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(22<sup>nd</sup> -31<sup>st</sup> JULY 2018)



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To bring Socio-Economic justice through most powerful weapon 'EDUCATION'

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## Urja Ganga Gas Pipeline Project

**Context:** Five public sector oil and natural gas companies have signed the joint venture agreement to implement the Rs 6000 Crore gas pipeline grid project in Northeast. **Key facts:** 

• The five companies are Indian Oil Corporation Limited (IOCL), ONGC, GAIL, Oil India Limited and Numaligarh Refinery Limited (NRL).

## Northeast gas pipeline grid project:

- The proposed gas pipeline grid will connect Guwahati to the major Northeast cities and major load centers.
- Besides connecting all the state capitals in the region, the pipeline will also connect with the National Gas Grid through Barauni-Guwahati Gas Pipeline, which is being laid by GAIL.
- From Guwahati, the pipeline will extend to Numaligarh, Dimapur, Kohima and Imphal inone direction; Shillong, Silchar, Aizawl and Agartala in the second direction and to Itanagar in the third direction. Gangtok will be connected from Siliguri from the gas pipeline of GAIL coming from Barauni to Guwahati.

## About the Pradhan Mantri Urja Ganga project:

The gas pipeline project aims to provide piped cooking gas to residents of Varanasi and later to millions of people in states like Bihar, Jharkhand, West Bengal and Odisha.

## International Solar Alliance (ISA)

**Context:** Myanmar has joined the India-initiated International Solar Alliance (ISA), thus, becoming the **68th signatory to the Framework Agreement of the ISA** that aims for optimum utilisation of solar energy.

### About ISA:

- The Paris Declaration establishes ISA as an alliance dedicated to the promotion of solar energy among its member countries.
- Objectives: The ISA's major objectives include global deployment of over 1,000GW of solar generation capacity and mobilisation of investment of over US\$ 1000 billion into solar energy by 2030.
- What it does? the ISA brings together countries with rich solar potential to aggregate global demand, thereby reducing prices through bulk purchase, facilitating the deployment of existing solar technologies at scale, and promoting collaborative solar R&D and capacity building.

When it entered into force? When the ISA Framework Agreement entered into force on December 6th, 2017, ISA formally became a de-jure treaty based International Intergovernmental Organization, Headquartered At Gurugram, India.

Way ahead:

 Ministry of External Affairs is expected to play a role in "marrying Indian tech and finance capabilities with specific projects around the world".

 India announced a goal of obtaining 40% of its electricity from non-fossil fuels by 2030 at the Paris climate change summit. It is close to achieving 20 GW grid connected solar power generation capacity this fiscal year (2018), in pursuit of achieving its target of 100 GW by 2022.

## SAFAR (System of Air Quality and Weather Forecasting)

**Context:** Ministry of Earth Sciences has unveiled state-of-the-art Air Quality and Weather Forecast System— SAFAR at Chandni Chowk in Delhi. It is first of its kind and most advanced system in India.

#### About SAFAR:

SAFAR was developed indigenously by Indian Institute of Tropical Meteorology (IITM), Pune and operationalized by India Meteorological Department (IMD).

- It has been introduced for greater metropolitan cities of India to provide locationspecific information on air quality in near real time and its forecast 1-3 days in advance for the first time in India.
- It is integral part of India's first Air Quality Early Warning System operational in Delhi. It will monitor all weather parameters like temperature, rainfall, humidity, wind speed and wind direction.
- Pollutants monitored: PM1, PM2.5, PM10, Ozone, CO, NOx (NO, NO2), SO2, BC, Methane (CH4), Non-methane hydrocarbons (NMHC), VOC's, Benzene, Mercury.

*Monitored Meteorological Parameters:* UV Radiation, Rainfall, Temperature, Humidity, Wind speed, Wind direction, solar radiation.

## Significance of the system:

The World Meteorological Organization has recognised SAFAR as a prototype activity on the basis of the high quality control and standards maintained in its implementation. *Facts for Prelims:* 

 Air Quality Index is a tool for effective communication of air quality status to people in terms, which are easy to understand. It transforms complex air quality data of various pollutants into a single number (index value), nomenclature and colour.

There are six AQI categories, namely Good + Satisfactory, Moderately polluted, Poor, Very Poor, and Severe. Each of these categories is decided based on ambient concentration values of air pollutants and their likely health impacts (known as health breakpoints).

AQ sub-index and health breakpoints are evolved for eight pollutants
 (PM10, PM2.5, NO2, SO2, CO, O3, NH3, and Pb) for which short-term (upto 24-hours) National Ambient Air Quality Standards are prescribed.

## Sukanya Samriddhi Yojana

**Context:** By amending **Sukanya Samriddhi Account Rules, 2016**, the Union Government has reduced minimum yearly deposit required under popular girl child savings scheme,

Sukanya Samriddhi Yojana to Rs 250 from Rs 1,000 earlier. This has been lowered to enable more people to enjoy benefits of this scheme.

#### What is it?

Sukanya Samriddhi Yojana (SSY) is a small deposit scheme for the girl child launched as a part of the 'Beti Bachao Beti Padhao' campaign.

Key features:

- It is currently 8.1 per cent and provides income-tax benefit under section 80 C of the Income Tax Act, 1961. Even the returns are tax free in the scheme.
- A Sukanya Samriddhi Account can be opened any time after the birth of a girl till she turns 10, with a minimum deposit of Rs 250 (Earlier it was Rs 1,000). In subsequent years, a minimum of Rs 250 and a maximum of Rs 1.5 lakh can be deposited during the ongoing financial year.
- The account can be opened in any post office or authorised branches of commercial banks.
- The account will remain operative for 21 years from the date of its opening or tillthe marriage of the girl after she turns 18.
- To meet the requirement of her higher education expenses, partial withdrawal of 50% of the balance is allowed after she turns 18.

