



VAJIRAM & RAVI

(Institute for Civil Services Examination)

SEPTEMBER 2019

the RECITALS

Explore Current Affairs Through Q&A



Featured
Articles

Mains
Q & A

Prelims
Q & A

Bridging
Gaps

Ban On e-Cigarettes

Debate Over Hindi As
The National Language

Visit Of Indian Prime
Minister To USA

VAJIRAM & RAVI

INDEX

Message From The Desk Of Director	1
1. Feature Article	2-15
a. Ban On e-Cigarettes	
b. Debate Over Hindi As The National Language	
c. Visit Of Indian Prime Minister To USA	
2. Mains Q&A	16-27
3. Prelims Q&A	28-59
4. Bridging Gaps	60-109
1. Hepatitis B Controlled in Bangladesh, Bhutan, Nepal and Thailand	
2. Indian Iodine Survey 2018-19	
3. International Migrant Stock 2019	
4. Global Liveability Index 2019	
5. AISHE Report	
6. Framework To Sustain India's '100% ODF status'	
7. Sardar Patel National Unity Award	
8. India State-Level Disease Burden Initiative	
9. 74-Year-Old Gives Birth Using IVF	
10. Census 2021	
11. UMMID Initiative	
12. National Animal Disease Control Programme	
13. World Tourism Day 2019	
14. Pradhan Mantri Matru Vandana Yojana	
15. Eat Right Movement	
16. Automatic Exchange of Information	
17. Measures to Boost Exports and Housing Sector	
18. National Infrastructure Pipeline	
19. Draft Social Security Code	
20. External Benchmarking Of Lending Rates	
21. Internal Working Group To Review Agricultural Credit	

VAJIRAM & RAVI

22. Inter-Ministerial Panel On Fintech
23. Asteroid Impact Deflection Assessment
24. AH-64E Apache Inducted In IAF
25. Water On Exoplanet
26. Adiya-L1
27. Project Netra
28. Build For Digital India Programme
29. Methane Powered Rocket Engine
30. Quantum Supremacy
31. IMD World Digital Competitiveness Ranking 2019
32. Scientific Social Responsibility Policy
33. LCA Tejas Makes Short Arrested Landing
34. 17 Squadron Golden Arrows
35. Special Training Programme for Maldivian Civil Servants
36. Indian, Chinese Troops Face-off in Ladakh
37. India Announces Aid for Bahamas
38. India-China Strategic Economic Dialogue
39. India, ASEAN to Review Free Trade Pact in Goods
40. Bangladesh Lifts Ban on Hilsa Export to India
41. India – Japan Defence Ministerial Meeting
42. Visit of Indian President to Iceland, Switzerland and Slovenia
43. Visit of Indian Prime Minister to Vladivostok, Russia
44. South Asian Speakers' Summit
45. India Contributes to Global Fund for AIDS, TB, Malaria
46. WHO Regional Committee of South-East Asia Meet
47. IAEA General Conference
48. RCEP Ministerial Meeting
49. World Energy Congress
50. Indian Ocean Conference
51. Chinese Navy Launches its First Amphibious Assault Ship
52. Google Wins Landmark Right to be Forgotten Case
53. Impeaching U.S. President
54. First Conference of Military Medicine for SCO Member State
55. Portal for Private Security Agency Licensing Launched
56. Public Safety Act of Jammu & Kashmir
57. INS Khanderi Submarine Commissioned
58. Indian Coast Guard Ship 'Varaha' Commissioned
59. Indian Army Team Summit MT Leo Pargyil
60. Seoul Defense Dialogue
61. National Intelligence Grid to be Ready by Early 2020

VAJIRAM & RAVI

- 62. Corps Of Army Air Defence Honoured with President's Colours Award
- 63. Shondol Dance
- 64. Asiatic Society of Mumbai
- 65. Gandan Monastery
- 66. Paika Rebellion
- 67. Firoz Shah Tughlaq
- 68. Sangam Era Older Than Previously Thought
- 69. Special Report on the Ocean and Cryosphere in a Changing Climate
- 70. PM KISAN: Where Is The Problem
- 71. Police Adequacy Index
- 72. Swachh Bharat
- 73. CSR Report Card
- 74. Farmer Field School For Effective Agricultural Extension
- 75. Changes in Open Defecation in Rural North India: 2014-2018
- 76. Ban On Animal Sacrifices
- 77. Restructuring PDS
- 78. Zero Based Natural Farming



From the Desk of the Director

Dear Students

The preparation of current affairs magazine is an evolutionary process as its nature and content keeps changing according to the demands of Civil Service Exam. As you are aware about the importance of current affairs for the prelims as well as mains exam, our aim is to follow an **integrated approach** covering all stages of examination from prelims to interview. Keeping these things in mind, we, at Vajiram and Ravi Institute, are always in the process of evolving our self so as to help aspirants counter the challenges put forward by UPSC.

In fulfillment of our objective and commitment towards the students, we have introduced some changes in our current affairs magazine. The CA Magazines, now with the name of "**The Recitals**", will have four sections. These are:

1. **Feature Article:** As you are aware of the fact that civil service mains exam has become quite exhaustive and analytical, especially since 2013 after the change in syllabus, we have decided to focus on 2-3 topics every month that will provide an insight into the issue so as to help students understand the core of the issue. This will help in Essay writing as well as Mains Exam.
2. **Mains Q&A:** New students quite often struggle to find out that in what way the given topic is useful for them and in what form questions can be framed from the article. To help those students, we at Vajiram and Ravi have designed an innovative way to teach current affairs. Now, we will cover the current issues through questions and answers so as to make it more targeted towards exam. This will not just provide the information and analysis on current issues but will also help in learning the art of answer writing. Further the related information on the topics on which questions have been framed but that is outside the purview of answer will be given in the Box as '**Extra Mile**'.
3. **Prelims Q&A:** This section will contain prelims based MCQs that will test your diligence while reading the current issues. These MCQs will be of UPSC standard and will contain detailed explanation. Students are advised to attempt these MCQs honestly and read the Explanation carefully. The idea is to also provide students with a question bank of around 600 current affairs MCQs ($50\text{ Qs} \times 12\text{ months} = 600\text{ Qs}$) just before their prelims examination, which will act as revision on issues spanning over the entire year.
4. **Bridging Gaps:** This section will contain miscellaneous topics which has not been covered through Q&A. That is why it is called Bridging Gaps, meaning the left-over topics.

So, the new magazine is a complete overhaul of what we have been doing for so long. We hope that the new beginning will be to the liking of students.

Thanks

Best Wishes

VAJIRAM & RAVI

Ban On e-Cigarettes

The Union Cabinet approved an ordinance prohibiting electronic cigarettes in the country, citing the need to take early action to protect public health. With the ordinance, *any production, manufacturing, import, export, transport, sale (including online sale), distribution or advertisement* (including online advertisement) of **e-cigarettes and other Electronic Nicotine Delivery Systems (ENDS)** such as vapes, e-hookahs and e-cigars shall be a cognisable offence punishable with imprisonment of up to one year, or fine up to ₹1 lakh, or both for the first offence; and imprisonment of up to three years and fine up to ₹5 lakh for a subsequent offence.

Storage of electronic-cigarettes shall also be punishable with imprisonment of up to 6 months or a fine of up to ₹50,000 or both. As per a release issued by the Centre, owners of existing stocks of e-cigarettes on the date of commencement of the ordinance will have to *suo motu* declare and deposit these with the nearest police station. The sub-inspector has been designated as the authorised officer to take action under the ordinance.

<ul style="list-style-type: none">■ e-cigarettes are brought from China and other countries and are not manufactured in India. They are also available online■ 16 States & one Union Territory have already banned them. The Indian Council of Medical Research, in a recent paper, had recommended a complete ban on them		<ul style="list-style-type: none">■ WHO too urged member countries to take appropriate steps. It does not endorse e-cigarettes as cessation aids■ They are marketed as being safer than conventional cigarettes but this is false. Available literature suggests that they may act as gateway products to induce non-smokers to nicotine-use
---	---	---

What Is E-Cigarettes

E-cigarettes are battery-operated devices that produce aerosol by heating a solution containing nicotine, which is the addictive substance in combustible cigarettes. These devices belong to a category of vapour-based nicotine products called ENDS. Several companies selling ENDS in India have positioned these products as a safer, less harmful alternative to traditional cigarettes or as devices that could help users quit smoking.

Why Ban

- Health Ministry sources told that these products have ***neither been assessed for safety in the national population, nor been approved under provisions of the Drugs and Cosmetics Act, 1940.*** Yet, they have been widely available to consumers. Though some smokers have claimed to have cut down smoking while using ENDS, the total nicotine consumption seemed to remain “unchanged”, according to the government.

VAJIRAM & RAVI

- Vaping is not a safe escape route from cigarette smoking. It is a ***treacherous pathway to nicotine addiction*** which traps young persons, entices ex-smokers and holds back persons who wish to give up smoking in a dual-use habit.
- The cartridges used in ENDS or e-cigarettes are filled with liquid nicotine, flavouring agents and other chemicals. A typical cartridge contains about as much nicotine as a pack of 20 regular cigarettes and can act as a potential source for nicotine addiction.
- Nicotine is a poisonous substance that, in very low dosage, for a limited period and under medical supervision can be used for tobacco cessation. However, e-cigarettes have very high amount of nicotine that is likely to damage human organs. It is also proven that ***nicotine in its pure form is carcinogenic***. So, if the nicotine delivery is quick and powerful, the e-cigarette would be no different from a conventional cigarette.
- In May 2019, the Indian Council of Medical Research (ICMR) released a white paper stating that the uses of ENDS, or e-cigarettes, have “documented adverse effects” which include DNA damage; carcinogenesis (initiation of cancer formation); cellular, molecular and immunological toxicity; respiratory, cardiovascular and neurological disorders. It also impacts foetal development and pregnancy, according to ICMR.

Against The Ban

- The Association of Vapers India (AVI), an organisation that represents e-cigarette users across the country, slammed the government's move, terming it 'a black day' for 11 crore smokers in India who had been deprived of safer options. On one hand, we talk about transitioning from a developing to developed nation but on the other we are closing our doors to new technology that has been embraced globally by governments and used by millions worldwide to quit smoking.
- Why ban when you can tax (heavily)? A group of people are of the view that banning e-cigarettes while keeping tobacco products is bizarre. Neither health nor fiscal grounds for this decision, so what's the logic? Nobody ever said e-cigarettes are harmless, the question here is of harm reduction. What should be banned are cigarettes that are killers & nobody is doing anything about them.

Scenario Elsewhere

As per the World Health Organization Report on the Global Tobacco Epidemic 2017, the Governments of thirty (30) countries including Mauritius, Australia, Singapore, Korea (Democratic People's Republic),

Sri Lanka, Thailand, Brazil, Mexico, Uruguay, Bahrain, Iran, Saudi Arabia, United Arab Emirates etc, have already banned Electronic Nicotine Delivery System (ENDS) in their countries.

- **United States:** Has the highest population of smokeless tobacco and vape-product users. Reports of over 400 hospitalisations and six deaths related to use of e-cigarette and vape uses. Plans to ban all e-cigarette flavours, except for tobacco.
- **UK:** Sales of ENDS products like vapes are legal. Introduced regulations for e-cigarette firms in 2016.
- **China:** Houses a third of the world's smokers. Announced in July 2019 that it plans to regulate e-cigarettes to strengthen supervision of these products.
- **France:** Allows sale of e-cigarettes as either medicines or consumer products, but those making health claims related to these products need marketing authorisation under standard drug licencing process. Those selling as consumer products are regulated by the country's May 2016 decree on vapour products containing nicotine.
- **Germany:** Classifies nicotine-containing e-cigarettes as tobacco-related products and regulates it under country's 2016 law on Implementation of the Tobacco Products Directive and Related Products.
- **Japan:** Non-nicotine e-cigarettes currently not regulated, but nicotine-containing e-cigarettes are classified as medicinal products and regulated under Japan's pharmaceutical affairs law.

Double Standards

- Although the move has been hailed by health experts, there have also been criticisms regarding the double standards in banning e cigarettes, while allowing the sale of conventional cigarettes which is a huge revenue generator for the government.
- According to the CDC in the US, cigarette smoking harms nearly every organ of the body, causes many diseases, and reduces the health of smokers in general. A study published in The Lancet found tobacco use was the "leading" risk factor for cancers in India in 2016.
- According to WHO, in 2018, India had nearly 27 crore tobacco users and a substantial number of people exposed to second-hand smoke, putting them at an increased risk for cardiovascular diseases.
- As the ill effects of conventional tobacco products are well documented, the government should at least work towards regulating and minimising the use of conventional tobacco products if not banning them altogether.

Debate Over Hindi As The National Language

Language as a potential ground for identity, power, unity and integrity has been the subject of debate among different political parties and linguistic groups in India for a considerable period of time. Recently on Hindi Diwas, the Union Home Minister said that it was necessary to have Hindi as a common language as it has the potential to unite India.

The speech has once again generated fear and apprehension among non-Hindi speakers and has been met with reasonable resistance from the southern states and West Bengal. The issue needs to be studied historically and analysed critically from the perspective of inclusive Indian nationalism as the question of language has multiple and contentious layers in it.

Background

- Among the topics debated by the Constituent Assembly, the most controversial, contested and provocative question was language.
- A range of discussions was held on which language should be spoken in the Constituent Assembly, which language should be used to write the Constitution, and the language that should be given the singular label '*Rashtra Bhasha*'.
- The 1951 Census of India reveals that Hindustani, considered to be the bazar language comprising Hindi, Urdu and Punjabi, was spoken only by 45% of the total Indian population. As a result, members of the Constituent Assembly expressed no interest in the '*one language*' formula. Instead, they were willing to accept Hindi as the official language of the Union.
- Ultimately, the Constituent Assembly decided that the official language of the Union would be Hindi in the Devanagari script. However, it made it clear that the English language would continue to be used for all the official purposes for ***15 years from the commencement*** of the Constitution.
- The question of language was taken up once again by the Lok Sabha in 1963. While the proposed immediate implementation of the constitutional provision on official language, the parliamentarians from the South and Bengal argued for the retention of English.
- Consequently, a compromise was reached which led to the introduction of the ***Official Languages Act in 1963***. The fundamental objective of this Act was to satisfy both the proponents of Hindi and non-Hindi members.

- However, there were further attempts to foreground Hindi, followed by massive student demonstrations, riots, and self-immolations, which continued for several months.
- A compromise was reached with an assurance that Hindi would never be imposed on non-Hindi speaking states. Subsequently an amendment was introduced through the **Official Languages Amendment Act in 1967**, which provided for joint use of Hindi and English in the Indian parliament.
- It also provided Hindi as the language of communication between the Centre and Hindi speaking states and English for communication between the Centre and non-Hindi speaking Indian states.

Constitutional Provisions

- **Article 29** of the Constitution of India protects the interests of minorities. The Article states that any section of the citizens who have a distinct language, script or culture of its own shall have the right to conserve the same.
- **Article 343** is about the official language of the Union of India. According to this Article, it is to be Hindi in Devnagri script, and numerals should follow the international form of Indian numerals. This Article also states that English will continue to be used as an official language for 15 years from the commencement of the Constitution.
- **Article 346** is about the official language for communication between the states and between a state and the Union. The Article states that the “authorised” language will be used. However, if two or more states agree that their communications shall be in Hindi, then Hindi may be used.
- **Article 347** gives President the power to recognise a language as an official language of a given state, provided that the President is satisfied that a substantial proportion of that state desires that the language be recognised. Such recognition can be for a part of the state or the whole state.
- **Article 350A** facilitates for instruction in mother tongue at the primary stage.
- **Article 350B** provides for the establishment of a *Special Officer for linguistic minorities*. The Officer shall be appointed by the President and shall investigate all matters relating to the safeguards for linguistic minorities.
- Further, the **Eighth Schedule** of the Constitution of India contains a list of 22 recognised official languages.

Statistics On Hindi Speaking

- A language is an umbrella term which contains many mother tongues. 43% of Indians speak the Hindi language, which includes many mother tongues such as Bhojpuri, Rajasthani & Hindi.
- According to Census 2011, only about 26% of Indians speak Hindi as mother tongue under the broader Hindi language grouping. The share of Hindi language speakers is highest in Uttar Pradesh and lowest in Kerala.
- Despite being spoken by a large number of people, Bhojpuri and Rajasthani are not listed as scheduled languages, while Bodo and Nepali which are spoken by relatively fewer people are in the Eighth Schedule.
- While, close to 40% of the Hindi language speakers speak mother tongues other than Hindi.

Analysis

- The idea that a language represents a nation is an idea rooted in colonialism, where the complex process of modern nation building in colonial countries involved questions of cultural unity.
- Language and literature held the key to the project of cultural continuity from a unique and great past. Almost all European nations had such projects, which they bequeathed to the nations they colonised.
- Despite having several languages and dialectal differences, European nations adopted their national languages through an elitist and exclusionary project. Today, this idea of linguistic unity is being contested from several quarters, including by immigrants from India.
- English gave the idea of a singular nation: One nation, one language. However, at no time in the history of the Subcontinent was there a need to showcase national unity through one language or one culture until after colonialism.
- Modern standard Hindi evolved from the interaction of early speakers of Khari Boli with speakers of different languages from the northern part of the Subcontinent and elsewhere.
- Although the current push is for a standardised and Sanskritised Hindi, spoken Hindi has largely been influenced by Persian — and then English, among other languages. And The history of Hindi is much more recent than many languages of India, say Tamil, Kannada, Telugu, and so on.
- While diversity is in itself important, it is equally important to consider the knowledge systems that are steeped in every spoken language — one that has its own history, literature (oral or written), relationship with the local economy, with people's lives, the way they understand the world around them and the relationships with other languages around them.

VAJIRAM & RAVI

- Further, national identity cannot be linked to any one language, as it is, by definition, something that transcends linguistic and regional differences.

Way Ahead

- While the development of Hindi is undoubtedly a constitutional command the Union government cannot ignore, the manner in which it is done should not give the impression to the States that there is creeping imposition of Hindi and the government must be sensitive to the fears, anxieties, and apprehensions of non-Hindi speakers.
- Further, it should be realistic about what constitutes unity and integrity in India, while respecting the diversity of the country, its plural ethos and the cauldron of languages and cultures.

VAJIRAM & RAVI

Visit Of Indian Prime Minister To USA

Context

Prime Minister of India made an official visit to the United States from 21-27 September. The visit had three main pillars to it. These were:

- A. First the multilateral engagements at the United Nations.
- B. Second the bilateral component of the visit in the United States covering political meetings, interaction with the business community and with the Indian diaspora.
- C. Thirdly the bilateral meetings with world leaders in New York.

Key Highlights

- PM's first engagement was a **round table discussion with several chief executives in the energy sector**. Energy is the major new component in the Indo-US trade mix. We import approximately \$4 billion worth of oil and gas from the United States.
- On September 22, he addressed the Indian community at '**Howdy Modi**' event. This was his third address of such kind in the United States. President Trump as well as the senior democratic leadership of the US was also present at this event. Their presence at this event was very significant. It represents the high standing and influence of the diaspora in the United States and the bipartisan support that Indo-US relation enjoys in the political leadership of the United States.
- On the 23rd, the Prime Minister participated in the **Climate Summit organized by the UN Secretary General**.
- This event was followed by another event also hosted by the UN Secretary General which was on **Universal Health Coverage**.
- Later he participated in leader's dialogue on **Strategic Responses to Terrorists and Violent Extremist Narratives**, jointly hosted by the King of Jordan, the PM of New Zealand, the President of France and the UN Secretary General.
- On September 24, India organized an event to commemorate the 150th anniversary of Mahatma Gandhi in the UN. This event was titled, '**Leadership Matters – Relevance of Gandhi in Contemporary Times**'. At this event, three launches were done:

VAJIRAM & RAVI

- **Gandhi Solar Park** which is the installation of solar panel on the rooftop of the UN headquarters from an Indian grant of \$1 million
- Remote inauguration of the **Gandhi Peace Garden** at the State University of New York Campus at Old Westbury where a 150 trees have been planted in honor of Gandhiji's 150th birth anniversary
- The release of a **UN postage stamp on Gandhi Ji.**
- Later, PM was honoured with the **Global Goalkeeper's Goal' award** given by the Bill and Melinda Gates Foundation. It is given every year to a world leader for achievement in a specific SDG (Sustainable Development Goal) and the previous winners have been PM Solberg of Norway and President Sirleaf Johnson of Liberia.
- On the 27th September, the Prime Minister **addressed the General Assembly**.

Other Multilateral Meetings

1. India Pacific Island States Leader's Meeting
2. India **CARICOM Leader's Meeting**
3. The Minister of State in the Ministry of External Affairs also engaged with groups such as NAM, the Commonwealth, CICA and BRICS.

A. Climate Action Summit

- World Leaders participated at the United Nations Secretary-General's Climate Action Summit to announce potentially far-reaching ambitious solutions in 9 areas which among the others include -
 - A global transition to renewable energy
 - sustainable and resilient infrastructures and cities
 - Sustainable agriculture and management of forests and oceans
 - Resilience and adaptation to climate impacts
 - alignment of public and private finance with a net zero economy.
- Indian PM was one of the leading speakers at the Summit. He highlighted various initiatives such as clean cooking gas initiative, Jal Shakti abhiyan etc. undertaken by GoI. He also highlighted India's decision to ban the use of **single use plastic** .

VAJIRAM & RAVI

- India and Sweden were part of the Industrial Transition Track as co-leaders. Under this track, PM announced the launch of the "Leadership Group", which will provide a platform for governments and the private sector with opportunities for cooperation in the area of technology innovation and develop low carbon pathways for industry.

B. High-level Meeting on Universal Health Coverage

- This was the first-ever United Nations General Assembly high-level meeting on universal health coverage.
- PM Modi highlighted India's effort in this direction. This included Ayushman Bharat, National Nutrition Mission, Ban on e-cigarettes, greater awareness through Clean India campaign etc.

C. Strategic Responses to Terrorists and Violent Extremist Narratives

- PM Modi attended the Leader's dialogue to discuss strategic responses to terrorists and violent extremist narratives.
- This took stock of the Christ Church Call to Action to eliminate terrorist and violent extremist content online.
- India has supported the Christ Church Call to Action to sanitize cyberspace from contents which promote and eulogize terrorism, hate and violence. India also urged for Qualitative Upgradation in the ongoing cooperation and intelligence sharing through bilateral and regional frameworks.

D. Different Bilateral and Multilateral Meetings

1. With Pacific Island Leaders

- The India-Pacific Islands Developing States (PSIDS) Leaders' Meeting was held on 24th September 2019 on the sidelines of the 74th UNGA. This was the first time Indian PM has met the leaders of the PSIDS on the margins of UNGA in plurilateral format.
- The Heads of delegation of Fiji, Kiribati, Marshall Islands, Micronesia, Nauru, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu attended the meeting.
- India announced allocation of US\$ 12 million grant (US\$ 1 million to each PSIDS) towards implementation of high impact developmental project in the area of their choice.

VAJIRAM & RAVI

- In addition, a **concessional Line of Credit of US\$150 Million** which can be availed by the PSIDS for undertaking solar, renewable energy and climate related projects based on each country's requirement was announced.
- India reaffirmed its commitment to provide developmental assistance for capacity building. So far, India has **proposed to depute technical experts** to provide training and offered to organize specialized courses also under **ITEC programme** in priority areas identified by partner countries, including training of diplomats from Pacific Island nations at the Foreign Service Institute.
- In the health sector, PM offered to organize a **Jaipur Foot Artificial Limb Fitment Camp** in a Pacific regional hub under '**India for Humanity**' programme.
- India announced a **Distinguished Visitors Programme** under which eminent persons from these countries can visit India.
- To continue High-Level engagement, **PM extended an invitation to all the leaders for the 3rd FIPIC Summit** to be held in **Port Moresby** in first half of 2020.

Background:

- India's relationship with Pacific Island nations has deepened **with the evolution of Act East Policy**, resulting in the setting up of the action-oriented Forum for India–Pacific Island Cooperation (FIPIC).
- The first and second editions of the FIPIC took place in Fiji (2015) and Jaipur (2016).

2. With The Leaders Of CARICOM

- PM Modi met with **14 leaders of the CARICOM group of countries** on sidelines of UNGA on 25 September 2019. It was the **first-ever meeting** of PM Modi with CARICOM leaders in a regional format.
- The meeting was attended by the leaders of Antigua and Barbuda, Barbados, Dominica, Jamaica, St. Kitts and Nevis, St Lucia, St Vincent and the Grenadines, Trinidad and Tobago, Suriname, Bahamas, Belize, Grenada, Haiti and Guyana.
- During the meeting, India laid emphasis on partnering with CARICOM countries in capacity building, development assistance and cooperation in disaster management and resilience.
- PM Modi invited CARICOM countries to join the **International Solar Alliance** and the **Coalition for Disaster Resilient Infrastructure**.

VAJIRAM & RAVI

- He also announced a **USD 14 million grant for community development projects** in the CARICOM and another **150 million Line of Credit for solar, renewable energy and climate- change related projects.**
- He also announced the setting up of the **Regional Center for Excellence in Information Technology in Georgetown**, Guyana and the **Regional Vocational Training Center in Belize** by upgrading the existing India-funded centers in these countries.

About CARICOM

- The **Caribbean Community (CARICOM)** is a grouping of twenty countries: fifteen Member States and five Associate Members.
- Stretching from **the Bahamas in the north to Suriname and Guyana in South America**, CARICOM comprises states that are **considered developing countries**, and except for Belize in Central America and Guyana and Suriname in South America, all Members and Associate Members are **island states**.
- **Evolution** - From the early efforts for a political union which led to the establishment of the **West Indies Federation (1958)** to the deeper and more structured engagements of the **Caribbean Free Trade Association (CARIFTA) (1965)** to the more sustained measure of regional integration through a **Caribbean Community (1973)**.
- CARICOM rests on four main pillars: **economic integration; foreign policy coordination; human and social development; and security.**

India – CARICOM Relation:

- CARICOM economies are Single market economies which facilitates free movement of goods, labor and services within the community. Also, the presence of 1 million strong Indian Diaspora makes this region important for India.
- The first meeting of India – CARICOM Foreign ministers was held in 2005. The first India-Caribbean Conclave was held in 2009 which identified the potential areas of investments.
- Both India and CARICOM are members of Commonwealth, G-77 and NAM.
- India had participated in the upgradation of CARICOM Secretariat's Information Technology and Communication infrastructure

3. SAARC Council of Ministers Meeting

- Keeping the tradition alive, SAARC Foreign Ministers met informally on UNGA sidelines. This meeting was chaired by Nepal.
- India highlighted the **impact of South Asia Satellite**, launched in 2017, on different sectors such as health, education, disaster response weather forecasting and communications.
- It also highlighted the extension of **National Knowledge Network (NKN)** to other SAARC countries such as Sri Lanka, Bangladesh and Bhutan.
- Pakistan Foreign Minister Shah Mahmood Qureshi boycotted External Affairs Minister S Jaishankar's opening statement at the meeting.

4. Meeting of BRICS Ministers of Foreign Affairs

- The BRICS Ministers of Foreign Affairs/International Relations held their annual meeting on the margins of the 74th session of UNGA.
- It was chaired by the Russia in the country's capacity as the incoming BRICS Chair for 2020.
- The Ministers recalled that 2020 is the 75th anniversary of the founding of the United Nations and of the end of the Second World War. Hence, they urged to make global governance more inclusive, representative and participatory by bringing necessary reform.
- The Ministers reaffirmed their commitment to multilateralism and to the multilateral trading system with the WTO at its center.
- Ministers commended the African Union's commitment to "**Silencing the Guns by 2020**".

5. Informal Ministerial meeting of CICA

- Tajikistan hosted the informal Ministerial meeting of CICA (**Conference on Confidence-Building Measures in Asia**). Kazakhstan will assume the chairmanship after Tajikistan.
- The 5th CICA Summit was held in Dushanbe in June 2019 which was attended by India.
- Minister of State for Foreign Affairs Shri V. Muraleedharan represented India at this informal meeting.
- At the summit, India highlighted its policies of **Think West, Act East, Security and Growth for All**, and its vision of **Indo-Pacific** which are reflection of India's commitment to partner with countries of Asia.

About CICA:

- It is a multi-national forum for enhancing cooperation towards promoting peace, security and stability in Asia.
- The idea of convening the CICA was first proposed by Nursultan Nazarbayev, the then President of Kazakhstan, on 5 October 1992, at the 47th Session of the United Nations General Assembly.
- The Secretariat of CICA was established in 2006 and it is located at **Astana**, which is now known as **Nursultan** – the capital of Kazakhstan.
- CICA summit is usually held after every four years.

1. The Government is in the process of implementing the One Nation-One Ration Card scheme in a phased manner across the country. What necessitated the introduction of the scheme? Elucidate the benefits and challenges that lie ahead in its implementation.

Answer**Need For One Nation One Ration Card (ONORC) Scheme**

- India runs the world's largest food security programme, distributing more than 600 lakh tonnes of subsidised food grain to more than 81 crore beneficiaries every year. This is done through a vast network of more than five lakh ration or fair price shops, where beneficiaries with a ration card can get their share of allotment.
- But, since ration cards are **issued by state governments**, each household's ration card was linked to a specific fair price shop. This implied that beneficiaries could procure food grains only from the designated ration shop within the concerned state.
- If a beneficiary were to shift to another state, he/she would need to apply for a new ration card in that state. Registering for ration cards at their new location is an arduous process, especially if some members of the household still remain in their original home.
- Thus practically, until recently, this has been **a location-linked benefit**, leaving crores of migrant workers and families out of the food safety net.
- The ONORC scheme attempts to address this gap in PDS delivery. The scheme will ensure all beneficiaries especially migrants to access rations across the nation from any PDS shop of their own choice.

