul of the World Trade Organisation (WTO) rules that emphasize **National treatment principle**.
- **Impact on airline sector:** The tariff on aviation turbine fuel (ATF), which will now attract 5% customs duty instead of nil may add to the stress of domestic airline operators, the rupee and rising oil prices having already hurt their wafer-thin margins.

Way forward

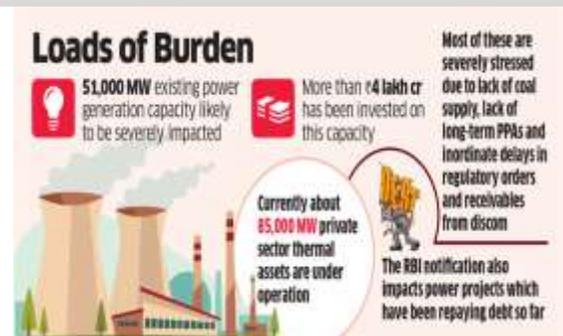
- It is strange that the government's stress is more on curbing imports than on promoting exports. Making imported inputs costly with high tariffs, even as the rupee's decline has made them more expensive, will not help exports grow. Restrictive trade practices by India will add to the anti-globalization narrative taking hold in the wake of trade wars and mercantilist policies by the US. India must champion, not oppose, globalization.
- Thus, a more robust approach in addressing the widening CAD would be to institute wide-ranging measures to boost exports and simultaneously reduce the import-intensity of the economy. Policymakers must renew efforts to ensure that export growth starts outpacing the expansion in merchandise imports. This includes expediting the refunds on GST to exporters, to working to woo some of the labor-intensive supply chains that are moving out of China to countries such as Vietnam and Bangladesh.
- The Centre's decision to increase customs duty on imports of 19 non-essential items amounts to tinkering at the margins to address a structural macro-economic issue.

Power Sector NPAs

Syllabus: Infrastructure: Energy

In News

- Flawed politics has stricken the power sector, and its woes have spilt over into banking by constituting a **fifth of whose non-performing assets**, currently estimated at **Rs. 10.3 lakh crore**.
- A RBI circular that came into effect on March 1, 2018 mandated banks to identify power projects with even one day's default as stressed assets and conclude their resolution proceedings **within 180 days**.



Final Analysis

- The Reserve Bank of India is right to insist on their prompt resolution, but we also need to boost power infrastructure to remove energy poverty without handing over prize assets to some select industrialists at throwaway prices.
- This calls for fixing the power sector so that power assets can generate revenue. Moreover, there is a need for improving transparency in power utility finances, ending unbudgeted giveaways in distribution and clamping down on electricity theft.

Pradhan Mantri Annadata Aay Sanrakshan Abhiyan

Syllabus: Issues related to direct and indirect farm subsidies and minimum support prices

In News

- The Cabinet has allowed gradual entry of private companies in procurement of food grains and sanctioned Rs. 31603 crore for two schemes to ensure farmers are able to sell their produce at the minimum support price (MSP).
- These initiatives are part of the **Pradhan Mantri Annadata Aay Sanrakshan Abhiyan (PMAASHA)** to ensure higher income of farmers with the help of robust procurement in coordination with states.

Provisions of New Scheme

- **Three components:** Under the PM-AASHA, states will be allowed to choose from three schemes existing **Price Support Scheme (PSS)**, newly designed **Price Deficiency Payment Scheme (PDPS)** and the new pilot **Private Procurement Stockist Scheme (PPSS)** to undertake procurement when prices of commodities fall below MSP level.
- **Existing PSS to continue:** The existing Price Support Scheme (PSS) will continue for pulses and copra, with Central agencies including the NAFED and the Food Corporation of India physically procuring the produce whenever the market rates fall below MSP, up to a **maximum limit of 25%** of the total harvest. The Centre will bear the costs, as per existing guidelines.
- **Private sector participation will be piloted:** The participation of private sector in procurement operation will be piloted so that on the basis of learning the ambit of private participation in procurement operations may be increased. Under it the selected private agencies will procure the commodity at the MSP, instead of the government. Maximum service charges up to **15% of the notified MSP** will be payable.
- **Choices in case for oil seed:** For oilseeds alone, the States will be allowed to choose between the PSS or private procurement. The Price Deficiency Payment Scheme is modeled on the **Bhavantar experiment in Madhya Pradesh** last year, where there is no physical procurement at all. Instead, farmers will sell their produce in the market, and the government will directly pay them the difference between the MSP and the average market rate.



Benefits Of Private Sector Participation

- **Overall benefits:** The direct procurement by private sector should help in improving transparency in price discovery for farmers, stabilizing and augmenting farmer's income by increasing competition for their produces and reducing inefficiency by curtailing role of the middlemen.
- **Attractive investment opportunity:** Once the farmer has better visibility on his income, agriculture will become attractive for entrepreneurs, thereby encouraging investments in all facets of agriculture like cultivation, storage, logistics, etc. resulting in enhanced productivity.

- **Holistic approach:** It shows the government's holistic approach as increasing MSP is not adequate and it is more important that farmers get the full benefit of the announced MSP. Thus, The scheme is expected to ensure that farmers get the MSP fixed by the Centre for crops grown this kharif season, to be marketed from next month.

Way Forward

- The question is again with regard to implementability. When market prices today are consistently ruling below MSPs, it only means that the latter do not reflect supply-demand fundamentals. That being so, the responsibility for making purchases at MSP and incurring both sale as well as storage losses would be solely on government agencies. Then question arises how much can these agencies buy and store? Moreover, how will they dispose of these stocks? NAFED is now struggling with the roughly 6.5 million tonnes of pulses and oilseeds it bought in 2017-18 and which is currently being offloaded back into the market at below MSPs.
- Thus, if farmers are to be paid remunerative rates, the best way to do it is not through distorting but by liberating the markets. Let the farmer grow any crop based on market signals and sell anytime at the going price that traders are willing are pay.
- Simultaneously, introduce competition by allowing anybody from anywhere to buy from any mandi within India, while doing away with all storage and movement restrictions. A truly national market for agricultural produce, coupled with a flat per acre government payment independent of the crop being grown is the need of the hour.
- Moreover, the success of the pilot scheme would depend on the mechanism to reimburse the difference between the support price and the market price to private agencies.

Maharashtra MSP

Syllabus: Issues related to direct and indirect farm subsidies and minimum support prices

In News

- The Maharashtra government has taken a decision to make purchase of any farm commodity at below MSP even by private players, be it traders or processors, a punishable offence attracting cancellation of licence of trader, **one-year prison term** and a fine of **Rs 50,000**.
- The government has fixed MSP for **24 crops** but is influential primarily in rice and wheat. Even in the case of these two cereals the extent of influence can be gauged from the quantity of production, which is procured at MSP by government agencies. At best, about **32-33%** of production is procured. Procurement is far lower in the case of other MSP crops. This means most of the production is sold to private traders at a price which is determined by the demand-supply dynamics of the relevant crop. Therefore, there may be situations when market price is below MSP. However, the government now wants to ban this by fiat.

Negative Impact

- **Shifting the burden of MSP implementation:** If the Maharashtra government has its way, the onus for implementing the Centre's historic decision to fix minimum support prices (MSP) for crops at **1.5 times their average production costs** will not lie with state procurement agencies. Instead, that responsibility shall be with private trade.
- **Price determination should be by market forces:** If market prices for crops are below the MSPs, it only means that the latter do not reflect supply-demand fundamentals. No rational trader would obviously buy at the MSP to sell at a lower rate.

- **The question of compensation to private trader:** The National Agricultural Cooperative Marketing Federation is now offloading tur, moong (green gram), urad (black gram) and groundnut that it procured at MSPs last year at market prices, which are far lower than MSP. The apex state procurement agency is able to do this only because its losses will be borne by the government. Thus, there is a question who will compensate private trade's losses for purchases at government determined MSPs.
- **Ultimate sufferer will be farmers:** If they are going to risk being jailed for not paying the MSP, the safest option is not to buy at all. Thus, ultimate sufferer will be farmers because traders will desert the market and there will be no buyers for produce.

Way Forward

- If the government in Maharashtra or at the Centre wants farmers to receive the MSP, it should be done without distorting the market. Farmers could be paid the difference between the MSP and the market determined prices through direct benefit transfer for the quantity of produce sold by them, which is what **Madhya Pradesh** has attempted to do.
- Even better is **Telangana formula** of making a flat per-acre payment, which is decoupled from production. Let the farmer grow any crop based on market signals and sell at the price that traders are willing to pay. Simultaneously, introduce competition by allowing anybody from anywhere in India to buy from any mandi within the country, to create a truly national agricultural market.
- Thus, the best way to help the farmer realise a better price is by ensuring more buyers not by threatening them.

Soil Health Card Scheme

Syllabus: Issues related to direct and indirect farm subsidies and minimum support prices

In News

- The Soil Health Card (SHC) scheme, that was introduced in 2015 intended that every farmer receive a health card for their soils that tells them the status of the nutrients in it and as a result, guides them about the fertilizers they should apply to maximize their yields.
- The soil is analyzed for **12 soil chemical parameters** and thereafter the soil is recommended for fertilizer dosages and the same is printed on the SHCs, which were given to farmers.
- As of June 2018, 2.53 crore samples had been collected and SHCs have been distributed to 10.74 crore farmers.