#### **About BBBP:**

- Beti Bachao Beti Padhao (BBBP) Scheme was launched in January, 2015. The scheme is aimed at promoting gender equality and the significance of educating girls.
- The Scheme is targeted at *improving the Child Sex Ratio* through multi sectoral interventions including prevention of gender biased sex selection and promoting girls' education and her holistic empowerment.
- It is *a tri-ministerial effort* of Ministries of Women and Child Development, Health & Family Welfare and Human Resource Development.

## Aspirational Districts.

**Context:** A Statement of Intent (SoI) was recently signed between NITI Aayog and Lupin Foundation to collaborate in Aspirational Districts Programme.

 For this programme, the NITI Aayog and Lupin Foundation are collaborating to improve indicators in education, health & nutrition, financial inclusion and skill development, agriculture and water resources and basic infrastructure in Aspirational Districts of India.

## About Aspirational Districts Programme:

Launched in January this year, the 'Transformation of Aspirational Districts' programme aims to quickly and effectively transform some of the most underdeveloped districts of the country.

- The broad contours of the programme are *Convergence* (of Central & State Schemes), *Collaboration* (of Central, State level 'Prabhari' Officers & District Collectors), and *Competition* among districts driven by *a Mass Movement or a Jan Andolan*.
- With States as the main drivers, this program will focus on the strength of each district, identify low-hanging fruits for immediate improvement, measure progress, and rank districts.

## Negotiable Instruments (Amendment) Bill, 2017

**Context:** Lok Sabha has passed Negotiable Instruments (Amendment) Bill, 2017 to reduce the number of cheque dishonour cases pending in courts.

- The bill amends Negotiable Instruments Act, 1881 to primarily address issues
  of dishonor of cheques and deal with unnecessary delay in disposal of such
  cases.
- The Negotiable Instruments Act, 1881 defines promissory notes, bills of exchange and cheques. It also specifies penalties for bouncing of cheques and other violations with respect to such negotiable instruments

## Key Features of Bill:

- Interim compensation: Section 143 A
- Deposit in case of appeal: Section 148-A
- Returning interim compensation: In case drawer is acquitted

### What is a negotiable instrument?

It refers to any legal documents like cheques, promissory notes, bill of exchange etc which promises to pay bearer or holder of instrument or person whose name is written on instrument specific amount of money either on demand or after specified time i.e. on some future date..

## Committee to check mob lynching

**Context:** Considering the increasing incidents of mob lynching, the Union Government has constituted a High Level **Committee chaired by the Union Home Secretary Rajiv Gauba** to deliberate in the matter and make recommendations. The committee will submit its recommendations to the Government within four weeks.

#### Background:

 The move comes after a number of mob lynching incidents were reported in several areas, stemming from fake social media rumours of child kidnappers as well as cow vigilantism.

### Recent directions of the Supreme Court on the issue of mob violence:

• Condemning mob lynching incidents across the country and the Supreme Court had urged the Parliament to enact a new law to deal with the crime. The court

- passed a slew of directions in this regard to deal with the mob lynching. Here are the directions:
- There shall be **a "separate offence" for lynching** and the trial courts must ordinarily award maximum sentence upon conviction of the accused person to set a stern example in cases of mob violence.
- The state governments will have to designate a senior police officer in each district for taking measures to prevent incidents of mob violence and lynching.
- The state governments need to identify districts, sub-divisions and villages
  where instances of lynching and mob violence have been reported in the recent
  past.
- The nodal officers shall bring to the notice of the DGP about any inter-district coordination issues for devising a strategy to tackle lynching and mob violence related issues.
- Every police officer shall ensure to disperse the mob that has a tendency to cause violence in the disguise of vigilantism or otherwise.
- Central and the state governments shall broadcast on radio, television and other media platforms about the serious consequences of mob lynching and mob violence.
- Despite the measures taken by the State Police, if it comes to the notice of the local police that an incident of lynching or mob violence has taken place, the jurisdictional police station shall immediately *lodge an FIR*.
- The State Governments shall prepare a lynching/mob violence victim compensation scheme in the light of the provisions of Section 357A of CrPC within one month from the date of this judgment.
- If a police officer or an officer of the district administration fails to fulfill his duty, it
  will be considered an act of deliberate negligence.

#### Need for an anti-lynching law:

- At present there is no law that criminalises mob killings. The Indian Penal
  Code has provisions for unlawful assembly, rioting, and murder but nothing
  that takes cognisance of a group of people coming together to kill (a lynch mob).
- Under Section 223 (a) of the Criminal Procedure Code (CrPC), to prosecute together two or more people accused of the same offence committed in the course of the "same transaction". But the provision falls far short of an adequate legal framework for prosecuting lynch mobs.

## Prevention of Corruption (Amendment) Bill, 2018

**Context:** The Lok Sabha has passed the Prevention of Corruption (Amendment) Bill, 2018. Punishment for both bribe givers and takers has been enhanced to make it a deterrent for the corrupt.