Features of ONORC Scheme

- It involves the creation of a central repository of NFSA beneficiaries and ration cards, which will integrate the existing databases maintained by States, Union Territories and the Centre.
- It will undertake **Aadhaar seeding** as the unique biometric ID will be used to authenticate and track the usage of ration by beneficiaries anywhere in the country.
- Further, all fair price shops would be equipped with electronic point-of-sale machines (**ePoS**), replacing the old method of manual record-keeping of transactions with a digital real-time record.
- The Food Corporation of India's **Depot Online System** will integrate all warehouses and godowns storing subsidised grain in an attempt to create a seamless flow of online information from procurement until distribution.

Benefits of ONORC

- Eliminate Exclusion:** As per Census 2011, there are more than 45 crore internal migrants in India. Apart from this, field studies estimate that 4-10 crore people are short-term migrants, often working in cities, but not moving there permanently. The scheme would act as a boon for such people and would go a long way in ensuring food and nutritional security to them. Moreover, Women who change locations after marriage also find it difficult to start accessing ration benefits using a new household's card.
- Remove Monopolies and Lessen Corruption:** Under the old system, beneficiaries were dependent on a single fair price shop and subject to the whims of its dealer. But under the new system, if they are denied service or face corruption or poor quality in one shop, they are free to head to a different

shop. Thus, ration card portability will curb corruption and improve access to and service quality by removing monopolies.

- **Peripheral Benefits:** The scheme will also drive faster implementation of initiatives to digitise and integrate the food storage and public distribution system.

Challenges

- **Lack of ePoS Machines:** There are only 4.32 lakh ePoS machines which have been installed in more than 5.3 lakh fair price shops. Further, in some rural and remote areas, ePoS connectivity remains erratic, jeopardising smooth functioning.
- **Denial of Food:** In Jharkhand, there have been widespread complaints of denial of food due to system failures. A 2017 study in Ranchi district found that 20% to 40% of beneficiaries had been unable to buy their rations. It has to be seen how the new system tackles these problems.
- **Difference In Ration Benefits Offered:** Few States run their own subsidised ration schemes, over and above the Central entitlement. Tamil Nadu, for example, offers 20 kg of free rice per month to almost 2 crore ration card holders, as well as subsidised sugar, pulses and oil, over and above the NFSA benefits. The State government has said that it will not be offering these benefits to migrant workers, as the Centre will cover the costs of NFSA benefits only.
- **Members Split Between Locations:** Another issue could arise if the members of a single household are split between two different locations. The scheme's guidelines only permit purchase of half the subsidised grain at one time in an effort to prevent one member of the household taking the entire ration for the month. This leaves family members in a different location stranded without food.
- **Lack Of Data On Inter-State Migration:** The biggest challenge may lie in the lack of any concrete data on inter-State migration trends, especially short-term migration. The allocation of food grains to States will have to be dynamic to allow for quick additional delivery to cover any shortfalls in States with large migrant populations. Currently, Food Corporation of India godowns stock grains up to three months in advance. Food Ministry officials acknowledge that there is a "steep learning curve" ahead to ensure that movement of grain matches migration flows.

So, it remains to be seen how the draft of scheme proposes to address these challenges so as to reap the benefits of this much needed scheme.

2. Two oil fields in Saudi Arabia were recently attacked by drones. Throw light on the impact of the attacks on India while showing Saudi Arabia's significance in the oil market

Answer

The Houthis, a rebel Shia group of Yemen that is backed by Iran, recently bombed the Abqaiq plant as well as the Khurais oil field in Saudi Arabia. The attack has not only led to the suspension of production of almost 6 million barrels per day (about 6 per cent of global oil supply) but also restricts the use of 2 mbd of spare capacity. The impact of the attacks pose fresh challenges to the Indian government's recent efforts to revive the pace of economic growth.

Saudi Arabia's Significance In Oil Market

- Saudi Arabia produces nearly 10 million barrels of oil every day and is one of the **largest producers of crude oil in the world**.
- Further, it **produces a variety of grades of crude**, including light grade crude which is in high demand in Asia.

- With its spare capacity — the ability to turn up supply to meet emergency demand situations — Saudi Arabia continues to play a **critical role in global price stabilisation** and has increased supplies on multiple occasions in the past in the event of geopolitical shocks.

Impact On India

India imports around 83 % of the oil it consumes, which means there are multiple ways in which the country will be impacted by this disruption.

I. Impact on Indian Supply

- India is already trying to make up for the loss of supply from Iran after US-imposed sanctions.
- After Iraq, Saudi Arabia is India's second-largest supplier of crude oil — it accounts for ~ 17 % of country's imports. If the process of restoration takes a long time, India would have to look for alternatives which again may not be easy since the global supply has been fairly volatile because of disruptions in some of the other big suppliers such as Venezuela, Libya and Nigeria.

II. Impact Of High Crude Prices On India

- Every \$1 appreciation in Brent price inflates the oil import bill by \$2 billion and a 10% rise in oil prices widens India's current account deficit by 0.4-0.5% of GDP.
- India is expected to import 1.6 billion barrels of crude oil in the current financial year. So, an increase in oil prices by just one dollar would lead to an increase of \$1.6 billion in the import bill.
- This is an additional Rs 11,500 crore at the current exchange rate, but supply constraints and rising oil prices would mean that the rupee will weaken further against the dollar.
- As the dollar prices of crude oil rise, India would need to buy more dollars for the same amount of oil, thus depreciating the value of the rupee vis-à-vis the dollar.

III. Macroeconomic Impact

- Higher crude oil prices would also lead to higher domestic oil prices, which, in turn, will further depress the demand for things that use oil as the primary input — say, cars.
- This dip in consumption demand, would likely mean lower economic activity and lower revenues for the government, which will worsen the government's fiscal balance.
- The subsidy bill and inflation, which has a bearing on interest rates, will also increase.
- All of these end up limiting the government's ability to spend on social sector schemes or sops to revive the economy.

So, the escalating rift in gulf countries and rising tension between Iran-Saudi Arabia is not good for the geopolitical scenario across the globe.

Extra mile

Rising Tensions In Gulf

- Since May, oil tankers that pass through the **Strait of Hormuz**, a choke-point connecting the Gulf (also known as the Persian Gulf and the Arabian Gulf) with the Arabian Sea through the Gulf of Oman, has come under multiple attacks.
- In June, Iran shot down an American drone** alleging that it had violated Iranian air space, taking tensions between the two countries to the brink of a conflict.
- Iran has also **seized a British-flagged vessel** near the Strait of Hormuz after an Iranian ship was captured by British forces off Gibraltar (it was later released).

- The incidents near the Strait of Hormuz were a **stark warning to global oil trade** as a third of crude oil exports transported on tankers pass through the strait.

American Response On The Attacks

- In a veiled attack on Iran, America has claimed it knows the culprit behind the attacks.
- According to America, the attacks are a work of a government or a government sponsored group instead of just Houthi rebels.
- Satellite imagery show the oil facilities were struck from the northwest pointing to Iraq or Iran — not from the south (Yemen, where the Houthis are operating from).
- Precise nature of the intelligence and mission planning used to conduct targeting.
- The drones and the missiles evaded Saudi Arabia's U.S.-supplied air defence system. It is difficult for a group of rebels to have possession of such sophisticated technology.

Iran's Response and Strategy

- Iran has however rejected accusations by the United States that it was behind attacks on Saudi oil plants and has claimed that Iran was **ready for a full-fledged war**.
- It has also **threatened America** stating that all American bases and their aircraft carriers in a distance of up to 2,000 kilometres around Iran are within the range of their missiles.

But whether Iran was directly involved in it or not, it cannot escape blame as **it is backing the Houthis in Yemen's civil war**. The attacks also fit in with Iran's strategy of **disrupting the global energy markets** using its military clout in the Gulf in retaliation for the sanctions imposed by America.

3. **The RBI has imposed several restrictions on the Punjab and Maharashtra Co-operative Bank due to financial irregularities and audit concerns. What are Co-operative banks? Highlight their significance and the issues faced by them.**

Answer

The RBI has imposed several restrictions on the Punjab and Maharashtra Co-operative (PMC) Bank for six months after finding financial irregularities and audit concerns. The restrictions on PMC Bank is not a case in isolation as 23 more co-operative banks faced similar action by the regulator so far in this calendar year.

About Cooperative Bank

- Cooperative bank is an institution established on the cooperative basis and dealing in ordinary banking business. It belongs to its members, who are both owners and customers of their bank.
- These banks have mostly been centred around communities and localities lending to small borrowers and businesses. Like other banks, cooperative banks are founded by collecting funds through shares, while they accept deposits and grant loans.
- Traditionally, the co-operative structure is divided into two parts--rural and urban.
- The short-term co-operative credit structure operates with a three-tier system -
 - Primary Agricultural Credit Societies (PACS) at the village level
 - Central Cooperative Banks (CCBs) at the district level
 - State Cooperative Banks (StCBs) at the State level.

VAJIRAM & RAVI

- Primary Cooperative Banks (PCBs), also referred to as Urban Cooperative Banks (UCBs), cater to the financial needs of customers in urban and semi-urban areas.

Significance of Co-operative banks

- **Alternative Credit Source:** The money lenders dominated the rural areas and exploited poor people by charging very high rates of interest and manipulation of accounts. The main objective of cooperative credit movement is to provide an effective alternative to the traditional defective credit system of the village money lender.
- **Encourages Productive Borrowing:** Previously the cultivators used to borrow for consumption and other unproductive purposes. Co-operative banks have created a culture of productive borrowing by discouraging unproductive borrowing.
- **Encouragement to Saving and Investment:** Cooperative credit movement has encouraged saving and investment by developing the habits of thrift among the agriculturists. Instead of hoarding money the rural people tend to deposit their savings in the cooperative or other banking institutions.
- **Improvement in Farming Methods:** Cooperative credit is available for purchasing improved seeds, chemical fertilizers, modern implements, etc. Hence, cooperative banks have also greatly helped in the introduction of better agricultural methods.

Issues with Co-operative Banks

- They suffer from **low or weak quality of loan assets** & from highly unsatisfactory recovery of loans.
- Most of the cooperative banks are plagued with a **lack of professional management** and **reluctance in technology adoption**.
- Due to **weak corporate governance**, they have become hotbeds of political patronage, unscrupulous financial practice and gross mismanagement.
- Another problem arises from the **duality of control** i.e. banks are organised under the dual control of RBI and as well as respective state governments.
- Further, they **unduly depend on government capital** rather than member capital.

So, it is undeniable that cooperative banks are of immense importance due to its reach to much needed poor people. However, these bottlenecks need to be removed to safeguard the small borrowers and depositors and make it effective in real sense.

Extra Mile

Regulation of Co-operative Banks

- Cooperative Banks are registered under the Cooperative Societies Act. Banking laws were made applicable to cooperative societies in 1966 through an amendment to the Banking Regulation Act, 1949.
- Since then, banking related functions are regulated by the RBI and management related functions are regulated by respective State Governments/Central Government.
- Powers have also been delegated to National Bank for Agricultural and Rural Development (NABARD) to conduct inspection of State and Central Cooperative Banks.
- However, Primary Agricultural Credit Societies fall outside the purview of the Banking Regulation Act, 1949 and hence are not regulated by the RBI.

Deposit Insurance

- One of the many safety nets in place to protect depositors is the deposit insurance under the Deposit Insurance and Credit Guarantee Corporation of India (DICGC). All State, Central and urban cooperative banks are covered under DICGC.
- However, each depositor is insured only upto Rs 1 lakh (for both principal and interest) across all accounts in one bank.
- So far in India, beneficiaries of the deposit insurance system have mainly been the urban cooperative banks, many of which fail every year.

Restrictions Imposed on Punjab and Maharashtra Co-operative bank

- According to the new restrictions, the bank cannot issue loans or open fixed deposit accounts for the next six months.
- Further, RBI has set a Rs 1000-withdrawal limit from savings, current or any other account in the bank.
- RBI has also appointed an administrator superseding the board of PMC. However, RBI has clarified that this does not mean the cancellation of a banking licence by the Reserve Bank.

4. Continuing with its series of reforms, the government has announced a significant cut in the corporate tax rates. What will be the impact of the tax cut on the overall economy?

Answer

The changes in corporate income tax (CIT) constitute an important milestone in India's recent legacy of tax reforms, aimed at lowering tax rates and broadening tax bases. In 2015-16, the then Finance Minister announced that the basic CIT rate would be reduced to 25 per cent but action on this was slow. The latest reforms go beyond this by lowering the basic rate to 22 % for domestic companies and 15 % for new manufacturing companies. The cess and surcharges will however continue.

The effective tax rate linked to the basic tax rate of 22 % is 25.17 %. While availing this lower rate, the companies will have to forego the benefits of any tax exemptions and deductions. Also under the new corporate tax policy, new companies that set up manufacturing facilities in India starting in October and commencing production before the end of March, 2023 will be taxed at an effective rate of 17%.

Need For The Cut

- The corporate tax cut is part of a series of steps taken by the government to tackle the slowdown in economic growth, which has dropped for five consecutive quarters to 5% in the June quarter.
- Investor sentiment had taken a hit by the additional taxes that were announced by the government during the budget in July and began pulling money out of the country.
- Moreover, corporate taxes in India were significantly higher than East Asian economies, which acted as a barrier in attracting investors in the country.

Impact Of The Cut

- Tax cuts, by putting more money in the hands of private sector, can offer people more incentive to produce and contribute to the economy. Thus, the present tax cut can help widen the economy.
- Investments crucially depend on the consumption levels in an economy. If there is high consumer demand, firms would eagerly invest. However, if the consumption level is depressed because

VAJIRAM & RAVI

incomes are low across the board and companies have high unsold inventories, the impact on fresh investments would be muted.

- The corporate tax rate is also a major determinant of how investors allocate capital across various economies. Hence, the present cut can help in increasing India's global competitiveness.
- In the medium to long term, the tax cut is expected to boost investments and increase the productive capacity of the economy. As regardless of a slump in demand in the short term, investment decisions are taken after considering long term demand projections.
- The tax cut, however, is expected to cause a yearly revenue loss of ₹1.45 lakh crore to the government which is struggling to meet its fiscal deficit target. This has the potential to further depress the economy as the government could use the same money to create new productive assets.

Conclusion

Nevertheless, if the cuts manage to sufficiently revive the economy, the present tax cut can help boost tax collections and compensate for the loss of revenue. Further, a considerable portion of the tax foregone will come back to the government via the dividends that public sector firms may announce as they too would pay lower taxes. Also, the spike in stock markets and the overall business sentiment would likely mean that the government will earn more from disinvestment. However, the government will also need to simultaneously enact along with these tax cuts other structural reforms that reduce entry barriers in the economy and make the marketplace more competitive.

Extra mile

- In the early 90s, the Chelliah Committee had recommended bringing down the CIT rate from between 51.75-57.5 per cent to 45 per cent.
- It was gradually brought down to 40 per cent, and then further to 35 per cent in 1997-98.
- Later, based on the Shome Committee (2001) and Kelkar Committee (2002) recommendations, the basic CIT rate was brought down to 30 per cent in 2004-05.

5. **It would be an understatement to say that India's contribution to global peace has been remarkable. In the light of this statement, highlight the significant role of India in UN Peacekeeping Operations.**

Context:

- United Nations Secretary-General Antonio Guterres has appointed **Lieutenant General (Retired) Abhijit Guha** as the **head of the UN Mission in Hodeidah, Yemen**.
- Guha will also assume the **chair of the Redeployment Coordination Committee (RCC)**, tasked with redeploying forces of the Yemeni warring parties in accordance with their agreement.
- Guha will succeed Danish Lieutenant General **Michael Lollesgaard**.

About UN mission in Hodeidah Agreement (UNMHA)

- On January 16, 2019 UN Security Council unanimously adopted the resolution 2452 (2019) to establish United Nations Mission to support the Hodeidah Agreement (UNMHA).
- The idea was to establish a **Special Political Mission** to support implementation of the **ceasefire agreement** reached in Stockholm on 13 December 2018 **between the Government of Yemen and the Houthi militia**.

VAJIRAM & RAVI

- It has an **initial mandate of six months** to lead and support the RCC tasked with overseeing the ceasefire, redeployment of forces and mine action operations.
- The mandate of this mission was extended for another six months on 16 July 2019 by UNSC.

Answer

India has been actively participating in peacekeeping right from 1950 when it supplied medical personnel and troops to the **UN Repatriation Commission in Korea**. As one of the founding members of the UN, India's contribution to the maintenance of international peace and security has been second to none.

Contribution of India in UN Peacekeeping:

- India has participated in 49 missions sending more than 2,08,000 troops.
- As of January 2019, India has suffered the **highest number of fatalities** (164 out of 6,593 personnel) among countries that have sent forces to the United Nations peacekeeping mission since 1948.
- Nearly 80% of the Indian peacekeepers are deployed in hostile regions such as **Central African Republic and South Sudan in various sections**.
- India has developed a well-rounded policy for participation in UN peacekeeping operations. **Centre for United Nations Peacekeeping** was set up in September 2000 under the aegis of the United Service Institution of India in New Delhi, with the support of the MEA.
- This Centre besides overseeing the training of contingents earmarked for peacekeeping operations, has undertaken conduct of training courses. These courses have now been formally endorsed by the Department of Peacekeeping Operations at UN HQ.
- In April 2019, a total of 150 Indian peacekeepers serving with the **UN Mission in South Sudan (UNMISS)** have received **medals of honour** for their dedicated service and sacrifice.

Conclusion

- Acknowledging India's contribution, UN secretary general Antonio Guterres said that it would be an understatement to say that India's contribution to global peace has been remarkable.
- India's spontaneous and unreserved participation in UN peacekeeping operations over the years has been a clear demonstration of the country's commitment to the objectives set out in the UN Charter.
- This commitment has been widely acknowledged and the image of the Indian forces in the international arena is that of highly competent and well-trained professionals.

Extra Mile

Reform in UN Peacekeeping: Need of the Hour

- There is a **difference of opinion** between the countries of the **Global North and South** with regards to the scope and mandates of peacekeeping operations.
- For instance, countries of the South often demand **more aggressive peacekeeping**. They condemn the North for **not intervening adequately** in Rwanda, Sierra Leone, and Congo, yet at the same time they **accuse them of interventionist policies**.
- Northern countries also hesitate to engage their troops with the UN due to its deficiencies and, also **refuse to finance the measures** needed to improve the UN.
- The countries of the north are asking for more **robust peacekeeping mandates**, while countries of the south fear that this may threaten their sovereignty.

VAJIRAM & RAVI

- The peacekeepers are demanding more resources, whereas Global South fears that this would divert resources better spent on fighting poverty.
- The Security Council is accused of **using these operations only in areas, which are geopolitically significant** to them, and ignoring the rest.

Steps Taken So Far:

- The Secretary-General of the UN, António Guterres, launched an **Action for Peacekeeping (A4P) initiative** on 28 March 2018.
- It was launched to renew the individual and collective commitments of Member States to strengthen peacekeeping operations on the ground and resolve these conflicting issues.
- The **Declaration of Shared Commitments on UN Peacekeeping Operations**, part of the A4P initiative, has highlighted the crucial areas for reforms. This includes: *improving the safety of peacekeepers, holding them accountable for their actions, strengthening protection provided by peacekeeping forces, and finding political solutions to conflicts and enhancing the political impact of peacekeeping.*
- UNSC has adopted the resolution 2272 - to hold peacekeepers accountable for sexual abuse.

India's Position on UN Peacekeeping Reform:

- India wants that the UNSC should decide peacekeeping operations within 30 days or a maximum period of 90 days in order to avoid tragedies because of delays.
- India also wants the involvement of experts from various fields in peacekeeping in order to better deal with emerging challenges. There should also be a **sound exit policy for peacekeepers**.

6. **There is a need to ensure that we all attain a blue economy that sustains life, rather than a brown one that kills it. Comment.**

Context:

Blue economy has gained importance in policy discussions. Recently, Indian President visited Iceland and Switzerland where he emphasized the importance of blue economy.

Answer

- The Blue economy refers to **sustainable use of ocean resources** for economic growth, improved livelihoods and ocean ecosystem health.
- The main assets include fisheries, the coastline itself, mangroves, carbon absorption, seagrass beds and corals reefs with associated benefits of **coastal and marine tourism, carbon sequestration**.
- On the other hand, Brown economy relies **heavily on fossil fuels** and does not consider the **negative side effects that economic production and consumption** have on the environment.

Benefits of Blue Economy

- **Food Security** through fisheries sector including aquaculture and aquatic plants.
- **Nutritional security** by fulfilling minimum amount of protein intake in daily food basket.
- Coastal Tourism presents huge potential for job creation and economic growth.

- **Surging of Seaborne Trade** as Sea is a cost-effective and carbon-friendly mode of transportation for global trade.
- **Alternative Sources of Clean, Affordable and Renewable Energy** in the form of wave energy, solar energy, tidal energy, hydroelectric energy.
- **Managing Coastal Urbanisation** as in the blue economy framework, coastal cities are viewed as a source of economic dynamism, agglomeration of blue activities, social empowerment and pollution-free built-in environment.
- **Improving Ocean Health** as blue economy approach would contribute to the process of restoring the ocean health and its precious resources.
- **Ocean technologies** such as deep-sea mining, freshwater production from sea etc. may get more attention in coastal economies pursing blue economy.

Hence, it is clear that, **blue economy breaks the mould of brown development model** where oceans are perceived as a means of free resource extraction and waste dumping.

Conclusion

- At the **United Nations Conference on Sustainable Development** held in **Rio de Janeiro in 2012**, blue economy was viewed as ocean economy that aims at the “improvement of human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. Therefore, the scope of blue economy is much wider and inclusive.
- Countries all over the world are mainstreaming policies related to blue economy. In November 2018, **first ever-Sustainable Blue Conference** was held at Nairobi.
- The island-nation of Seychelles has **launched the world's first blue bond** to raise the capital.
- It is time that other continents including Asia take up the challenge and tap the vast ocean of resources.

7. The G20 is becoming less relevant and more bureaucratic over time. Hence, it can be said that it has outlived its usefulness. Critically comment.

Context

- The Osaka summit of 2019 as well as the Buenos Aires summit of 2018 saw the increasing trend of bilateral meetings on the sidelines of G20 summit.
- Many analysts are criticizing the G20. According to them, the **G20 is revealing its non-binding architecture and unaccountability cracks**. It is imploding from within.
- They contend that the irrelevance of G20 has been slow, steady and certain, one Summit after another, one city at a time.

Answer

Established in 1999, G20 was elevated to a premier global forum for international economic cooperation in 2008 **to effectively respond to the global financial crisis of 2008**. However, in recent years, the G20 has struggled to maintain its influence as some members shift from multilateralism to more nationalistic policies. This has led to a perception that G20 has outlived its usefulness.

G20 Has Outlived Its Usefulness

- It failed to revive the **sluggish global growth and falling trade** between global economies. It failed to **find a solution to tariff war** between US and China.
- In recent times, it has been observed that the **rivalry between the United States and China hijacks** the agenda of this multilateral gathering.
- The summit often talks of wanting to open up new horizons for development **without giving any indication on how this would be done**. Buenos Aires declaration of 2018 or Osaka declaration of 2019 support this fact.
- So far, it has failed to check the **rising tendency of protectionism and xenophobia** which are evident from BREXIT, termination of GSP by USA and from statements of US President Trump.
- **Reducing the reliance on credit rating agencies** by finding alternate methods was one of the prime objectives of G20. It has not been able to devise the alternate mechanism.
- **Reform in IMF, WTO** is the need of the hour. However, it has failed to such financial reforms.
- For the participating leaders, the **lack of an overarching focus**, has meant the G20 was used mainly to burnish bilateral ties. This was seen at the recently concluded Osaka Summit.

G20 Is Still Relevant

- **Significant Weight** - G20 members represent around 85 per cent of global gross domestic product, over 75 per cent of global trade, and two-thirds of the world's population.
- **Promotes Multilateralism** – the G20 is better positioned than older groups to navigate the divide between developed and emerging economies, and the practice of rotating the chair gives them all a chance to shape the global agenda.
- **A number of overarching themes** –Summits usually have a number of overarching themes. In Buenos Aires last year, these were “**the future of work, infrastructure for development and a sustainable food future**”.
- It has gradually broadened its global economy focus to areas like counterterrorism, Climate change, North Korea and Iran.
- The G20 was also credited with **helping avert a shift to protectionism post-global financial crisis in 2008, tripling the International Monetary Fund's budget** and giving development banks more remit.

Conclusion

- There is need to persuade leaders that the task begun in November 2008 is not over. A slowdown is around the corner, a recession in some countries is a few quarters away.
 - The **tensions and so-called new cold war** make organisations like the G20 even more important as a venue for direct contact among leaders.
8. **Multilateralism as a concept is under threat as never before. Bring out the possible reasons behind the decline of multilateralism. According to your opinion, what should be the possible steps to revive multilateralism?**

Answer

- The network of multilateral institutions that oversees everything from states' progress toward the Sustainable Development Goals (SDGs) to the daily distribution of humanitarian aid is under threat.

VAJIRAM & RAVI

- The current crisis of multilateralism **can be seen in multiple forms**: fewer multilateral treaties are being signed and ratified; some of the existing treaties are poorly implemented, and states increasingly reject the oversight of treaty obligations; increasingly cutting the financial support to many institutions etc.

Reasons

- **Failure to break the ice** is leading to ineffectiveness of the institution. Consensus has become hard to reach within the existing multilateral structures. This has led to the stalemate in institutions like WTO. Last successful trade talk was Uruguay round.
- **Rise of Protectionist Measures** in the form of anti-immigration and anti-globalization policies is also one of the factors. Trade war between US and China, termination of GSP by USA are few examples in this regard.
- **Failure to bring suitable reforms** reflecting the emerging world order has brought rigidness and inflexibility in institutions like UN, IMF/World Bank. This has affected the credibility of these institutions in modern times.
- **Aggressive expansionist policies** followed by different countries is severely undermining the global norms and rules.
- For example, China refused to accept the verdict of ICJ on South China Sea thereby undermining the UNCLOS and Permanent Court Of Arbitration. Similarly, annexation of Crimea by Russia undermined the credibility of UN.
- **Super nationality Vs. Nationalism debate** is gaining traction. This can be seen in the case of BREXIT.
- **Increased Geopolitical Competition** has led to the emergence of mega blocs such as RCEP, BRICS, SCO etc.
- **Trust deficit among stakeholders** is affecting working of multilateral treaties and institutions. The collapse of INF treaty or the exit of USA and Israel from UNESCO highlight this fact.

Way Forward

- Countries that believe in multilateralism **should find ways to support** their key programmes that protect rights and justice. For example, When the **US cut off funding to the UNFPA and UNRWA**, European and other governments including India stepped in to provide vital financial support.
- While acknowledging multilateralism's current structural weaknesses, leaders should work towards bringing suitable reform reflecting the new geopolitical order.
- The leaders of international organisations should stand up to those countries which try to defy the mandate of organisation.
- There is need to ensure that citizens understand and appreciate the fact that giving away power to multilateral agencies enhances their own power.

Conclusion

- The world is becoming multipolar. But multipolarity will not, in itself, guarantee peace or solve global problems. We need a strong multilateral frameworks which is inclusive and representative of the current global realities.
- For this, the larger ideological battle for a rules-based international system must be fought using a strong dose of global civics as an antidote to neo-nationalism.

VAJIRAM & RAVI

PRELIMS MCQs

1. Consider the following statements about Influenza

1. H5N1 is Avian influenza
2. H1N1 is Swine influenza
3. The spread of Avian influenza is restricted to birds

Which of the statements given above is/are correct?

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) 1, 2 and 3

Context

- The OIE-World Organisation for Animal Health has declared India free of Avian Influenza (H5N1). However, the status will last only till another outbreak is reported from the country. India was last declared free of the disease in 2017.
- Avian Influenza was first reported from Hongkong in 1997, since then there have been many outbreaks across the world. In the last two years, there had been outbreaks of the disease in Odisha, Bihar, and Jharkhand.

Answer: A

Explanation

Significance Of The Declaration

- The declaration is important not just from the poultry industry standpoint, but also because humans can contact the disease from animals.
- At the moment, the pathogen is not capable of sustained human-to-human transmission.
- However, these viruses cause severe disease in humans and have the potential to mutate to become more contagious between people.

Classification of Influenza

- The influenza virus, which causes illness, is classified by WHO into four types - **A, B, C, & D**.
- According to the US Centres for Disease Control and Prevention (CDC), **only influenza A and B viruses** are known to cause epidemics.
- The C type virus usually causes mild respiratory illness, while the **D type virus typically affects cattle** and is not known to infect humans.
- Only the **influenza A virus is divided into subtypes** and the subtype is based on two proteins on the surface of the virus - hemagglutinin (H) and neuraminidase (N).
- Hemagglutinin has 18 further subtypes while neuraminidase has 11 and they are **named from H1 to H18 and N1 to N11** in a sequential system that applies uniformly to influenza viruses from all sources.

Impact of Influenza

- Humans can be infected with avian, swine and other zoonotic influenza viruses, such as
 - **Avian influenza virus** subtypes A(H5N1), A(H7N9), and A(H9N2)
 - **Swine influenza virus** subtypes A(H1N1), A(H1N2) and A(H3N2).
- According to the WHO, influenza is known to **affect 5-10% of adults and 20-30% of children** across the world every year, killing around 6.5 lakh people every year.