Lacunae in SHC Scheme

- **Operational challenges:** The current census approach, where soil samples are collected from every 2x2 hectare parcel of land in irrigated areas (10x10 hectare in dry areas) and transported en masse for analysis in a dated network of wet chemistry labs has put tremendous strain on the system and the quality of soil analysis has suffered.
- **Difference in result:** Studies conducted have shown a low correlation between the results generated by the SHC scheme and those generated by gold standard labs. For instance, a

GUIDE FOR FARMERS	
<ul style="list-style-type: none"> ➤ Card to carry crop-wise recommendations of nutrients/fertilizers for different soil types ➤ Details will be displayed on the basis of soil tests ➤ Help farmers in judicious use of fertilizers, organic manures and water ➤ Cards to be issued for all 14 crore farmland holdings in three years ➤ Three crore cards to be given in 2015; 5.5 crore in 2016 and 5.5 crore in 2017 ➤ Soil samples for testing to be drawn in a grid of 	
	<ul style="list-style-type: none"> ➤ 2.5 hectare in irrigated areas ➤ Soil samples for testing to be drawn in a grid of 10 hectare in rain-fed areas ➤ 248 lakh samples to be tested to generate 14 crore 'soil health cards'

Harvard study in Gujarat last year found accuracy issues in 300 of the 800 plots tested.

- **Over simplistic solution:** The scheme's current design oversimplifies the nutrient recommendations. For example, if the health card shows that a farmer's soil is deficient in zinc, it recommends topping up zinc. However, increasingly, research is showing that a crop's yield response to a nutrient is far more complex than this. It is determined not only by the deficiency of that nutrient, but also other variables such as rainfall, production practices, the presence of other nutrients, soil acidity, and temperature to name a few. The correct yield response can be predicted from a model with data on the above parameters, a system that the scheme currently does not use. The simplistic recommendation based on deficiency of that nutrient alone is often sub-optimal and can exacerbate the farmer's problem rather than solve it.
- **Underestimation of own potential:** The large scale collection of soil data sees little use outside of filling out a physical card. This vast repository of data, painstakingly aggregated from millions of samples remains largely isolated from researchers, start-ups and even state governments.

Way forward

- These shortcomings, however present a remarkable opportunity for Indian agriculture. The solution is moving toward a sampling based soil information system that reduces the need for the tens of millions of samples that strain our lab capacity and produces better results four times faster at half the cost.
- There is also need to develop predictive models using big data to provide recommendations to farmers that account for all the factors that affect a crop's yield response. For example, a recommendation that encourages the use of a custom fertilizer blend in addition to asking the farmer to reduce sowing depth.
- Moreover, the datasets collected should be made available through an open platform. This could help start ups to combine soil health card data with rainfall and irrigation data and deliver precision irrigation advisories to our farmers on their mobile phones. Moreover, Fertilizer companies building upon such a platform, leveraging soils data, weather data and farmer demand patterns can shape the distribution of fertilizer blends in different districts. Such a platform can catalyze a wave of innovations in agriculture.
- Andhra Pradesh for example is currently bringing together years worth of cropping pattern data, precipitation data, temperature readings, irrigation information and SHC data and combining them with farmer production practices to determine what impact different nutrients have on yield. As a first step, this will act as a decision support system to do more targeted extension and produce more customized fertilizer blends. Eventually, it can be used to offer recommendations to farmers to help improve yields.

Technology Initiatives for Coffee Stakeholders

Syllabus: Technology missions

In News

- The Coffee Board, under the **Ministry of Commerce and Industry**, launched **Coffee Connect** - India coffee field force app and Coffee Krishi Tharanga - digital mobile extension services for all relevant stakeholders across the ecosystem.
- One of the key reasons for launching the apps was to **ensure better information exchange** between the Coffee Board personnel and those on the ground growing and selling the coffee.

- The applications launched are one of the first in the country to use technologies like **blockchain across the value chain** as well as **IVR based back end operations** to give timely and precise advisory to coffee farmers.
- Farmers being the end user the technologies have been built on certain critical principles like ease of use, wider participation, maximization of reach and benefit.

Coffee Connect

- Coffee Connect has been developed by Coffee Board in association with **National Institute for Smart Government (NISG)** to ease the work of field functionaries & improve their work efficiency.
- The application provides solution by harnessing the power of mobility comprising the latest technology in easing the whole process of the field activities like digitization of coffee growers & estates with geo tagging and collecting the plantation details.
- It will also help in transparency in the activities of the extension officers and officials, transparency in subsidy disbursement and real time report generation.

Coffee Krishi Tharanga

- It has been jointly developed by Coffee Board and **Precision Agriculture for Development India Foundation (PADIF)**.
- Its services are aimed at **providing customized information and services** to increase productivity, profitability, and environmental sustainability. The customised services are two ways, 24*7 service supports.
- **NABARD** has partly funded the pilot project.
- Coffee Board in collaboration with EKA Analytics, a global leader in the data analytics and artificial intelligence has also developed the **hyper local weather forecast**, pest (white stem borer) identification and leaf rust disease forecast applications for pilot testing.

Coffee Plantation

- Coffee is cultivated in India in about 4.54 lakh hectares by 3.66 lakh coffee farmers and 98% of them are small farmers.
- Coffee plantations are spread across undulating terrains in hilly regions with most of the cultivation mainly confined to Karnataka (54%), Kerala (19%) and Tamil Nadu (8%) which form traditional coffee tracts.

Conclusion

Technology has a distinctive characteristic of bringing positive and disruptive change and it is always evolving. The initiatives will ensure efficiency and ensure long term sustainable livelihoods to lakhs of farmers involved in coffee industry across the country.

Technology

Scientists Grow Human Oesophagus In Lab

Syllabus: Science and Technology- developments and their applications and effects in everyday life

In News

- In a first, scientists have successfully grown oesophageal organoids — **miniature, functional versions of the human food pipe** — using stem cells, paving the way for new ways to study and test drugs against gut disorders.

- The human oesophageal tissue was grown entirely from pluripotent stem cells(PSCs), which can form any tissue type in the body.
- The development has intriguing consequences. It allows for the safe, detailed study of conditions related to our food channel in the lab and provides model samples to test therapies and drugs on.
- In addition to being a new model to study birth defects like esophageal atresia, the organoids can be used to study diseases like Eosinophilic esophagitis and Barrett's metaplasia, or to bioengineer genetically matched esophageal tissue for individual patients
- There are several diseases that can afflict people later in life. Some include oesophageal cancer, gastroesophageal reflux disease (GERD), or a rare ailment called achalasia -- a disease affecting the muscles of lower oesophagus that prevents contraction of the organ and the passage of food.
- These conditions require better treatments, and to reach them, it is important that both the genetic and biochemical mechanisms at play in the esophagus are understood. These organoids could be a game changer as they are ideal human tissues that can be experimented on safely.

Oesophagus

The oesophagus is also known as the **gullet or food pipe**.

- It is part of the digestive system, which is sometimes called the gastro-intestinal tract (GI tract).
- It is a long, muscular tube connecting one's mouth to stomach and is around 25cm long in adults.
- Upon swallowing food, the walls of the oesophagus squeeze together (contract). This moves the food down the oesophagus to the stomach.
- The oesophagus has four layers:
 - **The mucosa** – the inner layer, which is moist to help food pass smoothly into the stomach.
 - **The submucosa** – this contains glands that produce mucus (phlegm), which keeps the oesophagus moist.
 - **The muscularis** – the muscle layer, which pushes food down to the stomach.
 - **The adventitia** – the outer layer, which attaches oesophagus to nearby parts of the body.

World's First Hydrogen Train

Syllabus: Science and Technology- developments and their applications and effects in everyday life

In News

- Germany has rolled out the world's first hydrogen-powered train, signalling the start of a push to challenge the might of polluting diesel trains with an eco-friendly technology.
- Nicknamed **Hydrail**, these trains are called **Coradia iLint trains** and have been manufactured by Alstom, one of Europe's largest railway manufacturers.
- The train has batteries made of lithium-ion that is used in mobile phones and home appliances.
- Additionally, the train is equipped with **fuel cells** that produce electricity through a combination of hydrogen and oxygen, a process that leaves steam and water as the only emissions. Excess energy is stored in lithium ion batteries on board the train.
- Buying a hydrogen train is somewhat more expensive than a diesel train, but it is cheaper to run, the Coradia iLint trains can run for about 600 miles (1,000km) on a single tank of hydrogen, similar to the range of diesel trains.
- Further, hydrogen fuel cells have advantages over batteries. Instead of recharging, they can be easily refuelled like a gas or diesel engine.

- The European Commission has described hydrogen as an energy carrier with "great potential for clean, efficient power in stationary, portable and transport applications."
- However, hydrogen doesn't have the ready supply chain of diesel. To use hydrogen at the same or lower cost, a similar network needs to be built.
- Just like the steam-engine kickstarted the age of coal, the German train could just kickstart the age of hydrogen.

MoU on Block Chain Technology

Syllabus: Awareness in the fields of IT and Computers

In News

- The Union Cabinet has approved a Memorandum of Understanding (MoU) on **collaborative research in the field of blockchain and distributed ledger technologies**.
- The cabinet's approval will enable India's Export-Import (EXIM) Bank to launch research efforts in these fields with the participation of representative banks from BRICS financial bloc.
- The **Xiamen Declaration** signed in China on digital economy by the BRICS leaders had highlighted the importance of the digital economy and how the BRICS nations could leverage the thriving and dynamic digital economy that will foster global economic development and benefit everyone. Accordingly an MoU was suggested to be inked by all member banks.
- The MOU, which is a cooperative initiative under the BRICS Interbank Cooperation Mechanism, aims to **foster better understanding of DLT (distributed ledger technology)** and define areas where the technology can be deployed to **improve operational efficiency**.
- DLT holds potential for solutions to various challenges being faced in the financial sector space of the BRICS nations and it allows the banks to **study the applications of innovative technologies in infrastructure finance and bank products optimization**.