• Highlights of the Bill: Punishment for bribe-taking enhanced: Minimum punishment of 3 yrs, extendable up to 7 yrs with fine; from the earlier 6 months, with extension up to 3 yrs. 'Undue Advantage' expanded: The earlier limited

- definition of "undue advantage" expanded to now include "anything other than legal remuneration".
- **Gifts criminalised:** Gifts received for established undue advantage/mala-fide motive are now considered an act of corruption.
- Collusive bribe-givers criminalised: For the first time, the giving of bribe has
  now been made a direct offence on par with taking of bribe. At the same time,
  protection has been built in against coercive bribery, as long as the victim comes
  forward within 7 days.
- **Corporate bribery criminalised:** Superiors to be held if employee/agent has bribed with their approval, for advancement of the organisation's interests.
- Immediate forfeiture: Law enforcement empowered for immediate attachment & forfeiture of illegal property of a public servant, invoking provisions of the Prevention of Money Laundering Act (PMLA).
- *Timely trial mandated:* To conclude the investigation and trial within 2 yrs, extendable up to 4 yrs.

## 2018 Ramon Magsaysay Award:

**Context:** Two Indians Bharat Vatwani and Sonam Wangchuk are among six who have been declared winners of 2018 Ramon Magsaysay Award.

## About Ramon Magsaysay Award:

- It is Asia's highest honour and is often regarded as the region's equivalent of the Nobel Prize.
- It was established in 1957 by trustees of the New York City based Rockefeller Brothers Fund and Philippine government in the memory of Philippines' third President Ramon Magsaysay.
- It is awarded annually to individuals or organizations from Asia region for their altruistic and philanthropic service.
- It carries Medallion bearing the likeness of the late President Ramon Magsaysay, cash prize and a certificate.

## POSHAN Abhiyaan

Context: Union Ministry of Women and Child

Development (WCD) had recently organized 2nd meeting of **National Council on India's Nutrition Challenges under POSHAN Abhiyaan** in New Dehli.

### Outcomes of the meeting:

- Inclusion of 32 new districts under POSHAN Abhiyaan in the current year. This
  will help to saturate all districts of Union Territories (UTs) that were left out under
  Phase-I and Phase-II.
- In-principle approval to guidelines for construction of anganwadi centres in urban areas and slums under aanganwadi services.
- Month of September will be celebrated as the *National Nutrition Month* every year.

## POSHAN Abhiyaan:

POSHAN Abhiyaan (National Nutrition Mission) was launched by the Hon'ble
 Prime Minister on 8thMarch, 2018 in Jhunjhunu, Rajasthan.

**Targets:** The Abhiyaan targets to reduce stunting, under-nutrition, anemia (among young children, women and adolescent girls) and reduce low birth weight by 2%, 2%, 3% and 2% per annum respectively.

The target of the mission is to bring down stunting among children in the age group 0-6 years from 38.4% to 25% by 2022...

## Govt. amends definition of hydrocarbon to include shale

**Context:** The Ministry of Petroleum and Natural Gas has liberalised **the definition of petroleum** to bring more hydrocarbons such as **coal bed methane and shale gas** under its fold. **Petroleum and Natural Gas (Amendment) Rules, 2018** have been amended in this regard.

### The new Definition:

 Petroleum will now mean naturally occurring hydrocarbons, whether in the form of natural gas, in a liquid, viscous or solid form, or a mixture of these. It, however, does not include coal, lignite and helium occurring in association with petroleum or coal or shale.

#### What necessitated this move?

 Prior to this, the definition excluded shale and therefore barred companies from exploiting it from fields that are producing conventional oil and gas or coal-bed methane.

## Significance of this change:

- The amendment of the definition of petroleum is a welcome move as it would open up exploration of all hydrocarbons in existing fields which is line with the new Hydrocarbon Exploration Licensing Policy (HELP).
- It would help in enhancing domestic exploration and production of hydrocarbons and increasing India's energy security and reducing dependency on imports.

#### Other reforms necessary:

- The exclusion of natural gas from the purview of GST remains a deterrent to attracting large-scale investments as neither the producers nor the consumers are able to set off the taxes paid on their input and output.
- While the Goods and Service Tax (GST) was implemented from July 1, 2017,
   crude oil,natural gas, petrol, diesel, and jet fuel (ATF) were kept out of it for the time being. No date for their inclusion in GST regime has yet been announced.

## What is Coal Bed Methane?

 Coal Bed Methane (CBM) is an unconventional form of natural gas found in coal deposits or coal seams. CMB is formed during the process of coalification, the transformation of plant material into coal. It is considered a valuable energy

resource with reserves and production having grown nearly every year since 1989. Varied methods of recovery make CBM a stable source of energy.

#### What is Shale Gas?

Shale gas is a natural gas formed from being trapped within shale formations. It is unconventional source of methane, like coal-bed gas (in coal seams) and tight gas (trapped in rock formations). It is colourless, odourless gas, lighter than air. It is cheaper than natural gas, releases 50% less CO2, hence better source for generating electricity. It also provides feedstock for petrochemicals industry, which is turned into fertilizer, plastics and other useful stuff.

## Invest India

**Context:** Invest India and Business France have signed an MoU to promote investment facilitationand cooperation between startups of the two countries.

### As per the MoU:

- Invest India and Business France will collaborate to promote business and startup ecosystem cooperation through joint activities and exchange experiences to strengthen institutional knowledge.
- The goal will be **to facilitate direct foreign investment** by providing practical investment information to enterprises and support the companies pursuing those opportunities, which contribute positively to economic growth of the two countries.

#### What is Invest India?

- Invest India is the National Investment Promotion and Facilitation Agency of India and acts as the first point of reference for investors in India.
- Invest India is set up as a non profit venture under the Department of Industrial Policy and Promotion, Ministry of Commerce and Industries, Government of India.
- A joint venture: Operationalized in early 2010, Invest India is set up as a joint venture company between the Department of Industrial Policy & Promotion (DIPP), Ministry of Commerce & Industry (35% equity), Federation of Indian Chambers of Commerce and Industry (FICCI) (51% equity), and State Governments of India (0.5% each).