2. Consider the following statements about Leprosy

1. Leprosy is an infectious disease.
2. Leprosy leads to damage of nerves.
3. According to WHO, Leprosy has been eliminated from India.

Which of the statements given above is/are correct?

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) 1, 2 and 3

Answer: D

Explanation

- The Union government has rolled out a programme for universal screening of children below 18 years for leprosy and tuberculosis (TB).
- Rashtriya Bal Swasthya Karyakram (RBSK) Mobile Health teams will screen children of 0-6 years at Anganwadis and children of 6-18 years enrolled in government and government-aided schools.
- The cases detected through the screening process will be referred to the block or district health officials concerned for treatment. Moreover, those who have come in contact with confirmed leprosy cases would be given prophylactic medication.

Need for Screening

- Both leprosy and tuberculosis are **infectious diseases** and India has a substantial burden of these diseases.
- **Children tend to be more prone** to catching infectious diseases from their peers because of long hours in confined spaces and more bodily contact than in adults.
- Addressing the problem early would ensure that the infection cycle is broken.

Leprosy

- Leprosy is a chronic infectious disease caused by **Mycobacterium leprae**. It usually affects the skin and peripheral nerves, but has a wide range of clinical manifestations.
- The disease is characterised by a **long incubation period** that is generally 5-7 years and is a leading cause of permanent physical disability. Timely diagnosis and treatment of cases, before nerve damage has occurred, is the most effective way of preventing disability due to leprosy.

VAJIRAM & RAVI

- As per World Health Organisation, while eradication means complete removal of the disease, elimination as a public health problem means to decrease the prevalence rate to **less than 1 case per 10,000 people** from random population at national level.
- This was achieved in India in December 2005, however **1.15 lakh to 1.2 lakh** new leprosy cases are still detected every year.

Tuberculosis

- Tuberculosis infection, caused by **Mycobacterium tuberculosis**, is one of the most common communicable diseases in India.
- India has the **highest TB burden in the world**, and kills an estimated 4.8 lakh Indians every year, which leads to an average of over 1,300 every day.
- India also has more than a million “missing” cases every year that are not notified. Most such cases remain either undiagnosed or unaccountable and inadequately diagnosed and are treated in the private sector.
- The global Sustainable Development Goal target to end the TB is 2030. However, there is a new urgency in India’s TB control efforts since last year, when the deadline to end TB was advanced to 2025.

Rashtriya Bal Swasthya Karyakram (RBSK)

- Launched in 2013** under the National Health Mission, RBSK is focused on preventing disease and disability in children.
- “Child Health Screening and Early Intervention Services” basically refer to early detection and management of a set of 30 health conditions prevalent in children less than 18 years of age.
- These conditions are defects at birth, diseases in children, deficiency conditions and developmental delays including disabilities, together described as **4Ds**.

3. What is Salmonella?

- a) Bacteria
- b) Fungi
- c) Virus
- d) Protozoa

Context

- At least three lots of MDH sambar masala were recalled from retail stores in California recently, after tests by the United States Food and Drug Administration (FDA) showed positive for salmonella.
- This is not the first time that the American regulator has flagged problems of salmonella contamination in MDH products. The USFDA had detained imports of its spice products in over 20 instances between 2016 and 2018 for this reason.

Answer: A

Explanation:

VAJIRAM & RAVI

- Salmonella is a **group of bacteria that can cause food-borne illnesses known as salmonellosis**. The existence of the pathogen has been known since at least 1880, but it came to be called Salmonella from around 1900, after the veterinary pathologist and surgeon Daniel Elmer Salmon.
- According to estimates by US Centres for Disease Control and Prevention (CDC), Salmonella causes 1.2 million illnesses, 23,000 hospitalisations and about 450 deaths in the United States every year.
- In a majority of these cases — roughly 1 million — food is the source of the illness. Usually, the illness lasts for 4-7 days, and most people recover without treatment.
- According to the CDC, children under the age of 5 are at highest risk for Salmonella infection. Older adults and people with weakened immune systems too, are likely to have severe infections.
- The WHO identifies Salmonella as one of four key global causes of diarrhoeal diseases.
- Salmonellosis in humans is generally contracted through consumption of contaminated food of animal origin although other foods, including green vegetables contaminated by manure, have been implicated in its transmission. Person-to-person transmission can also occur through the faecal-oral route.

4. With reference to NEAT Scheme consider the following statements

1. It aims to harness technology for better learning outcomes in primary education.
2. It is under the Ministry of Human Resource and Development.
3. AICTE is the implementing agency.

Which of the statements given above is/are correct?

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) 1, 2 and 3

Context

The Ministry of Human Resource Development has announced a new public private partnership Scheme - **National Educational Alliance for Technology (NEAT)**, under which technology will be used for better learning outcomes in higher education.

Answer: B

Explanation:

- The objective is to use Artificial Intelligence to make learning more personalised and customised as per the requirements of the learner which requires development of technologies in adaptive learning to address the diversity of learners.
- There are a number of Edtech companies working on this and MHRD would look to bring such companies under a common platform for easier access to students.

Salient features of the project

- MHRD would create and maintain a National NEAT platform that would provide one-stop access to these technological solutions.

VAJIRAM & RAVI

- EdTech companies would be responsible for developing solutions and managing registration of learners through the NEAT portal and they would be free to charge fees as per their policy.
- As their contribution towards the National cause, they would have to offer free coupons to the extent of 25% of the total registrations for their solution through NEAT portal. MHRD would distribute the free coupons for learning to the most socially/economically backward students.
- The scheme shall be administered under the guidance of an Apex Committee constituted by MHRD and AICTE would be the implementing agency for NEAT programme.

5. With reference to National Service Scheme consider the following statements

1. NSS comes under the Ministry of Home Affairs.
2. The logo of NSS is based on the giant wheel of Konark Sun Temple.
3. It was launched in the Mahatma Gandhi's centenary birth year in 1969.

Which of the statements given above is/are correct?

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) 1, 2 and 3

Context

The President of India, recently presented the National Service Scheme (NSS) Awards for 2017-18 to universities, NSS units and NSS volunteers.

Answer: B

Explanation

- NSS is an Indian government-sponsored public service program conducted by the **Ministry of Youth Affairs and Sports**. The scheme was launched in Gandhiji's Centenary birth year in 1969.
- Aimed at developing student's personality through community service, NSS is a voluntary association of young people in Colleges, Universities and at +2 level working for a campus-community (esp. Villages) linkage.
- The programme aims to instill the idea of social welfare in students, and to provide service to society without bias.
- NSS volunteers work to ensure that everyone who is needy gets help to enhance their standard of living and lead a dignified life. In doing so, volunteers learn from people in villages how to lead a good life despite a scarcity of resources.
- It also provides help in natural and man-made disasters by providing food, clothing and first aid to the disaster's victims.
- **Motto:** The Motto of NSS "Not Me But You", reflects the essence of democratic living and upholds the need for self-less service. It underlines the belief that the welfare of an individual is ultimately dependent on the welfare of the society as a whole.

VAJIRAM & RAVI

- **Logo:** The logo for the NSS has been based on the giant Rath Wheel of the world famous Konark Sun Temple (The Black Pagoda) situated in Orissa, India.
- The wheel portrays the cycle of creation, preservation and release and signifies the movement in life across time and space. The wheel thus stands for continuity as well as change and implies the continuous striving of NSS for social change.

6. Consider the following statements about MUDRA Yojana

- 1. NBFCs cannot give Mudra loans**
- 2. Loans up to Rs 20 lakhs can be given under Mudra Yojana**

Which of the statements given above is/are correct?

- a) Only 1
- b) Only 2
- c) Both 1 and 2
- d) Neither 1 nor 2

Context

A survey to assess the impact of Mudra loans to collect information on generation of employment in different sectors, was recently conducted by Labour Ministry. The reference period for the Mudra survey was taken from April 8, 2015, the launch date, to December 2017, while studying 97,000 beneficiaries.

Findings Of The Survey

Loan Disbursals

- A total of **Rs 5.71 lakh crore in loans** was sanctioned through 12.27 crore loan accounts during the first three years, with an **average ticket size of Rs 46,536**.
- Of the total loan amount sanctioned in 2017-18, Shishu loans account for 42%, Kishor loans 34% and Tarun loans constituted the remaining 24%.

Job Creation Statistics

- During April 2015-December 2017, around **1.12 crore additional jobs were created**. Of this, 51.06 lakh were self-employed or working owners which also included unpaid family members while 60.94 lakh were employees or hired workers.
- In effect, the number of additional jobs in 33 months was less than **10 per cent of the total number of loans**.
- The loan extended for every additional job created works out to Rs 5.1 lakh, which explains why units may be finding it difficult to generate employment.
- Percentage of new jobs created under various Mudra loan categories - Shishu loans (66%), Kishor loans (18.85%) and Tarun loans (15.51%).
- Services and trading accounted for more than two-thirds of the additional jobs with services creating 38.46 lakh jobs (34.34%) and trading accounting for 37.21 lakh jobs (33.23%).
- Allied agriculture created 22.77 lakh jobs (20.33%), while manufacturing could add only 13.10 lakh jobs (11.7%).

Answer: D**Explanation:****MUDRA scheme**

- Pradhan Mantri Mudra Yojana (PMMY) is a flagship scheme of the government to **fund the unfunded** by bringing such enterprises to the formal financial system and **extending affordable credit** to them.
- It was launched in April, 2015 and provides **loans up to Rs 10 lakh** to non-corporate, non-farm small/micro enterprises.
- These loans are given by commercial banks, RRBs, small finance banks, cooperative Banks, MFIs and NBFCs.
- It has three products —**Shishu** (loans up to ₹50,000), **Kishore** (loans above ₹50,000 and up to ₹5 lakh) and **Tarun** (loans above ₹5 lakh and up to ₹10 lakh) — to signify the stage of growth, development and funding needs of the beneficiary.

7. Consider the following statements about Participation Guarantee Scheme

1. It is a quality assurance initiative for certifying organic products
2. It is implemented by the Ministry of Rural Development

Which of the statements given above is/are correct?

- a) Only 1
- b) Only 2
- c) Both 1 and 2
- d) Neither 1 nor 2

Answer: A**Explanation:**

- The head of India's food safety regulator (FSSAI) has said that it expects the **Union Agriculture Ministry's** Participatory Guarantee Scheme (PGS) to incentivise more farmers to grow organic food.
- It is a process of certifying organic products, which ensures that their production takes place in accordance with laid-down quality standards. The certification is in the form of a documented logo or a statement.
- Thus, PGS is a quality assurance initiative that is locally relevant, emphasizes the participation of stakeholders, including producers and consumers and operates outside the framework of third-party certification.

Four Pillars of PGS

The government's 2015 PGS manual underlines that the system in India is based on 4 pillars -

I. Participation

- Stakeholders such as producers, consumers, retailers, traders, NGOs, Gram Panchayats, government organisations and agencies are collectively responsible for designing, operating, and decision-making.
- Direct communication among the stakeholders helps create an approach based on integrity and trust.

VAJIRAM & RAVI

- It leads to transparency in decision-making, easy access to databases and, where possible, visits to farms by consumers.

II. Shared Vision

- Collective responsibility for implementation and decision making is driven by a common shared vision.
- Each stakeholder organisation or PGS group can adopt its own vision conforming to the overall vision and standards of the PGS-India programme.

III. Transparency

- At the grassroots level, transparency is maintained through the active participation of producers in the organic guarantee process.
- This includes information-sharing at meetings and workshops, peer reviews, and involvement in decision making.

IV. Trust

- The basic idea of PGS is that producers can be trusted, and that the organic guarantee system can be an expression and verification of this trust.
- The mechanisms for trustworthiness include producer pledge made through a witnessed signing of a declaration and written collective undertakings, by the group to abide by the norms, principles and standards of PGS.

Advantages of PGS

- Procedures and documents are simple and basic and farmers understand the local language used. Moreover, as practising organic farmers themselves, they understand the processes well.
- As peer appraisers live in the same village, they have better access to surveillance and peer appraisal instead of third-party inspections also reduces costs.
- Mutual recognition and support between regional PGS groups ensures better networking for processing and marketing.
- Unlike the grower group certification system, PGS offers every farmer individual certificates, and the farmer is free to market his/her own produce independent of the group.

Limitations of PGS

- PGS certification is only for farmers or communities that can organise and perform as a group within a village or a cluster of contiguous villages.
- It is applicable only to farm activities such as crop production, processing, and livestock rearing and off-farm processing by PGS farmers of their direct products.
- Individual farmers or group of farmers smaller than five members are not covered under PGS. They either have to opt for third party certification or join the existing PGS local group.
- PGS ensures traceability only till it is in the custody of PGS group. Once the product leaves the custody of PGS group there is no control of PGS on its integrity.

8. What is Pusa Yashasvi?

- a) **Variety of Wheat**
- b) **Variety of Rice**
- c) **Variety of Cotton**

- d) None of the above

Answer: A

Explanation:

- After HD-2967 (Pusa Borlaug) and HD-3086 (Pusa Gautami), which together occupy roughly 40% of the country's total wheat area, the Indian Agricultural Research Institute (IARI) has released yet another variety of wheat - HD-3226 (Pusa Yashasvi) - for planting in the upcoming rabi crop season.
- The new variety has recorded a weighted average yield of 57.5 quintals per hectare in coordinated trials at 56 locations over three years of testing (2015-16 to 2017-18).
- This is comparable to or higher than the mean yields for HD-3086, HD-2967 and other check varieties. Further, the genetic yield potential, at 79.6 quintals, is even more compared to other varieties.
- It also has higher content of protein and gluten (which contributes to strength and elasticity of the dough), apart from more zinc (at 36.8 parts per million, as against 34.8 for HD-3086 and 36 for HD-2967) and good chapatti, bread and biscuit quality.
- It has high levels of resistance against all major rust fungi — yellow/stripe, brown/leaf and black/stem and is ideal for zero tillage planting.
- It will grow to its full maturity duration of 150 days and is ready for harvesting by end-March/early-April, 10-15 days before other wheat varieties.

9. With reference to NIRVIK scheme consider the following statements

1. Export Credit Guarantee Corporation is controlled by the Ministry of Corporate Affairs
2. Nirvik scheme compensates the entire amount of foreign invoice in case of any loss.

Which of the statements given above is/are correct?

- a) Only 1
- b) Only 2
- c) Both 1 and 2
- d) Neither 1 nor 2

Answer: D

Explanation:

- **Ministry of Commerce & Industry** has introduced a new Export Credit Insurance Scheme (ECIS) called NIRVIK through Export Credit Guarantee Corporation (ECGC) to offer higher insurance cover to banks lending working capital for exports.
- In case of any loss, the then ECGC provided credit guarantee of up to 60% loss until now, however, under the new scheme Nirvik consumers and exporters will be covered up to **90%**. If there is any loss then in that case ECGC will refund 90% to the banks including principal and interest.
- The scheme envisages simplified procedure for settlement of claim and also for provisional payment up to 50% within 30 days of lodging the complaint.

Benefits

- It will enable reduction in the overall cost of export credit including interest rate, especially for MSMEs.

VAJIRAM & RAVI

- It is expected to make Indian exports competitive and benefit MSME exporters with tax reimbursements, and ease of doing business.
- It will also enhance the loan availability of exporters and lead to moderation in premium incidence.

ECGC

- The ECGC Limited is a company wholly-owned by the Government of India, and is controlled by the Ministry of Commerce. It provides export credit insurance support to Indian exporters.
- The ECGC cover provides additional comfort to banks as the credit rating of the borrower is enhanced to AA rated account.
- The Government had initially set up Export Risks Insurance Corporation in 1957, and it was transformed into Export Credit and Guarantee Corporation Limited (ECGC) in 1964 and to Export Credit Guarantee Corporation of India in 1983.

10. With reference to Blood Groups consider the following statements

1. **Blood Group A has Type A Antigen and Type B Antibody**
2. **Bombay Blood Group has Antibody H**
3. **Bombay Blood Group has Antigen H**

Which of the statements given above is/are correct?

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) 1, 2 and 3

Context

- Recently, the demand for “Bombay blood group”, a rare blood type, has spiked at hospitals, but supply has been scarce.
- Bombay blood group was first discovered in Mumbai (then Bombay) in 1952 by Dr Y M Bhende.

Answer: A

Explanation:

Blood Configuration

- Nearly 50 % of blood is made of RBCs, 1 % is the white blood cells and the rest is plasma.
- The RBCs and plasma have protein molecules called antigens and antibodies respectively and both are very important for a resilient immune system.
- Antigens on the surface of RBCs are either A or B and sometimes have both. The antigens are responsible for blood to be typed A, B, AB and O respectively.
- Antibodies (also called immunoglobulins) are specialized proteins that identify and defend against foreign intruders to the body. Antibodies recognize and bind to specific antigens so that the foreign substance can be destroyed.

VAJIRAM & RAVI

- Antibodies in an individual's blood plasma will be different from the antigen type present on the red blood cell surface. For example, a person with type A blood will have A antigen on the blood cell membrane and type B antibodies (anti-B) in the blood plasma.
- In the case where the red blood cells have neither A nor B antigen, the plasma has antibodies of A and B, which is the case of the blood type O.
- The positive and negative charge comes into play because of another protein called the Rh Factor. If the RBC surface has the Rh, the blood type is positive and if not, negative.
- All these blood groups have an overarching antigen H in their blood as well, which is responsible for the generation of A, B, AB, O blood groups. When people do not have the antigen H in their blood, but only the antibody H, no other blood can be given to them. This low occurrence is the Bombay Blood Group.
- They can donate blood to anybody with ABO grouping but can receive blood only from Bombay blood group people.

Testing for Bombay Blood Group

- Most places where blood type tests are done, the presence & absence of AB and Rh alone is tested in the blood. Bombay Blood Group does not have A or B antigens and hence can be mistaken as Blood Group O.
- It is only when a specific test, often unavailable in India, for H antigen is done that it can be differentiated between O and Bombay Blood group. The difference is that the O group has Antigen H, while the hh group does not.

Incidence

- It is estimated that only 4 per million people have it in the world. It has a higher incidence in South Asia and in India, one in 7,600 to 10,000 are born with this type.
- It is largely because of extensive inbreeding within the same lineage or close-community marriages, often consanguineous, such that the 'blood type' or the gene pool is greatly restricted.
- Such intra-community marriages have happened in small isolated communities such as the gypsies, Russian Jewish or Parsi communities. It is thus likely that the Bombay Blood types have common ancestral origins.

11. With reference to Survey of India consider the following statements

1. It is the oldest scientific department of India.
2. It was set up in 1767
3. It comes under the Department of Science and Technology

Which of the statements given above is/are correct?

- a) 1 and 2
- b) 2 and 3
- c) 1 and 3
- d) 1, 2 and 3

Answer: D

Explanation:

VAJIRAM & RAVI

- The Survey of India (Sol) — historically tasked with mapping the country — will **for the first time rely on drones to map the country**. The making of the map will cost between Rs 400-500 crore.
- Aerial photography has been used before for mapping purposes (taking pictures from planes) but it is expensive and has its limitations.
- Currently the best Sol maps have a resolution of 1:250000, meaning a 1 cm on the map represents 2500 cm on the ground. The maps being prepared, **will be of 1:500 resolution**, meaning 1 cm will represent 500 cm.
- The aim is to **map 75% of India's geography**— about 2.4 million sq km of the 3.2 million sq km — within the next two years. However forests, hills and deserts are likely to be left out.

Significance

- Every square kilometre mapped by drones will be encapsulated in 2500 pictures and will lead to the creation of a trove of digital data.
- A major consequence of the drone-based exercise will be mapping of settled habitations in villages.
- Based on the availability of accurate maps and **digitisation of land titles**, residents will finally be able to get property cards as well as proper legal titles to their lands.

Survey of India

- Survey of India, the national survey and mapping organization of the country under the Department of Science & Technology, is the **oldest scientific department of the country**.
- It was **set up in 1767** to help consolidate the territories of the British East India Company and is **headed by the Surveyor General of India**.
- It has the responsibility to ensure that the country's domain is explored and mapped suitably, provide base maps for expeditious and integrated development and ensure that all resources contribute with their full measure to the progress, prosperity and security of the country.

12. Which space agency has launched the Lunar Reconnaissance Orbiter?

- a) NASA
- b) Roscosmos
- c) JAXA
- d) ISRO

Answer: A

Explanation:

ISRO'S attempts to figure out what happened to Chandrayaan-2's lander has got a boost as NASA's Lunar Reconnaissance Orbiter (LRO) will release images it takes of Vikram the lander.

Lunar Reconnaissance Orbiter (LRO)

- The LRO is a robotic spacecraft launched in 2009 and is currently orbiting the Moon. It studies the Moon's surface, clicks pictures, and collects data that help in figuring out the presence and possibility of water ice and other resources on the Moon, as well as plan future missions to it.
- The mission has provided technical innovations and made surprising discoveries that have changed mankind's view of the Moon.

VAJIRAM & RAVI

- The instruments, on board the spacecraft, return global data such as day-night temperature maps, a global geodetic grid, high resolution color imaging and the moon's UV albedo.
- However, there has been particular emphasis on the polar regions of the moon where continuous access to solar illumination may be possible and the prospect of water in the permanently shadowed regions at the poles may exist.
- It is estimated that the LRO has fuel enough to stay on its mission for at least six more years.

13. With reference to Lightnings, consider the following statements

1. Lightning is a result of the difference in electrical charge between the top and bottom of a cloud.
2. Lightning has a greater probability of striking raised objects on the ground.

Which of the statements given above is/are correct?

- a) Only 1
- b) Only 2
- c) Both 1 and 2
- d) Neither 1 nor 2

Answer: C

Explanation

For the first time, a report has mapped lightning strikes across the country, and the lives they have claimed. It has been prepared by Climate Resilient Observing Systems Promotion Council (CROPC), a non-profit organisation that works closely with India Meteorological Department (IMD).

Report Findings

- Lightning strikes have caused at least 1,311 deaths in the four-month period between April and July this year. UP accounted for 224 of these deaths, followed by Bihar (170), Odisha (129) and Jharkhand (118).
- 65.55 lakh lightning strikes were accounted for in India during this four-month period, of which 23.53 lakh (36 per cent) happened to be cloud-to-ground lightning, the kind that reaches the Earth.
- The other 41.04 lakh (64 per cent) were in-cloud lightning, which remains confined to the clouds in which it was formed.
- Odisha recorded over 9 lakh incidents of lightning (both kinds), the maximum for any state but fewer deaths than Uttar Pradesh, which had 3.2 lakh incidents.

Significance Of The Report

- Between 2,000 and 2,500 people are estimated as killed every year in lightning strikes in the country. The report is part of an effort to create a database that can help develop an early warning system for lightning, spread awareness, and prevent deaths.
- It is possible to predict, 30-40 minutes in advance, when a lightning strike heads towards Earth. The prediction is made possible through study and monitoring of the in-cloud lightning strikes. Timely dissemination of this information can save several lives.

How Is Lightning Formed

- Lightning is a very rapid and massive discharge of electricity in the atmosphere, some of which is directed towards the Earth. It is a result of the difference in electrical charge between the top and bottom of a cloud.
- The lightning-generating clouds are typically about 10-12 km in height, with their base about 1-2 km from the Earth's surface. The temperatures at the top range from -35°C to -45°C.
- As water vapour moves upwards in the cloud, it condenses into water due to decreasing temperatures. A huge amount of heat is generated in the process, pushing the water molecules further up. As they move to temperatures below zero, droplets change into small ice crystals. As they continue upwards, they gather mass, until they become so heavy that they start descending. It leads to a system where smaller ice crystals move upwards while larger ones come down.
- The resulting collisions trigger release of electrons, in a process very similar to the generation of electric sparks. The moving free electrons cause more collisions and more electrons; a chain reaction is formed. The process results in a situation in which the top layer of the cloud gets positively charged while the middle layer is negatively charged. The electrical potential difference between the two layers is huge, of the order of billions of volts. In little time, a huge current, of the order of lakhs to millions of amperes, starts to flow between the layers.
- It produces heat, leading to the heating of the air column between the two layers of cloud. It is because of this heat that the air column looks red during lightning. The heated air column expands and produces shock waves that result in thunder sounds.

Lightning Striking The Earth

- The Earth is a good conductor of electricity. While electrically neutral, it is relatively positively charged compared to the middle layer of the cloud.
- As a result, an estimated 20-25 per cent of the current flow gets directed towards the Earth. It is this current flow that results in damage to life and property.
- Lightning has a greater probability of striking raised objects on the ground, such as trees or buildings. Once they are sufficiently near the ground, about 80-100 m from the surface, they even tend to redirect their course to hit the taller objects.
- This is because travelling through air, which is a bad conductor of electricity, the electrons try to find a better conductor and also the shortest route to the relatively positively charged Earth's surface.

14. AUMX 2019, recently in news, is

- a) The tenth edition of ASEAN-US Maritime Exercise
- b) The first ASEAN-US Maritime Exercise
- c) The first Australia-US Maritime Exercise
- d) The tenth edition of Australia-US Maritime Exercise

Answer: B**Explanation:**

- The first ASEAN-US Maritime Exercise (AUMX) started on September 2.
- The exercise started at the **Sattahip Naval Base in Thailand** and ended in **Singapore**.

VAJIRAM & RAVI

- The five-day naval exercise was **co-led by the navies of US and Thailand**. The exercise stretched into international waters in Southeast Asia, including Gulf of Thailand and South China Sea and saw the participation of navies of all the 10 members of ASEAN.

Significance

- The idea of this exercise is not new as it builds on Washington's longstanding security ties with individual Southeast Asian countries. However, its translation to reality has significance – for both U.S. policy as well as broader regional security dynamics.
- With respect to U.S. policy, it reinforces the United States' longstanding role in serving as a security partner for Southeast Asian states.
- It can also be seen as **advancing defence ties** with regional countries under the **security aspect of Free and Open Indo-Pacific strategy**.
- With respect to ASEAN, the holding of a U.S.-ASEAN maritime exercise serves to reinforce the **grouping's engagement of major powers**.
- It allows ASEAN to claim that Southeast Asian states are able to both strengthen their engagement with the United States but also do so in a calibrated way with China (Last year, it had conducted a similar exercise with China).
- Beyond ASEAN, this engagement will be **viewed as a barometer of U.S.-China relations** and **broader competition between the two powers in the Indo-Pacific region**.

15. Indonesia is planning to move its capital from ----- to ----- . The places are:

1. Jakarta, Bali
2. Jakarta, Raja Ampat Islands
3. Bali, Raja Ampat Islands
4. Jakarta, Island of Borneo

Answer: D

Explanation

- Indonesia's President Joko Widodo has announced that the country's capital would be moved to an area in its **East Kalimantan province on the island of Borneo**.
- The proposed location is situated in the geographical centre of the Southeast Asian archipelago. It is near to the regional cities of Balikpapan and Samarinda.
- The physical relocation of the capital would not begin until 2024.
- Reasons for this relocation –
 - The **current capital Jakarta** is one of the world's most densely populated cities
 - It is **prone to floods** and is **sinking due to subsidence**, caused by millions of residents using up groundwater.
 - In Jakarta, the land is sinking up to 6.7 inches per year due to rise in sea-level.
- **Criticism Of This Move:** Borneo is a region known for its rainforests, coal mines, orangutans, sun bears, pangolins, sambar deers. Hence, environmentalists fear that a new capital could compromise the habitats of endangered wildlife.

16. Which of the following countries has decided to end the use of Glyphosate by 2023?

1. Germany
2. India
3. Morocco
4. None of the above

Answer: A

Explanation:

- **Germany** has decided to phase out **glyphosate** by the end of 2023.
- Glyphosate — also the subject of legal claims over **an alleged link with cancer** — was developed by Monsanto under the brand name Roundup as a weed killer.
- Germany's move comes after **lawmakers in Austria** passed a bill **banning all use of the weed killer**, making the country the first to do so.

17. Tibetan Democracy Day is observed on

1. September 1
2. September 2
3. September 3
4. None of the above

Answer: B

Explanation:

- The **Tibetan Government-in-Exile** celebrated its **59th Democracy Day** at the **McLeodganj** monastery on **September 2**.
- This day is celebrated to mark the anniversary of the *establishment of the democratic system of the Tibetan people living in exile in India*.

Background:

- In February 1960 in Bodh Gaya, the **Fourteenth Dalai Lama** outlined a detailed programme of democratic practice for exiled Tibetans.
- After elections were held, 13 elected representatives, called '**Deputies**', were designated as the '**Commission of Tibetan People's Deputies**'. They took oath on Sept' 2, 1960. Subsequently from 1975 onward, this date began to be formally observed as Tibetan Democracy Day.
- On March 10, 1963, the Dalai Lama promulgated the Constitution of the Tibetan Government-in-Exile (TGiE). The **TGiE is not recognised officially** by any country, including India.
- The **Tibetan Parliament-in-Exile (TPiE)** is the highest legislative body of the Central Tibetan Administration (CTA). The other two organs are the **Tibetan Supreme Justice Commission** (judicial organ) and the **Kashag** (the executive organ).
- The CTA is based in **Dharamsala, Himachal Pradesh**. Elections are held **every five years** to elect Members of the TPiE, and their Sikyong (Prime Minister). The 16th TPiE was elected in 2016.

18. Consider the following statements about exercise “HimVijay”:

1. It will be carried out by the Indian Armed Forces in Arunachal Pradesh, close to the borders with China.
2. The Integrated Battle Groups (IBGs) of Indian Army will be seen in action for the first time during this exercise.

