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CURRENT AFFAIRS
ANALYST
— *WEEKLY* —

Week - 2

MAY, 2019

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CURRENT AFFAIRS ANALYST
WEEK-2 (MAY, 2019)

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SECTION: A
(MAINS)

CURRENT AFFAIRS

OFF-BUDGET ACCOUNTING

CONTEXT

- The Comptroller and Auditor General (CAG) of India has pulled up the government for increased use of off-budget financing for schemes and subsidies in its Compliance of the Fiscal Responsibility and Budget Management (FRBM) Act report for FY17.

- This practice of off- budgeting masks the true extent of fiscal and revenue deficits.

- The CAG of India recommended that the government to institute a policy framework for off-budget financing, which, should include a disclosure about its rationale and objective to Parliament.

⊙ ABOUT:

- Off-Budget Accounting refers to expenditure that's not funded through the budget. In terms of revenue spending, off-budget financing was used for covering the fertilizer bills through special banking arrangements; food subsidy bills of the Food Corporation of India through borrowings.

- Such off-budget financing are not part of calculation of the fiscal indicators despite fiscal implications. Governments across the world use this to escape budget controls.

⊙ BACKGROUND:

Fiscal Responsibility and Budget Management (FRBM) Act:

- FRBM became an Act in 2003 which provides a legal-institutional framework for fiscal consolidation.

- The objective of this Act is to ensure inter-generational equity in fiscal management, long-term macroeconomic stability by achieving sufficient revenue surplus, better coordination between fiscal and monetary policy, and transparency in fiscal operation of the Government.

- The FRBM Bill was to bind future governments to a pre-specified fiscal policy framework which is an entirely anti-democratic measure.

- The FRBM Act which became effective from July 5, 2004 mandated the Central Government to eliminate revenue deficit by March 2009 and subsequently build up a revenue surplus. The Act also mandated the Central Government to reduce fiscal deficit to an amount equivalent to 3% of GDP by March 2009.

- The FRBM Act provides for greater transparency in fiscal operations, quarterly review for fiscal situation and regulating direct borrowing and control expenditure to effect fiscal discipline.

⊙ ANALYSIS:

Why is it Problematic?

- Off-budget financing by its nature isn't taken into account when calculating fiscal indicators. But the cost is borne by the budget through some mechanism or the other.

- Such financing tends to hide the actual extent of government spending, borrowings and debt and increase the interest burden.

Report by CAG

- It said that off-budget financing was being used by the government (in the fiscal 2016-17) to defer fertiliser arrears, food subsidy bills and outstanding dues of Food Corporation of India (FCI).

OFF-BUDGET FUNDING IN FY17

- **REVENUE SPENDING:**
  - ➤ Deferred fertilizer arrears/bills through special banking arrangements
  - ➤ Food subsidy bills/arrears of Food Corp. of India through borrowings
  - ➤ Accelerated Irrigation Benefit Program through National Bank for Agriculture and Rural Development borrowing

- **CAPITAL SPENDING:**
  - ➤ Indian Railway Finance Corp. borrowing for railway projects
  - ➤ Power Finance Corp funding of power projects

- Off-budget financing includes mechanisms like market borrowing and ways and means advances, which are outside the purview of parliamentary oversight for e.g., Special banking arrangements were used to conceal the deferment of fertiliser subsidies.

- Spending on irrigation was masked by borrowing by the National Bank for Agriculture and Rural Development (NABARD).

- Railway expenditure was covered by borrowing

by the Indian Railway Finance Corporation, and spending on power projects by the Power Finance Corporation.

- Though these provides flexibility in meeting requirement of capital intensive projects, it would pose fiscal risk in the long term, in case the entity that raises the funds fails to meet debt servicing.

- Despite this, the government resorts to off-budget methods of financing to meet its revenue and capital requirements.

- The quantum of such borrowings is huge and current policy framework lacks transparent disclosures and management strategy for comprehensively managing such borrowings.

What is the case with Food Corporation of India?

- To illustrate off-budget financing, the CAG report gave the example of Food Corporation of India (FCI).

- The difference between the cost of procurement of foodgrains and cost of providing them to fair price shops is what FCI demands from the government as subsidy.

- When the budget allocation of a financial year is not sufficient to clear all the dues of food subsidies bill raised by FCI, the dues of such subsidies are carried over to next financial year.

- It is evident that there was increase of about 350% over subsidy arrears in the five years preceding 2016-17.

- But the government has passed on its own food subsidy burden on to the FCI, rather than servicing it from the budget.

- This require financing from a number of methods including very high interest cash credit facility which increases actual cost of this subsidy substantially.

- The FCI has borrowed to pay for that burden and has also borrowed from NSSF to the tune of tens of thousands of crores to service that debt.

- In 2017-18, the FCI took loans of Rs 65,000 crore from the NSSF, partly for fresh expenditure and also to repay some of the principal of an earlier loan.

- However, all this money should have been part of official government expenditure in the Budget.

CAG favours a Policy for Disclosure

- A policy framework for off-budget financing that should include disclosures to parliament about the amount, rationale and objective of such funding. Off-budget financing being outside the parliamentary control has implication for fiscal indicators as they "understate" government's expenditure in the year by keeping them off the budget.