International Center for Transformative Artificial Intelligence

Syllabus: Awareness in the fields of IT and Computers

In News

- NITI Aayog, Intel and the Tata Institute of Fundamental Research (TIFR) have come together to set up a model International Center for Transformative Artificial Intelligence (ICTAI) towards developing and deploying AI-led application-based research projects.
- It will be located in Bengaluru, Karnataka.
- The model ICTAI aims to conduct advanced research to incubate AI-led solutions in three important areas – healthcare, agriculture and smart mobility.
- It aims to experiment, discover and establish best practices in the domains of ICTAI governance, fundamental research, physical infrastructure, compute and service infrastructure needs and talent acquisition.
- The intent is to develop standards and support policy development related to information technology such as data-storage, information security, privacy, and ethics for data capture and use.
- The model Centre also plans to develop AI foundational technologies to promote applied research that can scale for national impact and will lead to the creation of a vibrant and self-sustaining ecosystem.

- Another key area of its focus will be collaboration with industry leaders, startups, and AI services and product companies to productize technologies and IP and along the lines support skilling and talent development for world-class AI talent.
- The learnings and best practices developed through this model ICTAI will be used to set up the future ICTAIs across the country.
- Artificial Intelligence is going to be a transformative driver of economic growth and social progress, and the vision is to drive human-centric AI to benefit humanity in an inclusive manner with potentially transformative effects on society.

ICESAT-2

Syllabus: Awareness in the fields of Space

In News

- NASA has launched a satellite **Ice, Cloud and Land Elevation Satellite-2 (ICESAT-2)** into orbit to measure changes in the height of Earth's polar ice cover.
- The satellite launched aboard a United Launch Alliance (ULA) Delta II rocket from Vandenberg Air Force base will measure the average annual elevation change of land ice covering Greenland and Antarctica to within the width of a pencil, capturing 60,000 measurements per second.
- The ICESat-2 observatory contains a single instrument, an improved laser altimeter called ATLAS (Advanced Topographic Laser Altimeter System).
- ATLAS is designed to measure ice-sheet topography, sea ice freeboard as well as cloud and atmospheric properties and global vegetation.
- Satellite is also tasked with measuring ocean & land surfaces — even forests and provide scientists with useful estimates of forest densities, how much carbon is stored in them and wildfire behaviour.
- It uses a technique called **photon counting**. It fires about 10,000 pulses of light every second. Each of those shots go down to Earth and bounce back up on a timescale of about 3.3 milliseconds. The exact time equates to the height of the reflecting surface.
- It will extend and improve upon NASA's 15-year record of monitoring change in polar ice heights, which started in 2003 with the first ICESAT mission and continued in 2009 with NASA's Operation Ice Bridge — an airborne research campaign that kept track of accelerating rate of change.
- It is hoped that ICESat-2 can help produce the first robust maps of sea-ice thickness in the Antarctic. At the moment, the technique for assessing ice floes really only works in the Arctic.
- It will also help researchers narrow the range of uncertainty in forecasts of future sea level rise and connect those changes to climate drivers.

Transiting Exoplanet Survey Satellite

Syllabus: Awareness in the fields of Space

In News

- NASA's **orbital telescope Transiting Exoplanet Survey Satellite**, better known as TESS discovered two distant planets five months after its launch from the Cape Canaveral Air Force Station in Florida.
- The telescope is designed to find thousands of new **exoplanets – planets circling nearby stars** – including those that could support life over a two-year mission.

- It is designed to build on work of its **predecessor, the Kepler space telescope**, which discovered bulk of some 3,700 exoplanets documented during past 20 years & is running out of fuel.
- With four special cameras, TESS uses a detection method called **transit photometry**, which looks for periodic dips in the visible light of stars caused by planets passing or transiting, in front of them.
- The first planet **Pi Mensae c**, a super-earth orbits a bright yellow dwarf star Pi Mensae, just under 60 light-years from Earth.
- The second **LHS 3844 b**, a hot earth, orbits a red dwarf star LHS 3844, just under 49 light-years away.
- A planet is classified as a super-earth if it's at least three times the mass of Earth and can be as big as 10 times the size of Earth.
- Both planets appear to be Earth-like and rocky, but neither is habitable as both are too close to their stars for liquid water.

Cassini Spacecraft

Syllabus: Awareness in the fields of Space

In News

- Data from NASA's Cassini spacecraft has led to the scientists spotting a surprising feature emerging at Saturn's northern pole as it nears summertime — **a warming, high-altitude jet stream with a hexagonal shape**.
- The edges of this newly found vortex appear to be hexagonal, precisely matching a famous and bizarre hexagonal cloud pattern we see deeper down in Saturn's atmosphere. This warm vortex sits hundreds of miles above the clouds, in the stratosphere.
- The results suggest that the lower-altitude hexagon may influence what happens above, and that it could be a towering structure hundreds of miles in height.

Cassini

- The **Cassini–Huygens mission**, commonly called Cassini, was a **collaboration between NASA, the European Space Agency (ESA), and the Italian Space Agency (ASI)** to send a probe to study the planet Saturn and its system, including its rings and natural satellites.
- Cassini was the fourth space probe to visit Saturn and the **first to enter its orbit**.
- The lander Huygens landed on Saturn's largest moon **Titan**.
- Cassini was active in space for nearly 20 years, with 13 years spent orbiting Saturn, after entering orbit in July 2004.
- Its mission ended in September 2017, when Cassini's trajectory took it into Saturn's upper atmosphere and it burned up.

ISRO Launches Two U.K. Satellites

Syllabus: Awareness in the fields of Space

In News

- ISRO recently launched PSLV-C42 into orbit carrying two earth observation satellites from Britain. The satellites onboard are **NovaSAR and S1-4**.
- The launch was a collaboration between Surrey Satellite Technologies Limited and Antrix Corporation Limited, ISRO's commercial arm.

- India is seeking a larger share of the more than \$300 billion global space industry as it seeks to project itself as a global low-cost provider of services in space.
- The PSLV-C-42 launched the two satellites into a 583 km sun-synchronous orbit.
- A satellite is said to be in a sun-synchronous orbit when it changes its orientation throughout the year to ensure that the angle of sunlight is the same every time it passes over a particular geographical area on the surface of the earth.
- NovaSar is a Synthetic Aperture Radar that will be used for ship detection, maritime monitoring and flood monitoring, besides agricultural and forestry applications.
- The S1-4 is a high-resolution optical earth observation satellite which will be used for environment monitoring, urban management, and tackling disasters.

Dickinsonia

Syllabus: Awareness in the fields of bio-tech

In News

- Scientists have discovered an *ancient fossil of the earliest animal* on geological record — **Dickinsonia** — a strange oval creature with rib like segments running along its body that lived on Earth 558 million years ago.
- The animal, which grew up to 1.4 metres in length, was part of the **Ediacaran Biota (earliest animal group)** that lived on Earth 20 million years prior to the Cambrian explosion of modern animal life.
- The Cambrian explosion is the term given to the period of time in history when complex animals and other macroscopic organisms such as molluscs, worms, arthropods and sponges began to dominate the fossil record.
- Researchers found the Dickinsonia fossil so well-preserved in a remote area near the White Sea in the northwest of Russia, that the tissue still contained molecules of cholesterol, a type of fat that is the hallmark of animal life.
- The fossil fat molecules found prove that animals were large and abundant 558 million years ago, millions of years earlier than previously thought.
- Scientists have been debating for more than 75 years over what Dickinsonia and other fossils of the Ediacaran Biota were — giant single-celled amoeba, lichen, failed experiments of evolution, or the earliest animals on Earth.
- The fossil fat found in the earliest animal now confirms it as the oldest known animal **fossil**, solving a decades-old mystery.

Apsara U Reactor

Syllabus: Indigenization of technology and developing new technology.

In News

- Nine years after Apsara (the country's first and oldest atomic reactor) was shut down, the Bhabha Atomic Research Centre (BARC) has set in motion a higher capacity version Apsara-upgraded (U).
- Indigenously constructed, Apsara U is a swimming pool type research reactor that **uses plate type dispersion fuel elements made of low enriched uranium**.

- Using high neutron flux, the reactor will increase the indigenous production of radioisotopes for medical application by about 50% and will also be extensively **used for research in nuclear physics, material science and radiation shielding.**
- Radioisotopes generated via power generation in nuclear reactors, research reactors, accelerators and spent fuel are used in agriculture, healthcare, industry and even municipal waste management.
- This development has re-emphasised the capability of Indian scientists and engineers to build, complex facilities for health care, science education and research.

Apsara

- Apsara, in addition to being the **first nuclear research reactor in India** that reached criticality in August 1956, was also the **first in Asia.**
- A light water swimming pool-type reactor with a maximum power output of one megawatt thermal (MWT) was inaugurated by then Prime Minister Jawaharlal Nehru.
- The reactor was designed by the BARC and built with assistance from the **United Kingdom.**
- The production of radioisotopes in the country commenced with the commissioning of Apsara.

Environment and Biodiversity

India's National REDD+ Strategy

In News

- Reiterating India's commitment to Paris Agreement, India has prepared REDD+ Strategy.
- The Strategy Report has been prepared by Indian Council of Forestry Research and Education (ICFRE), Dehradun.
- The Strategy builds upon existing national circumstances which have been updated in line with India's National Action Plan on Climate Change, Green India Mission and India's Nationally Determined Contribution (NDC) to UNFCCC.
- The National REDD+ Strategy will soon be communicated to the UNFCCC (United Nations Framework Convention on Climate Change).