*Functions:* The core mandate of Invest India is investment promotion and facilitation.

## 2018 Earth Overshoot Day fall on August 1

Context: 2018 Earth Overshoot Day will fall on August 1, the earliest date since ecological overshoot began in early 1970s.

• This year the overshoot day falls two days earlier than the last year's.

#### What is the Earth Overshoot Day?

• It is date when humanity annual demand on nature exceeds what Earth can regenerate over the entire year. It is calculated by Global Footprint Network and World Wide Fund for Nature (WWF).

The increasing burden on natural resources:

- Currently, humankind is using 170% of the world's natural output. That
  means we are using up the equivalent of 1.7 Earths. And, according to the Global
  Footprint Network, we're on track to be using two Earths by the end of the 21st
  Century.
- In 1963, we used 78% of the Earth's biocapacity. However by the early 1970s we began to consume more energy than the planet could produce. By 10 years ago, we were using 144% of the Earth's biocapacity.
- Reasons for this and what can be done?

The two greatest contributing factors to humanity's Ecological Footprint are carbon emissions, which accounts for 60%, and food, 26%.

- If we cut our carbon emissions by half, according to the Global Footprint Network, Earth Overshoot Day would come 89 days later in the year.
- If we cut food waste in half worldwide, we could move the date back 11 days. By eating less protein-intensive food, we could move it back 31 days.

#### How is it calculated?

• Earth Overshoot Day is calculated by dividing the world biocapacity (the amount of natural resources generated by Earth that year), by the world ecological footprint (humanity's consumption of Earth's natural resources for that year), and multiplying by 365, the number of days in one Gregorian common calendar year.

### **Global Footprint Network:**

• It is an *international nonprofit organization* founded in 2003 to enable a sustainable future where all people have opportunity to thrive within the means of one planet.

**Functions:** It develops and promotes tools for advancing sustainability, including ecological footprint and biocapacity, which measure amount of resources we use and how much we have These tools aim at bringing ecological limits to center of decision-making..

## Green Mahanadi Mission

**.Context:** Odisha government has launched **Green Mahanadi Mission**. Under the mission, a total of two crore saplings will be planted on the banks of the Mahanadi.

#### Green Mahanadi Mission:

- The Green Mahanadi Mission envisages rejuvenating Mahanadi river and its
   tributaries Tel and Ib by increasing recharging capacity through massive
   plantation.
- Under the mission, a green belt with width of 1 km will be created on both sides of the river beginning from the place, where the river enters Odisha to Paradip, where it merges with The plantation will be undertaken over 75,760 hectares government land besides 47,470 hectares private land.

### About Mahanadi River:

 The Mahanadi is one of the largest Indian peninsular rivers that drains into the Bay of Bengal.

- The 857 km long river originates in Raipur district of the central Indian state
   of Madhya Pradesh and flows through the eastern state of Orissa before
   meeting the sea.
- The Mahanadi River is a river of eastern India. The Mahanadi rises in the Satpura Range of central India, and flows east to the Bay of Bengal.
- The major tributaries of Mahanadi are Seonath, Jonk, Hasdo, Mand, Ib, Ong, Tel etc.

## **BRICS 2018 Summit**

**Context:** The 2018 BRICS summit, the tenth such annual summit, is being held in South Africa.

**Theme:** "BRICS in Africa: Collaboration for Inclusive Growth and Shared Prosperity in the 4<sup>th</sup> Industrial Revolution".

 The theme is intended to align and ensure strategic continuity with the approved themes for South Africa's Chairship of both the South African Development Community (SADC) and the Indian Ocean Rim Association (IORA).

The new areas of BRICS cooperation as proposed by South Africa, are as follows:

- Establishment of a Working Group on Peacekeeping.
- Establishment of *a Vaccine Research Centre* for Collaboration with BRICS vaccine innovation and development partners this is intended to be a physical research centre focused on research and development and vaccine innovation.
- Establishment of a BRICS Gender and Women's Forum intended as a
  dedicated track for gender and women's issues, given the economic benefit to
  be derived from the socio-economic empowerment of women, particularly in
  developing countries.
- Establishment of a BRICS Tourism Track of Cooperation.

## "Innovate India Platform"

Context: Atal Innovation Mission, NITI Aayog & MyGov (a citizen centric platform of the Government of India) have launched "Innovate India Platform".

## About Innovate India portal:

**Aim:** It aims to serve as the common point for all the innovation happening across the nation.

**How?** It creates the much-needed innovations platform for registering both grassroots and deep-tech innovators at a national level. Those searching for a critical innovation can leverage the portal advantageously for the benefit of the economy as well as national social needs."

### Some of the features of this platform are:

- The platform is open to all Indian citizens. The users can View, comment, share, and rate the innovations crowdsourced on the #InnovateIndia platform.
- View the leaderboard which is calculated based on the votes on each innovation.
- Citizens can share their/organizations/someone else's innovation on the platform by login to the MyGov website.

 These innovations can also be shared on various social media platforms such as WhatsApp, Facebook, and Twitter.

## Significance of the portal:

- India has been a very innovation-oriented society, but our challenge has been a structured approach to innovation, capturing them and building an ecosystem to take them global.
- The new initiative to capture and support innovation from ground up, is *aimed at creating a structured ecosystem to encourage, enhance and develop India's innovative character*.