Which of the above statements is/are Correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Answer: C

Explanation

- Indian Armed Force is scheduled to carry out an exercise code named ‘**HimVijay**’ in October 2019.
- The exercise will be held near the Line of Actual Control (LAC) in Arunachal Pradesh.
- The exercise assumes greater significance because the Army will for the **first time see in action its integrated battle groups** (IBGs).
- Three mountain IBGs carved out of the Panagarh-based 17 Corps’ (Mountain Strike Corps) 59 Mountain Division will be in action.
- Although, **Tezpur-based 4 Corps** will be used in the operation while **personnel would be completely from the Mountain Strike Corps**.

About IBG And Why The Need For IBGs:

- In a bid to ensure **faster punitive and defensive operations**, Gen Bipin Rawat had envisioned the IBGs. IBGs are **brigade-sized self-sufficient** agile formations which are touted to be mainstay of future operational strategies in Western, Northern and Eastern theatres.
- The **Cold Start Doctrine** called for defensive corps to carry out **shallow cross-border thrusts within 72 hours** for limited objectives such as the capture of territory. However, the new Army leadership felt that the **72 hours notice was also very long**.
- As a result, the **IBGs are part of the reforms** in the way the Indian Army functions and **are to replace the current concept of the Cold Start Doctrine**.
- **Each corps is to have three divisions**, with each division to have three brigades. The overall idea is to break down the divisions into IBGs with all essential elements.
- The IBGs are **primed to strike in less than 24 hours**. They will be **sector and terrain specific** — in effect, the IBGs in the North will not be the same as the IBGs in the Western sector.

17 Mountain Strike Corps

- It is the first mountain strike corps of India whose creation was cleared by the Cabinet Committee of Security in 2013.
- Its **headquarters** are located at **Panagarh in West Bengal** under Eastern Command. It is also known as **Brahmastra Corps**.

19. Consider the following pairs:

Name of Exercise	Participating Countries
1. MAITREE	India & Bhutan
2. SLINEX	India & Sri Lanka
3. Yudh Abhyas	India & USA

Which of the above pairs is/are correctly matched?

- a) 1 and 2 Only
- b) 2 and 3 Only
- c) 1 and 3 Only
- d) 1, 2 and 3

Answer: B

Explanation:

Maitree 2019

India and Thailand organized joint military exercise **MAITREE-2019** at Foreign Training Node, Umroi (Meghalaya). The 2019 edition will be the **third consecutive army engagement** between India and Thailand's forces.

28TH Indo-Thai CORPAT

- 28th edition of **India-Thailand Coordinated Patrol** (Indo-Thai CORPAT) between the Indian Navy (IN) and the Royal Thai Navy (RTN) was conducted from 05 – 15 September 2019.
- It is a biannual event being conducted since 2003.

SLINEX 2019

It is the annual Joint Indo-Lanka maritime fleet exercise which was conducted from 07-14 September 2019. The first ever exercise took place in 2005.

Yudh Abhyas 2019

- Exercise Yudh Abhyas is one of the largest joint running military training and defence corporation endeavors between **India and USA**.
- The 2019 edition was conducted at **Joint Base Lewis Mc Chord, Washington, USA** from 05-18 September 2019.
- It was the **15th edition of the joint exercise** hosted alternately between the two countries.

20. Which of the following Institutions has organised a unique expedition from Kargil to Kohima, an ultra-marathon - 'Glory Run'?

- a) Indian Air Force
- b) Indian Army
- c) Indian Navy
- d) Border Security Force (BSF)

Answer: A

Explanation:

- Commemorating 20 years of 'Vijay Diwas', the Indian Air Force has organised an **ultra-marathon spanning over 4,500 km from Kargil to Kohima**.
- The run -- **Kargil to Kohima (K2K): Glory Run** -- was from Kargil War Memorial at Dras in Jammu and Kashmir, and Kohima War Cemetery in Nagaland.
- **Kohima and Kargil** are the **two forward most outposts** of India in the east and the north where two of the most fierce battles of modern India were fought in 1944 and 1999.
- The aim of the expedition is to **promote awareness for safety of pedestrians** and **recently launched 'Fit India Movement'**, along with **paying tribute to brave hearts** who made the supreme sacrifices.
- The expedition is led by **Squadron Leader Suresh Razdan**, who is a Su-30 aircraft pilot. It also includes **one woman officer Flight Lieutenant Rishabh Jeet Kaur**.

21. Consider the following statements regarding Vladivostok, Russia:

1. It is located north of North Korea on the Golden Horn Bay.
2. It has the distinction of being the largest port on Russia's Pacific coast.
3. Vladivostok is the western railhead of the Trans Siberian Railway.

Which of the above statements is/are Correct?

- a) 1 and 2
- b) 1 and 3 Only
- c) 2 and 3 Only
- d) 2 Only

Context:

- India and Russia have agreed to **open a maritime route between the ports of Chennai and Vladivostok** to ensure connectivity between the two countries.
- This sea route covers a distance of approximately 5,600 nautical miles, or about 10,300 km.
- **Route** - An ocean liner travelling from Vladivostok to Chennai would sail *southward on the Sea of Japan past the Korean peninsula, Taiwan and the Philippines in the South China Sea, past Singapore and through the Strait of Malacca, to emerge into the Bay of Bengal* and then cut across through the Andaman and Nicobar archipelago to Chennai.

Answer: A**Explanation****Significance of Route**

- It will ensure **connectivity between the two major ports** which will give impetus to the cooperation between India and the Russian Far East.
- Russia has a shortage of labour. This new route will promote manpower exports to Russia.
- India is building nuclear power plants with Russia's collaboration in Kudankulam on the seacoast in Tamil Nadu's Tirunelveli district. The opening of a sea route is likely to help in the project.

VAJIRAM & RAVI

- This route will also increase India's presence in the Indo-Pacific, and especially the South China Sea.

Vladivostok

- Located on the **Golden Horn Bay** north of North Korea and a short distance from Russia's border with China, it is the **largest port on Russia's Pacific coast**.
- It is the **eastern railhead of the Trans Siberian Railway**, which connects the far east of Russia to the capital Moscow, and further west to the countries of Europe.

22. Cultural event “Namaste Pacific“ was organised by

- a) All the member of The Pacific Islands Forum
- b) Australia, New Zealand, Fiji and Papua New Guinea
- c) Australia and USA
- d) Australia, USA and Japan

Answer: B

Explanation

- Recently, the High Commissions of Australia, New Zealand, Fiji and Papua New Guinea jointly organised “Namaste Pacific” in New Delhi.
- It was an event to celebrate the life and culture of the Pacific region.
- Cultural events hold importance as they encourage people to people links. In this context, Namaste Pacific will be a significant step in Bringing India closer to the Pacific.

23. Consider the following statements regarding India – Nepal Petroleum Pipeline:

- 1. This pipeline runs from Motihari in Bihar to Amlekhgunj in Nepal.
- 2. This is the first-ever cross-border petroleum product pipeline in the South Asia region.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Answer: C

Explanation

- Prime Minister Modi and his Nepal counterpart K P Sharma Oli jointly inaugurated the **Motihari-Amlekhgunj petroleum product pipeline** via a video link.
- The 69 km-long pipeline from **Motihari in Bihar to Amlekhgunj in Nepal** is the **first-ever cross-border** petroleum product pipeline in the South Asia region.
- The pipeline will carry two million metric tonne of clean petroleum products at an affordable price to Nepal. It will help to enhance the energy security of the region and substantially cut down on transit costs.

24. Consider the following statements regarding Indian Council of World Affairs (ICWA):

1. It is an institution under Ministry of External Affairs devoted for the study of international relations and foreign affairs.
2. The Vice President of India is the ex-officio President of ICWA.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Answer: B

Explanation

- National Conference on 'India-Africa Partnership in a Changing Global Order: Priorities, Prospects and Challenges' was held in New Delhi.
- It was organized by Indian Council of World Affairs (ICWA).

About ICWA:

- It was established in 1943 by a group of Indian intellectuals **as a think tank**.
- By an Act of Parliament in 2001, the ICWA has been declared an **institution of national importance**.
- The Vice President of India is the **ex-officio President of ICWA**.
- It is devoted exclusively for the study of international relations and foreign affairs.
- Historic international conferences like '**Asian Relations Conference**' in **1947** under the leadership of freedom fighter Sarojini Naidu and '**United Nations and the New World Order**' in **1994** have been held by this think tank.

25. Consider the following statements regarding St. Vincent and Grenadines:

1. It is an island country that lies within the Lesser Antilles, in eastern Caribbean Sea.
2. It got the distinction of becoming the smallest country ever to be elected as a non-permanent member of United Nations Security Council.

Which of the above statements is/are *Incorrect*?

- a) 1 Only
- b) 2 Only
- c) Both 1 and 2
- d) Neither 1 nor 2

Answer: D

Explanation

- Prime Minister of St Vincent and Grenadines Dr Ralph Everard Gonsalves met Indian Prime Minister.
- This was a first ever visit of Prime Minister of St. Vincent and Grenadines to India.

VAJIRAM & RAVI

- He came to India in order to participate in high-level United Nations Convention on Combating Desertification (UNCCD) Symposium in New Delhi.

St. Vincent and Grenadines:

- This island country lies within the Lesser Antilles, in eastern Caribbean Sea.
- It has registered a historical achievement of **becoming the smallest country ever to be elected as a non-permanent member of UNSC.**

26. Consider the following statements regarding Eastern Economic Forum (EEF):

1. The 2019 edition of EEF took place at St. Petersburg, Russia.
2. EEF is an international forum held each year since 2015 for the purpose of encouraging foreign investment in the African continent.

Which of the above statements is/are Correct?

- a) 1 Only
- b) 2 Only
- c) Both 1 and 2
- d) Neither 1 nor 2

Context:

- The 2019 edition (5th) of Eastern Economic Forum took place in Vladivostok under the motto “**The Far East – Development Horizons**”.
- **Participants** - From Russia and 65 countries and territories around the world. India also participated.
- **India’s Prime Minister** Narendra Modi was **Chief Guest** at the event.

Answer: D

Explanation

Key Announcement By India At The Forum:

- India announced **Line of Credit (LoC)** worth \$1 billion for the development of the Far East region of Russia. This is the **first-ever region-specific LoC extended by India** in a foreign country.
- **Act Far East policy** – India announced launching of Act Far East policy. The region specific LoC announced by India at the forum is being termed as a **take-off point for the Act Far East policy**.

Why Act Far East Policy?

- Although, India was the **first country to open a consulate in Vladivostok**, its engagement with Far East was negligible compared to western and central parts of Russia. Hence, this policy would further deepen the ties between India and Russia.
- Russia’s Far East is sparsely populated but is rich in resource. This policy *aims to tap the region for the resources* and also *find opportunities for skilled workers* to find employment in this region.
- It also **ties in well with the Indo-Pacific concept**, and opens up possibilities for **using the Arctic route** to connect with northern Europe.

About EEF

- It is an international forum held **each year in Vladivostok, Russia since 2015.**
- **Purpose** - encouraging foreign investment in the Russian Far East and to expand international cooperation in Asia-Pacific region.
- **The Russian president and the Japanese premier** have attended this forum since its beginning.

27. Consider the following statements:

1. Book titled '**Glorious Diaspora- Pride of India**' contains brief profiles of the recipients of Pravasi Bharatiya Samman Awards from 2003 to 2019.
2. Prime Minister of India, as part of Pravasi Bharatiya Divas Convention, confers Pravasi Bharatiya Samman Award.

Which of the above statements is/are incorrect?

- a) 1 Only
- b) 2 Only
- c) Both 1 and 2
- d) Neither 1 nor 2

Answer: B**Explanation**

- A Coffee Table Book titled '**Glorious Diaspora- Pride of India**' has been released by Vice-President of India.
- It contains brief profiles of the recipients of Pravasi Bharatiya Samman Awards from 2003 to 2019.
- It has been brought out by Indian Diaspora Club.

Pravasi Bharatiya Samman Award (PBSA):

- It was started in 2003. It is the **highest honour** conferred upon by the Indian Government **to overseas Indian**.
- PBSA is conferred by President of India every year on January 9, which is celebrated as Pravasi Bhartiya Diwas.

28. India's first-ever helicopter summit was organized at

- a) Dehradun, Uttarakhand
- b) Gurugram, Haryana
- c) Noida, Uttar Pradesh
- d) None of the above

Answer: A**Explanation**

- India's first ever helicopter summit was **organised by Ministry of Civilian Aviation at Dehradun, Uttarakhand.**

VAJIRAM & RAVI

- It was organized to discuss issues related to "enhancing connectivity through helicopters".

29. Consider the following statements regarding Association of World Election Bodies (A-WEB):

1. A-WEB is largest association of Election Management Bodies worldwide.
2. It has a permanent secretariat at Seoul.
3. India was elected as A-WEB's Chair for the 2018-20 term.

Which of the above statement is/are correct?

- a) 1 only
- b) 1 and 2 only
- c) 1 and 3 only
- d) 2 and 3 only

Context:

- Election Commission of India hosted the **4th General Assembly of Association of World Election Bodies (A-WEB) at Bengaluru**.
- At this assembly, India took over **as A-WEB's Chair for the 2019-21 term**. As a result, Chief Election Commissioner Sunil Arora became the new chairman of A-WEB.
- The incumbent chairman, Lon Mincu Radulescu, was from Romania.

Answer: B

Explanation

About A-WEB

- It is the largest association of Election Management Bodies (EMBs) worldwide, which was **established on October 14, 2013 in Song-do, South Korea**.
- Permanent Secretariat – Seoul, South Korea
- A-WEB's vision is to foster efficiency and effectiveness in conducting free, fair, transparent and participative elections worldwide.
- At present A-WEB has **115 EMBS as Members** & 20 Regional Associations as Associate Members.

India's Association with A-WEB

- ECI has been its Executive Board Member since AWEB's inception in October 2013 for two consecutive terms (2013-15 and 2015-17).
- ECI was unanimously elected as Vice-Chair of A-WEB 2017-19.
- India is all set to take over as Chair now for the 2019-21 term. It will continue to **remain on the Executive Board of A-WEB for 2021-23** in its capacity as immediate former Chair of A-WEB.

30. Travel and Tourism Competitiveness Index is released by

- a) World Bank
- b) World Economic Forum

- c) World Tourism Organisation
- d) None of the above

Context:

Travel & Tourism Competitiveness Index for 2019 has been released by the World Economic Forum (WEF).

Answer: B**Explanation****Key Highlights**

- **World's most travel-ready nations** – Spain (1), France (2), Germany (3), Japan (4) and the United States (5), the United Kingdom (6), Australia (7), Italy (8), Canada (9) and Switzerland (10).
- **Japan remains Asia's most competitive** travel and tourism economy, ranking 4th globally, while **China is by far the largest travel and tourism economy** in Asia-Pacific and 13th most competitive globally.

India Specific Observation

- **Ranking** in the current index – 34th (40th in 2018)
- This improvement in ranking is driven by *rich natural and cultural resources and strong price competitiveness*.
- India showed the **greatest percentage improvement** to its overall score, which has helped it become the **only lower-middle income country in the top 35**.
- **Strengths** (as per report) - India has **better air infrastructure** (33rd) and **ground and port infrastructure** (28th), **international openness** (51st) and **natural** (14th) and **cultural resources** (8th).
- **Weaknesses** (as per report) - India needs to enhance its **enabling environment** (98th), **tourist service infrastructure** (109th) and **environmental sustainability** (128th)

About The Index

- Published biennially by WEF
- Ranks 140 economies
- Four sub-indices used for ranking - Enabling environment; Travel and tourism policy and enabling conditions; Infrastructure; Natural and cultural resources.

31. Consider the following statements regarding International Astronomical Union (IAU):

1. Its mission is to promote and safeguard the science of astronomy in all its aspects.
2. IAU is a member of the International Science Council.
3. IAU acts as the internationally recognized authority for assigning designations and names to celestial bodies.

Which of the above statements is/are Correct?

- a) 1 and 2 Only

- b) 1 and 3 Only
- c) 2 and 3 Only
- d) 1, 2 and 3

Context:

- The International Astronomical Union (IAU) has named an asteroid after Indian **classical singer Pandit Jasraj**.
- The number given to Pandit Jasraj planet was 300128 which is a reverse order of his date of birth 28/01/30.
- The Catalina Sky Survey, whose telescopes are based in Arizona in the United States, discovered this asteroid in 2006.

Answer: D**Explanation****Process of Naming**

- The privilege of naming a planet is first given to discoverers, who have 10 years to propose a name.
- The discoverer or team is expected to write a short citation, explaining the reasons for assigning the name.
- All names proposed are judged by the 15-member Working Group for Small Body Nomenclature (CSBN) of the IAU.

International Astronomical Union (IAU)

- It was founded in 1919 with an objective to promote and safeguard astronomical science in every aspect.
- Headquartered at – Paris
- It acts as the internationally recognized authority for assigning designations and names to celestial bodies.
- The IAU is a **member of the International Science Council (ISC)**.
- The IAU general assembly **meets once in 3 years**. The last IAU assembly was held in **Vienna, Austria in 2018**.
- The next assembly is to be held at **Busan, South Korea in 2021**.

32. Recently, which of the following countries has started offering Tourist Visas for the first time?

- a) Saudi Arabia
- b) Qatar
- c) Tanzania
- d) Oman

Answer: A**Explanation**

Context:

Saudi Arabia has started offering tourist visas for the first time.

Key Highlights

- Initially, the country will open **applications for online tourist visas** to citizens of 49 countries.
- The kingdom will also **ease its strict dress code for foreign women**, allowing them to go without the **body-shrouding abaya robe** that is still mandatory public wear for Saudi women.

Why This Step

- Kickstarting tourism** is one of the main aim of Crown Prince Mohammed bin Salman's **Vision 2030 reform programme** to prepare the biggest Arab economy for a post-oil era.
- This step is taken to open up the ultra-conservative kingdom to holidaymakers as part of a push to **diversify its economy** away from oil.
- Reeling from low oil prices, the Kingdom is expecting that **tourism will contribute up to 10 percent of the gross domestic product** by 2030, compared to three percent currently.
- Currently, Saudi Arabia is **battling with high youth unemployment**. This sector is expected to create up to one million tourism jobs.

What Was The Prevailing Rule So Far?

Visas in the desert kingdom were restricted to expat workers, their dependents and Muslim pilgrims travelling to holy sites in Mecca and Medina.

33. Hazza Al Mansouri got the distinction of becoming the first Arab astronaut to travel to International Space Station. He belongs to

- a) Algeria
- b) Saudi Arabia
- c) Egypt
- d) United Arab Emirates

Answer: D

Explanation

- Hazzaa al-Mansoori**, a **former Emirati F-16 pilot**, launched for the International Space Station (ISS) in a Soyuz space capsule from a Russian spaceport in Kazakhstan.
- He became the first Emirati and the first Arab astronaut to travel to ISS.

UAE's Space Ambition:

- It plans to send an unmanned probe to orbit Mars by 2021 to coincide with the 50th anniversary of the founding of the state. Its Mars Mission has been named as "**Hope**".
- It also plans to build a "**Science City**" to **replicate life on Mars**. It also aims to create the **first human settlement on red planet by 2117**.

34. Consider the following statements regarding Exercise TSENTR 2019:

1. This was conducted by Central Military Commission of Russia.

2. China along with India and Pakistan participated in this mega event.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Answer: C

Explanation

- Exercise TSENTR 2019 is part of the annual series of large scale exercises that form part of the Russian Armed Forces' annual training cycle.
- Russia holds a **major military exercise every year** at one of its four military Commands i.e Vostok (East), Zapad (West), TSENTR (Centre) and Kavkas (South).
- This year's Exercise TSENTR 2019 was conducted by Central Military Commission of Russia.
- Apart from host Russia, military contingents from *China, India, Kazakhstan, Kyrgyzstan, Tajikistan, Pakistan and Uzbekistan* also participated in this mega event.
- The exercise aims at evolving drills of the participating armies and practicing them in the **fight against the scourge of international terrorism** thereby ensuring military security in the strategic central Asian region.

35. Which of the following countries has unveiled South Asia's tallest tower recently:

- a) India
- b) Sri Lanka
- c) Bhutan
- d) Pakistan

Answer: B

Explanation

- Sri Lanka has unveiled South Asia's tallest tower in Colombo city.
- It is a **350-metre-tall Lotus Tower** which has been funded (80% of the project cost) by China under the Belt and Road Initiative (BRI).
- The 17-storey Lotus Tower comprises a television tower, a hotel, a telecommunications museum, restaurants, auditorium, an observation deck, a shopping mall and a conference centre.
- Sri Lanka and China signed the **Lotus Tower agreement in 2012**.

36. Consider the following statements regarding Interpol:

1. Interpol is an international police organization of United Nation.
2. Agents of Interpol have the power to make arrests.
3. Once the Interpol issues Red Notices, States are obliged to follow these notices.

Which of the above statements is/are Correct?

- a) 1 and 2
- b) 1 and 3
- c) 2 and 3
- d) None of the above

Context:

India has proposed to Interpol that the **General Assembly of the organization be held in New Delhi in 2022** as part of the nation's 75th Independence Day celebrations.

Answer: D**Explanation****About Interpol:**

- **Full Name** - International Criminal Police Organisation
- Interpol is an **international police organisation** made up of 194 member countries. Interpol does not work under UN. It has enjoyed a special role – that of **Permanent Observer at the United Nations** - since 1996.
- **Founded** in 1923; **Headquartered** at Lyon, France
- It is **not a police force** in the traditional sense—its agents are **not able to arrest criminals**.
- It is **more of an information-sharing network**, providing a way for national police forces to co-operate effectively and tackle international crime ranging from human trafficking and terrorism to money laundering and illegal art dealing.
- The organization operates centralised criminal databases that contain fingerprint records, DNA samples and stolen documents.
- “**Red Notice**” - a notification that a member state would like someone arrested. States are not obliged to follow these notices, but will often treat them as a warrant for someone’s arrest and extradition.
- **Kim Jong Yang** of South Korea was elected **president of Interpol for a two-year term** until 2020.

Interpol General Assembly:

- The General Assembly is Interpol’s **supreme governing body**, and comprises representatives from all its member countries.
- It meets annually for a session lasting approximately four days, to vote on activities and policy. It takes decisions in the form of resolutions.
- The Interpol’s **88th General Assembly** will assemble in Santiago, Chile, later this year.

37. The proposed National Police University will be setup in

- a) Noida, Uttar Pradesh
- b) Gurugram, Haryana
- c) Bhopal, Madhya Pradesh
- d) Patna, Bihar

Answer: A**Explanation**

- The government has initiated a proposal to establish the **first National Police University in the country**.
- It will be set up in **Greater Noida, Uttar Pradesh** and will be dedicated to imparting education in policing and internal security.
- The university will provide formal education programmes in the field of policing science in the forms of undergraduate, postgraduate and even doctoral training programmes.
- Students joining the university will be **able to earn degrees** in niche areas related to policing including cyber forensics, criminology, criminal justice, forensic science, risk management and allied subjects.

38. Consider the following pairs:

Name of Exercise	Participating Countries
1. Malabar 2019	- India, US and Japan
2. KAZIND 2019	- Kazakhstan and India
3. SITMEX 2019	- India and Malaysia
4. Samudra Laksamana	- India and Singapore

Which of the above pairs is/are Correctly matched?

- a) 1, 2 and 4
- b) 1 and 2 Only
- c) 1, 2 and 3
- d) All are correctly matched

Answer: B**Explanation****Malabar 2019**

- India, the US and Japan began the '**Malabar 2019**' trilateral maritime exercise in the **Pacific Ocean**. It was the 23rd edition off this exercise.

KAZIND – 2019

- Joint Military Exercise between **India and Kazakhstan**
- It was the **fourth edition** of an annual event that is conducted alternatively in Kazakhstan and India.
- 2019 edition was **conducted in Uttarakhand, India**.

SITMEX-19

- A trilateral maritime exercise between **India- Singapore-Thailand**. 2019 exercise was the **first edition** of this exercise.
- This exercise was announced by Prime Minister Modi during his address at Shangri-La dialogue in June 2018.

Samudra Laksamana

Bilateral maritime exercise between India and Malaysia.

39. Exercise Tiger Triumph is

- a) A naval exercise between India and US
- b) First tri-services exercise between India and US
- c) First tri-services exercise between India and France
- d) A naval exercise between India and Philippines

Answer: B

Explanation

- **India and the United States** are set to hold their **first tri-services exercise code-named "Tiger Triumph"** at Visakhapatnam and Kakinada in November this year.
- This exercise was announced by President Trump **at Howdy Modi event**.
- It is being organised under the aegis of the headquarters of the Integrated Defence Staff. It will focus on large-scale **amphibious Humanitarian Relief and Disaster Relief (HADR) operations**.
- This will be the **second such tri-service exercise** to be performed by India with some other nation after Russia.

Different Exercises Between India and US

- Malabar (Naval Exercise)
- Vijay Prahar (Counter Terror)
- Yudh Abhyas (Between Armies of both countries)

40. Nua Khai festival is celebrated in which state?

- a) Tamil Nadu
- b) Karnataka
- c) Rajasthan
- d) Odisha

Answer: D

Explanation

- Nuakhai, as the name suggests - nua means new and khai means food - is a festival to celebrate newly harvested food by the farmers in the western part of Odisha.
- People offer the newly harvested crop called Nabana to their respective presiding deities at a stipulated moment this morning.
- Although it has lost its significance over the centuries, oral tradition of this festival dates back to 12th century A.D. when this festival was celebrated by Chauhan Raja Ramai Deo at Patanagarh which is currently known as Bolangir district of Odisha.
- The king knew the relevance of agriculture for the economic development of the state and hence the celebration of Nuakhai festival promoted the agrarian way of life in the Western Odisha region instead of the previously practiced hunting and gathering.

VAJIRAM & RAVI

- Nuakhai Festival gives the present society a great message of the relevance of agriculture in the economic progress of the country and the role of farmers in the process of nation building in those days and also in the present days.

41. Galo Community belongs to which state?

a) Arunachal Pradesh

b) Sikkim

c) Assam

d) Meghalaya

a) 1 and 2

b) 1 and 3

c) 2 and 4

d) 3 and 4

Answer: B

VAJIRAM & RAVI BRIDGING GAPS

Hepatitis B Controlled in Bangladesh, Bhutan, Nepal and Thailand

- Bangladesh, Bhutan, Nepal and Thailand became the first four countries in the World Health Organization's southeast Asia region to have successfully controlled hepatitis B.
- The virus is said to be controlled when the disease prevalence is reduced to ***less than 1% among children less than five years of age.***
- Hepatitis B is a potentially life-threatening liver infection caused by the hepatitis B virus (HBV). It is a major global health problem which can cause both acute and chronic disease and puts people at high risk of death from cirrhosis and liver cancer.
- The virus is most commonly transmitted from mother to child during birth and delivery, as well as through contact with blood or other body fluids.
- A safe and effective vaccine that offers a 98-100% protection against hepatitis B is available. Hepatitis B birth dose, given in the first 24 hours, helps prevent vertical transmission from the mother to child.

Types Of Viral Hepatitis

- Viral infections of the liver that are classified as hepatitis include hepatitis A, B, C, D, and E. A different virus is responsible for each type of virally transmitted hepatitis.
- Hepatitis A is always an acute, short-term disease, while hepatitis B, C, and D are most likely to become ongoing and chronic. Hepatitis E is usually acute but can be particularly dangerous in pregnant women.

India's Status

- Despite the introduction of hepatitis B vaccine in the Universal Immunisation Programme in 2002 and scaling-up nationwide in 2011, about one million people in India become chronically infected with the virus every year.
- According to a 2019 Health Ministry report, the coverage of birth dose has remained low — 45% in 2015 and 60% in 2016.
- Further, as on February 2019, an estimated 40 million people in India were infected.

Indian Iodine Survey 2018-19

- The India Iodine Survey 2018-19 conducted by Nutrition International, a global nutrition organisation, in collaboration with AIIMS, New Delhi and the Indian Coalition for the Control of Iodine Deficiency Disorders (ICCID) has released its report.
- The survey tested the iodine content in samples of cooking salt from households to estimate the coverage of the use of adequately iodised salt.

Findings

- The survey found that ***76.3 % of Indian households*** consume adequately iodised salt, meaning salt with more than or equal to 15 ppm of iodine.
- It also revealed that ***13 out of 36 states*** have already achieved Universal Salt Iodisation (USI).
- ***Jammu and Kashmir, Manipur, Mizoram and Nagaland*** are front-runner states with more than 99 per cent of households having access to adequately iodised salt.

VAJIRAM & RAVI

- Further, the north-eastern States are doing very well with respect to iodised salt consumption at the household level.
- The five worst performers were Tamil Nadu (61.9%), Andhra Pradesh (63.9%), Rajasthan (65.5%), Odisha (65.8%) and Jharkhand (68.8%).
- The Survey also revealed that awareness about iodised salt was at 62.2 % in urban areas and at 50.5 % in rural areas.
- Gujarat produces 71% of salt in the country, followed by Rajasthan at 17% and Tamil Nadu at 11%. The rest of the country accounts for a mere 1% of salt produced.
- By and large most States get their salt from Gujarat and Rajasthan and because of the distance, it is sent by rail.