Background

- In simple terms, REDD+ means "Reducing Emissions from Deforestation and forest Degradation", conservation of forest carbon stocks, sustainable management of forests, and enhancement of forest carbon stocks in developing countries.
- It aims to achieve climate change mitigation by incentivizing forest conservation. The strategy seeks to address drivers of deforestation and forest degradation and also developing a roadmap for enhancement of forest carbon stocks and achieving sustainable management of forests through REDD+ actions.
- Paris agreement on climate change also recognizes role of forests in climate change mitigation and calls upon country Parties to take action to implement and support REDD+.
- India has communicated in its Nationally Determined Contribution under Paris Agreement, that it will capture 2.5 to 3 billion tonnes of Carbon dioxide through additional forest & tree cover by 2030.
- India's first biennial update report to UNFCCC has revealed that forests in India capture about 12% of India's total GHG emissions. Thus, forestry sector in India is making a positive cost effective contribution for climate change mitigation.

Save Himalayan Springs**In News**

CONTEXT: Shimla Water Crisis

- A NITI Aayog constituted group of experts has urged the government to set up a dedicated mission to salvage and revive spring water systems in the country's Himalayan States given their vital importance as a source of water for both drinking and irrigation for the region's inhabitants
- Spanning States across the country's north and northeast and home to about 50 million people, the Indian Himalayan Region (IHR) has been heavily reliant on these natural groundwater sources that are under increasing threat from the urbanisation caused by a constant push for development and climate change.
- Almost half of perennial springs have already dried up or have become seasonal and tens of thousands of villages are currently facing acute water shortage for drinking & other domestic purposes.

Shimla Crisis

- The extent of the crisis plaguing the mountainous region was recently evident when more than half a dozen districts of Himachal Pradesh and the State capital Shimla faced a severe drinking water crisis this May after major water sources either went fully or partially dry.
- While poor water management was said to be the key cause, according to State authorities, they also attributed reduced snowmelt and depressed flow from springs as contributors to the crisis.
- Also, with almost 64% of the cultivable area in the Himalayas fed by natural springs, they are often the only source of irrigation in the region.

Nature of Springs Water

- The report noted that there were also multiple sources of pollution in springs and these were due to both geogenic, or 'natural' causes and anthropogenic, or man-made, ones.
- Microbial content, sulphates and nitrates were primarily because of anthropogenic reasons and contamination from fluoride, arsenic and iron was mainly derived from geogenic sources.
- Coliform bacteria in spring water could originate from septic tanks, household wastewater, livestock facilities, and manure lagoons in the source area or in the aquifers feeding springs. Similarly, nitrate sources were septic tanks, household wastewater, agricultural fertilisers, and livestock facilities.

States Potential

While Meghalaya with 3,810 villages with springs had the highest number of these water sources in the Eastern Himalayan States, Sikkim had the greatest density with 94% of its villages having a spring. In the Western Himalayas, Jammu & Kashmir had both the highest number of villages with springs at 3,313 and the greatest density of 50.6%.

Task Force

- The group recommends "a multidisciplinary, collaborative approach of managing springs that will involve building upon the existing body of work on spring water management.
- The programme could be designed on the concept of an action-research programme as part of a hydrogeology-based, community-support system on spring water management."
- The task force moots an 8-year programme to overhaul spring water management. This includes: preparing a digital atlas of the country's springsheds, training 'para hydrogeologists' who could lead grassroots conservation and introduction of a 'Spring Health Card.

NGT Puts Curbs On Western Ghats States

- The six Western Ghats States, including Kerala, have been restrained by the National Green Tribunal (NGT) from giving environmental clearance to activities that may adversely impact the eco-sensitive areas of the mountain ranges.
- The panel directed that the extent of Eco-Sensitive Zones of Western Ghats, which was notified by the Central government earlier, should not be reduced in view of the recent floods in Kerala
- The *Madhav Gadgil-led Western Ghats Ecology Expert Panel (WGEEP) report* had created a political furore in the State with most of the political parties and a section of the church opposing it.
- The Tribunal Bench, in its order, noted that any alteration in the draft notification of zones may seriously affect the environment, especially in view of recent incidents in Kerala.

The WGEEP had earlier proposed “much larger areas for being included in the eco-sensitive zone” though the Kasturirangan-led High Level Working Group also appointed by the MoEF and CC to look into the WGEEP report, had reduced it. The Ministry had accepted the Kasturirangan report and issued the draft notifications on ecologically sensitive zones.

Integrated Development of Wildlife Habitats**In News**

- Cabinet has approved the continuation of the Centrally Sponsored Umbrella Scheme of Integrated Development of Wildlife Habitats beyond 12th Plan.
- The Scheme consists of Centrally Sponsored Scheme of Project Tiger (CSS-PT), Development of Wildlife Habitats (CSS-DWH) and Project Elephant (CSS-PE).

Key Highlights

- A total of 18 tiger range States, distributed in five landscapes of the country would be benefitted under the Project Tiger scheme.
- Similarly, for other two schemes, the coverage is entire country in case of Development of Wildlife Habitats (DWH) and 23 elephant range States for Project Elephant. It would foster wildlife conservation in general with specific inputs for tiger in Project Tiger area and elephant in Project Elephant area.
- Besides immense environmental benefits and effective implementation of tiger conservation inputs in and around tiger reserves under Project Tiger, wildlife conservation inputs in Protected Areas & nearby areas under Development of Wildlife Habitats and Elephant conservation inputs in Project Elephant areas, the schemes would result in overall strengthening/ consolidation of tiger, elephant and wildlife conservation in the country.
- The schemes would address the human wildlife conflict effectively. Besides, the communities opting for voluntary relocation from the Core/Critical Tiger Habitat (6900 families) would be benefitted under Centrally Sponsored Scheme of Project Tiger (CSS-PT) and 800 families under Centrally Sponsored Scheme of Development of Wildlife Habitat.
- These schemes would generate employment opportunities resulting in economic upliftment of people in and around tiger reserves/ Protected Areas besides leading to reduction in natural resource dependency with substitution by clean energy use.
- These schemes would foster imparting various skills towards making people self-dependent through various eco-development projects, thereby enabling them to go for self-employment.

- It would result in resource generation through tourist visits, thereby fostering in securing tiger source areas and other areas important for wildlife conservation, besides being helpful in sustaining life support systems as well as ensuring the food, water and livelihood security.

Saving The World By Capturing Emissions

Context

Along with reducing emissions, India must promote the capturing of emissions to become the world leader in climate change mitigation.

Analysis

- Even if we miraculously stop emitting any carbon today, the planet will still undergo an average temperature increase of 0.6 degree Celsius because of the sheer amount of carbon already present in the atmosphere and oceans.:
- The hottest year on record without an El Nino event was 2017, with the average global temperature being one degree Celsius higher than pre-industrial levels.
- This was driven by an increase in energy demand in India and China, leading to global carbon emissions reaching a record high of 32.5 gigatons, reversing the plateau achieved in the three preceding years.
- The aim of the Paris agreement to limit the increase in average temperatures to 2 degrees Celsius in the short term and 1.5 degrees Celsius in the long run is now under serious threat.

Cause of Hope

- Yet, there remains a case for cautious hope. Global renewables-based electricity generation increased by 6.3% in 2017, now meeting a quarter of the world's energy demand growth.
- At the same time, cost of such resources is falling rapidly. Estimates from the International Renewable Energy Agency (IRENA) suggest that the global average cost of electricity generated from new onshore wind and solar photovoltaic sources already matches the cost of fossil fuel-fired electricity.
- Continuous technology improvements and competitive procurement practices mean that the cost of these renewables will become significantly cheaper than fossil fuel sources by 2020.
- Steady progress is also being made to shift the oil dependent transport sector towards renewable options. The International Energy Agency (IEA) estimated that the number of electric vehicles rose from 1.98 million in 2016 to 3.11 million in 2017, an increase of more than 54%.
- With our future hanging in the balance, 2018–2020 is a critical time for countries to peak and then flatten their emissions trajectory, while simultaneously implementing ambitious solutions for reducing them at pace.

Where The Focus Should Be

- A key factor behind the adoption of the Paris Agreement was its bottom-up approach, encouraging countries to come up with their own action plans to mitigate climate change—the nationally determined contributions (NDCs).
- While these NDCs have been successful in increasing individual responsibility, more work needs to be done as projections estimate an increase in global temperature of 2.7-3.7 degrees Celsius based on current NDCs.
- The 2018 UN Climate Change Conference (COP24) and the subsequent NDCs then become crucial in determining the political commitment to enhanced climate action. The revised NDCs must

include policies designed to promote the capture, storage and sequestration of carbon from the atmosphere and oceans.

- Carbon capture and storage (CCS) projects have had a chequered past. From ecological and ethical questions surrounding geo-engineering to the high costs involved in carbon neutral construction, large scale CCS programmes have traditionally limited themselves to afforestation as the means to capture emissions.
- While afforestation provides huge benefits and should be encouraged, it must be complemented by other initiatives that can capture emissions quickly and safely.
- One such initiative that has floundered in past, despite the technology being available, is capturing and storage of CO₂ from coal plants. This is simply because there is no market for stored CO₂.
- Policy frameworks included in future NDCs will benefit from:
 - (i) Actively promoting innovations and technologies that facilitate the safe re-utilization, rather than just the storage, of CO₂, thereby creating incentives for private investment.
 - (ii) Appropriately valuing the social benefit of decarbonization and reducing the costs borne by CO₂ storage companies accordingly.
 - (iii) Adopting best practices from successful global CO₂ capture programmes to develop the expertise needed.
- Another avenue for policymakers to consider is seaweed farming. It is estimated that the global commercial seaweed market will be worth \$87 billion by 2024.
- Farmed seaweed, with its exceptional ability to capture CO₂ from the oceans and produce bio-digested methane which can be substituted for natural gas, can play a substantive role in reducing carbon emissions.
- The relatively low production cost, the speed at which seaweed grows, the vast potential of the Indian coastline and the subsidies and grants offered by the government, are strong incentives for private sector expansion into seaweed farming.