#### **About AIM:**

- The Atal Innovation Mission (AIM) is the Government of India's flagship initiative to promote a culture of innovation and entrepreneurship in the country.
- AIM is mandated to create an umbrella structure to oversee innovation
   ecosystem of the country and revolutionizing the innovation eco-system –
   touching upon the entire innovation life cycle through various programs.

The Atal Innovation Mission shall have two core functions:

Entrepreneurship promotion through Self-Employment and Talent Utilization, wherein innovators would be supported and mentored to become successful entrepreneurs. Innovation promotion: to provide a platform where innovative ideas are generated.

## Bombali: New strain of Ebola virus

What? Researchers have discovered new strain of Ebola virus. Where? In bats in northern Bombali region of Sierra Leone. Key facts:

• It has been named as Bombali virus strain, after district where it was found.

The sixth in line: The Bombali virus is overall sixth known virus strain Ebola virus.

Others are Zaire, Sudan, Tai Forest, Bundibugyo and Reston.

### What you need to know about Ebola?

- **Ebola virus disease (EVD)**, formerly known as **Ebola haemorrhagic fever**, is a severe, often fatal illness in humans.
- *Transmission:* The virus is transmitted to people from wild animals and spreads in the human population through human-to-human transmission.
- The average EVD case fatality rate is around 50%. Case fatality rates have varied from 25% to 90% in past outbreaks.
- Prevention: Community engagement is key to successfully controlling outbreaks.
  Good outbreak control relies on applying a package of interventions, namely case
  management, surveillance and contact tracing, a good laboratory service and
  social mobilisation. Early supportive care with rehydration, symptomatic treatment
  improves survival.
- There is as yet no licensed treatment proven to neutralise the virus but a range of blood, immunological and drug therapies are under development.

### Background:

- More than 11,000 people died in the Ebola outbreak in West Africa in 2014-2015, mainly in Guinea, Sierra Leone and Liberia.
- The last outbreak in the DRC was in 2014 and killed more than 40 people. The region affected lies 1,300 km north-east of Kinshasa, close to the border with the Central African Republic.

## Western Dedicated Corridor (WDFC)

Context: Indian Railways set to get its first dedicated freight corridor on Independence Day. The 190-km dedicated freight railway line between Dadri in Uttar Pradesh and Phulera in Rajasthan falls under the Western Dedicated Corridor (WDFC).

## What are Dedicated Freight Corridors (DFC)?

- These are freight-only railway lines to move goods between industrial heartlands in the North and ports on the Eastern and Western coasts.
- The dedicated freight-only lines are being built along the four key transportation routes –known as the Golden Quadrilateral and connecting Delhi, Mumbai, Chennai, Howrah and its two diagonals (Delhi – Chennai and Mumbai – Howrah).

## Western Dedicated Freight Corridors:

- The 1,504-km-long route from JNPT to Dadri via Vadodara-Ahmedabad-Palanpur- Phulera- Rewari — Western DFC will pass through Haryana, Rajasthan, Gujarat, Maharashtra and Uttar Pradesh.
- It is proposed to *join the Eastern Corridor at Dadri*.

#### Why do we need DFCs?

- Increased burden: Covering a total of 10,122 km, these corridors carry the
  heaviest traffic and are highly congested. The route carries 52% of passenger
  traffic and 58% of freight traffic, according to the Make-in-India report of 2017.
  Also, these routes are highly saturated, with line capacity utilisation reaching as
  high as 150%.
- **Rise in demand:** Considering increased transport demands, overtly congested routes and greenhouse gas (GHG) emissions associated with road transport, these freight corridors will help reduce the cost and allow faster transportation.
- Revenue generation: They will open new avenues for investment, as this will lead to the construction of industrial corridors and logistic parks along these routes.

### About Dedicated Freight Corridor Corporation of India (DFCCIL):

- The DFCCIL is a corporation run by the Ministry of Railways (India) to undertake planning & development, mobilisation of financial resources and construction, maintenance and operation of the Dedicated Freight Corridors.
- DFCC has been registered as a company under the Companies Act 1956 on 30 October 2006.

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## Draft of Data Protection Bill

Context: A committee headed by former Supreme Court judge BN Srikrishna recently submitted its recommendations and a draft law titled the Personal Data Protection Bill, 2018 to the government. These are two separate outcome documents submitted to the ministry of electronics and information technology that will steward a legislative effort and define the legal boundaries of the use of personal data.

## Background:

The 10-member committee was set up in July 2017 to recommend a framework for securing personal data in the digital world.

## Highlights of the Personal Data Protection 2018 Bill:

- The draft bill notes that "the right to privacy is a fundamental right and it is necessary to protect personal data as an essential facet of informational privacy."
- The bill also notes that it is necessary to create trust between the individual who provide their data and those who process this.
- On the right to be forgotten, the bill notes that that 'data principal' which
  means the individual or the person providing their data, has a right to "right
  to restrict or prevent continuing disclosure." But the bill does not allow for a right
  of total erasure like the European Union does.

It also gives a data processor considerable leeway when it comes to deciding on this 'right to be forgotten.' The bill notes that "the data fiduciary may charge a reasonable fee to be paid for complying with requests."

The Bill also calls for *privacy by design on part of data processors*, and defines terms like consent, data breach, sensitive data, etc.

Data Protection Authority of India (DPA): It proposes setting up of a DPA, an
independent regulatory body responsible for the enforcement and effective
implementation of the law, consisting of a chairperson and six full-time members.

*In case of any appeal against an order of the DPA*, an appellate tribunal should be established or an existing appellate tribunal should be granted powers to hear and dispose of any appeal.