Importance of Iodine

- Iodine is a vital micronutrient needed regularly in small quantities. Deficiency of iodine can result in a range of disabilities and disorders such as goitre, hypothyroidism, cretinism, abortion, still-birth, mental retardation and psychomotor defects.
- Children born in iodine-deficient areas may have up to 13.5 IQ points less than those born in iodine-sufficient areas.
- A majority of these consequences are invisible and irreversible but can be prevented. Fortifying cooking salt with iodine is the easiest and most cost-effective way to address this problem.
- India made fortification of salt with iodine mandatory for direct human consumption in 1992. This was relaxed in 2000 and then reimposed in 2005. In 2011, the Supreme Court, too, mandated universal iodisation for the control of iodine deficiencies.

Significance Of The Findings And Way Ahead

- The results signify the progress made by India towards Universal Salt Iodisation (USI) which has a target of reaching **90 %** of the population with adequately iodised salt.
- The results also convey the need to step up efforts to ensure all households consume adequately iodised salt while sustaining the gains achieved over the years to protect everyone from the risk of iodine deficiency disorders.
- It is important that the States and the Centre work together to address the current gaps and look into issues that vary from one State to another, leading to adequately iodised salt not being produced.

International Migrant Stock 2019

- The UN Department of Economic and Social Affairs has released the International Migrant Stock 2019.
- UN defines international migrants as anyone who changes their country of usual residence, irrespective of their motive – be it for work or as a refugee.

Global Findings

- The number of international migrants in the world has reached an estimated 272 million in 2019. This reflects a rise of 23% over 2010 data, where the migrant population was 221 million.
- The share of women in international migrants fell from 49.3% in 2000 to 47.9% in 2019.
- Forced displacements continue to rise, with the number of refugees and asylum seekers increased by about 13 million from 2010 to 2017.

VAJIRAM & RAVI

- Around two-fifths of all international migrants had gone from one developing country to another and one-third of all international migrants have originated from 10 countries.
- After **India**, **Mexico** ranked second as the country of origin for 12 million migrants, followed by **China** (11 million), **Russia** (10 million) and **Syria** (8 million).

Destination Countries

- Although migration is global, most journeys are taking place within a limited set of countries.
- The **US** hosted the largest number of international migrants (close to 51 million) - about 19% of the global migrants, followed by **Germany and Saudi Arabia**, with nearly 13 million migrants each.
- The **European region** hosted the highest number of the immigrants at 82 million in 2019, followed by North America (59 million) and Northern Africa and Western Asia (49 million).

India Specific Findings

- India has emerged as the leading country of origin for immigrants across the world, with 17.5 million international migrants (6.4% of the total world migrant population) in 2019.
- While India's diaspora in absolute numbers has increased 10% from 15.9 million in 2015, it has remained largely static & trails the 12% rise in total migrant population, which was 243 million in 2015.
- The number of migrants living in India saw a slight decline from 5.24 million in 2015 to an estimated 5.15 million in 2019. **Bangladesh** was the leading country of origin for migrants in India, followed by Pakistan, Nepal, Sri Lanka and China.
- **Destination Countries for Indians**
 - While the Gulf countries continue to have a high concentration of Indians, they have lost some of their drawing power, as the figures show a decline in the flow to this region.
 - The UAE, the US and Saudi Arabia—with 3.4 million, 2.6 million and 2.4 million respectively—were the top three destinations for Indians.
 - More than 50,000 Indian citizens acquired US citizenship which is a rise of 10% over the previous year.
 - Also, 10,000 Indians acquired Canadian citizenship and 17,000 obtained British citizenship. These statistics showed a decline of 40% and 33% respectively.

UN DESA

- The United Nations Department of Economic and Social Affairs (UN DESA) is part of the United Nations Secretariat and is also a member of the United Nations Development Group.
- UN DESA's mission is to promote sustainable development for all, focusing on the most vulnerable.
- It assists countries around the world in agenda-setting and decision-making with the goal of meeting their economic, social and environmental challenges.

Global Liveability Index 2019

- The **Economist Intelligence Unit** released its annual Global Livability Index 2019, measuring the most livable cities in the world.
- The index assesses 140 cities and ranks them according to their performance in over 30 qualitative and quantitative factors across five broad categories - **stability, healthcare, culture and environment, education, and infrastructure**.
- Each factor in a city is rated as acceptable, tolerable, uncomfortable, undesirable or intolerable.

Highlights Of The Index

- **Top Three:** Vienna in Austria, Melbourne and Sydney in Australia
- **Bottom Three:** **Damascus** in Syria, Lagos in Nigeria and Dhaka in Bangladesh.
- Of the 37 Asian and Australasian cities included in the index, five are among the ten most liveable and six are among the 20 least liveable.
- A slew of cities in emerging markets that are among the most exposed to the effects of climate change have seen their scores downgraded. These include **New Delhi, Cairo** in Egypt (where air quality is also a major issue) and **Dhaka** in Bangladesh.
- Significantly, the index remains dominated by medium-sized cities in wealthy countries, as opposed to big global cities such as London and New York, which rank 48 and 58, respectively.
- The most liveable cities all boast of well-funded public healthcare systems, compulsory and high-quality education, and functional road and rail infrastructure. The provision of these services is assisted by the presence of fully democratic electoral systems and generally low levels of corruption.

India Specific Highlights

- The index shows that the living conditions in India's largest metropolises, Mumbai and New Delhi, are getting worse.
- The capital's appalling air quality as well as downgrades to its culture and stability score have pulled down its ranking by six places to 118th.
- The 2018 update to the World Health Organisation (WHO) Global Ambient Air Quality Database shows that New Delhi currently boasts the sixth highest annual mean concentration of fine particulate matter among cities around the world.
- Mumbai's rank also fell in this year's index by two places to 119th as a result of a downgrade in its culture category.

Analysis

- India needs to approach urban local government differently. State governments have centralised too much authority and devolve too little power and funds to municipal corporations.
- Consequently, civic bodies and town planners lack the capacity to handle rapid urbanisation. The spurt of slums and landfills, encroachment on public land, non-existent drainage, groundwater exploitation, and clogged roads can all be traced to weak municipal corporations.
- Mumbai & Delhi are two Indian cities measured by World Bank for its influential ease of doing business index. Foreign investors tend to be chary about cities showing regression in a key area like liveability.
- When government finally gets going on the next generation of economic reforms, it must untangle municipal governance which holds back Indian cities from realising their potential.

AISHE Report

The All India Survey on Higher Education 2018-19 was recently released by the Ministry of Human Resource and Development.

Highlights

- **Number of universities** has grown from 903 in 2017-18 to 993 in 2018-19 and total HEIs (higher educational institutions) from 49,964 to 51,649 in the same period.

VAJIRAM & RAVI

- The **gross enrolment ratio (GER)** has increased marginally – from 25.8 in 2017-18 to 26.3 in 2018-19, while in absolute terms, enrolment increased from 3.66 crore to 3.74 crore students in the same period. GER for SCs has also shown a growth from 21.8 to 23.0 and STs from 15.9 to 17.2.
- **Gender gap** has been narrowing significantly in India in higher education with Uttar Pradesh for the first time registering more female enrolment. The report indicates the narrowing of the gender gap with female enrolment improving from 47.6% in 2017-18 to 48.6% in 2018-19.
- At the UG level, 35.9% of the total enrolment was in **arts/ humanities/social science**, just 16.5% students are pursuing science, followed by commerce with 14.1%, while Engineering is the 4th choice.
- While one-third of undergraduate students are enrolled in humanities, **management** seems to be a preferred stream at the postgraduate (PG) level.
- Moreover, **Science and engineering technology** registered relatively more enrolment in M. Phil and Ph.D programmes.

Framework To Sustain India's '100% ODF status'

- With over 10 crore toilets having been built in rural areas, the Jal Shakti Ministry has launched the **10-year Rural Sanitation Strategy (2019-2029)** to sustain India's 100 per cent Open Defecation Free (ODF) status.
- The Strategy is a framework to guide policymakers, implementers and other relevant stakeholders in their planning for ODF (Open Defecation Free) Plus, where everyone uses a toilet, and every village has access to solid and liquid waste management.

Strategy

- It includes the retrofitting of single pit toilets to twin pits or making provisions to empty pits every five years, repair of defunct ones, and construction of soak pits for septic tanks wherever not already present.
- A district-level **Training Management Unit (TMU)** will be set up to provide oversight and support to gram panchayats (GPs) so that they ensure the operation and maintenance of sanitation infrastructure.
- The GPs are also supposed to conduct rapid assessment of water and sanitation gaps.
- While government funding is the primary source of financing in the sanitation sector, the strategy mentioned in the framework also suggests **alternative self-financing** by gradual leveraging of community resources in the form of tariffs for ODF plus activities. It will follow the same 60:40 financing model as being followed till now in Swachh Bharat.
- The framework also talks about **state-specific strategies** on menstrual hygiene management, including menstrual waste management, which may be supported under the ODF plus strategy.

Sardar Patel National Unity Award

- A notification instituting the Sardar Patel National Unity Award was recently issued by Ministry of Home Affairs. It is the **highest civilian award** in the field of contribution to the unity and integrity of India.
- An Award Committee would be constituted by the Prime Minister, which would include the Cabinet Secretary, Principal Secretary to the Prime Minister, Secretary to the President, Home Secretary as Members and three-four eminent persons selected by the Prime Minister.

VAJIRAM & RAVI

- The award will be announced on the occasion of the National Unity Day, i.e. the birth anniversary of Sardar Patel on 31st October.
- Not more than three Awards would be given in a year.
- It would not be conferred posthumously except in very rare and highly deserving cases.

Eligibility

- All citizens, without distinction of religion, race caste, gender, place of birth, age or occupation, and any institution/organization would be eligible for the Award.
- Any Indian national or institution or organization based in India would be able to nominate an individual for consideration for this Award. Individuals may also nominate themselves. State Governments, UT Administrations and Ministries of Government of India may also send nominations.

India State-Level Disease Burden Initiative

- The first comprehensive estimate of disease burden due to child and maternal malnutrition and the trends of its indicators in every State from 1990 was published in *The Lancet Child & Adolescent Health* by the India State-Level Disease Burden Initiative.
- The India State-Level Disease Burden Initiative is a consortium of experts and stakeholders including the Indian Council of Medical Research (ICMR), the Public Health Foundation of India, and Institute for Health Metrics and Evaluation, an independent global health research centre at the University of Washington.

Highlights Of The Report

- Overall under-five death rate and the death rate due to malnutrition has decreased substantially from 1990 to 2017, but malnutrition is still the leading risk factor for 68% of deaths in children under five years.
- Two-thirds of the 1.04 million deaths in children under five years in India are still attributable to malnutrition.
- Among the malnutrition indicators, ***low birth weight*** is the biggest contributor to disease burden followed by child growth failure which includes stunting, underweight and wasting.
- Another important revelation is that overweight among a subset of children is becoming a significant public health problem as it is increasing rapidly across all states of India.
- The prevalence of low birthweight in India in 2017 was 21.4%, child stunting 39.3%, child wasting 15.7%, child underweight 32.7%, anaemia in children 59.7%, anaemia in women between 15–49 years of age 54.4% and child overweight 11.5%.
- The study showed that the disease burden rate, attributable to malnutrition in children, varies seven-fold between the states. States like Rajasthan, UP, Bihar and Assam top the list while Kerala and Tamil Nadu have the lowest disease burden.
- The performance of different states was measured using disability-adjusted life-years (DALYs) per 100,000 lost due to child and maternal malnutrition.

Way Ahead

- The findings highlight that there are wide variations in the malnutrition status between the States. It is important therefore to plan the reduction in malnutrition in a manner that is suitable for the trends and context of each State.

VAJIRAM & RAVI

- State governments are being encouraged to intensify efforts to reduce malnutrition and undertake robust monitoring to track the progress.
- For substantial improvements across the malnutrition indicators, States will need to implement an integrated nutrition policy to effectively address the broader determinants of under-nutrition across the life cycle.
- Focus will be needed on major determinants like provision of clean drinking water, reducing rates of open defecation, improving women's educational status, and food and nutrition security for the most vulnerable families.

74-Year-Old Gives Birth Using IVF

A 74-year-old woman recently became the oldest-ever to give birth after she delivered twins in Andhra Pradesh's Guntur town. The woman could conceive through the process of In Vitro Fertilisation (IVF) process.

Assisted Reproductive Technology

- Assisted Reproductive Technology includes all fertility treatments in which both eggs and embryos are handled.
- In general, ART procedures involve surgically removing eggs from a woman's ovaries, combining them with sperm in the laboratory, and returning them to the woman's body or donating them to another woman.
- It comprises procedures such as in-vitro fertilisation (IVF), intra-uterine insemination (IUI), oocyte and sperm donation, cryopreservation and includes surrogacy as well.
- Social stigma of being childless and lengthy adoption processes have increased the demand for ART, due to which many older women are also going for ART.
- According to the Assisted Reproductive Technology (Regulation) Bill, 2017, Assisted Reproductive Technology services shall not be available to a woman below the age of 18 years and above the age of 45 years.
- However, there is a loophole that the above provision is still a guideline and not a law yet. Due to the lack of strict regulation via ART laws, there is a surge in unethical practices and rampant commercialisation of IVF.

Concerns around ART

- Reproductive health providers have strongly condemned the act calling it a mindless misuse of IVF technologies.
- It has been described as a deplorable omission of ethics, morality, and the misuse of Assisted Reproductive Technologies (ART).
- Women are most fertile between the ages of 15 and 30, beyond which there is increased risk of producing eggs and embryos with chromosomal and other abnormalities.
- IVF at advanced ages come with the risks of pregnancy loss, high rates of multiple delivery, preterm delivery, and low birth-weight delivery.
- The average life expectancy of an Indian woman is 70 and of a man 69, and the medical community has expressed concerns over future of children born to such an elderly.
- Further, the womb of an older woman has to be prepared by injecting hormones for the foetus to grow for nine months. Also, a woman of that age cannot breastfeed.

VAJIRAM & RAVI

- Calling for a legislation against such interventions, the medical fraternity wants the Artificial Reproductive Technology (ART) Bill 2017 to be revisited, which has not received Parliament's approval.

Census 2021

- Indian will be using a mobile app for the first time in the 2021 census due to which the country would be moving to a digital Census. It will be carried out in 16 languages and at a cost of Rs 12,000 crore.
- The mobile applications to be used in the Census, developed in house by the Registrar General of India are house listing, population enumeration and National Population Register.
- The data for the National Population Register (NPR), a list of usual residents of the country, will also be collected along with the census exercise.
- RGI has received permission with UIDAI to allow a voluntary question for Aadhaar number in the NPR form. However, there will be no biometric authentication in the census.
- Among other things, it will help in demarcating boundaries of municipal wards, assembly and Lok Sabha constituencies.
- The Census 2021 data will be the base for the country's future planning, development initiatives and welfare schemes.
- The utilisation of census data will be multi-dimensional and will significantly contribute towards the nation's progress.

Benefits Of A Digital Census

- The digital census will create a potential for new data analysis and visualisation and will lend a scientific approach to the whole process.
- The digital census can also help in merging multiple cards into a single multipurpose card.
- For example, birth and death registrations can be tied to the electoral rolls. If a child's birth is registered and there is no death registered until he/she turns 18, the electoral rolls may be able to automatically include the person.

UMMID Initiative

- In India's urban areas, congenital malformations and genetic disorders are the third most common cause of mortality in new-borns.
- With a very large population and high birth rate, and consanguineous marriage favored in many communities, prevalence of genetic disorders is high in India
- Hence, to address the issue of inherited genetic diseases, Ministry of Science & Technology has launched UMMID (Unique Methods of Management and treatment of Inherited Disorders) initiative.
- The initiative is designed on the principle of prevention is better than cure.
- The UMMID initiative aims to
 - Establish NIDAN (National Inherited Diseases Administration) Kendras to provide counselling, prenatal testing and diagnosis, management, and multidisciplinary care in Government Hospitals.
 - Produce skilled clinicians in Human Genetics and

VAJIRAM & RAVI

- Undertake screening of pregnant women and new born babies for inherited genetic diseases in hospitals at aspirational districts.
- As a part of this initiative, in the first phase, five NIDAN Kendras have been established to provide comprehensive clinical care.

National Animal Disease Control Programme

- The National Animal Disease Control Programme (NADCP) for eradicating the foot and mouth disease and brucellosis in livestock was recently launched.
- The project aims to control the livestock diseases by 2025 and eradicate these by 2030.
- It aims at vaccinating over 500 million livestock including cattle, buffalo, sheep, goats and pigs against the FMD.
- It also aims at vaccinating 36 million female bovine calves annually in its fight against the brucellosis disease.

Foot and Mouth Disease

- Foot-and-mouth disease (FMD) or hoof-and-mouth disease (HMD) is an infectious and sometimes fatal viral disease that affects cloven-hoofed animals.
- It has severe implications for animal farming, since it is highly infectious and can be spread by infected animals comparatively easily through contact with contaminated farming equipment, vehicles, clothing, feed, and by domestic and wild predators.
- Its containment demands considerable efforts in vaccination, strict monitoring, trade restrictions, quarantines, and occasionally the culling of animals.
- Humans can be infected with foot-and-mouth disease through contact with infected animals, but this is extremely rare.
- Because the virus that causes FMD is sensitive to stomach acid, it cannot spread to humans via consumption of infected meat, except in the mouth before the meat is swallowed.

World Tourism Day 2019

- World Tourism Day is celebrated on September 27 every year by the United Nations World Tourism Organization. This date was chosen as the Constitution of the World Tourism Organization was accepted on this day in 1970.
- The aim of the day is to raise awareness about the role of tourism and to focus on the fact that travelling has a major social, cultural, political and economic effect on all of our lives.
- This year for the first time India was chosen as the host of WTD, with the theme '*Tourism and Jobs: A Better Future For All*'.

About UNWTO

- The World Tourism Organization (UNWTO) is the United Nations specialized agency responsible for the promotion of responsible, sustainable and universally accessible tourism.
- United Nations Economic and Social Council (UNESCO) is the parent organization of UNWTO.
- It promotes tourism as a ***driver of economic growth, inclusive development and environmental sustainability*** and offers leadership and support to the sector in advancing knowledge and tourism policies worldwide.

VAJIRAM & RAVI

- 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.
- It 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.

Pradhan Mantri Matru Vandana Yojana

- Pradhan Mantri Matru Vandana Yojana (PMMVY), a flagship scheme of the Government for pregnant women and lactating mothers has achieved a significant milestone by crossing one crore beneficiaries.
- PMMVY is a direct benefit transfer (DBT) scheme under which cash benefits are provided to pregnant women in their bank account directly to meet enhanced nutritional needs and partially compensate for wage loss.
- Under the 'Scheme', Pregnant Women and Lactating Mothers (PW&LM) receive a cash benefit of Rs. 5,000 in three installments.
- The said benefit is given on fulfilling the respective conditionality, viz. early registration of pregnancy, ante-natal check-up and registration of the birth of the child and completion of first cycle of vaccination for the first living child of the family.
- The eligible beneficiaries also receive cash incentive under Janani Suraksha Yojana (JSY) for institutional delivery. Thus, on an average, a woman gets Rs. 6,000.
- A beneficiary is eligible to receive benefits under the scheme only once. In case of miscarriage/still birth, the beneficiary would be eligible to claim the remaining instalment(s) in event of any future pregnancy.
- Madhya Pradesh, Andhra Pradesh, Himachal Pradesh, Dadra & Nagar Haveli and Rajasthan are the top five States/UT in the country in implementation of PMMVY.

Eat Right Movement

- A year-long social and mass media campaign on the Eat Right India movement was recently launched by the government.
- The movement on preventive health for all was launched in the backdrop of the increasing burden of non-communicable diseases including diabetes, hypertension and heart diseases, widespread deficiencies of vitamins and minerals and rampant food-borne illnesses
- The movement is a crucial preventive healthcare measure to trigger ***social and behavioural change*** through a judicious mix of regulatory measures, combined with soft interventions for ensuring awareness and capacity building of food businesses and citizens alike.
- It is aligned with the government's flagship public health programmes such as POSHAN Abhiyaan, Anaemia Mukt Bharat, Ayushman Bharat Yojana and Swachh Bharat Mission.
- FSSAI has put in place robust regulatory measures under three major pillars: ***Eat Safe, Eat Health and Eat Sustainably*** for the programme.
- FSSAI has also prescribed a limit for Total Polar Compounds (TPC) at 25% in cooking oil to avoid the harmful effects of reused cooking oil.

VAJIRAM & RAVI

- The strength of the movement lies in its holistic and collaborative approach, with stakeholders on both the demand and supply-side joining to make a difference through some clearly identified steps -
 - On the demand side, the Eat Right Movement focuses on empowering citizens to make the right food choices.
 - On the supply side, it nudges food businesses to reformulate their products, provide better nutritional information to consumers and make investments in healthy food as responsible food businesses.

FSSAI

- Food Safety and Standards Authority of India (FSSAI) is an autonomous body established under the Ministry of Health & Family Welfare, Government of India.
- It was established under the Food Safety and Standards Act, 2006 which is a consolidating statute related to food safety and regulation in India.
- It is responsible for protecting and promoting public health through the regulation and supervision of food safety.
- The following are the statutory powers that the FSS Act, 2006 gives to FSSAI
 - Framing of regulations to lay down food safety standards
 - Laying down guidelines for accreditation of laboratories for food testing
 - Providing scientific advice and technical support to the Central Government
 - Contributing to the development of international technical standards in food
 - Collecting & collating data regarding food consumption, contamination, & emerging risks.
 - Disseminating information and promoting awareness about food safety & nutrition in India.

Automatic Exchange of Information

- The automatic exchange of information regime between India and Switzerland has become operational from September 1, following which banking details of Indians with accounts in Switzerland will be available to tax authorities in India.
- Under the agreement, both jurisdictions will inform each other of any relevant developments in respect to the implementation of the **OECD Common Reporting Standard (CRD)** in their respective domestic laws.
- The idea of CRD was based on the US *Foreign Account Tax Compliance Act (FATCA)* implementation agreements. It sets out the financial institutions required to report the different types of accounts and taxpayers covered, as well as common due diligence procedures to be followed by financial institutions.

Background

- After declining for three years, money parked by Indians in Swiss Banks rose 50 per cent to CHF (Swiss Franc) 1.02 billion (Rs 7,000 crore) in 2017 over the previous year.
- In 2016, Switzerland and India had signed a joint declaration on the introduction of the automatic exchange of information (AEOI) in tax matters on a reciprocal basis.
- Both countries had planned to start collecting data in accordance with the global AEOI standard in 2018 and to exchange it from 2019 onwards.

Benefits

- It will enable governments to discover formerly undetected tax evasion and recover tax revenue lost to non-compliant taxpayers.
- It will further strengthen international efforts to increase transparency, cooperation and accountability among financial institutions and tax administrations.
- Additionally, AEOI will generate secondary benefits by increasing voluntary disclosures of concealed assets by encouraging taxpayers to report all relevant information.
- It will be a significant step in the Government's fight against black money and is expected to end the era of Swiss bank secrecy.

Measures to Boost Exports and Housing Sector

- The Union Finance Minister has announced a third set of government decisions to revive the economy, which include measures to boost exports and give a fillip to the housing sector.
- The announcements have come after the latest trade data reveals poor trade performance, with exports falling for the second time in three months, while imports have slid for three straight months now.

A. Announcements Related To Housing Sector

Last Mile Funding

- A **Rs. 20,000 crore fund** to provide last mile funding for housing projects that are 60% ready, will be set up to focus on construction of unfinished units.
- The fund will be available for projects not categorised as non-performing assets, not undergoing National Company Law Tribunal proceedings and affordable and middle income projects.
- The government's contribution to the fund would be ₹10,000 crore and remaining sources would be LIC, private capital from banks, sovereign funds, etc.

Increase In Credit

- **External Commercial borrowing** guidelines will be relaxed to facilitate financing for homebuyers who are eligible under PMAY.
- Interest rates on house building advance for government employees will be lowered and will be linked to 10-year government bonds, which is currently 6.63%.

Impact Of Housing Sector Announcements

- The announcements are expected to provide the much-needed boost to the sector, and enable homebuyers get possession of their incomplete homes currently stuck in stalled projects due to want of funds.
- Government employees contribute to a major component of demand for houses, so lowering of interest rates will **encourage more government employees to buy new houses**.
- One rupee spent in housing sector leads to a direct growth of 42 paise in GDP, hence the measures announced will help in the **revival of the entire economy**.

B. Announcements To Boost Exports

Remission of Duties or Taxes on Export Product

VAJIRAM & RAVI

- A new scheme - Scheme for Remission of Duties or Taxes on Export Product (**RoDTEP**), will replace the Merchandise Exports from India Scheme (MEIS).
- The previous MEIS and the new RoDTEP are designed to **incentivise exports by giving them rewards to offset the duties** they pay to export their products.
- RoDTEP will result in the government **foregoing revenue of up to Rs 50,000 crore** annually — **36% higher** than the Rs 36,615 crore budgeted for MEIS.

Higher Insurance Cover

- The Export Credit Guarantee Corporation (ECGC) will expand the scope of its **Export Credit Insurance Scheme** to provide a higher insurance cover to banks that are lending working capital for exports.
- At present banks are covered for 60% of what they lend to exporters for working capital, post this move this will be **increased to 90%**.
- The initiative will cost the exchequer about ₹1,700 crore per year and would enable a **reduction in the overall cost of export credit** including interest rates, especially to MSMEs.

Reduce Turnaround Time And Time To Export

- An action plan to **reduce the time to export and turn-around time** in airports and ports benchmarked to international standards will be implemented by December 2019.
- The entire process of **export clearances will be digitised** and all offline or manual processes will be eliminated to reduce the 'time to export'.
- Kochi currently ranks as India's best port with a turnaround time of 1.1 days, which is more than twice the time taken at the Boston port, while Shanghai takes 0.8 days.
- **Electronic Refund Module:** A fully electronic refund module for the *quick and automated refund of input tax credits* of exporters will be operational. This would go a long way in *improving their working capital* thereby providing much needed impetus to exports
- **PSL:** The government will also **revamp the priority sector lending norms** for export credit, which is expected to release an additional Rs 36,000 crore to Rs 68,000 crore of funding.
- **FTA:** The government will also enable exporters to **take advantage of lower duty benefits** available under free trade agreements, where the utilisation rate is as low as 35-40% in some cases.

National Infrastructure Pipeline

- The Government has constituted an inter-ministerial task force to draw up annual National Infrastructure Pipeline for each of the five years, starting this fiscal i.e. 2019-20 to FY 2024-25. The pipeline will ensure that the projects are adequately prepared and launched.
- The task force will submit its report on the pipeline for FY 2019-20 by October 31, 2019 and on the indicative pipeline for FY 2021-25 by December 31, 2019.
- The National Infrastructure Pipeline would include greenfield and brownfield projects costing above Rs 100 crore each.

Background

- Prime Minister in his Independence Day speech had highlighted that Rs.100 lakh crore would be invested on infrastructure over the next five years, which will include social and economic infrastructure projects. The task force has been constituted in pursuance of this goal.

VAJIRAM & RAVI

- Availability of quality infrastructure is a pre-requisite to achieve broad-based and inclusive growth on a sustainable basis. Investment in infrastructure is also necessary for sustaining the high growth rate.
- In the past decade (FY 2008-17), India invested about \$1.1 trillion on infrastructure. The challenge is to step-up annual infrastructure investment so that lack of infrastructure does not become a binding constraint on the growth of the Indian economy.
- Further, to achieve the GDP of \$5 trillion by 2024-25, India needs to spend about \$1.4 trillion (Rs. 100 lakh crore) over these years on infrastructure.

Draft Social Security Code

- The labour ministry has proposed a draft social security code that aims to merge, simplify and rationalize the relevant provisions of the existing central labour laws.
- The idea is to provide a comprehensive social security system that will cater to the needs of 50 crore workers in the country.
- The **Code on Social Security 2019**, once in place, will merge *eight exiting labour laws* viz. Employees' Compensation Act, 1923; Employees' State Insurance Act, 1948, Employees' Provident Funds and Miscellaneous Provisions Act, 1952; Maternity Benefit Act, 1961; Payment of Gratuity Act, 1972; Cine Workers Welfare Fund Act, 1981; Building and Other Construction Workers Cess Act, 1996 and Unorganized Workers' Social Security Act, 2008.

Highlights Of The Draft Code

I. Insurance, PF, Life Cover For Unorganized Sector Employees

- The Central Government shall formulate and notify, suitable welfare schemes for unorganised workers on matters relating to life and disability cover; health and maternity benefits; old age protection; and any other such benefits.
- Further, the states may also formulate and notify suitable initiatives for unorganized workers.

II. Corporatization of EPFO and ESIC

- The pension, insurance and retirement saving bodies including EPFO and ESIC will be a body corporate.
- The draft also talks about appointment of chief executive officers (CEOs) in these organization indicating that the labour minister, labour secretary, the central PF commissioner and Director General of ESIC may not be by default the head of such organizations.
- The Central Government shall also appoint a Financial Advisor and Chief Accounts Officer to assist the Chief Executive Officer in the discharge of his duties.

III. Benefits For Gig Workers

- Though the exact number of gig workers are unknown as it is being still figured out whether they are formal workers or informal workers or independent entrepreneurs. A 2017 study by consulting firm EY has said that nearly one out four gig workers in the world are from India.
- As per the code, the Central Government may formulate and notify, suitable social security schemes for gig workers and platform workers.

VAJIRAM & RAVI

- Such schemes would encompass issues like life and disability cover, health and maternity benefits, old age protection and any other benefit as may be determined by the Central Government.

IV. Maternity Benefits

Subject to the other provisions of this Code, every woman shall be entitled to, and her employer shall be liable for, the payment of maternity benefit at the rate of the average daily wage for the period of her actual absence.