Way Forward

How we mitigate climate change is a defining question for our generation. The commitment must be steadfast. Setting ambitious goals, scaling up infant technologies and fostering markets for capturing emissions will be key to our success.

Cloudy Forecast: On Climate Change

Context

Climate change financing facing challenges with USA opting out of Paris climate deal.

Issue

- The conference of the UN Framework Convention on Climate Change in Bangkok in Sept', that was to draft a rulebook for the Paris Agreement ahead of a crucial international conference in Poland in December, ran into predictable difficulties over the issue of raising funds to help poorer nations.
- Some developed countries led by the U.S. — which, under the Trump administration, has rejected the agreement — are unwilling to commit to sound rules on raising climate finance.
- Under the pact concluded in Paris, rich countries pledged to raise \$100 billion a year by 2020 to help developing countries reduce their greenhouse gas (GHG) emissions and aid populations to cope with extreme events such as floods, droughts and storms.

- Obstructing the transition to a carbon-neutral pathway and preserving the status quo is short-sighted, simply because the losses caused by weather events are proving severely detrimental to all economies.
- By trying to stall climate justice to millions of poor people in vulnerable countries, the developed nations are refusing to accept their responsibility for historical emissions of GHGs.
- Those emissions raised living standards for their citizens but contributed heavily to the accumulated carbon dioxide burden, now measured at about 410 parts per million of CO₂ in the atmosphere, up from 280 ppm before the industrial revolution.

India and China Conundrum

- There is international pressure on China and India to cut GHG emissions. Both countries have committed themselves to a cleaner growth path.
- India, which reported an annual CO₂ equivalent emissions of 2.136 billion tonnes in 2010 to the UNFCCC two years ago, estimates that the GHG emissions intensity of its GDP has declined by 12% for the 2005-2010 period.
- As members committed to Paris Agreement, China and India have the responsibility of climate leadership in developing world, and have to green their growth. What developing countries need is a supportive framework in the form of a rulebook that binds the developed countries to their funding pledges, provides support for capacity building and transfer of green technologies on liberal terms.
- If scientific estimates are correct, the damage already done to the West Antarctic Ice Sheet is set to raise sea levels; a 2° Celsius rise will also destabilise the Greenland Ice Sheet.
- Failed agriculture in populous countries will drive more mass migrations of people, creating conflict. A deeper insight on all this will be available in Oct' when the Intergovernmental Panel on Climate Change releases its scientific report on the impact of a 1.5° C rise in global average temperature.
- This is the time for the world's leaders to demonstrate that they are ready to go beyond expediency and take the actions needed to avert long-term catastrophe.

70% Chance Of El Nino Event This Year

Context

An El Nino event that could disrupt global weather is likely by end of what has already been a hot year.

What WMO Is Expecting

- The World Meteorological Organisation (WMO) has forecasted "a 70 percent chance of an El Nino developing by the end of this year".
- El Nino is triggered by periodic warming in the eastern Pacific Ocean which can trigger drought in some regions, heavy rain in others. WMO does not expect the anticipated El Nino to be as powerful as the 2015-2016 event, but it will still have considerable impacts.
- The organisation sees increased odds of higher surface temperatures in most of Asia-Pacific, Europe, North America, Africa and along much of South America's coastline.

The WMO is an intergovernmental organization with a membership of 191 Member States and Territories. It originated from the International Meteorological Organization (IMO), which was founded in 1873. Established by the ratification of the WMO Convention on 23 March 1950, WMO became the specialised agency of the United Nations for meteorology (weather and climate), operational hydrology and related geophysical sciences a year later. The Secretariat, headquartered in Geneva, is headed by the Secretary-General. Its supreme body is the World Meteorological Congress

Ocean Cleanup Team Heads To The Pacific

Context

Their target is the eastern Pacific and what's called the Great Garbage Patch, where circular currents have concentrated plastic in one large area.

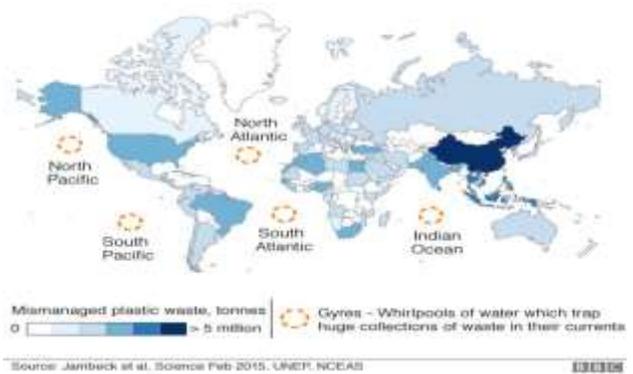
What Is It

A supply ship towing a long floating boom designed to corral ocean plastic has set sail from San Francisco for a test run ahead of a trip to the Great Pacific Garbage Patch. The ambitious project by The Ocean Cleanup, a Dutch non-profit group, hopes to clean up half of the infamous garbage patch within five years once all systems are deployed.

Key Highlights

- The supply vessel was towing a 600 meter-long boom device dubbed System 001, designed to contain floating ocean plastic so it can be scooped up and recycled. The system includes a tapered three-meter skirt to catch plastic floating just below the surface. The key point is that the collection system is passive - there are no motors, no machines. Instead, it'll drift, acting like an artificial coastline, gently gathering any plastic in its path.
- The ship was heading to a spot 240 nautical miles off the California coastline for a two-week trial before sailing to the Great Pacific Garbage Patch, a floating trash pile twice the size of France that swirls in the ocean halfway between California and Hawaii.
- Plastic waste: The project team believes the Pacific garbage patch contains some 80,000 metric tonnes of plastic waste. The aim is to halve the amount of pollution in the patch every five years so that by 2040 almost all of it will be gone. Plastic has started to accumulate in the ocean since the 1950s. Land-based plastic comes mainly from rivers.

Ocean plastic



Green Agriculture

The Green Agriculture project synergises biodiversity conservation, agriculture production, and development.

Role of Biodiversity

- India is signatory to the Convention on Biological Diversity. As four of the 35 biodiversity hotspots are located in India, it is biodiversity-rich. However, climate change and development without consideration for biodiversity are leading to loss of biodiversity. India's National Biodiversity Action Plan (NBAP) recognises the importance of biodiversity for inclusive development.
- The Green Agriculture project implemented by the Indian government and the Food and Agricultural Organisation (FAO) takes a novel approach to support the NBAP and synergise biodiversity conservation, agriculture production and development.
- It is being implemented in five landscapes adjoining Protected Areas/Biosphere Reserves: *Madhya Pradesh, Mizoram, Odisha, Rajasthan and Uttarakhand*. It envisages a transformation in Indian agriculture for global environmental benefits by addressing land degradation, climate change mitigation, sustainable forest management, and biodiversity conservation.

- Man-animal conflicts in the fringes of Protected Areas or animal corridors, and conflicts over unsustainable procurement of non-timber forest products (NTFPs) have been contentious, especially in Odisha and Uttarakhand.
- A *participatory and landscape approach* can ensure sustainability of conservation efforts. Keeping the focus on initiatives for sustainable NTFP harvest, eradication of invasive alien species, and mitigation of wildlife conflicts is essential.
- The landscape approach will aim to restore traditional knowledge systems, such as the conservation of common property resources. Examples include the Orans of Rajasthan and the village safety and supply reserves in Mizoram. Traditional farming systems such as jhum encouraged crop diversity. However, climate change and shortened fallow cycles are undermining jhum cultivation sustainability. Participatory learning tools will encourage farmers to adopt more sustainable indigenous soil conservation.
- India gave the world crops such as rice, chickpea, pigeon pea, mango and eggplant. However, with the focus on policies that cater to market demands, its reservoir of indigenous traditional crops has dwindled. Most keepers of these crop genetic diversity are smallholder farmers, including women.
- The approach will be to strengthen their role as agrodiversity guardians by developing value chains for their indigenous crops such as traditional rice varieties in Odisha.
- Environmental concerns are inadequately reflected in the development rhetoric. Thus, projects such as Green Agriculture are essential in equipping decision-makers with the necessary instruments to design effective and informed policies to underpin environmental concerns.

Snow Leopard Spotted

In News

- Snow leopard was spotted in Himachal Pradesh's Kinnaur district. The footage of elusive snow leopards were captured in the remote areas of Lippa Asrang, signifying that there is plenty of prey for the wild cats.
- Lippa-Asra wildlife sanctuary in Kinnaur district is located at a height of around 4,000 metres while snow leopards are usually found between 9,800 and 17,000 feet in high and rugged terrain.
- Snow leopards are given the same protection as the tiger, listed under Schedule I of the Wildlife (Protection) Act, 1972 – the highest protection afforded to a species.
- It is listed as Vulnerable on the IUCN Red List of Threatened Species.

India Cooling Action Plan

In News

- India is the first country in world to develop such a document (ICAP), which addresses cooling requirement across sectors and lists out actions which can help reduce the cooling demand.
- This will help in reducing both direct and indirect emissions. The thrust of the ICAP is to look for synergies in actions for securing both environmental and socio-economic benefits.