### Other recommendations by the committee:

 The committee has recommended phased timelines for the adoption of different aspects of the privacy law, making data protection a critical component in India's security posture rather than a mere compliance prerequisite. Also, the stringent penalties proposed on the misuse of data would create deterrence and also compel organizations to build a controlsled environment while processing or storing personal data.

### A COMPARISON OF DATA LAWS IN OTHER COUNTRIES:

#### **EUROPE (EUROPEAN UNION):**

 Has an all-encompassing law 'General Data Protection Regulations,' which came into effect on May 25, 2018.

- User consent needs to be explicit n Right to be forgotten, a concept that arose in the EU. Right to be forgotten, a concept that arose in the EU.
- Applies to businesses anywhere in the world that handle European data.
- Penalties for non-compliance are up to 4 percent of the company's global turnover, or 20 million Euros, whichever is higher.

#### **UNITED STATES:**

- Data protection fragmented in various federal and state laws.
- Each sector will deem what is private or personal data.
- A movement to pass a new law on consumer privacy protections failed in the Congress in 2017.
- California, with 'Shine the Light Law,' was one of the first states in the US to implement privacy laws.

#### **AUSTRALIA:**

- The Privacy Act of 1988 regulates the handling of personal information of individuals.
- Privacy is not a fundamental right.
- Does not apply to government agencies, political parties.

## India to give flash flood warning to Asian nations

Context: India has been designated as a nodal centre for preparing flash-flood forecasts by the World Meteorological Organization (WMO). That means India will have to develop a customized model that can issue advance warning of floods in Vietnam, Sri Lanka, Myanmar and Thailand.

**About WMO:** The World Meteorological Organization (WMO) is **a specialized agency of the United Nations** dedicated to meteorology (weather), climatology (climate), operational hydrology (water) and other related geophysical sciences such as oceanography and atmospheric chemistry.

## **Blood Moon**

### What is **Blood Moon?**

 When a lunar eclipse (Chandra Grahan) occurs, the Earth comes between the sun and moon, preventing light from falling on the moon. When this happens, the moon appears to glow red and is thus called the blood moon.

### Significance of July 2018 Lunar Eclipse:

• It was the longest eclipse of the 21st century. It occurred for 1 hour 43 minutes.

## Manipur People's Protection Bill

**Context:** Manipur People's Protection Bill, 2018, passed by the state assembly recently, has been welcomed with protests across various districts in the state.

#### Highlights of the Bill:

 The Manipur People's Protection Bill, 2018 seeks to regulate the entry and exit of "outsiders" on the lines of the British-era inner-line permit system

prevalent in three other north-eastern states — Arunachal Pradesh, Mizoram and Nagaland.

- The bill sets 1951 as the base year to identify locals and prevent an influx of outsiders.
- According to the bill, Manipur people include Meitis, the Pangal Muslims, scheduled tribes as listed under the Constitution in terms of Manipur and all those citizens of India who have been living in Manipur before 1951.
- The rest have been put in the category of non-Manipuris and will have to register themselves within one month of the notification of the law. They will be issued a pass extendable up to six months. While those who have trade licences can get a pass extendable up to five years, which will have to be renewed every year.
- Any outsider visiting Manipur would need a pass.

#### What next?

• If approved by the Governor and made an Act, people who came to Manipur after 1951 would be viewed as 'foreigners' and would have no voting or land rights.

### WHAT IS THE INNER LINE PERMIT?

- The Inner Line Permit (ILP) is **an official travel document** issued by the Government of India to grant inward travel of an Indian citizen into a protected area for a limited period.
- It is obligatory for Indians residing outside those states to obtain permission prior to entering the protected areas.
- Currently, the *Inner Line Permit is operational in Arunachal Pradesh*, *Mizoram and Nagaland*.
- The document has been issued under the Bengal Eastern Frontier Regulation,
   1873 and the conditions and restrictions vary from state to state.

It can be issued for travel purposes solely. Visitors are not allowed to purchase property in these regions. However, there might be a different set of rules for long term visitors, though they are not valid for central government employees and security forces.

## National Viral Hepatitis Control Programme

**Context:** With an aim to combat viral hepatitis and reduce mortality and morbidity associated with it, the Union Ministry of Health and Family Welfare has launched **National Viral Hepatitis Control Programme**. It was launched on the occasion of **World Hepatitis Day, that is July 28**.

• The *theme for World Hepatitis Day 2018* is "Test. Treat. Hepatitis".

### About National Viral Hepatitis Control Programme:

- *Aim:* The programme aims at both *prevention and treatment* of hepatitis which is among leading causes of liver cancer, cirrhosis of liver and acute liver failure.
- *Target:* It aims to treat minimum of 3 lakh hepatitis C cases over a period of three years for eliminating deadly condition by 2030.

The programme is part of National Health Mission.

- Under it, expensive antiviral for hepatitis B and C infections will be made available free of cost at all government hospitals.
- **Treatment:** It will set up and upgrade facilities for diagnosis and treatment primarily of hepatitis B and C. These designated treatment centres will provide free anti-viral to hepatitis C patients. They will also provide hepatitis B vaccine to babies born to mothers carrying the virus within 24 hours of birth.

**Decentralization:** The programme also aims to build capacities at national, state, district levels and sub-district level up to Primary Health Centres (PHC) and health and wellness centres to scale program till lowest level of the healthcare facility in a phased manner. **What is hepatitis?** 

 Hepatitis is an *inflammation of the liver*. The condition can be self-limiting or can progress to fibrosis (scarring), cirrhosis or liver cancer. Hepatitis viruses are the most common cause of hepatitis in the world but other infections, toxic substances (e.g. alcohol, certain drugs), and autoimmune diseases can also cause hepatitis.