External Benchmarking Of Lending Rates

The Reserve Bank of India (RBI) has made it mandatory for all banks to link floating rate loans — to retail customers and loans to micro, small and medium enterprises (MSME) — to an external benchmark.

Background

- At present, interest rates on loans are linked to a bank's marginal cost of fund-based interest rate (**MCLR**).
- The repo (or repurchase) rate is the rate at which the Reserve Bank of India (RBI) lends money to other banks. Hence, cuts in the repo rate are meant to lead to cuts in other lending rates as banks get to borrow money cheaply from the RBI.
- However, it has been observed that the banks have been reluctant to cut interest rates despite the RBI lowering the repo rate by 110 basis points (bps) between February and August.
- By pegging the rate to an external benchmark, RBI is hoping for a faster transmission of rate cuts than has happened so far under the MCLR system.

Details

- The banks are free to choose one of the several benchmarks — Repo rate, 3-Months Treasury Bill yield, 6-Months Treasury Bill yield or any other benchmark market interest rate published by the Financial Benchmarks India Private Ltd.
- However, adoption of multiple benchmarks by the same bank is not allowed within a loan category.
- While banks are free to decide on the spread over the external benchmark, credit risk premium can change only when borrower's credit assessment undergoes a substantial change. Adding other components of spread, including operating cost, could be altered once in three years.
- The banks have also been asked to reset the interest rate under external benchmark at least once in three months.
- Under the MCLR system, even if banks were to cut rates, there was a reset clause, which meant that there could be a lag in the home loan rate being changed even if the MCLR changed, because the reset period could be as long as a year.

Impact

- The step would help in ensuring transparency, standardisation, and ease of understanding of loan products by borrowers.
- It is a welcome change for borrowers, and can give a much-needed boost to the retail lending space, which could, in turn, boost consumption.
- Interest rates on new personal loans including, housing and auto, which will be linked to the Repo rate, are likely to become cheaper from October 1. It also means interest rate on such loans can also go up when the RBI hikes repo rate.

VAJIRAM & RAVI **Internal Working Group To Review Agricultural Credit**

The Reserve Bank of India's Internal Working Group (IWG) headed by RBI Deputy Governor **MK Jain** to review agricultural credit has submitted its report.

Agricultural Credit in India

- Agricultural credit plays a vital role in farm sector development and facilitates adoption of new technologies.
- The agricultural credit policies in India are **mainly supply driven** through targeted ground level credit, interest subvention scheme and directed lending under Priority Sector Lending guidelines.
- The success depends upon many other **supporting factors** including the availability of agricultural inputs, services and remunerative markets for the products.

Issues With Agricultural Credit

Despite the impressive growth in the formal agricultural credit, there are several issues and challenges.

I. Credit Reach

- As per the NAFIS Report 2016-17, the average loan taken by agricultural households indicated that 72 % of the credit requirement was met through institutional sources and 28 % from non-institutional sources.
- Further, in the absence of a proper legal framework and lack of records relating to their agricultural activity, tenant farmers/ share croppers/ landless labourers face difficulty in accessing institutional credit.

II. Regional Disparity in Agricultural Credit

- Some of the states are getting much higher share, as high as 10 % of total agricultural credit compared to other states getting as low as 0.5 %.
- Also, in some states, viz., Bihar, Chhattisgarh, Jharkhand, West Bengal, etc., bank credit is not proportionate to their share in agricultural output.

III. Loan Waiver

- Loan waivers announced by state governments have **affected the credit culture** in the country with many borrowers withholding repayment, in anticipation of a loan waiver.
- This adversely **affected the credit history of borrowers** and their future prospects of availing fresh loan for agricultural purposes.

Recommendations Of The IWG

I. Measures to Improve Reach of Institutional Credit

- State governments should give access to banks to digitised land records in order to verify land title and create charge online.
- **Legal Framework:** State governments should be encouraged to reform their legal framework on the basis of Model Land Leasing Act proposed by NITI Aayog so that formal lending to tenant farmers can improve.
- Banks should explore collaborations with agri-tech companies/start-ups so as to provide access to credit in an integrated, timely and efficient manner to the farmers.

II. Improvement of KCC Scheme

- The limit of ₹0.3 million for waiving collateral security by the banks in case of tie-up arrangements should be revised to ₹0.5 million under the existing KCC guidelines.

VAJIRAM & RAVI

- For better monitoring of branches by banks and easier implementation of KCC, there should be uniformity in scale of finance (SoF) for both crops and allied activities.

III. Farmer Producers' Organisations

- NABARD should design a financing model for credit requirements of FPOs across the entire supply and value chain.
- Bank loans to FPOs undertaking farming with assured marketing of their produce at a pre-determined price, having at least 75 per cent SMF, should be eligible for PSL with a credit cap of ₹50 million.

IV. Farm Loan Waivers

- Farm loan waivers have seen an unprecedented increase since 2014-15 driven by state governments.
- Hence, GoI and state governments should undertake a holistic review of the agricultural policies and their implementation, and evaluate the effectiveness of current subsidy policies. In light of the said review, the panel has also asked the governments to avoid loan waivers.

V. Database For Indian Agriculture Sector

- At present there is no database of the Indian agriculture sector due to which the planning/ policy formulation lacks effectiveness and is difficult to monitor.
- GoI, with the help of state governments, should **develop a centralised database** capturing details related to crops cultivated, cropping pattern, output, sown/irrigated area, health of soil, natural calamity, etc.

VI. Credit Guarantee Scheme for Agriculture sector

- In India, there is no guarantee scheme available to banks to cover the default risk of the borrowers.
- GoI in partnership with state governments should **set up a credit guarantee fund** for the agriculture sector on the lines of credit guarantee schemes implemented in the MSME sector.

VII. Address Regional Disparity

- PSL guidelines should be revisited in order to explore the feasibility of introducing suitable measures for improving the credit off-take in central, eastern and north eastern states.
- NABARD should gradually increase the allocation of Rural Infrastructure Development Fund in central, eastern and north eastern states over a period of time.

VIII. Miscellaneous

- **Land Consolidation:** State governments should promote and conduct awareness drives for land consolidation. This will help the farmers to achieve economies of scale and have the incentive to make long term investments.
- **Consumption loans:** Banks should be allowed to give consumption loans to farmers upto a sanctioned limit of ₹0.1 million under PSL, provided banks are able to obtain collateral security.

Inter-Ministerial Panel On Fintech

- The Steering Committee on Fintech related issues constituted by the Ministry of Finance, has submitted its report.
- The report outlines the current landscape in the Fintech space globally and in India and studies the various issues relating to its development.

VAJIRAM & RAVI

- It focuses on how fintech can be leveraged to enhance financial inclusion of MSMEs with a view to make fintech related regulations more flexible and generate enhanced entrepreneurship.

Recommendations

- Given the rapid pace at which technology is being adopted primarily by private sector financial services, the Department of Financial Services (DFS) should work with PSU banks to bring in more efficiency to their work and reduce fraud and security risks.
- Insurance companies and lending agencies should be encouraged to use drone and remote sensing technology for crop area, damage and location assessments to support risk reduction in insurance/lending business.
- Opportunities should be explored to increase the levels of automation using artificial intelligence (AI), cognitive analytics and machine learning in their back-end processes.
- Modernisation and standardisation of land records by setting up a dedicated National Digital Land Records Mission based on a common National Land Records Standards.
- Department of Financial Services and RBI should examine the suitability of 'virtual banking system' in the Indian context, costs and benefits regarding allowing virtual banks and prepare for a possible future scenario where banks do not need to set up branches and yet deliver the full scale retail banking services.
- A common digital platform for all micro-pension schemes and government pension schemes, including EPF, through which pension subscribers can subscribe to specific schemes seamlessly and reduce access barriers.
- NABARD should take steps to create a credit registry for farmers with special thrust for fintech use along with core banking solutions (CBS) by agri-financial institutions, including cooperative societies.

Institutional set up

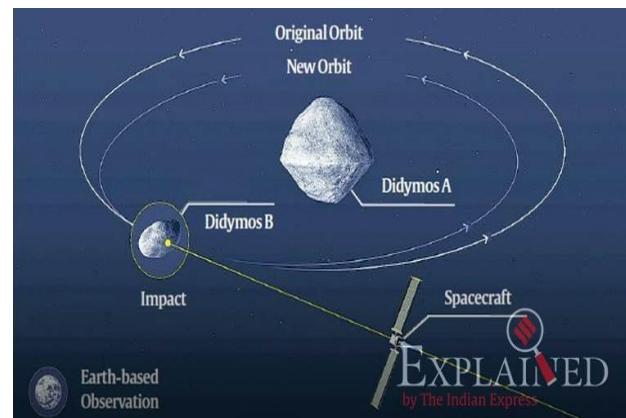
- A comprehensive legal framework for consumer protection should be put in place keeping in mind, the rise of fintech and digital services.
- An Inter-Ministerial Steering Committee on Fintech Applications in the Department of Economic Affairs (DEA) to monitor progress, including exploring and suggesting the potential applications in government financial processes and applications.
- Financial sector regulators should develop an institutional framework for specific use-cases of supervisory technology (or SupTech), testing, deployment, monitoring and evaluation.

Asteroid Impact Deflection Assessment

- NASA is building the Double Asteroid Impact Test (DART) spacecraft for launch in summer 2021.
- The mission, which includes NASA and the European Space Agency (ESA), is known as the Asteroid Impact Deflection Assessment (AIDA).

Background

- Among all the causes that will eventually cause the extinction of life on Earth, an asteroid hit is widely acknowledged as one of the likeliest.



VAJIRAM & RAVI

- Over the years, scientists have suggested different ways to ward off such a hit, such as blowing up the asteroid before it reaches Earth, or deflecting it off its Earth-bound course by hitting it with a spacecraft.

Mission

- Now, scientists have embarked on a double-spacecraft mission to deflect an asteroid in space, to prove the technique as a viable method of planetary defence.
- The target is the smaller of two bodies in the “double Didymos asteroids” that are in orbit between Earth and Mars. Didymos is a near-Earth asteroid system with its main body measuring about 780 m across and the smaller body being a “moonlet” of about 160 m diameter.
- The project aims to deflect the orbit of the smaller body through an impact by one spacecraft. Then a second spacecraft will survey the crash site and gather the maximum possible data on the effect of this collision
- Flying along with DART will be an Italian-made miniature CubeSat, called LICIACube, to record the moment of impact.
- ESA’s contribution is a mission called Hera, which will perform a close-up survey of the post-impact asteroid, acquiring measurements such as the asteroid’s mass and detailed crater shape.
- Hera will also deploy a pair of CubeSats for close-up asteroid surveys and the very first radar probe of an asteroid.
- All this would allow researchers to model the efficiency of the collision. This can help turn this experiment into a technique that could be repeated, as needed, in the event of a real threat.

AH-64E Apache Inducted In IAF

- In a major boost to the Indian Air Force’s combat capabilities, eight US-made Apache AH-64E attack helicopters have been inducted into the IAF.
- The AH-64E Apache is one of the world’s most advanced multi-role combat helicopters and is flown by the U.S. Army. India is the 14th nation in the world to be operating the Apache attack helicopters.
- The IAF had signed a multi-billion dollar contract with the U.S. government and Boeing Ltd in September 2015 and by 2020, the IAF will operate a fleet of 22 Apaches.
- It is the only available combat helicopter with a spectrum of capabilities for virtually any mission requirement. This includes greater thrust and lift, joint digital operability, improved survivability and cognitive decision aiding.
- It is uniquely suited to meet the commander’s needs, including reconnaissance, security, peacekeeping operations, and lethal attack — in both land and littoral environments — all without reconfiguration.

Water On Exoplanet

- Astronomers have for the **first time discovered water in the atmosphere of an exoplanet (K2-18b)** orbiting within the habitable zone of a distant star.
- The habitable zone is the region around a star where temperatures are considered sufficiently benign for water to exist in liquid form on the surface of a planet.

VAJIRAM & RAVI

- Archival data from 2016 and 2017 captured by the **ESA/NASA Hubble Space Telescope** and open-source algorithms to analyse the starlight filtered through K2-18b's atmosphere were used to arrive at the conclusion.
- The results revealed the molecular signature of water vapour, also indicating the presence of hydrogen and helium in the planet's atmosphere.
- It is also believed that other molecules including nitrogen and methane may be present on K2-18b but with current observations, they remain undetectable.
- Further studies are required to estimate cloud coverage and the percentage of atmospheric water present on the exoplanet.

Concerns

- However, K2-18b is not 'Earth 2.0' as it is **significantly heavier and has a different atmospheric composition**.
- Certain astronomers, also dispute the claim that the planet is potentially habitable. One analysis indicates that planets that are 1.5 times the mass of the Earth are unlikely to have a rocky surface. There is also concern that K2-18b's gravity would make it difficult for the world to support life.
- Another issue is that astronomers can't agree what conditions are needed for habitability. It is likely to require a survey of the chemical composition of, perhaps, hundreds of worlds and an understanding of how they are created and evolve.

K2-18b

- K2-18b was discovered in 2015 and is one of the hundreds of **super-Earths -- planets with a mass between Earth and Neptune** -- found by NASA's Kepler spacecraft.
- The planet orbits the cool dwarf star K2-18, in the Leo constellation.
- It is **eight times the mass of Earth, is just over twice the size of Earth and is 111 light years away** (about 650 million million miles) from Earth.

Exoplanet

- Planets beyond the Solar System are called exoplanets. The first exoplanet was discovered in 1992, orbiting a pulsar (a neutron star that emits electromagnetic radiation)
- More than 4,000 exoplanets have been detected to date using several technique and most of them are large planets believed to resemble Jupiter or Neptune.

Adiya-L1

- The Indian Space Research Organisation (ISRO) has planned to launch Aditya-L1, its mission to study the sun for the first time by 2020.
- The mission plans to **study corona**, the outer layer of the sun, that has an extremely high temperature of more than a million degree Kelvin, much higher than the solar disc temperature of around 6000K. The study will find out why the corona gets heated to such high temperatures.
- The Aditya-L1 spacecraft will take up its position in a 'halo orbit' around the Lagrangian Point 1 (L1).
- In all, there are five different "Lagrange points" — regions of space in systems like the Earth-Moon system or the Earth-Sun system, where the gravitational pull from both these bodies is balanced (equal). These Lagrange points are important in space exploration as they offer many benefits for orbiting satellites.

VAJIRAM & RAVI

- The path such a satellite would follow around a Lagrange point is called a 'halo orbit'. These halo orbits, just like satellites that orbit the Earth or Moon, are periodic and predictable.
- The mission, once called "Aditya-1" was renamed "Aditya-L1" after its final orbit around the L1 Lagrangian Point and will not have any obstructions in viewing the Sun — not even during eclipses.
- When the mission was first conceptualized, it was supposed to carry just a single payload. This was later changed, and the mission now has six payloads in all.
- However, the Visible Emission Line Coronagraph (VELC) that was once the first and only payload on the mission, remains the most important one, since it will observe the solar corona.
- The corona is an aura of plasma (hot gas) that envelopes the Sun and other stars, which becomes visible to the naked eye during a total solar eclipse and extends millions of kilometers into space.
- The additional experiments will provide observations of Sun's Photosphere (soft and hard X-ray), Chromosphere (UV) and corona (Visible and NIR). In addition, particle payloads will study the particle flux emanating from the Sun and reaching the L1 orbit, and the magnetometer payload will measure the variation in magnetic field strength at the halo orbit around L1.

Project Netra

- Indian Space Research Organisation (ISRO) has initiated 'Project NETRA' – an early warning system in space to detect debris and other hazards to Indian satellites.
- The project estimated to cost ₹400 crore, when in place, will give India its own capability in space situational awareness (SSA) like the other space powers.

Need for Netra

- Space debris could be floating particles from dead satellites or rocket parts that stay in orbit for many years. Satellite agencies agonise over even a speck of paint or fragment floating towards their spacecraft.
- It disables on board electronics and cripples the satellite worth several hundred crore rupees besides many services that run on it. Agencies constantly look for debris at the time of a launch and through the life of a satellite.
- Even now, India does collision avoidance manoeuvres on Indian satellites. To do that it depends on data from NORAD (North American Aerospace Defense Command) and others available in the public domain. However, it does not get accurate or comprehensive information.

Project Details

- The new SSA centre would consolidate debris tracking activities that are now spread across ISRO centres.
- Under NETRA, the ISRO plans to put up many observational facilities: connected radars, telescopes, data processing units and a control centre.
- They will be able to spot, track and catalogue objects as small as 10 cm, up to a range of 3,400 km and equal to a space orbit of around 2,000 km.
- With this the ISRO, which has placed satellites to track the earth from above, will also start training its eyes on space from earth.
- More importantly, the SSA also has a military quotient to it and adds a new ring to the country's overall security.

VAJIRAM & RAVI

- Combined with other elements of military intelligence, the SSA would help in understanding motives behind any suspicious orbit changes of other satellites and to know if they are spying on or harming Indian spacecraft.
- Furthermore, the SSA also serves as a warning system against missile or a space attack against India.
- NETRA will first be for low-earth orbits or LEO which have remote-sensing spacecraft. However, the eventual goal for NETRA would be to capture the geostationary orbit, which is reportedly seen at 36,000 kilometres, where communication satellites operate.

Build For Digital India Programme

- The Ministry of Electronics and Information Technology (MeitY) and Google have signed a statement of intent to roll-out 'Build for Digital India' programme.
- The programme will give engineering students a platform to develop market-ready, technology-based solutions that address key social problems.
- As part of the program, engineering students across the country will be invited to present their ideas and solutions in areas like healthcare, agriculture, education, smart cities and infrastructure, women safety, smart mobility and transportation, environment, accessibility and disability and digital literacy.
- Applicants will take part in online and offline learning opportunities on key technologies such as Machine Learning (ML), Cloud and Android that will be offered through Google's Developer Student Club network and other Google Developer networks.
- Google will also offer mentorship sessions in product design, strategy and technology to the most promising products and prototypes.
- The initiative will not only motivate the college students across India to innovate but will also provide great exposure to students in dealing with real world problems and develop deeper understanding of how newer technologies can be used to solve them.

Methane Powered Rocket Engine

- In its endeavour to develop cutting-edge technologies that are on par with elsewhere in the world, ISRO, is developing methane-powered rocket engines. Methane, which can be synthesised with water and carbon dioxide in space, is often described as the space fuel of the future.
- The space agency is developing two 'LOx methane' engines (liquid oxygen oxidiser and methane fuel) engines.
- One of the two projects is trying to convert the existing cryogenic engine, which uses liquid hydrogen for fuel, into a LOx methane engine. The other is a smaller engine of 3 tonnes thrust, which will feature an electric motor.
- **Current fuel:** ISRO currently prefers to use a fuel called Unsymmetrical Di-Methyl Hydrazine, along with Nitrogen tetroxide for oxidiser, in its liquid fuel (Vikas) engines, which are used in the lower stages of its rockets, PSLV and GSLV.
- This fuel, like all hydrazine-based fuels, is said to be highly toxic and cancer-causing and globally, governments are keen on banning hydrazine.
- **Advantages:** Besides, methane beats hydrazine on every other count, too. Apart from being non-toxic, it has a higher specific impulse (which means one kg of the gas can lift one kg of mass for a

longer time), it is easy to store, does not leave a residue upon burning, less bulky, and, importantly, can be synthesised up in space.

- **Flipside:** But on the flipside, methane-fired engines need an igniter to start the fire. Hydrazine fuels are hypergolic, which means they start burning on their own upon coming in contact with oxygen.

Quantum Supremacy

- Google researchers claim to have achieved a major milestone in computer science known as "quantum supremacy." However, the research paper is yet to be formally vetted by peers in the field.
- Quantum supremacy means that researchers have been able to use a quantum computer to perform a single calculation that no conventional computer, even the biggest supercomputer, can perform in a reasonable amount of time.
- The researchers were able to use a quantum computer to perform a complex mathematical calculation in three minutes and 20 seconds, which would have taken Summit 3—the world's most powerful commercially-available conventional computer—about 10,000 years to perform the same task.

Working of Quantum Computers

- Quantum computers work by harnessing the properties of quantum mechanics.
- Classical computers process information in a binary format, called bits, which can represent either a 0 or 1. Quantum computers, in contrast, use logical units called quantum bits, or qubits for short, that can be put into a quantum state where they can simultaneously represent both 0 and 1.
- While the bits in a classical computer all operate independently from one another, in a quantum computer, the status of one qubit effects the status of all the other qubits in the system, so they can all work together to achieve a solution.
- These two properties are what give quantum computers so much more potential power than conventional computers.
- But while a conventional computer outputs the same answer to a problem every time a calculation is being run, the outputs of a quantum computer are probabilistic.
- That means it does not always produce the same answer. So to use a quantum computer, one has to run a calculation through the system thousands or even millions of times, and the array of outputs converge around the answer that is most likely to be correct.

Applications

- Among the most anticipated uses of quantum computers is the ability to create new chemicals, like catalysts for producing nitrogen-based fertilizers or for use in cells in higher-powered batteries.
- Quantum computing could also be used to crack most commonly used forms of digital encryption. It may one day also be used to streamline logistics and delivery operations, as well as speeding up machine learning applications.

Significance Of The Achievement

- The speed and capability of classical supercomputers are limited by energy requirements. Along with these they also need more physical space. Looking for really useful information by processing huge amounts of data quickly is a real-world problem and one that can be tackled faster by quantum computers.

VAJIRAM & RAVI

- The basic advantage is speed as it is able to simulate several classical computers working in parallel. Several encryption systems used in banking and security applications are premised on computers being unable to handle mathematical problems that are computationally demanding beyond a limit. Quantum computers, in theory, can surpass those limits.
- Impressive as this may sound, experts caution that this does not imply that the quantum computer can solve every challenging problem thrown at it.
- Then again, nothing yet rules out the creation of new mathematical methods or techniques that would allow classical computers to execute the same task faster.

IMD World Digital Competitiveness Ranking 2019

- The IMD World Digital Competitiveness Ranking 2019 was recently released.
- It measures the capacity and readiness of 63 economies to adopt and explore digital technologies as a key driver for economic transformation in business, government and wider society.
- To evaluate an economy, WDCR examines three factors: **knowledge**, the capacity to understand and learn the new technologies; **technology**, the competence to develop new digital innovations; and **future readiness**, the preparedness for the coming developments.

Findings

- The **US** was ranked as the world's most digitally competitive economy, followed by Singapore in the second place. Sweden was ranked third on the list, followed by Denmark and Switzerland in the 4th and 5th place, respectively.
- Several Asian economies advanced significantly in the ranking compared to last year. Hong Kong SAR (8th) and the Republic of Korea (10th) entered the top-10 for the first time, while Taiwan and China moved up to 13th and 22nd place, respectively.
- India has advanced four places to 44th position in terms of digital competitiveness in the world as the country has made improvement in terms of knowledge and future readiness to adopt and explore digital technologies.
- The most remarkable advancement in 2019 was in the technology sub-factor level, where India held the first position in telecommunications investment.

Scientific Social Responsibility Policy

- India is going to be possibly the first country in the world to implement a Scientific Social Responsibility (SSR) Policy on the lines of Corporate Social Responsibility (CSR).
- It will encourage science and technology (S&T) institutions and individual scientists in the country to proactively engage in science outreach activities to connect science with the society.

Objectives

- The main objective of SSR policy is to harness the voluntary potential that is latent in the country's scientific community to strengthen science and society linkages so as to make S&T ecosystem vibrant. This specifically implies:
- **Science-society connect:** Facilitating inclusive and sustainable development by transferring the benefits of scientific work to meet existing and emerging societal needs.
- **Science-science connect:** Creating an enabling environment for the sharing of ideas and resources within the knowledge ecosystem.

VAJIRAM & RAVI

- **Society-science connect:** Collaborating with communities to identify problems and develop scientific and technological solutions. [L1 SEP]
- **Cultural change:** Inculcating social responsibility among the individuals and institutions practicing science; creating awareness about SSR within society; and infusing scientific temperament into day-to-day social existence and interaction. [L1 SEP]

Highlights of the policy

- Under the proposed policy, individual scientists or knowledge workers will be required to devote at least 10 person-days of SSR per year for exchanging scientific knowledge to society.
- It also recognises the need to provide incentives for outreach activities with necessary budgetary support.
- It has also been proposed to give credit to knowledge workers/scientists for individual SSR activities in their annual performance appraisal and evaluation. No institution would be allowed to outsource or sub-contract their SSR activities and projects.
- A central agency will be established at DST to implement the SSR. Other ministries would also be encouraged to make their own plans to implement SSR as per their mandate.
- A national digital portal will be developed up to capture societal needs requiring scientific interventions and as a platform for implementers and for reporting SSR activities.

Benefits

- It will expand the domain of science and its benefits to the community and encourage students into science through handholding and nurturing their interest.
- It will provide training for skill development and upgrade scientific knowledge.
- It will help MSMEs, Startups and informal sector enterprises in increasing their overall productivity.
- Facilitate scientific intervention in rural innovation and empower women, disadvantaged and weaker sections of the society through the same.
- Facilitate actions towards addressing Technology Vision 2035 Prerogatives and Sustainable Development Goals (SDGs) of the country such as water, ecology, health and livelihood.

LCA Tejas Makes Short Arrested Landing

- The **naval variant** of the Light Combat Aircraft (LCA) Tejas has made a **successful short landing** with arrestor wires on the **Shore Based Test Facility (SBTF) in Goa**.
- This is a big step forward as it will enable **LCA to operate from an aircraft carrier**.
- LCA (Navy) is designed with **stronger landing gears** to absorb forces exerted by the ski jump ramp during take-off, to be **airborne within 200 m, as against 1000 m** required for normal runways.
- Its **special flight control law mode** allows **hands-free take-off**, reducing the pilot's workload.

SBTF

- Replicates the flight deck of an aircraft carrier.
- Built to train naval pilots in complex manoeuvres of landing on short flight deck
- Situated in - Goa

17 Squadron Golden Arrows

- Indian Air Force has resurrected the **17 Squadron, nicknamed Golden Arrows**, which will be the first unit to operate the French-origin fighter aircraft, Rafale.
- The **17 Squadron was formed at Ambala** on October 1, 1951 under the command of Flight Lieutenant DL Springett.
- Among notable operations of Golden Arrows was Goa Liberation Campaign in December 1961, Indo-Pak war of 1971 and Kargil War of 1999.
- **On December 31, 2011 the squadron was ‘number plated’** after the Russian Mig-21 jets that it flew were decommissioned. It was since awaiting newer inductions.

Special Training Programme for Maldivian Civil Servants

- It was conducted from **September 16-28, 2019 at Mussoorie** and Delhi.
- This training programme was conducted under the **India-Maldives MoU on Training and Capacity Building Programme**.
- This MoU was signed between the **National Centre for Good Governance (NCGG) and the Maldives Civil Service Commission (CSC)** during the visit of Indian PM to Maldives in June 2019.
- Under the MOU, 10 training programmes will be conducted from September 2019 to December 2020.

Indian, Chinese Troops Face-off in Ladakh

- Soldiers of Indian and Chinese Army were engaged in a face-off near the **northern bank of Pangong Tso Lake** in Ladakh.
- Such incidents happen due to differing perceptions of the LAC. Both the sides stake claim over the more than 130 km which extends between both India and Chinese controlled Tibet area.

India Announces Aid for Bahamas

- India has announced a humanitarian assistance of USD 1 million.
- This was to help people in The Bahamas affected by **Hurricane Dorian**.
- Hurricane Dorian ravaged the Bahamas as a Category 5 hurricane.

Pangong Tso

- Brackish water lake in Himalayas
- 134 km Long, narrow, deep, endorheic (landlocked) lake
- Situated at a height of about 4,350 m.
- extends from India to Tibetan Autonomous Region (TAR), China

India-China Strategic Economic Dialogue

- The 6th India-China Strategic Economic Dialogue (SED) was organised in New Delhi.
- The SED focused on collaboration on areas of infrastructure, energy, high-tech, resource conservation, pharmaceuticals and policy coordination.
- It was set up between the **erstwhile Planning Commission and National Development and Reform Commission of China** during the visit of Chinese Prime Minister Wen Jiabao to India in December 2010.

- It has served as an effective mechanism for enhancing bilateral practical cooperation.
- The **5th SED was held in Beijing** on April 14 2018 right before the informal Wuhan Summit.

India, ASEAN to Review Free Trade Pact in Goods

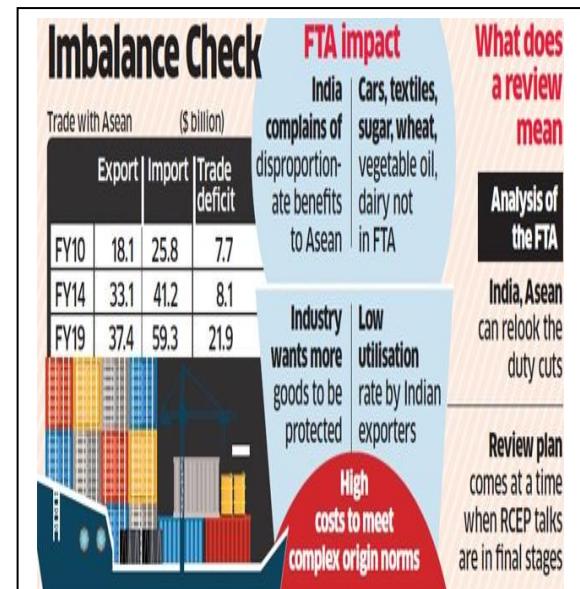
- India and 10-member bloc of South-East Asian nations have agreed to **review their free trade agreement in Goods**. A joint committee would be constituted for this purpose.
- The aim of this review would be to make ASEAN-India trade in goods agreement more user-friendly, simple, and trade facilitative for businesses.