Key Highlights

- The overarching goal of ICAP is to provide sustainable cooling and thermal comfort for all while securing environmental and socio-economic benefits for the society.
- The goals emerging from the suggested interventions stated in ICAP are:

- (i) Recognition of “cooling and related areas” as a thrust area of research under national science and technology programme to support development of technological solutions and encourage innovation challenges,
 - (ii) Reduction of cooling demand across sectors by 20% to 25 % by year 2037-38,
 - (iii) Reduction of refrigerant demand by 25% to 30% by year 2037-38,
 - (iv) Reduction of cooling energy requirements by 25% to 40% by year 2037-38, and
 - (v) Training and certification of 100,000 servicing sector technicians by the year 2022-23, in synergy with Skill India Mission.
- The broad objectives of the India Cooling Action Plan include –
 - Assessment of cooling requirements across sectors in next 20 years and the associated refrigerant demand and energy use,
 - Map the technologies available to cater the cooling requirement including passive interventions, refrigerant-based technologies and alternative technologies such as not-in-kind technologies,
 - Suggest interventions in each sector to provide for sustainable cooling and thermal comfort for all,
 - Focus on skilling of RAC service technicians, and
 - Develop an R&D innovation ecosystem for indigenous development of alternative technologies.
 - Recognizing that integrated actions, taking a holistic view on the cooling requirement across sectors with long term perspective (20 years) will have a higher impact than either of the actions taken in isolation, the Ministry had initiated the process for developing the Cooling Action Plan in July 2017.

World Ozone Day

In News

- It is Celebrated every year on 16th September.
- **Theme: Keep Cool and Carry on: The Montreal Protocol**

About Montreal Protocol

- The Montreal Protocol is the only environmental treaty which enjoys universal ratification of 197 UN numbers countries. The Montreal Protocol on Substances that Deplete the Ozone Layer has been recognized as the most successful international environment treaty in history.
- Its implementation has not only led to the phase-out of around 98% of ozone depleting chemicals, but also averted more than 135 billion tonnes of carbon dioxide equivalent emissions. Nearly 2 million cases of skin cancer per year have been averted globally.

What Are Ozone Depleting Substances

- Ozone depleting substances (ODSs) are those substances which deplete the ozone layer and are widely used in refrigerators, airconditioners, fire extinguishers, in dry cleaning, as solvents for cleaning, electronic equipment and as agricultural fumigants.
- Ozone depleting substances controlled by Montreal Protocol include:
 - Chlorofluorocarbons (CFCs)
 - Halon
 - Carbon tetrachloride (CCl₄), Methyl chloroform (CH₃CCl₃)
 - Hydrobromofluorocarbons (HBFCs), Hydrochlorofluorocarbons (HCFCs)

- Methyl bromide (CH₃Br)
- Bromochloromethane (CH₂BrCl)

Why Focus On Cooling

- Cooling has been recognized as an important development need due to cross-sectoral nature and considerable use of cooling and air conditioning in different Sectors of the economy such as industries, residential and commercial buildings, cold chain, transport (personal, commercial, metro and railways, ships).
- The integration of topics on HCFC phase out and energy efficiency in architectural curriculum will help the future architects to introduce energy efficiency and use ozone friendly materials in new construction of buildings. This will help not only in the protection of Ozone layer, but also reduce energy consumption in building sector, which is one of the significant consumers of electricity in urban areas.

WAYU

In News

- **Wind Augmentation Purifying Unit (WAYU)** is developed by Council of Scientific and Industrial Research –**National Environmental Engineering Research Institute (CSIR-NEERI)** as a part of Technology Development Project being funded by Department of Science and Technology.
- The prototype device that has been indigenously developed has the capacity to purify air in an area of 500 meter square.

Key Highlights

- The device consumes only half a unit of electricity for 10 hours of running and has a maintenance cost of only Rs. 1500 per month.
- **The device works on two principles mainly Wind generation for dilution of air pollutants and Active Pollutants removal.**
- The device has filters for Particulate Matter removal and activated carbon (charcoal) and **UV lamps for poisonous gases removal** such as VOCs and Carbon Monoxide.
- The device has one fan and filter for sucking and removing Particulate Matter. There are two UV lamps and half kg of activated carbon charcoal coated with special chemical Titanium Dioxide.

More River Stretches Are Critically Polluted

In News

In its 2015 report, the Central Pollution Control Board (CPCB) identified 302 polluted stretches on 275 rivers, spanning 28 States and six Union Territories.

Key Highlights

- The number of polluted stretches of the country's rivers has increased to 351 from 302 two years ago, and the number of critically polluted stretches — where water quality indicators are the poorest — has gone up to 45 from 34, according to an assessment by the CPCB.
- While the ₹20,000 crore clean-up of the Ganga may be the most visible of the government's efforts to tackle pollution, the CPCB says several of the river's stretches — in Bihar and Uttar Pradesh — are actually far less polluted than many rivers in Maharashtra, Assam and Gujarat. These three States account for 117 of the 351 polluted river stretches.

- Based on the recommendations of the National Green Tribunal, the CPCB in August, 2018 apprised the States of the extent of pollution in their rivers.
- Mithi among the worst - The most significant stretches of pollution highlighted by the CPCB assessment (which is yet to be published) include the Mithi river — from Powai to Dharavi — with a BOD (Biochemical Oxygen Demand) of 250 mg/l; the Godavari — from Someshwar to Rahed — with a BOD of 5.0-80 mg/l; the Sabarmati — Kheroj to Vautha — with a BOD of 4.0-147 mg/l; and the Hindon — Saharanpur to Ghaziabad — with a BOD of 48-120 mg/l.

Graded Scale

- The CPCB, since the 1990s, has a programme to monitor the quality of rivers primarily by measuring BOD, which is a proxy for organic pollution — the higher it is, the worse the river.
- The health of a river and the efficacy of water treatment measures by the States and municipal bodies are classified depending on BOD, with a BOD greater than or equal to 30 mg/l termed 'priority 1,' while that between 3.1-6 mg/l is 'priority 5.'
- The CPCB considers a BOD less than 3 mg/l an indicator of a healthy river.

Biochemical Oxygen Demand (BOD, also called Biological Oxygen Demand) is the amount of dissolved oxygen needed (i.e. demanded) by aerobic biological organisms to break down organic material present in a given water sample at certain temperature over a specific time period. The BOD value is most commonly expressed in milligrams of oxygen consumed per litre of sample during 5 days of incubation at 20 °C and is often used as a surrogate of the degree of organic pollution of water.

BOD is similar in function to chemical oxygen demand (COD), in that both measure the amount of organic compounds in water. However, COD is less specific, since it measures everything that can be chemically oxidized, rather than just levels of biodegradable organic matter.

PM Narendra Modi Gets Top United Nations Environmental Honour

In News

- Prime Minister Narendra Modi was awarded the United Nations' Champions of the Earth award for the year 2018.
- The United Nations recognised Modi with its highest environmental honour in the policy leadership category for his extensive efforts to 'Beat Plastic Pollution'- *including an ambitious pledge to eliminate all single-use plastic in the country by 2022.*
- President of France, Emmanuel Macron has also been awarded in the same category for his work on the Global Pact for the Environment.
- Cochin International Airport was also awarded for its leadership in use of sustainable energy in the category of entrepreneurial vision.
- The airport is world's first fully solar-powered airport.
- The other three winners are: Joan Carling ,Beyond Meat and Impossible foods and China's Zhejiang Green Rural Revival Programme.

- The Champions of the Earth award is the United Nations highest environmental honour recognizing visionary people and organisations all over the world that exemplify leadership and advocate action on sustainable development, climate change and a life of dignity for all.
- Launched in 2005, Champions of the Earth has recognized dozens of exemplary individuals and

organizations. Through their extraordinary achievements – whether through political leadership, grassroots action, scientific innovation, or entrepreneurial vision – each of these Champions has inspired critical action on behalf of the global environment.

- It is awarded by UNEP.
- Past laureates include: Afroz Shah, who led the world’s largest beach cleanup (2016), Rwandan President Paul Kagame (2016), former US Vice-President Al Gore (2007), Ocean Cleanup CEO Boyan Slat (2014), scientist-explorer Bertrand Piccard, and developer of Google Earth Brian McClendon (2013)

Disaster Management

IOWave16

In News

- India along with 23 other countries participated in a large-scale tsunami simulation exercise organized by the Intergovernmental Oceanographic Commission (IOC) of UNESCO on 7 and 8 September.
- The tsunami mock drill, known as the IOWave16, will test the standard operating procedures of the Indian Ocean Tsunami Warning and Mitigation System and is designed to assess the effectiveness of communication flows between operational centres and stakeholders, emergency procedures and country readiness, according to the IOC.
- The exercise will include community evacuation drills in at least 10 countries, involving over 50,000 participants, and will comprise two scenarios.
 - I. The first drill will simulate an earthquake on 7 September with a magnitude of 9.2 south of Sumatra, Indonesia.
 - II. The second drill on 8 September will simulate an earthquake with a magnitude of 9.0 in the Makran Trench south of Iran and Pakistan

While the **first drill** will involve the **east coast**, India’s **west coast** will be part of the **second drill**.