## Types:

- There are 5 main hepatitis viruses, referred to as types A, B, C, D and E.

  These 5 types are of greatest concern because of the burden of illness and death they cause and the potential for outbreaks and epidemic spread.
- In particular, types B and C lead to chronic disease in hundreds of millions of people and, together, are the most common cause of liver cirrhosis and cancer.
- Hepatitis A and E are typically caused by ingestion of contaminated food or water. Hepatitis B, C and D usually occur as a result of parenteral contact with infected body fluids.

### Spread:

- Common modes of transmission for these viruses include receipt of contaminated blood or blood products, invasive medical procedures using contaminated equipment and for hepatitis B transmission from mother to baby at birth, from family member to child, and also by sexual contact.
- Acute infection may occur with limited or no symptoms, or may include symptoms such as jaundice (yellowing of the skin and eyes), dark urine, extreme fatigue, nausea, vomiting and abdominal pain.

## Naturalized species

- An intentionally or unintentionally introduced species that has adapted to and reproduces successfully in its new environment.
- Naturalised species reproduce naturally in the environments they colonise.
   Invasive species do this so prolifically that they alter the workings of the natural ecosystems they colonise or invade.
- Why in News? An international team including scientists from India have collated information on alien plant species from several sources, ranging from online plant lists to old compilations of India's national and regional flora.

They found that as many as 471 plant species that are alien or exotic — not native to India — are 'naturalised,' for they can thrive in the country's wildernesses by forming stable populations.

## Highlights of the findings:

- At 332, *Tamil Nadu has the highest number of naturalised exotics*, followed by Kerala (290), while Lakshadweep has the least (17).
- The distribution across Indian States of over 20 of these naturalised species (in the list of 471) is unknown.

## India- the 'hotspots' of naturalised plant species:

- More than 13,000 plant species are now naturalised in ecosystems across the world due to human activity; many of these later turn invasive and impact local flora and fauna.
- Last year, a study identified India as one of the 'hotspots' of naturalised plant species and among the seven regions in the world that have the highest number of invasive species.
- The ENVIS Centre on Floral Diversity hosted by the BSI lists more than 170 invasive plant species in India.

## Arsenic contamination

**Context:** A recent publication by researchers at the School of Environmental Studies (SOES), Jadavpur University, reveals not only rise in arsenic contamination of paddy plants from ground water in West Bengal, but also that concentration of 'arsenic accumulation' depends on the variety of paddy and its stage in the crop cycle.

### Highlights of the study:

- The study highlights the processes and dependencies of arsenic trans-location in rice from contaminated irrigation water.
- The study shows that arsenic uptake in the paddy plant reduces from root to grain, and that its concentration is related to the variety of the rice cultivated.
- The uptake of arsenic is faster in young roots in a vegetative state than in older tissues with a higher concentrations of iron in root soil in the reproductive phase.
- The study was carried out on two commonly consumed rice varieties Minikit and Jaya — and the latter was found to be more resistant to arsenic.
- The study has raised concerns over the disposal of the contaminated rice straw
  which is used as animal fodder or burnt or sometimes left in the field itself to
  serve as fertiliser.

## Arsenic in groundwater:

 Arsenic in ground water is a geogenic contaminant i.e. caused by natural geologic processes. Incidence of high arsenic in groundwater reported from various parts of the country, particularly in the Ganga- plains is a serious threat to the health of human being.

- Over the last three decades numerous measures have been initiated which includes alternate arrangement for supply of arsenic free water to the affected populace and providing arsenic removal plants.
- Arsenic occurrences in ground water in these areas is highly sporadic in nature and all the sources in these areas are not necessarily contaminated.
- Technological options to combat arsenic menace, in groundwater, to ensure supply of arsenic free water, in the affected areas can be in-situ remediation of arsenic from aquifer system, ex-situ remediation of arsenic from tapped groundwater by arsenic removal technologies, use of surface water source as an alternative to the contaminated groundwater source, tapping alternate safe aquifers for supply of arsenic free groundwater or combination of above techniques.

## Central Road and Infrastructure Fund (CRIF)

Context: The administrative control of Central Road and Infrastructure Fund (CRIF)has been transferred to the Department of Economic Affairs (DEA), Finance Ministry. So far, it was under the domain of Ministry of Road Transport and Highways. Background:

- Over the last one and a half decade, the Central Road Fund (CRF) was a major revenue for the government to finance ambitious road projects.
- The CRF launched in 2000 is basically a cess imposed along with excise duty on petrol and diesel.
- The cess revenue was accrued to the CRF which was uniquely created and out of this major road projects were financed ever since its launch.

### Conversion of CRF into Central Road and Infrastructure Fund (CRIF):

- The budget 2018 has amended the Central Road Fund Act, 2000, and has renamed the Central Road Fund as Central Road and Infrastructure Fund (CRIF).
- Main purpose of the amendment is to use the proceeds of the road cess under CRIF tofinance other infrastructure projects including waterways, some portion of the railway infrastructure and even social infrastructure including education institutions, medical colleges etc.
- The amendment prescribes that road cess is first credited to the Consolidated Fund of India and later, after adjusting for the cost of tax collection, should go to the CRIF.
- As per the amendment, the share for each infrastructure areas and projects from the CRIF shall be finalised by a Committee, constituted by the Central government.
- The Committee will be headed by the Finance Minister.

## Assam NRC explained

**Context:** The draft National Register of Citizens (NRC), published recently, includes only those able to prove they were in Assam before 1971. It excludes D- voters.