Key Facts

- This decision to review was taken during the meeting between **Economic Ministers of ASEAN** and **Commerce Minister Piyush Goyal** in Bangkok. They met for the **16th AEM-India consultations**.
- The India-ASEAN trade in goods pact came into force from January 2010. The **services component**, in which India has a greater interest, and the investment chapter are yet to be ratified.
- Under the pact, two trading partners set **timelines for eliminating duties** on the maximum number of goods traded between the two regions.
- The **bilateral trade between the two sides** has increased to \$80.8 billion in 2018 from \$73.6 billion in 2017.

Review - India's Long-pending Demand

- India has highlighted the fact that it has not benefitted from the agreement as its **goods trade deficit** with the bloc has widened. The **trade gap was \$22 billion in FY19**, up from \$13 billion in FY18.
- The surge in goods imports into India is accentuated by instances of non-adherence to origin norms. Also, there is lack of full cooperation in investigating and addressing such breaches.
- The utilisation of preferential tariffs by India under the India-ASEAN FTA is below 30% because of standards, regulatory measures and other non-tariff barriers in the region.
- The pact does not have an exit clause.
- NITI Ayog has said that liberalisation under the India-ASEAN FTA covers 75% of the two-way trade. India kept around 10% of tariff lines in exclusion.
- These included motor vehicles, textiles, petroleum products, sugar, wheat, vegetable oil, dairy products and other food products.
- However, Thailand, Philippines, Myanmar, Brunei and Vietnam kept a higher number of tariff lines under exclusion.



Bangladesh Lifts Ban on Hilsa Export to India

- Bangladesh has allowed **500 tonnes of Hilsa fish to be exported** to India as a goodwill gesture during the Durga Puja.
- Commerce Ministry of Bangladesh gave the go ahead permitting export of Hilsa from Bangladesh **as a one time arrangement**. The curb will again be imposed from October 11, three days after Vijaya Dashmi.
- Export of the popular Hilsa or 'Ilish' fish from Bangladesh was banned in 2012. The official reason stated behind the curb was low availability of the fish that makes up nearly 11% of the fish production in Bangladesh.
- Hilsa is an endemic species of Bangladesh. It is the **national fish of Bangladesh**.
- IUCN Status – **Threatened**

India – Japan Defence Ministerial Meeting

- India and Japan organised a **Defence Ministerial meeting** in Tokyo on September 2, 2019.
- It was co-chaired by **Indian Defence Minister** Rajnath Singh and **Japanese Defence Minister** Takeshi Iwaya.

Key Highlights:

- The **Indo-pacific vision** was discussed with an expression of **India's preference for a rules-based order** along with **centrality of ASEAN** and inclusiveness and security for all.
- The significance of the **Special Strategic and Global Partnership** between India and Japan in addressing the security, stability and regional peace was highlighted.
- India extended an invitation to Japanese companies to participate in the **biennial DefExpo 2020 to be held in Lucknow**.
- The two Ministers affirmed their intention to hold the **first Foreign and Defence Ministerial Dialogue (2+2)** ahead of the Japan-India Annual Summit this year.
- The two ministers shared the views to promote cooperation and exchanges in the following areas:
 - **Exchanges between the Japan Ground Self-Defense Force (JGSDF) and the Indian Army** - First bilateral exercise between the JGSDF and the Indian Army in the area of counter-terrorism "Dharma Guardian" was held in the autumn of 2018.
 - **Exchanges between the Japan Maritime Self-Defense Force (JMSDF) and the Indian Navy**.
 - Exchanges between the Japan Air Self-Defense Force (JASDF) and the Indian Air Force ('**SHINYUU MAITRI 18'** - the first bilateral exercise between the air components, was held in December 2018)
 - Education and Research Exchanges
 - Cooperation on Third Countries
 - Cooperation in Defence Equipment and Technology

Visit of Indian President to Iceland, Switzerland and Slovenia

- Indian President paid an official visit to Iceland, Switzerland and Slovenia from 9 - 17, September 2019.
- India shares very cordial bilateral ties with each of these three European countries.

VAJIRAM & RAVI

- The importance of these countries can be seen in their potential in the field of technology particularly niche areas.
- They are in *blue economy, sustainable development, innovation, R&D*, there is a lot of tourism potential also in these countries. They are very keen to attract tourist or they have deep interest in visiting India.

A. Iceland

- During the visit, the President met with the President of Iceland, Mr. Guðni Thорlacius Jóhannesson and Prime Minister of Iceland, Ms. Katrín Jakobsdóttir.
- During the visit, both countries signed **Agreements and MOUs on fisheries collaboration, cultural cooperation and visa waiver for holders of diplomatic and official passport.**
- All formalities for commencement of **India supported Hindi Chair at the University of Iceland** have been completed and the teaching of **Hindi language will begin shortly.**
- India invited **Iceland to join the International Solar Alliance** led by India to promote solar energy worldwide. So far 75 countries have already become members of it.
- Currently, the Iceland is occupying the **chair of the Arctic Council** and is also involved in the Arctic Circle Cooperation. **India is an observer in the Arctic Council.** Hence, this visit expected to strengthen India's position in the council.

B. Switzerland

- Indian President visited Switzerland from 11 to 15 September. This was actually a return visit of Indian President following the state visit of the then Swiss President Doris Leuthard in August – September 2017.
- Indian President **unveiled a bust of Mahatma Gandhi** in Villeneuve, a commune of Pigniu which had been visited by Mahatma Gandhi in 1931 at the invitation of Noble laureate Romain Rolland.
- Last year, India celebrated the **70th Anniversary of the India-Switzerland Treaty of Friendship** signed in 1948. This **was the first Treaty of Friendship** that India signed as an independent nation.

C. Slovenia

- Last leg of the visit was to Slovenia from 15 to 17 September. This was the **first ever presidential visit** from India to Slovenia.
- Both leaders have signed several MoUs and Programmes of Cooperation in the fields of Investment, Sports, Culture, River Rejuvenation (Clean Ganga Mission), Science & Technology and Standards. These include:
 - Programme of Scientific and Technological Cooperation between the Ministry of Science and Technology of India and the Ministry of Education, Science and Sport of Slovenia for the period 2020-2022
 - Programme of Cooperation in the fields of Culture, Arts, Education, Sports and Mass Media
 - MoU between Invest India and SPIRIT Slovenia
 - Cooperation Agreement between Chamber Of Commerce And Industry Of Slovenia (CCIS) and the Associated Chambers Of Commerce And Industry Of India (ASSOCHAM)
- The Slovenian Government has decided to release a postal stamp to commemorate the life of Mahatma Gandhi.

VAJIRAM & RAVI

Visit of Indian Prime Minister to Vladivostok, Russia

- Indian PM visited Vladivostok, Russia from 4 – 5 September 2019.
- There were two main purposes for this visit. He has been **invited to attend the Eastern Economic Forum** by President Putin as **one of the Chief Guests**.
- And secondly he will also hold the **20th Annual Summit between India and Russia**.

Key Highlights

- The Annual Summit took place in Vladivostok. The last one was in Delhi on October 5 2018. The Annual summits provide occasions to look at the entire gamut principally focusing on bilateral relations.
- In a very special gesture President Putin took Prime Minister by boat to the **new shipyard at Zvezda**.
- The principle focus of this annual summit was to strengthen the economic relationship.
- Both sides agreed on a **road-map of cooperation in hydrocarbon sector** in the next 5 years (for 2019-24) in which we will concretely work on investments both ways.
- Indian investment in Russian fields, in exploration and exploitation, in transportation of energy to India as well as Russian investments in India in the downstream sectors. Hence, this visit made sure that energy is going to be a major pillar of the relationship.
- List of MoUs/Agreements exchanged during visit of Prime Minister to Vladivostok:
 - Agreement on the cooperation in the production of spare parts for Russian/Soviet military equipment.
 - MoU on the **Development of Maritime Communications** between the **Port of Chennai, Republic of India and the Port of Vladivostok**, Russian Federation.
 - MoU on the use of Natural Gas for Transportation
 - Program between the Ministry of Petroleum and Natural Gas of the Republic of India and the Ministry of Energy of the Russian Federation **on expansion of cooperation in oil and gas sector**.
 - MoU between Coal India Limited and Far East Investment and Export Agency to **cooperate in coking coal mining projects** implementation in the Russian Far East.
 - MoU between the Joint Stock Company NOVATEK and PETRONET LNG Limited on cooperation with respect to the **joint development of downstream LNG Business and LNG supplies**.
 - MoU between Department of Science & Technology of the Republic of India and Ministry of Economic Development of the Russian Federation for cooperation in the field of Innovation.
- To bring the **bilateral trade to USD 30 billion by 2025**, both leaders agreed to enhance industrial cooperation, create new technological and investment partnership, especially in advanced high-tech areas and find new avenues and forms of cooperation.
- Both Sides welcomed the **increased cooperation between the State Space Corporation "Roscosmos" and the Indian Space Research Organization**, including the human spaceflight programs and satellite navigation.

Analysis Of This Visit

- The need to diversify the relationship between these two countries from purely one limited to defense and civil nuclear to economic issues was long felt.
- With the **signing of the Roadmap for cooperation in Hydrocarbons** for 2019-24 during the Summit, both countries have taken first step in this direction.

VAJIRAM & RAVI

- Second **emerging pillar is the Vladivostok eastern economic forum summit**, which provided India a platform to engage with resource rich region of Russian Far East.
- Here India is not looking just at the energy sector. Besides manpower export, it is looking at the agriculture, forestry and other resources as well.
- This summit ensured that **both countries are going to have joint strategy for enhancing trade**. They have set a target of 30 billion dollars by 2025 (currently it is 11 billion dollars).
- There were different MoUs signed during the summit. Four of them were in the **energy sector**. These cover natural gas, oil and gas and coking coal. This highlights India's urge to diversify its energy sources so as to achieve **energy security**.
- There is one very **important agreement in the defence sector**. This is the inter-governmental to produce spare parts for Russian origin military equipment.
- This is important because India has repeatedly called for changing the **nature of our relationship from a buyer-seller relationship to one of co-production**.

South Asian Speakers' Summit

- **4th South Asian Speakers' Summit** on 'Achieving the Sustainable Goals (SDGs) was held in **Male, Maldives**.
- Indian delegation was led by the Speaker of the Lok Sabha.
- **International Food Policy Research Institute (IFPRI)** also participated. It was present in order to achieve *SDGs 2 & 3 targets: Nutrition and food security as drivers of maternal, child and adolescent health in the Asia-Pacific region*.

About The Summit:

- Speakers of the Parliaments of Afghanistan, Bangladesh, Bhutan, India, Myanmar, Nepal, Pakistan, Sri Lanka, and the Maldives participate in this summit.
- This forum allows Speakers of these Parliaments to continue to develop dialogue and parliamentary cooperation on achieving the SDGs.
- The **first Summit was held in 2016** in Dhaka (Bangladesh) with India as a major proponent.
- The **second and third editions** of the Summit were respectively held in Indore (Madhya Pradesh) and Colombo (Sri Lanka) in 2017 and 2018.

India Contributes to Global Fund for AIDS, TB, Malaria

- India has pledged a **contribution of \$22 million** to the Global Fund for AIDS, TB and malaria (GFTAM) for the 6th replenishment cycle (2020-22).
- India shares a sustained partnership with the Global Fund since 2002, **both as recipient and as a donor**.
- India was the **first implementing country** to host a replenishment milestone of the Global Fund.
- It has now become the **first among G20, BRICS and implementer countries** to announce the pledge for the sixth replenishment conference.

WHO Regional Committee of South-East Asia Meet

- 72nd session of World Health Organization (WHO) Regional Committee for South-East Asia (SEA) was held in New Delhi.
- Indian Health Minister, Harsh Vardhan was **unanimously elected as chair** of 72nd session.
- The session was organized to deliberate on public health issues and work towards elimination of diseases.
- The committee is the **highest decision making and governing body** of WHO in the region.

Achievement of SEA Region of WHO

- Polio eradicated in 2014.
- In 2016, it became the second WHO region to eliminate maternal and neonatal tetanus.
- The Maldives and Sri Lanka have eliminated malaria.
- Thailand and the Maldives have eliminated mother-to-child transmission of HIV and syphilis.

IAEA General Conference

- The 63rd Annual Regular Session of the IAEA General Conference (GC) was held from 16 to 20 September 2019 at the Vienna, Austria.'
- Indian delegation was headed by **Dr. K N Vyas**, Chairman of Atomic Energy Commission (AEC) and Secretary of Department of Atomic Energy.

About IAEA:

- It is widely known as the world's "**Atoms for Peace and Development**" organization **within the United Nations family**.
- It is an independent international organization that **reports annually to the UN General Assembly**. It also **reports to the UN Security Council** whenever necessary.
- It works with its Member States and multiple partners worldwide to promote the safe, secure and peaceful use of nuclear technologies.
- Created in 1957; Headquarter – Vienna, Austria

NCG Vishwam Cancer Care**Connect**

- Launched by India, on the sidelines of 63rd GC of IAEA
- It envisages integration of hospitals and relevant cancer care institutes in partner countries with the **National Cancer Grid** (NCG) of India.
- NCG – Established in 2012, Managed by Tata Memorial Centre (TMC)
- NCG was established with a vision of creating uniform standards of cancer care across India.
- At present, NCG has grown to a large network of 183 cancer centres, and hospitals.

RCEP Ministerial Meeting

- The 7th Regional Comprehensive Economic Partnership (RCEP) ministerial meeting was held in Bangkok, Thailand from 8-10 September 2019.
- Indian side was represented by the Union Minister of Commerce & Industry and Railways, Piyush Goyal.
- The meeting emphasized that the ongoing global uncertainties have added to urgency to conclude mega FTA between these nations.
- The RCEP is a **proposed free trade agreement** between **10 ASEAN members** (Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, Vietnam), and **its six partners** (China, Japan, India, South Korea, Australia and New Zealand).

World Energy Congress

- The 24th World Energy Congress was organized in Abu Dhabi, UAE from 9-12 September 2019.
- Theme - '**Energy for Prosperity'**
- **Russia will be hosting the 25th World Energy Congress in 2022.**
- The World Energy Congress (WEC) is the world's largest and most influential energy event with over 150 countries represented, covering all aspects of the energy agenda.
- Running since 1924, it is a **triennial event** which enables dialogue between different stakeholders on critical developments in the energy sector.

Indian Ocean Conference

- 4th Indian Ocean Conference 2019 was **held in Male**, the capital of Maldives.
- Theme - '**Securing the Indian Ocean Region: Traditional and Non-Traditional Challenges'**
- Sri Lankan Prime Minister Ranil Wickremesinghe was the Chairman of the conference.

About the Conference:

- **Organised by** - India Foundation (New Delhi), in association with Government of Maldives and S Rajaratnam School of International Studies (RSIS) in Singapore.
- It is an annual event which brings together Heads of States/Governments, Ministers, and other stakeholders from across the region to develop an effective regional institutional mechanism for implementation of prevailing norms and rules.
- The **first edition** of the conference was hosted in **Singapore in 2016** followed by two successive editions in Sri Lanka and Vietnam.

Key Issues in IOR:

- Climate Change, Rising Sea Level
- Proper implementation of prevailing norms and rules under UNCLOS
- Fast depletion of marine livestock
- Combating illicit trafficking of humans and narcotics

Chinese Navy Launches its First Amphibious Assault Ship

- Chinese navy launched its first amphibious assault ship. This would enable ground forces to carry out attacks on enemy territory from sea. This ship is the first in **China's Type 075** class of amphibious assault ships
- Amphibious assault ships -- sometimes called **helicopter landing docks** -- can be described as **small aircraft carriers designed for island or coastal assaults**.
- The US and Japanese navies also operate amphibious assault ships in the Pacific.

Since 2013, China has stepped up the development of its navy. PLA Navy acquired one aircraft carrier, the Liaoning, in 2012. It plans to acquire six aircraft carrier in coming years.

Google Wins Landmark Right to be Forgotten Case**Context**

- The EU's top court has ruled that **Google does not have to apply the right to be forgotten globally**.

VAJIRAM & RAVI

- It means the firm only needs to **remove links from its search results in Europe** - and not elsewhere - after receiving an appropriate request.

Background

- The case originated in a dispute between Google and the French privacy regulator CNIL.
- In 2015, **CNIL ordered the firm to globally remove search result** listings to pages containing damaging or false information about a person.
- In 2016, Google introduced a geo-blocking feature, which stopped European users from being able to see delisted links.
- However, it resisted censoring search results for people in other parts of the world. It also challenged a €100,000 (£88,376) fine CNIL tried to impose.

Arguments Put Forward By Google In Its Defense

- It argued that, if this rule were applied outside Europe, the obligation **could be abused by authoritarian governments** trying to cover up human rights abuses.
- The company said there should be a **balance between sensitive personal data and the public interest** and that no one country should be able to impose its rules on citizens of another.
- According to Google, 845,501 "right to be forgotten" requests have been received in the past five years, leading to the removal of 45% of the 3.3m links referred to in the requests.
- Although the content itself remains online, it cannot be found through online searches of the individual's name.

What Is The Right To Be Forgotten

- It is the rule that gives EU citizens the power to demand data about them be deleted.
- It was **enshrined by the same European court in 2014** when it ruled that people could ask search engines like Google to remove inadequate or irrelevant information from web results appearing under searches for their names.

Impeaching U.S. President

Context

The U.S. House of Representatives have launched an official impeachment investigation of President Donald Trump.

Background

- It has been alleged that the US President Trump tried to create pressure on Ukrainian President to investigate Joe Biden, Trump's potential rival in the 2020 elections.
- This allegation is centred on a whistle-blower complaint that reportedly includes information on the phone call
- As a result, **House Speaker Nancy Pelosi** launched the formal impeachment inquiry.
- According to many analysts, pressuring a foreign leader to interfere in a U.S. election is the sort of conduct that can be considered as an impeachable offense.

History of Impeachment in US:

- So far, no US President has been removed from its post as a result of impeachment.

VAJIRAM & RAVI

- In the past, impeachment process was initiated against three US Presidents - Andrew Johnson, Richard Nixon and Bill Clinton.
- The House of Representatives did impeach two Presidents — Andrew Johnson (1968) and Bill Clinton (1998) — but the Senate did not convict them. As a result, they could not be removed.
- President Richard Nixon (1974) resigned before he could be removed.

Process of Impeachment

- The process of impeachment has to be started by the House of Representatives (Lower House) and **only needs a simple majority (out of total 435 votes) to pass.**
- If the House approves articles of impeachment, or "impeaches" a president, he or she would then **be subject to trial in the US Senate.**
- The trial will be held in the Senate (Upper House) as it has "the sole power to try all impeachments". Here, a **two-thirds vote (out of total 100 votes) is necessary for removal.**
- The **Chief Justice of the US Supreme Court** has the duty of presiding over impeachment trials in the Senate.
- Under the US Constitution, the **president can be removed** from office for "**treason, bribery, or other high crimes and misdemeanors.**" However, these terms have not been defined.
- **Criminal charges cannot be brought** against a sitting president, however, the Constitution **does allow for separate criminal charges once a president is removed.**



Is There Another Way to Remove a President?

- Under the Constitution's 25th Amendment, a president can be replaced by their vice president if the chief executive becomes unable to do the job, such as due to a disabling medical or mental condition.
- That process begins with the vice president and a majority of the members of the Cabinet notifying Congress that the president is not capable of performing the job.

First Conference of Military Medicine for SCO Member State

- The first conference of Military Medicine for Shanghai Co-operation Organisation (SCO) Member States was held in New Delhi on 12 – 13 September, 2019.
- It was also the first Military co-operation event hosted by India under the SCO Defence Co-operation Plan 2019-2020.
- Its aim was to share best practices in the field of military medicine, build capacities and overcome common challenges.

- The Union home ministry has launched a **single-window system for issuing licences** to private security agencies.
- It will help streamline the licensing regime. MHA is responsible for regulating the industry under **The Private Security Agencies (Regulation) Act, 2005**.
- The web portal will be available in all official languages of India.

Importance

- It will be easier for agencies registered in one state to expand their operations in other states by applying through the single-window system.
- Majority of police stations across the country are connected online. Hence, the online police verification of security guards would become very easy by accessing the criminal records online from across the country. This in turn will increase the trustworthiness.

Public Safety Act of Jammu & Kashmir**Context**

- Former Jammu-Kashmir Chief Minister Farooq Abdullah has been booked under the Public Safety Act (PSA).
- Farooq Abdullah, who had been kept under house arrest since the abrogation of Article 370 of the Constitution. He has been charged with disturbing public order and has been detained for at least three months.

About Public Safety Act of Jammu & Kashmir

- It was enacted in **1978 by the then CM Sheikh Abdullah**. It is a **defensive detention law** that allows taking a person into custody to prevent him or her from acting in any matter that is prejudicial to "the security of the state or the maintenance of the public order".
- The preventive detention, however, is meant to be protective, not punitive.
- A person can be booked under this act after an administrative order is passed either by Divisional Commissioner (DC) or the District Magistrate (DM).

INS Khanderi Submarine Commissioned

- INS Khanderi, the **second of the six Scorpene Class submarines**, was commissioned into the Indian Navy on September 28.
- The **first submarine named INS Kalvari** was commissioned into the Indian Navy last September.
- The **third submarine named INS Karanj** is currently undergoing sea trials. Remaining three submarines of this class are - **'Vela'**, **'Vagir'** and **'Vagsheer'**.
- Mazagon Dock is building the submarines **as part of Project-75 of the Indian Navy** under a transfer of technology agreement with the Naval Group of France.

Indian Coast Guard Ship 'Varaha' Commissioned

- The Coast Guard offshore patrol vessel 'Varaha' was commissioned at the Chennai Port Trust. It has been **indigenously designed and built by Larsen & Toubro (L&T)**.

VAJIRAM & RAVI

- It has capabilities to operate twin-engine Advance Light Helicopters developed by HAL.
- The vessel also has the capability of carrying limited pollution response equipment to contain oil spill at sea.
- The vessel will be based at New Mangalore and will be under the administrative and operational control of the Coast Guard Commander (West) Region.

Indian Army Team Summit MT Leo Pargyil

- An Indian Army team successfully summited Mount Leo Pargyil (6773M).
- Leo Pargyil is the third highest peak of Himachal and is considered to be among the most challenging and technically difficult peak to scale. It lies in the Zanskar range.

Seoul Defense Dialogue

- 8th Seoul Defense Dialogue was held recently. It is an annual international security forum hosted by the Ministry of National Defense, South Korea.
- This year's theme was "**Building Peace Together: Challenges and Visions**".
- Indian Defence Minister Rajnath Singh delivered a keynote address at the dialogue.
- Seoul Defense Dialogue was launched in 2012. It was launched as a vice ministerial level multilateral security consultation regime to promote talks on Asia-Pacific cooperation and peace on Korean Peninsula.

National Intelligence Grid to be Ready by Early 2020

The NATGRID is likely to be operational by January 2020. This was announced by the MHA after the Union Home Minister recently reviewed the progress of NATGRID project.

About NATGRID

- It is an ambitious counter terrorism programme, which will utilise technologies like Big Data and analytics to study and analyse the huge amounts of data from various agencies to help track suspected terrorists and prevent terrorist attacks.
- The NATGRID was set up as an attached office of the Ministry of Home Affairs in 2009, in the wake of the 26/11 attack.
- Once fully functional, NatGrid is supposed to enable all the eleven security and intelligence agencies, including RAW, IB, Enforcement Directorate, National Investigation Agency (NIA), CBI, Directorate of Revenue Intelligence (DRI), Financial Intelligence Unit (FIU) and others, to process their queries and get results, in real time, on virtually any individual or entity.
- It will help in zeroing in on a suspect by converging and processing all kinds of personal details including medical and financial information, iris, fingerprints and transactions of an individual like railway and air travel, income tax, phone calls, bank account details, credit card transactions, visa and immigration records, property records, Aadhaar and NPR cards, and driving licences.
- The data recovery centre of the NATGRID has been constructed in Bengaluru and its headquarters is nearing completion in Delhi. It is now headed by IAS officer Ashish Gupta.

NATGRID wants to link social media accounts to central database

- NATGRID Project wants to **link social media accounts to the huge database** of records related to immigration entry and exit, banking and telephone details among others.
- However, many analysts fear that linking the social media accounts to sensitive government data could expose the system to “trojan attacks.”

Corps Of Army Air Defence Honoured with President's Colours Award

- President Kovind presented the prestigious President's Colours to the Corps of Army Air Defence at a function in Gopalpur, Odisha.
- The award was given to the Corps on the occasion of 25 years of Army Air Defence College. This College is situated in Gopalpur, Odisha.
- One of the youngest corps of Army, the Army Air Defence Corps was bifurcated from the Regiment of Artillery in 1989.
- It is an active Corps of Indian army which are responsible for the protection of Indian air space below 5,000 feet.

Shondol Dance

- Shondol dance, which is known as the royal dance of Ladakh, has created history by entering into the Guinness Book of World Records as the largest Ladakhi dance.
- As many as 408 women attired in traditional dresses and head gears performed the dance. It was held on the concluding day of the ongoing Buddhist carnival Naropa festival near the Hemis Monastery.
- Shondol is a famous dance, which artistes used to perform for the king of Ladakh.

Asiatic Society of Mumbai

- The Asiatic Society of Mumbai, which was started by and for white European men in the early 19th century, recently elected the first woman president in the 215 years of its existence.
- It is a learned society whose activities include conducting historical research, awarding historians, and running an institute of post-graduate studies.
- Its library, home to over 1 lakh books, consists of rare manuscripts contributed to it by the East India Company, as well as generous donations.
- The Society offers Junior Fellowships for research and recommends scholars for the Tagore National Fellowship of the Ministry of Culture. The Governor of Maharashtra is the Society's Chief Patron.
- The Asiatic Society began its journey in 1804 as the Literary Society of Bombay. It was founded by Sir James Mackintosh, to gather, systematise and disseminate knowledge of India and the Orient.
- In 1826, the Literary Society became the Mumbai arm of the London-based Royal Asiatic Society of Great Britain and Ireland and came to be called the Bombay Branch of the Royal Asiatic Society (BBRAS).
- In its early days, membership of the Society was restricted to European gentlemen, and the natives were not allowed to join until 1841.

VAJIRAM & RAVI

- In 1954, the institution was severed from its London parent and became the Asiatic Society of Bombay and in 2002, it acquired its present name.

Gandan Monastery

- Prime Minister Narendra Modi recently unveiled a statue of Lord Buddha, installed at the historic Gandan Tegchenling Monastery in Ulaanbaatar.
- The Statue depicts Lord Buddha in a sitting posture along with his two disciples conveying the message of compassion along with peace and co-existence.
- The statue was installed and consecrated at the Gandan Monastery earlier this month during the third edition of SAMVAAD dialogue held in Ulaanbaatar.
- The SAMVAAD dialogue brought together Buddhist religious leaders, experts and scholars from different countries to deliberate on contemporary issues related to Buddhism.
- Gandan Tegchenling Monastery is a prominent centre of Mongolian Buddhists and a treasure house of valuable Buddhist heritage.

Paika Rebellion

- President Ram Nath Kovind recently laid the foundation of a memorial dedicated to the 1817 Paika Rebellion.
- Paikas had been recruited since the 16th century by kings in Odisha from a variety of social groups to render martial services in return for rent-free land (nish-kar jagirs) and titles.
- After entering Odisha in 1803, the British introduced new revenue settlements, due to which many Odia proprietors ended up losing their lands to absentee Bengali landlords.
- Changes in the currency and revenue systems meant the Odias had to pay taxes in silver, which was more expensive for them, and resulted in their further marginalisation and oppression
- In 1817, some 400 Kondhs, who belonged to the state of Ghumsur, banded together to revolt against the British. Bakshi Jagabandhu Bidyadhar Mohapatra Bharambar Rai, the highest-ranking military general of King of Khorda Mukund Dev II, led the Paikas to join the uprising.
- During the course of the rebellion, government buildings in Banapur were set on fire, policemen and British officials were killed, and the treasury was looted.
- The uprising lasted for a few months but was eventually crushed by the better-equipped and trained forces of the East India Company. Bakshi escaped to the jungles, and ultimately surrendered in 1825 under negotiated terms.
- The Paika Rebellion is one among the peasant rebellions that took place in India when the British East India Company was expanding its military enterprise.
- Because these uprisings violently clashed with European colonialists and missionaries on many occasions, their resistance is sometimes seen as the first expression of resistance against colonial rule — and therefore considered to be “nationalist” in nature.

Firoz Shah Tughlag

- The Delhi and District Cricket Association (DDCA) has decided to rename Feroz Shah Kotla Stadium as Arun Jaitley Stadium in memory of its former president.

VAJIRAM & RAVI

- Born in 1309, Firoz Shah Tughlaq was the third ruler of Tughlaq dynasty that ruled over Delhi from 1320 to 1412 AD. Firoz Shah Tughlaq was in power from 1351 to 1388 AD. The dynasty started from the rule of Ghiyasuddin Tughlaq (ruled from 1320 to 1324 AD) and ended at Nasiruddin Mahmud (ruled from 1395 to 1412 AD).
- Firoz Shah was different from his predecessor when it came to ruling. Leave alone conquering new areas, he did not even try to claim the areas which were split away and many regions took autonomy while he was in power.
- Firoz Shah also gave imperative concessions to the Islamic scholars. To keep them on his side, he boycotted the practices in the kingdom, the scholars deemed un-Islamic. He was the one who started the imposition of Jaziya.
- He provided the principle of inheritance to the armed forces where the officers were permitted to rest and send their children in army in their place. However, they were not paid in real money but by land.