- Operations will begin when the Joint Australian Tsunami Warning Centre, the Indian Tsunami Early Warning Centre and the Indonesian Tsunami Early Warning System issue alert notifications to the 24 countries concerned.
- Simulating tsunami waves travelling across the Indian Ocean, both exercises will be conducted in real time lasting about 12 hours.
- In India, massive community-level evacuations will be carried out in about 350 villages involving some 35,000 participants from coastal communities mostly in Odisha, Andaman and Nicobar Islands, Andhra Pradesh, Tamil Nadu, West Bengal, Kerala, Gujarat and Goa.
- In Sri Lanka, 14 villages will be evacuated, involving some 7,000 participants. In Oman, eight schools and about 8,000 students will take part in simulated evacuations.

Indian Ocean nations called for the establishment of an Indian Ocean Tsunami Warning and Mitigation System in the wake of the 2004 tsunami disaster. “The Indian Tsunami Early Warning Centre (ITEWC), based out of the Indian National Centre for Ocean Information Services (INCOIS), which was set up in 2007 in Hyderabad is an autonomous institution under the Ministry of Earth Sciences and can detect tsunamigenic earthquakes within 10 minutes of their occurrence and disseminate timely advisories to disaster management officials and the vulnerable communities.

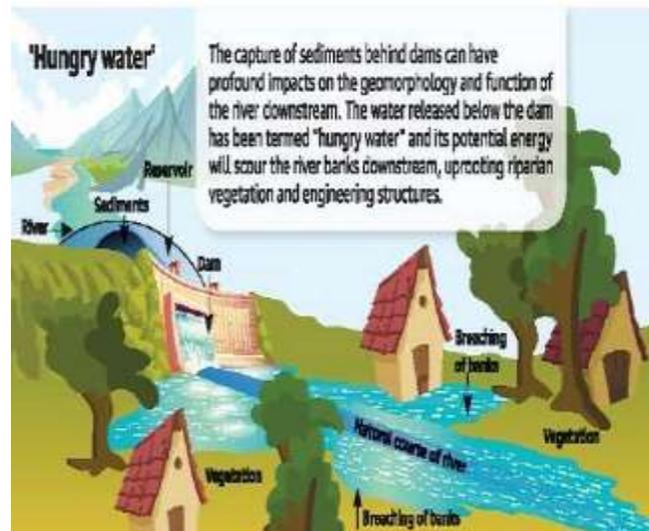
What Caused The Floods In Kerala?

A combination of four factors led to extreme flooding across Kerala this year, a study says. *Above normal seasonal (May-August) rainfall, extreme rainfall events occurring almost across the State during the season, over 90% reservoir storage even before the onset of extreme rainfall events, and finally, the unprecedented extreme rainfall in catchment areas of major reservoirs in State led to the disaster.*

1. The summer monsoon rainfall in Kerala from May to August this year was 2,290 mm, which was 53% above normal. The average rainfall during the summer monsoon period (June-September) is about 1,619 mm. This makes 2018 Kerala's third wettest year in the last 118 years (1901-2018)
2. Kerala received 1634.5 mm rainfall during the period May 1 to August 7, which is more than the average rainfall (1619.37 mm) during the summer monsoon period (June-September). As a result, six of the seven major reservoirs in the State had over 90% storage before August 8, well before Kerala received the unprecedented extreme rainfall events.
3. Finally, the catchment areas of major reservoirs in the State received extreme rainfall never before witnessed in the State. The role of other factors such as changes in how infrastructure has grown at the expense of vegetation and drainage remains to be studied.

The State-wide flooding shows that reservoirs can play a major role in improving or worsening the flood situation. The widespread damage caused by recent floods in Kerala can be attributed to the 'hungry water' effect' caused by the surge of sediment-starved water from the upstream reaches of a river. While heavy rainfall is also a key factor behind the floods, hungry water had a more pronounced effect.

- Dams and reservoirs trap the sediments eroded from rocks and soils, leaving the river starved of its sediment load. When the sediment transport is interrupted, the potential energy of the hungry water released from dams will scour the river banks downstream, uprooting trees or riparian vegetation and damaging bridges and other engineering structures.
- Overloaded with silt and clay from the eroding river banks, the highly turbid and viscous water clogs drainage channels. Subsequent discharge of water from the dam will lead to inundation and water logging of large areas.
- Hungry water can also develop in high gradient river channels devoid of adequate quantity of sand and gravel, especially during periods of high rainfall.
- Years of uncontrolled sand mining have left most of rivers in Kerala depleted or exhausted of sand & gravel. This creates a situation similar to release of hungry water from dams.
- When the river channel has adequate supply of sand and gravel, the potential energy of the water is used to transport the mixture. The water does not scour the banks or turn muddy.

**Centre To Hike Grant For State Disaster Response Fund (SDRF)****In News**

The Centre has enhanced its contribution in the SDRF from 75% to 90%. Kerala, which has recently faced the worst floods, will be a major beneficiary of the Centre's decision. Henceforth all States will be required to contribute 10% to the SDRF.

What Does The Act Have

- Under the **Disaster Management Act 2005**, a financial mechanism has been set up by way of National Disaster Response Fund (NDRF) at national level and SDRF at the State level to meet the rescue and relief expenditure during any notified disasters.
- The SDRF has been constituted in each State in which the Centre, so far, had been contributing 75% for the general category states and 90% for special category States of hilly regions every year.
- The SDRF is a resource available to the States to meet the expenses of relief operations of immediate nature, for a range of specified disasters. At any point, the state government has fair amount of funds available under the SDRF.
- Based on the recommendations of successive Finance Commission, the central government approves the annual allocation to SDRF.

Security

New Cyber University

Syllabus: Basics of cyber security

In News

- The Maharashtra Government has taken steps towards setting up a new cyber university
- This university will be dedicated to mitigating cyber threats, which will train 3,000 professionals to fight online space cyber attacks, internet crimes, and conduct cyber forensics.
- It will also impart training in 15 other Internet of Things (IoT) areas such as Data Analytics and Artificial Intelligence (AI).
- The current supply of cyber professionals in the country is about a lakh while the demand hovers around 30 lakh.
- A cyber attack is taking place every 10 minutes as opposed to 12 minutes previously. Against this backdrop, cyber university is being set up as a remedy to these problems.
- Maharashtra is already in the process of setting up its version of the **Indian Computer Emergency Response Team** to ward off external cyber threats.

Data Localisation

Syllabus: Basics of cyber security

In News

- US technology giants and leading Indo-US business advocacy groups plan to intensify lobbying efforts against stringent Indian data localisation requirements.
- According to them, these requirements will undermine their growth ambitions in India.

Background

- Earlier, the RBI had asked all payment companies operating in India to set up data storage facilities within the country in the next six months.
- The central bank in its notification said while the payments ecosystem had grown in India, it needed “unfettered supervisory access” to the transaction data to ensure better monitoring of the network.

What is Data Localisation

- Data localization is the act of storing data on any device that is physically present within the borders of a specific country where the data was generated.
- Free flow of digital data, especially data which could impact government operations or operations in a region, is restricted by some governments.
- Data localization often requires better IT infrastructure and stringent security measures for data related to business operations.

Analysis

- Calls for data localisation are not new. It has been a mainstay of Indian policymakers' demands from foreign technology companies.
- The *Justice Srikrishna Committee* in its report accompanying the draft Personal Data Protection Bill released on July 27 notes that eight of the top 10 most accessed websites in India are owned by U.S. entities. This reality has often hindered Indian law enforcement agencies when investigating routine crimes or crimes with a cyber element.
- Police officials are forced to rely on a long and arduous bilateral process with the U.S. government to obtain electronic evidence from U.S. communication providers. In such scenario, data localization seems to correct this anomaly.
- Post the recent Cambridge Analytica and Facebook data breach controversy, the Indian government is considering asking all global firm to ensure that data of Indians are stored locally.
- Greater use of digital platforms in India for shopping or social networking have made it a lucrative market for technology companies, but a rising number of data breaches have pushed New Delhi to develop strong data protection rules.
- Also, localisation was a global phenomena and India wasn't an outlier. It is in the long term strategic and economic interest of the country
- However, many analysts believe that data localisation is not a perfect solution. According to them, this step is borne of hope that when questions of data access are determined, their storage here will give rise to a strong Indian claim.
- However, this is not true. U.S. law effectively bars these companies from disclosing user data to foreign law enforcement authorities.
- Technology companies are allowed to share data such as content of an email or message only upon receiving a federal warrant from U.S. authorities. This scenario will not change even after technology companies relocate Indian data to India.
- Stricter localisation norms would help India get easier access to data when conducting investigations, but critics say it could lead to increased government demands for data access.
- Technology firms worry the mandate would hurt their planned investments by raising costs related to setting up new local data centres.
- Leading techno giants are claiming that restricting data flowing across borders would risk a country's global competitiveness and economic growth. Also such a move would also not necessarily ensure data protection.
- There is also the risk of a backlash from India's IT export markets, which could result in reciprocal changes that could undermine India as the preferred outsourcing destination.

- The measures are a further move towards breaking up the world into a series of data regimes, a phenomenon sometimes named the “splinternet”. This could seriously retard the growth of data-enabled innovation beyond simply the delivery of online services.

e-Sahaj Portal

In News

- The government has launched an online ‘e-Sahaj’ portal for grant of Security Clearance.
- The aim of this portal is to strike a healthy balance between meeting the imperatives of national security and facilitating ease of doing business and promoting investment in the country.

Key Highlights

- The portal will facilitate an applicant to submit application online and also to view the status of his application from time to time.
- Ministry of Home Affairs (MHA) is nodal Ministry for security clearances in certain sensitive sectors before issue of licence/permit, permission, contract etc, to companies/ bidders/individuals by the administrative Ministry.
- The objective of national security clearance is to evaluate potential security threats, including economic threats, and provide risk assessment before clearing investment and project proposals in key sectors.