#### Who is a D-voter?

 Short for 'dubious' or 'doubtful, this is a category of voters disenfranchised by the government for alleged lack of proper citizenship documents. Some 2.48 lakh people got the Dvoter tag during NRC process

### Who is a declared foreigner?

 D-voters are tried by special tribunals under the Foreigners' Act and if they fail to defend their citizenship claim they are marked as declared foreigners and sent to any of six detention camps, which are within jails for criminals, for deportation.
 There were 91,206 declared foreigners as on December 31, 2017.

## Why is NRC being updated in Assam?

 Officially, the NRC process will address the issue of illegal migrants, specifically from Bangladesh. The National Register of Citizens was first published in 1951 to record citizens, their houses and holdings. Updating the NRC to root out foreigners was a demand during the Assam Agitation (1979-1985).

### Why is March 24, 1971 the cut-off date?

- There have been several waves of migration to Assam from Bangladesh, but the biggest was in March 1971 when the Pakistan army crackdown forced many to flee to India.
- The Assam Accord of 1985 that ended the six-year anti-foreigners' agitation decided upon the midnight of March 24, 1971 as the cut-off date.

#### Who is a citizen in Assam?

- The Citizenship Act of 1955 was amended after the Assam Accord for all Indianorigin people who came from Bangladesh before January 1, 1966 to be deemed as citizens.
- Those who came between January 1, 1966 and March 25, 1971 were eligible for citizenship after registering and living in the State for 10 years while those entering after March 25, 1971, were to be deported.

## What happens to the excluded 40 lakh?

- They will have to file for claims and objections and submit relevant documents for reverification. The NRC office will issue claim forms from August 7 to 30, and these applicants would have to submit the forms from August 30 to September 28.
- The documents will be verified and accepted or rejected for the final NRC to be published on an unspecified date.
- The cases of those left out of the final NRC will be heard in the Foreigners' Tribunals, after which applicants can approach the High Court.

## 'Deep Ocean Mission (DOM)'

**Context:** Ministry Of Earth Sciences Plans Rs 8000 Crore 'Deep Ocean Mission' To Boost India's Sea Exploration Capabilities. The mission proposes to explore the deep ocean similar to the space exploration started by ISRO about 35 years ago.

#### Features of the Mission:

 The focus of the mission will be on deep-sea mining, ocean climate change advisory services, underwater vehicles and underwater robotics related technologies.

**Two key projects** planned in the 'Deep Ocean Mission' report include **a desalination plant** powered by tidal energy and **a submersible vehicle** that can explore depths of at least 6,000 metres.

## Significance of the Mission:

- The 'Deep Ocean Mission' plan will enable India to develop capabilities to exploitresources in the Central Indian Ocean Basin (CIOB).
- India has been allotted 75,000 square kilometres in the Central Indian
   Ocean Basin (CIOB) by UN International Sea Bed Authority for exploration of
   poly-metallic nodules.
- CIOB reserves contain deposits of metals like iron, manganese, nickel and cobalt.

#### Potential:

 It is envisaged that 10% of recovery of that large reserve can meet the energy requirement of India for the next 100 years. It has been estimated that 380 million metric tonnes of polymetallic nodules are available at the bottom of the seas in the Central Indian Ocean.

### What are PMN?

 Polymetallic nodules (also known as manganese nodules) are potatoshaped, largely porous nodules found in abundance carpeting the sea floor of world oceans in deep sea. Besides manganese and iron, they contain nickel, copper, cobalt, lead, molybdenum, cadmium, vanadium, titanium, of which nickel, cobalt and copper are considered to be of economic and strategic importance.

#### About ISA:

International Seabed Authority (ISA) is a UN body set up to regulate the exploration and exploitation of marine non-living resources of oceans in international waters. India actively contributes to the work of International Seabed Authority. Last year, India was reelected as a member of Council of ISA. India's nominees on Legal and Technical Commission and Finance Committee of the ISA were also elected last year.

## International Tiger Day: 29 July

- Context: Global Tiger Day, often called International Tiger Day, is an annual celebration to raise awareness for tiger conservation, held annually on 29 July.
- It was created in 2010 at the Saint Petersburg Tiger Summit.

### Concerns and challenges:

 India has one of the *lowest per capita forest areas in the world*. Forests as carbon sinks are deemed to be a major mean of controlling climate change.
 Depletion of forests is responsible for reduction of tiger habitats.

# Reduced food base, Poaching. Climate change Conservation efforts:

- The National Tiger Conservation Authority (NTCA) has launched the M-STrIPES
   (Monitoring System for Tigers Intensive Protection and Ecological Status), a
   mobile monitoring system for forest guards.
- At the St. Petersburg Tiger Summit in 2010, leaders of 13 tiger range countries resolved to do more for the tiger and embarked on efforts to double its number in the wild, with a popular slogan 'T X 2'.
- The *Global Tiger Initiative (GTI) program of the World Bank*, using its presence and convening ability, brought global partners together to strengthen the tiger agenda.
- Over the years, the initiative has institutionalised itself as a separate entity in the form of the Global Tiger Initiative Council (GTIC), with its two arms – the Global Tiger Forum and the Global Snow Leopard Ecosystem Protection Program.
- The Project Tiger, launched way back in 1973, has grown to more than 50 reserves amounting to almost 2.2% of the country's geographical area.
   Additionally, improving patrolling and doing it specifically in areas vulnerable to poaching can bring the crime rate down.

#### Some controversial projects:

- Highways and railway lines are being expanded in the corridor connecting Kanha and Pench tiger reserves.
- A railway line is being constructed through Melghat tiger reserve.
- Ken-Betwa river linking project will submerge over 100 square kilometres of the Panna Tiger Reserve in Madhya Pradesh.)