Achievements

- Firoz Shah Tughlaq worked majorly for development of infrastructure in his kingdom. He built schools, hospitals, river canals, reservoirs, rest houses among other things. He also repaired the Qutub Minar which had been damaged by an earthquake.
- He established the Diwan-i-Khairat -- office for charity, established the Diwan-i-Bundagan -- department of slave and adopted the Iqtadari framework.
- He is known to establish four new towns, Firozabad, Fatehabad, Jaunpur and Hissar.
- He also constructed canals from Yamuna to the city of Hissar, Sutlej to the Ghaggar, Ghaggar to Firozabad, Mandvi and Sirmour Hills to Hansi in Haryana.

Taxes imposed under Firoz Shah

- Kharaj: land tax which was equal to one-tenth of the produce of the land
- Zakat: two and a half per cent tax on property realized from the Muslims
- Kham: one-fifth of the booty captured (four-fifth was left for the soldiers)
- Jaziya: levied on the non-Muslim subjects, particularly the Hindus. Women and children were, however, exempted from the taxes

Sangam Era Older Than Previously Thought

- Sangam age is generally considered between 300 BC and 300AD. But scientific examinations suggest that the Sangam age materials unearthed from the Keeladi excavation site in Sivaganga district of Tamil Nadu could be dated between 600 BC and 100 AD.
- The Tamil Nadu state archaeology department that conducted the excavations released the findings, after analysing the AMS (accelerator mass spectrometry) dates obtained from Keeladi materials.
- The results suggest that the urbanisation of Vaigai plains happened in Tamil Nadu around 6th century BCE as happened in the Gangetic plains. Likewise, the recent scientific dates obtained for Keeladi findings push back the date of Tamil-Brahmi to 6th century BC.
- A large number of inscribed potsherds next to a graffiti were found to be in Tamil Brahmi. These letters were inscribed when the pot was wet or after the pot became dry. This clearly suggests literacy levels in the 6th century BC.
- Trace of agrarian society and cattle rearing were also noticed. Species such as cow, ox, buffalo, sheep, goat, nilgai, blackbuck, wild boar and peacock were identified from the skeletal remains.

VAJIRAM & RAVI

- A 13-metre long wall and well-laid floors along with roof tiles in a collapsed state were found at the site. The iron nails were fastened to the poles and rafters proving that the wooden poles must have been placed over the roof. The roof tiles contained finger groove impressions to drain water. Such activities go on to prove a high standard of living during the Sangam age

Special Report on the Ocean and Cryosphere in a Changing Climate

- With representatives from nearly 200 countries at the United Nations Climate Summit underway in the United States, the **Intergovernmental Panel on Climate Change (IPCC)** — the apex referee for scientific evidence on the impact of global warming — made public a special report that underlined the dire changes taking place in oceans, glaciers and ice-deposits on land and sea. The report takes a look at the impact of climate change on oceans and snow-covered land areas.
- The '**Special Report on the Ocean and Cryosphere in a Changing Climate**' was prepared following an IPCC Panel decision in 2016 to prepare three Special Reports and follows the Special Reports on Global Warming of 1.5°C (SR1.5), and on Climate Change and Land (SRCCL). The 1.5°C report was a key input used in negotiations at Katowice, Poland in 2018 for countries to commit themselves to capping global temperature rise to 1.5°C by the end of the century.

Report's Highlights

- "Over the 21st century, the ocean is projected to transition to unprecedented conditions with increased temperatures, further ocean acidification, marine heatwaves and more frequent extreme El Niño and La Niña events," according to a summary of the report made available to policymakers.
- The report updates scientific literature available since 2015 — when the IPCC released its comprehensive 5th Assessment Report — and summarises the disastrous impacts of warming based on current projections of global greenhouse gas emissions.
- Since 1993, the rate of ocean warming has more than doubled. Marine heatwaves have very likely doubled in frequency since 1982 and are increasing in intensity.
- The Southern Ocean accounted for 35%–43% of the total heat gain in the upper 2,000 m global ocean between 1970 and 2017, and its share increased to 45%–62% between 2005 and 2017.
- The report says global mean sea-level had increased by 16 cm between 1902 and 2015, and that the rate of increase had doubled of late. Between 2006 and 2015, global mean sea level recorded an average rise of 3.6 mm per year, which was more than double of 1.4 mm per year recorded in the first 90-year-period of the 20th century.
- The melting of glaciers had contributed significantly to the rise in sea-levels. Between 2006 and 2015, the Greenland ice sheet lost ice-mass at an average rate of 278 billion tonnes every year, which was enough to result in a global sea-level rise of 0.8 mm per year. During the same period, the Antarctic ice sheet lost a mass of 155 billion tonnes on an average every year. Snow over outside of these two regions, like the glaciers in the Himalayas, together lost an average of 220 billion tonnes of ice every year.
- Since the mid-20th century, the shrinking cryosphere in the Arctic and high-mountain areas has led to predominantly negative impacts on food security, water resources, water quality, livelihoods, health and well-being, infrastructure, transportation, tourism and recreation, as well as culture of human societies, particularly for Indigenous peoples.

A farmer from Punjab was not able to avail the third instalment of money under the nationwide cash transfer scheme, the Pradhan Mantri Krishi Samaan Yojana (PM-KISAN). His installment was rejected due to, of all things, his mother tongue. His Aadhaar authentication failed as records in the bank concerned were in English, but Aadhaar details were in Gurmukhi. Aadhaar seeding—linking it with the bank and the scheme—is a mandatory requirement under PM-KISAN for getting the third installment of Rs 2,000.

But, he isn't alone. Latest data shows that by September 20, around 36.1 million transactions for the third instalment got rejected due to difficulties in authentication. The third instalment pertains to August - November 2019. In some places, we received complaints that the beneficiary name is spelt differently on the Aadhaar and in the bank account. This is hindering the seeding process, and cash is not getting transferred.

So far (till September 28), only 24 per cent of the 73 million registered beneficiaries have received their third instalment. But difficulty in Aadhaar seeding is but one of the several reasons for the slow progress of cash transfers under PM-KISAN. Even for the second instalment (April-July), where Aadhaar seeding was not mandatory, only 57 per cent beneficiaries have received cash.

In comparison, about 80 % of farmer/labourer beneficiaries under **Odisha's Kalia scheme**, and **Telangana's Rythu Bandhu**, have got their legitimate cash instalments by now, their official data show. While PM-KISAN promises Rs 6,000 per year in three instalments to each "farmer family", Rythu Bandhu promises Rs 5,000 per acre per season to each "farm land holder". Odisha, under Kalia, promises Rs 12,500 per year in a single tranche to every "small and marginal farmer" in the state.

But why exactly is the central scheme lagging behind similar programmes offered by states?

1. States use data more effectively

Odisha (Kalia) uses the decadal population Census of 2011, and applies some approximations to arrive at the beneficiary universe. The state agriculture department further uses existing data from the paddy procurement database, subsidy repository and food security lists to reconfirm the beneficiaries. In addition, the state department visited all panchayats (villages) and verified data of all farmers and landless labourers in Odisha.

Telangana did it differently. It took two years to modernise its land records, invested more public funds in the process. The 2014-born state generated first-hand data on all landholders in the state, envisioning a state-wide farmer scheme back then. Today, more than 92 per cent of farmers already have digitised Aadhaar-seeded pattadar passbooks (land records).

The Centre, on the other hand, used the data from agriculture census, which is carried out every five years. The biggest discrepancy in the agri-census is that it is developed from a survey of a sample. Secondly, it captures those cultivators too, who do not have land records, who are share-croppers with or without contract and those just tilling the land.

Though the agriculture census gives the clearest idea of the number of cultivators in the country, experts feel it is not the perfect kind of data to assess beneficiaries at the unit level, due to a dearth of records.

2. Fund flow crashes despite fall in rejection rate

Application of the eligible beneficiary needs to go through certain steps such as validation, making corrections and authentication in the public funds management system (PFMS), which is the payment gateway for all central funds.

VAJIRAM & RAVI

PM-KISAN was riddled with the problem of high rejection rates in the first instalment pertaining to the December 2018-March 2019 period. The rejection rate was 75 per cent lower in the second instalment than in the first. Despite this, the cash flow to beneficiaries is lower in the second than the first.

3. “You are the beneficiary” vs “Please apply”

The Centre and states differ in the manner in which they communicate with prospective beneficiaries. States have aggressively made efforts to market their scheme, reach farmers' doorsteps and get them enrolled in the respective scheme. If any discrepancy arose, the state department ensured that it was solved, so that no eligible farmers were left out.

The central scheme PM-KISAN, on the other hand, requires the beneficiary to get his bank account and identification details seeded to the scheme. Unnecessary paperwork drove some farmers away while absentee landlords would anyway not turn up.

4. Better the lead time, faster the implementation

Finally, both the states, Telangana and Odisha, spent considerable time in finalising land records, linking bank accounts and Aadhaar. The lead time of two years gave Telangana the necessary window to do all the groundwork, which has been the key reason for faster implementation.

The Centre, on the other hand, announced the scheme in the interim Budget in February 2019, without much concrete information on the number of beneficiaries it intends to cater to.

Police Adequacy Index

Police Adequacy Index, derived from national data, was part of the '*Status of Policing in India Report 2019*', released on August 27, 2019 by Common Cause and Lokniti—Centre for the Study Developing Societies, a nonprofit and a think tank, respectively, based in New Delhi.

Index Parameters

To derive indices, researchers used data from the Bureau of Police Research and Development and the National Crime Records Bureau for the following parameters:

1. Strength:
 - a. Police strength as a percentage of sanctioned strength (2012-16 average)
2. Infrastructure
 - a. Police stations having vehicles (2012-16 average)
 - b. Police stations having telephones and wireless (2012-2016 average)
 - c. Computers per police station (2012-2016 average)
3. Budget
 - a. Police expenditure as a percentage of budget (2014-16 average)

Highlights Of Index

- The Delhi police are India's best in terms of staffing, infrastructure and use of budget, followed by Kerala and Maharashtra, a new study has revealed. Uttar Pradesh, Chhattisgarh and Bihar are the worst and most overworked among the 22 states analysed.
- Nagaland had the best score on police strength (0.80), followed by Kerala (0.71) and Delhi (0.70). Delhi had the best infrastructure (1.03), followed by Haryana (0.94) and Kerala (0.89). Tamil Nadu

VAJIRAM & RAVI

scored the highest on budget utilisation (0.09), followed by Maharashtra, Odisha, Rajasthan and Haryana (0.08).

- **Strength:**

- Overall, as of 2016, Indian police forces were working at 77.4 per cent of their sanctioned capacity, leading to personnel being overworked.
- Police personnel work for 14 hours a day on an average, with about 80 per cent personnel working for more than 8 hours a day.
- Nearly half the personnel work overtime regularly, while 80 per cent do not get paid for overtime work.

- **Infrastructure**

- 267 police stations across India had no telephones and 129 had no wireless communication devices as of January 2017.
- There were eight vehicles for every 100 police personnel for responding to distress calls, patrolling and maintaining law and order in their jurisdictions.
- Across the 22 states analysed in the study, police stations had, on average, six computers each. Delhi had the highest (16.5 computers per police station) and Bihar had the lowest (0.6).

- **Budget**

The utilisation of police forces' modernisation budget was less than half (48 per cent) of the funding available.

- **Other Findings**

- The study also pointed out the **lack of diversity** in the India police. About 86 per cent states (19 of 22) did not fulfil their Scheduled Castes (SC) quota, 73 per cent (16 of 22) did not fulfill their Scheduled Tribes (ST) quotas while 59 per cent (13 of 22) failed to fulfil their Other Backward Classes (OBC) quotas.
- None of the states achieved the mandated 33 per cent **representation of women** in the police force. Further, while 14.3 per cent of all police personnel were officers in 2016--up from 11.6 per cent in 2007, the proportion of officers among policewomen has declined from 11.4 per cent in 2007 to 10.2 per cent in 2016.
- While 41 per cent personnel think **women lack the “physical strength and aggressive behaviour”** required for the job, 32 per cent think “women police are incapable of handling high intensity crimes and cases”, and 51 per cent think that, due to “inflexible working hours, it is not alright for women to work in the police force as they cannot attend to homely duties”.
- About 28 per cent police personnel believe that **“pressure from politicians” is the “biggest hindrance” in crime investigations**. Three out of five police personnel surveyed reported transfer as the most common consequence of not complying with external pressures.

Swachh Bharat

- More than 100 million toilets were constructed in rural areas; the national rural sanitation coverage which was 38.7 per cent in October 2014 reached 100 per cent in September 2019. Nearly 600,000 villages became ODF in the process
- The government credits the mission's success to administratively placing the scheme under the mandate of two ministries of the government of India, working closely with the states with teams

VAJIRAM & RAVI

deployed at the various levels of governance, public participation, breaking the ultimate target into smaller targets with shorter timeframes in each state. The SBM was administratively placed under the mandate of two ministries — the rural component is handled by the Department of Drinking Water and Sanitation (DDWS), Ministry of Jal Shakti (erstwhile, Ministry of Drinking Water and Sanitation), and the urban component is handled by the Ministry of Housing and Urban Affairs.

- The sheer scale of accomplishment under the scheme has key lessons in leadership, project management and planning. Leadership was particularly critical in SBM's case — in making not just the officials but also the people on the ground work towards a target. The Mission, in 2016, also brought in over 500 young and bright professionals from various disciplines to work with the district administrations through the Zila Swachh Bharat Prerak Programme with the support of the Tata Trusts.
- The Prime Minister had already set the larger goal of achieving universal sanitation coverage in five years, by October 2, 2019, the 150th birth anniversary of Mahatma Gandhi. Given that each state was at a different stage of sanitation progress, the target had to be broken down into smaller targets with shorter time frames in each state. Working with the states, the strategy was to first target the low-hanging fruits -- the districts with the highest sanitation coverage to become ODF on priority. "This created a demonstration effect for others to learn from, and created belief in the system, as nothing succeeds like success. Over time, the goals extended to the districts with lower coverage and one by one, each state and Union Territory of India declared itself open defecation free

Key To Success

DDWS ascribes the success of SBM to **4Ps**

1. **Political leadership:** The biggest game-changer was that the prime minister lent his personal political capital to the Mission. Inspired by his leadership, various chief ministers (CMs) and district magistrates (DMs) emerged as sanitation champions — setting up the PM-CM-DM model
2. **Public funding:** Over \$20 billion were committed to the SBM-
3. **Partnerships:** The SBM-Grameen partnered with implementors and influencers alike — state governments, national and international development agencies, media houses, civil society, celebrities and all ministries of the Government of India
4. **Peoples participation:** The mission trained over 600,000 swachhagrahis who triggered behaviour change in every village of India. Common people took the lead and inspired others to build and use toilets. Stories of sanitation champions emerged from every nook and corner of the country

CSR Report Card

- India is the first country in world to make CSR mandatory, following an amendment to Companies Act 2013. Expenses towards CSR not eligible for deduction in the computation of taxable income
- According to report card of High Level Committee on CSR 2018 that review the CSR performance of companies, the total CSR spend of companies from 2014-15 to 2017-18 was more than 52,208 crores. Of this, over 58% was spread across 5 industrialised states – Maharashtra, Karnataka, Andhra, Gujarat, and Tamil Nadu. Education sector saw the maximum CSR contribution followed by healthcare.

Amendments In CSR Legislation

- To increase seamless industry action during disasters, the government recently made an amendment in the CSR legislation to **include disaster management** including relief, rehabilitation and reconstruction activities under CSR activities.

VAJIRAM & RAVI

- One of the key amendments suggested by industry was allowing adequate flexibility to roll over the unspent CSR amount to subsequent years for implementation of multi-year projects as well as projects that have been delayed due to unexpected reasons. The government recognised suggestion and amended the legislation to allow companies to **carry forward the unspent CSR amount** by transferring it to a special account which can be spent within 3 subsequent financial years.
- Government decision to allow corporate India to use their CSR spending on publicly funded incubators and contribute to research efforts is strongly welcomed. Companies can now **spend CSR funds in research on science, technology, medicine and engineering** at major institutions and bodies.

In the last few years of the legislation, many large companies have streamlined organisational structure with CSR process design. Companies are now moving beyond compliance to focus on creating a long term and sustainable impact for the beneficiaries. But yet companies need to leverage CSR to re-imagine interventions and explore innovative CSR models. Given that most of the CSR funds have been directed to the industrialised states, company should now look at expanding their social development outreach and shift focus to aspirational districts which have soon relatively less progress in key shosal areas.

Farmer Field School For Effective Agricultural Extension

- Like other farmers in Karate, a village in the Baramati taluka of Pune, Vijay Salunkhe was mildly surprised when the agricultural assistant of his area talked about a “Farmer Field School” and asked him to attend it.
- Salunkhe, who grows mainly maize, and partly onion and bajra, in his 2.5 acres, is thankful that he agreed because these lessons in the “school” helped him to take preventive measures against the dreaded **Fall Army Worm (FAW)** for his maize crop.
- Held right at the farms, this school has officers and staff of the agriculture department get farmers together on a fixed day to discuss issues related to their crops and fields.
- During the school which is held every Sunday, the agricultural assistant talked about the crops, sowing, seeds treatment, new pest control technique, harvest practices, post-harvest treatment etc.

These schools were developed by the Food and Agriculture Organization as an alternative to the top-down way of providing extension under the Green revolution. This has been in practice for a few decades in Southeast Asia. It involves giving focused guidance to small groups of farmers in their fields by way of learning-by-doing exercises.

Changes in Open Defecation in Rural North India: 2014-2018

- A study on changes in open defecation in 4 north Indian states: Bihar, Madhya Pradesh, Rajasthan, and Uttar Pradesh.
- In these four states, four-fifths of all rural households did not own a toilet in 2011
- The SBM accelerated the pace of toilet construction in these states. In our study, we found that open defecation declined from approximately 70% of rural people in 2014 to approximately 45% in 2018. This represents an annual rate of decline of about 6 percentage points per year, which is a rapid acceleration in the rate of decline compared to the 2 percentage points per year documented by the 2005 and 2015 National Family Health Surveys (NFHS)
- However, this increase came largely from increases in toilet construction, and not from increases in toilet use among households that own toilets. In both the 2014 and 2018 surveys, we found that

VAJIRAM & RAVI

among households that owned a toilet, **23% of the household members still defecated in the open.**

- Even more worryingly, we found that coercion and threats have been a central feature in the implementation of the SBM. More than 12% of households in our survey had faced coercion: many had received threats that they would no longer receive public benefits such as subsidised grains from ration shops.
- Going forward, it is essential that there is still a sanitation policy. We have seen that once a state is declared open defecation free, sanitation programs stop. There is no funding available for even toilet construction for people who still do not have one.
- According the UNICEF and WHO Joint Monitoring Program, Bangladesh had eliminated open defecation in 2017, and just about 0.2% of China's population defecated in the open. In Sub-Saharan Africa, which is poorer than India, just about twenty percent of the population defecated in the open.

Ban On Animal Sacrifices

- Two days after Tripura High Court banned animal sacrifice in temples, the royal scion of Manikya dynasty, Pradyot Kishore Manikya Debarman, said he would challenge the order at the Supreme Court. Meanwhile, the BJP-IPFT alliance government in the state is also contemplating to move the apex court against the order.
- The order came in response to a Public Interest Litigation (PIL) filed by Advocate Subhash Bhattacharjee signed in 2018. On whether the act of the State in offering an animal for sacrifice in the temples in Tripura can be said to be a secular activity and if prohibiting it would infringe upon the fundamental right as envisaged under Article 25 (1) of the Constitution of India, among other issues, the Court ruled against the tradition of animal sacrifice in temples and issued an order along with mandatory directions, prohibiting and banning animal or bird sacrifices in the temples.

Debarman Argument

- As per Merger Agreement between the princely kingdom of Tipperah and Union of India in 1949, the state government sponsors ceremonial animal sacrifice on certain occasions at few temples, like the Tripura Sundari Temple.
- It is an overreach from the High Court when it says you cannot sacrifice at all. Can they do it at the Kamakhya temple? Could we ban Jallikattu, which is not even a temple ritual but a sport? Can they stop Bakrid?

However, the High Court had termed the argument "preposterous", saying the plea needs to be "repelled at the threshold" as the issue of animal sacrifice during Eid stands settled in the ***Mohd Hanif Qureshi vs Bihar, Ashutosh Lahiri vs state of West Bengal and the and Mirzapur Moti Kureshi v state of Gujarat cases***. In those cases, the courts held that animal sacrifice was not an essential component of Islam and cannot be granted protection under the Article 25 of the Constitution.

The same reasoning also found mention in the Tripura High Court judgement, with the two-judge bench stating that animal sacrifice "cannot be considered essential and integral part of religion protected under Article 25(1) of the Constitution".

The court also said the merger agreement, placed on record by the petitioner, does not refer to performance of any practice, custom or tradition of animal sacrifice in Tripura.

According to Debarman, the court has no basis in saying that animal sacrifice is not an essential part of Hindu faith of the tantrik tradition.

Restructuring PDS

“One Nation, One Ration Card”, is meant to enable a resident from, say, Darbhanga, to access her food rations in Patna or Mumbai. The Ministry for Food and Public Distribution has commenced pilots between Maharashtra-Gujarat and Andhra-Telangana, and has committed to a national rollout by June 30, 2020.

The Economic Survey 2017 estimated that over nine million Indians change their state every year. For them, the “One Nation, One Ration Card” is a gamechanger because it makes their rations “portable”, allowing them to pick up foodgrains from any ration shop in the country. It also benefits non-migrants by allowing them to transact at better-performing shops locally. This local “**choice effect**” is extremely popular in Andhra Pradesh, which has introduced such portability within the state since October 2015. A study by researchers at the Indian School of Business (ISB) found that over 25 % of PDS beneficiaries in the state now use portability.

However, we must approach this bold vision with utmost caution because PDS is a crucial lifeline for many of the 800 million Indians it reaches. In 2017, it was reported that a 11-year old Dalit girl named Santoshi Kumari from Jharkhand died when her family was unable to access rations in the aftermath of large-scale revisions in the beneficiary list. Over 18 starvation deaths have been reported in the state since September 2017. Such tragedies must be prevented at all costs and we should therefore be cautious while restructuring the program.

Three Considerations

Three considerations are important to keep in mind while thinking about the “One Nation, One Ration Card” initiative.

1. First, **fundamental processes related to the PDS need to be redesigned** to empower every individual. The State of Aadhaar Survey 2017-18 found that nearly 6.5 per cent of PDS beneficiaries in Rajasthan were denied ration because the shop owner claimed to be out of food grain. This translates to over 3.5 million people in Rajasthan alone. A beneficiary has no mechanism to question whether the shop owner is telling the truth or diverting rations. Portability and biometrics will not solve this problem completely.

Portability in Andhra Pradesh does well because it exists in an environment of accountability of ration shops. The state government collects feedback in real time through a mobile-based system. The central government should use this opportunity to make PDS more user-centric. It should *track denial of service on a real-time basis through mobile-based surveys*. It should enable beneficiaries to track the amount of food at nearby ration shops using their mobile phones.

2. Second, the **operational backbone of the PDS needs to be restructured** to promote portability. States should be brought together on a national platform that is based on the *same technical standards* and can therefore “speak” to each other (what technologists call “interoperability”), so that portability works seamlessly across states. The system should be based on what technologists call “open APIs” so that states can customise the user interface to their local needs, and add features and additional entitlements as they deem fit.
3. Thirdly, while leveraging the power of Aadhaar for PDS, the government should actively address privacy and exclusion risks that the use of Aadhaar and a centralised PDS platform can lead to. In early 2018, the UIDAI introduced *privacy protecting features* such as virtual ID and tokenisation. However, few actually use them. The government should enable every section of society to understand and use these features through both online and offline methods. The government should also acknowledge that *authentication failures* will happen in any biometric system. Studies by ISB in multiple states point to a 1-3 per cent failure rate, potentially affecting 8-24 million people at a national scale. To prevent denial of service, the government should ensure availability of non-biometric means of authentication (such as OTP or PIN), as well as manual overrides.

VAJIRAM & RAVI

In conclusion, we suggest that the central government adopt a patient path of “a hundred small steps” while implementing this vision. It should start by encouraging all states to roll out within-state portability. This will also increase their operational and technical capacity. In the meantime, it should work on a national technical platform that works for all states. Such a gradual rollout will prevent transition glitches that show up as harmless statistics in reports, but are a matter of life and death for millions in our country.

Zero Based Natural Farming

Consumers, including in India, are increasingly looking for food and non-food agricultural products that are free of chemicals. There are versions of farming without chemicals: From Rudolf Steiner’s Biodynamic Agriculture, Masanobu Fukuoka’s One Straw Revolution and Miguel Altieri’s Agro-ecology, to the latest Subhash Palekar’s Zero Budget Natural Farming (ZBNF). All have a common philosophy — farming based on using natural inputs, treating the soil as a living entity, promoting biological diversity and protecting the health of our ecosystem. These will, in turn, reflect on human wellbeing and the food that we eat.

Palekar’s ZBNF runs on four “wheels”: **Jiwamrita** (a microbial culture of dung and urine from indigenous cow species, jaggery, pulses flour, bund soil and water), **Bijamrita** (a seed treatment solution with almost the same ingredients), **Mulching** (covering the topsoil with dried leaves and straw for moisture conservation and proper aeration) and **Waaphasa** (providing water outside the plant’s canopy). These four elements will ensure that the crop receives enough nutrients through the action of living microorganisms in the soil, in addition to the water, carbon dioxide, nitrogen and solar energy for photosynthesis that come “free” from the monsoon rains, air and sun. ZBNF also advocates insect and pest management through decoction sprays of Agniasthra, Bramhastra and Neemastra, which are made using desi cow urine, tobacco and leaves/pulp of neem, datura, garlic, papaya and pomegranate.

Whatever name they go by, natural farming approaches are now finding acceptance even from governments. Sikkim claims to have become India’s first fully organic state. Andhra Pradesh has established Rythu Sadhikara Samstha, a not-for-profit company that aims at extending the reach of ZBNF to all six million farmers of the state by 2023-24. The ultimate endorsement for ZBNF has, of course, come from the Finance Minister Nirmala Sitharaman’s 2019-20 budget speech and Prime Minister Narendra Modi’s own address at the United Nations Convention to Combat Desertification on Sept’ 9.

While agricultural scientists may dismiss ZBNF as “unproven” technology, there is a clear market, nevertheless, emerging even in India for products from natural farming. A recent Assocham-EY study has estimated the size of this market to touch Rs 10,000-12,000 crore by 2020. It is also a fact that the cost of chemical fertilisers, pesticides and energy used in conventional agriculture has skyrocketed in recent times, even as crop realisations for farmers have plummeted. This, along with the growing consumer preference for organic products, has opened up possibilities for natural farming.

If consumers are prepared to pay more for organic produce, the challenge lies in enabling farmers to adopt ZBNF and other such agricultural practices.

- Our scientific establishment has not shown much interest in these, which may partly have to do with legacy issues: Most of the agricultural universities in India are based on the US Land Grant Colleges model and they came up largely during the Green Revolution period. That explains why whenever any discussions on natural farming take place, the immediate reaction from scientists is that our soils don’t have enough nitrogen, phosphorus or potash_and we cannot feed our population without chemical fertilisers.
- Many even belittle organic models as NGO-driven, despite the Indian Council of Agricultural Research recently starting a National Organic Farming Research Institute at Tadong in Sikkim.

VAJIRAM & RAVI

- What can policymakers do to making organic agriculture viable, especially for 85% of India's farmers who have less than one-hectare holding?

To start with, they should recognise that India is a vast country with many agro-climatic zones, crops and, within that, myriad varieties, some high yielding and some local cultivars. While our policy focus earlier was to increase production, the emphasis now should be on what is an optimal model for each of these zones, crops, varieties and even different classes of farmers. Equally important to note is that each model — be it natural farming or growing high-yielding varieties/hybrids responsive to application of chemical inputs — has prerequisites.

Secondly, there should be no discrimination against natural farming through extension of subsidy only on chemical fertilisers. Let all farmers be entitled to a fixed sum of money per acre, which they can use either to buy chemical-based inputs or engage the extra labour required for organic agricultural operations. One criticism against ZBNF is that it doesn't factor in the labour required for maintaining indigenous cows (which yield less milk), collecting their dung and urine, and making the various Jiwamrita, Bijamrita or Neemastra concoctions. We forget that urea, di-ammonium phosphate or Rynaxypyrr insecticide are all made in factories and delivered to farmers in practically ready-to-use form. How can farmers be motivated to practice organic agriculture when the basic input in this case — labour — has an opportunity cost? The least policy can do is to make agricultural subsidies/incentives technology-agnostic, so that farmers can freely choose between organic and non-organic.

Third, just as there are firms manufacturing fertilisers, crop protection chemicals and hybrid seeds, why not have enterprises that produce and sell organic inputs? This would make it viable for farmers to use these inputs directly, apart from helping create a new industry that will produce them in accordance with minimum quality standards. The government can further provide support to institutions providing training to farmers in organic agriculture, which is both labour as well as knowledge-intensive.

Finally, there can be no better time for a communication campaign targeting farmers and consumers on the benefits of organic. Remember what the National Egg Coordination Committee's 'Sunday ho ya Monday, roz khao ande' ad jingles in the nineties did for our poultry industry? When the national mood is slowly moving towards natural farming, it offers a perfect moment to launch a surgical strike.