Background

- Based on the inputs received from the agencies, MHA takes decision to grant or deny security clearance with reference to core national security i.e. unity, integrity and sovereignty of the country.
- There were several projects which were stuck for lack of approval by Intelligence Bureau (IB) or other agencies including the State police. Hence, in order to speed up the process, government had formulated a new policy in 2015.
- The time taken for security clearance for a project was eight-nine months on an average. This has been brought down to 40 days since 2017.

About National Security Clearance Policy

- The national security clearance policy was drawn up by the ministry to fast-track the security clearance process and complete it within 4-6 weeks upon receiving the application as part of Government’s ease-of-doing-business mantra under the Make In India initiative.
- The objective of the national security clearance is to evaluate potential threats, visible or embedded, in proposals received by the home ministry and to provide a national risk assessment.
- As per the policy, the promoters, owners and directors of the company are mandated to give self declarations regarding any criminal history on their part, which reduced the period required to give security clearance from 2-3 months earlier to to just 4-6 weeks now.
- Security inputs from the Intelligence Bureau, the CBI, the Enforcement Directorate and other agencies are sought only in cases of serious crimes and not in case of minor offences.
- A total of 14-15 parameters have been set out in eight to nine sensitive areas like telecom, ports, civil aviation, uplinking/downlinking of TV channels or FM stations.
- It has also spelt out locations where foreign investment is not welcome such as those close to border and vital installations.

- Strict scrutiny is also proposed to check if the promoters or directors of the company come from China and Pakistan or they are originally from these two countries.

Amendment to DPP-16

In News

- The Defence Acquisition Council (DAC), chaired by Raksha Mantri, has approved several amendment to Defence Procurement Procedures 2016 (DPP – 16).
- This step is taken in an effort to reduce timelines in defence procurements and streamline Defence Procurement Procedures.

Key Highlights

- The new amendment has limited the time period for executing Repeat Order to five years after date of completion of warranty of final delivery in the previous contract.
- Repeat Order provisions have also been extended to procurements by other services like the Central Armed Police Force (CAPF) and Border Roads Organisation (BRO).
- It includes permissions to commence with benchmarking of cost for equipment immediately on receipt of trial report in Service headquarter.
- The amendment has legislating provisions for exchange rate variations when pursuing procurement with 'Option Clause'.

[Also refer the topic DAC Approves Measures to Simplify Defence Procurement Procedure in CA of May 2018]

DPP-2016

- The Ministry of Defence (MoD) had released the revised Defence Procurement Procedure (DPP) in March 2016.
- DPP-2016 draws heavily from the report of the **Committee of Experts under the chairmanship of Dhirendra Singh**, to suggest a policy framework for facilitating 'Make in India' in defence and further streamlining the procurement process.
- The document has aimed to create a new procurement regime with a clear intention to boost the 'Make in India' initiative in the defence sector, and to speed up the procurement process.

Key Provisions:

- **Buy (Indian-IDDM) Procurement Category** - DPP-2016 has introduced a new procurement category, Buy (Indian–Indigenously Designed, Developed and Manufactured), or 'Buy (Indian – IDDM)' to provide a greater thrust to Make in India.
- Outright purchase of equipment and procurements under this scheme are further categorized as Buy (Indian- IDDM), Buy (Indian), and Buy (Global).
- **Priority wise**, the procurement of defence equipment can be arranged as (1) Buy (India-IDDM) (2) Buy (Indian) (3) Buy and Make (Indian) (4) Buy and Make (5) Buy (Global).
- **Higher yet Flexible Indigenous Content Requirement** - the revised DPP has enhanced the indigenous content requirement under the existing 'Buy (Indian)' category from the earlier 30 per cent to 40 per cent. It also provides flexibility to the procurement authorities to stipulate either a higher or lower indigenisation content, depending on the merits of the projects.
- **Revamped 'Make' Procedures** to remove the complexities and thereby efficiency and

effectiveness in 'Make' procedures.

- **Institutionalising the RFI Process** - DPP-2016 has institutionalised the request for information (RFI) process, which was followed in not so a disciplined manner under the earlier DPPs. Although the new measure has increased the number of procurement steps involved in 'Buy' and 'Buy and Make' schemes by one more to 12, it has nonetheless brought about much needed clarity in the vital step of procurement.
- **Provision for 'Single OEM, Multiple Bids' and 'Multiple Bids by Single Indian Vendor'** - Accepting the uniqueness of defence procurement, DPP-2016 has incorporated two provisions – 'single OEM, multiple bids' and 'multiple bids by single Indian vendor' – in which although the bids are single-vendor in nature they would not be retracted because of lack of competition.
- **Definition of Indian Vendor** - Providing clarity as to who is an Indian vendor, DPP-2016 defines the same as an Indian entity (which could include incorporation, ownership model, and proprietorship, among others) that is established under the Companies Act or any other applicable regulations.

IAF Test Fires Astra

Indigenization of technology

In News

- The Indian Air Force (IAF) successfully test fired the indigenously developed **Beyond Visual Range Air-to-Air Missile (BVRAAM) Astra** from a Su-30 aircraft.
- The flight test assumes significance as it was part of the series of final pre-induction trials. Astra, deemed to be the best in class weapon system, has undergone more than 20 developmental trials.
- Only a handful of missile builders — in the United States, Russia, Europe and China — have mastered the technologies that go into air-to-air missiles. India is now joining that elite group.
- With air-to-air missiles costing in the region of \$2 million each, the Astra will provide major business opportunities to Indian firms.

Astra

- Astra is an all weather, state of the art missile developed by DRDO.
- It is the first air-to-air missile developed by India.
- Astra is designed to be capable of engaging targets at varying range and altitudes allowing for engagement of both short-range targets at a distance of 20 km and long-range targets up to a distance of 80 km.

India's First Missile Tracking Ship

In News

- Hindustan Shipyard Limited (HSL) is gearing up to undertake sea trials of India's first missile tracking ship by the first week of October.
- Once ready, it will be India's first, a force multiplier and cruise the country into a global elite club.

Key Highlights

- It is being built for National Technical Research Organisation, the technical intelligence agency working directly under supervision of the Prime Minister's Office and the National Security Adviser.

- It is one of the top most secret project of India. It will be named after its induction into the Indian Navy. For now, it is simply referred as VC 11184.
- This will be the first of its kind ocean surveillance ship being built as part of the efforts to strengthen the country's strategic weapons programme.
- The objectives of the VC11184 are two-fold. One, track missiles using the two sensors on-board, the X-Band AESA primary radar and S-Band AESA secondary radar. And, two, gather electronic intelligence.
- There are only four other countries - the US, Russia, China, and France - that have have similar vessels in their arsenal.

India's First Indigenous Anti-nuclear Medical Kit

In News

- Scientists at Institute of Nuclear Medicine and Allied Sciences (INMAS) have developed India's first indigenous medical kit that may ensure protection from serious injuries and faster healing of wounds resulting from nuclear warfare or radioactive leakage.
- This development is being seen as a major shot in the arm for paramilitary and police forces.

Key Highlights

- Developed in India for the first time, it's a potent alternative to similar kits that were till now being procured from strategically advanced nations such as the US and Russia at much higher prices.
- The kit has been developed for the armed, paramilitary and police forces only as they are the first ones likely to get exposed to radiation -- be it during nuclear, chemical and biomedical (NCB) warfare or a rescue operation after a nuclear accident.
- The kit has over 25 items, including radio-protectors that provide 80-90 per cent protection against radiation and nerve gas agents, bandages that absorb radiation as well as tablets and ointments.
- The contents include an advanced form of *Prussian blue tablets*, highly effective in incorporating Radio Cesium (Cs-137) and Radio Thallium, among the most feared radioisotopes in nuclear bombs that destroy human body cells.
- It also has an *Ethylenediaminetetraacetic acid* (EDTA) injection that traps uranium in the guts and blood of victims during a nuclear accident or warfare.
- The kit also has *Ca-EDTA Respiratory Fluid*, which is the inhalation formula for chelation, or grabbing, of heavy metals and radioactive elements deposited in lungs through inhalation at nuclear accident sites.
- The kit has *Radioactive Blood Mopping Dressing* -- a special kind of bandage that absorbs radiation.
- The kit also has a *radioactive urine/biofluid collector* which is cost-effective, easy to store and can safely dispose of the urine of a person affected by radiation.
- The kit has *anti-gamma ray skin ointment* that protects and heals the radiation damage on the skin.
- Also part of the kit is the *amifostine injection*, a US Food and Drug Administration (FDA) approved conventional radiopharmaceutical that limits damage from gamma radiation.
- Another medicine in the form of a tablet is *Indranil 150 mg*. It is being introduced as a reserve emergency drug for services, rescue workers and places where high acute exposures are expected and lives will be at stake.

- Preliminary tests have shown the efficacy of the therapeutic dose and the result shows 80-85 per cent animals may survive at 100 per cent lethal gamma radiation if given as a prophylactic.
- The drugs in the medical kit are 'Made in India', without any foreign counterpart and come with the tag of cost-effective and industrial networking.

Institute of Nuclear Medicine and Allied Sciences (INMAS)

- The Institute of Nuclear Medicine and Allied Sciences (INMAS) is a mandated multidisciplinary laboratory of DRDO engaged in R&D activities in the field of Radiation, Imaging Sciences and CBRN technologies.
- It is located in New Delhi.
- It is involved in Nuclear medicine research and responding to nuclear accidents and explosions.
- Core Competence of INMAS include:
 - Area I: Biological Radioprotection (Radiation countermeasures)
 - Area II: Management of Thyroid Disorders
 - Area III: Nuclear and Medical Imaging