- Such off-budget financial arrangement, defers committed liability (subsidy arrears/bills) or create future liability and increases cost of subsidy due to interest payment . In order to address these issues, it said the government should consider "putting in place" a policy framework for off-budget financing. The framework should specify the rationale and objective of off-budget financing, quantum of off-budget financing and sources of fund, among others.

- Government may consider disclosing the details of off-budget Borrowings through disclosure statements in Budget as well as in Accounts. In Indian context, at state level, expenditure related to activities undertaken by the Government is considered off-budget if they are not routed through consolidated fund of the state or, outside the budgetary process or, not accounted for in the budget document.

Government Argument:

- The government has made amendments in the FRBM architecture through the Finance Act, 2018, presented along with Budget 2018-19.

- In the revised FRBM architecture, the government focused on achieving the fiscal deficit target of 3% of gross domestic product by the end of 2020-21.

- Government refuted the CAG charge by maintaining that since amendments to the FRBM Act in 2018 include a debt target, it has legislative control over Off-Budget financing.

Case Study

- UDAY: Discoms cut down on fresh borrowing

- State-run electricity distribution entities (discoms), which had saved a substantial Rs 34,000 crore on interest costs due to the UDAY scheme in the two years ended December 2018, seem to be on a belt-tightening mode. According to data reviewed by FE, fresh borrowings by discoms of 12 major states in the 18 months ended Match 31, 2018 was only Rs 1.2 lakh crore, one-fifth lower than anticipated by the Union power ministry.

- Borrowings were expected to be higher given these discoms' combined accumulated losses of Rs 66,436 crore (which is usually financed entirely via fresh borrowings) during the period and the allowed working capital limit of Rs 87,595 crore (banks and financial institutions could lend only 25% of a discom's revenue in the previous year as working capital).

- States' reluctance to fund losses of discoms is also said to be a reason for distribution companies cutting down on borrowings, as they are unsure of sovereign backing for post-UDAY losses. On a

pan-India basis, discoms continue to lose 35 paisa on every unit of electricity sold (ACS-ARR gap), as they failed to meet the UDAY target to eliminate the ACS-ARR by FY19.

Recapitalising public sector banks

- Over the last few years, the government had spend a lot of money on recapitalising public sector banks. In 2009-10, the government spent no money in recapitalising public sector banks. In 2018-19, it will end up spending Rs 1.06 lakh crore on the same.

- Above figure plots the proportion of government money spent on recapitalising public sector banks, over the years. These banks have ended up with a huge amount of bad loans, which has led to the government having to constantly investing money in these banks, to keep them going. Bad loans are loans which haven't been repaid for a period of 90 days or more. Other than public sector banks, the government also spends a lot of money to keep many public sector enterprises going.

⊙ WAY FORWARD

- The objective of the FRBM Act, 2003 was to provide for the responsibility of the Central Government to ensure inter-generational equity in fiscal management and long-term macro-economic stability. However, successive governments have resorted to methods like –

  - ▸ Rolling over additional subsidy burden

  - ▸ Taking back unspent amounts from ministries

  - ▸ Converting certain expenditure entries to ways and means advances

  - ▸ Running down the cash reserves

- Investors require a fiscal deficit number that is credible and that reflects the true level of government borrowing and spending.

- The more transparent it is, the better the market works and the more money can be raised going forward.

- Thus, the government should not sacrifice the effectiveness of the bond markets to its short-term desire to raise more finance while appearing fiscally conservative.

- Also, investing the small savings fund (NSSF) into the troubled and loss-making public sector units like state-owned airline Air India should be avoided.

📑 Practice Question

- "The budget math is always a lot of smoke and mirrors and various governments have used various means to prima facie meet the targets." Examine. In light of this statement discuss how successive governments in India have used off-budget financing to meet their fiscal targets?

SC AND RBI TUSSLE

CONTEXT

- The Supreme Court order quashing the Reserve Bank of India's rules on bad loans comes as a major disappointment to the dogmatic effort to clean-up the stressed banking system, which sought to shift the balance of power from defaulting corporate promoters to ordinary bank depositors.

⊙ ABOUT:

- The Supreme Court order quashing a circular issued by the RBI on resolution of bad loans is a setback to the evolving process for debt resolution.

- Declaring the central bank's order as ultra-vires, this is likely to significantly affect the implementation of the bankruptcy process and the Insolvency Bankruptcy Code (IBC) over time.

- The SC order may also subsequently renew friction between the Centre and the RBI in terms of mutually agreeing on a timeline for recovering dues from large corporations and deciding an appropriate time period for framing and implementing debt-restructuring programmes.

⊙ ANALYSIS:

RBI's February 12 Circular

- In its February 12, 2018 circular, the RBI asked lenders to institute a board-approved policy for resolution of stressed assets.

- At the same time, commercial banks were told to start the resolution process as soon as a borrower would default on a term loan, and then were given a period of 180 days to cure it. If the borrower still failed to pay the defaulted sum in this extended period, the matter would then dragged to bankruptcy proceedings at the National Company Law Tribunal (NCLT).

- The voiding of the February 12, 2018 circular could slow down and complicate the resolution process for loans aggregating to as much as ₹3.80 lakh crore across 70 large borrowers, according to data from the ratings agency ICRA.

- As of March 31, 2018, 92% of this debt had been classified as non-performing, and banks have made provisions (percentage of bad asset that has to be 'provided for') of over 25-40% on these accounts.

- Under previous guidelines – before the February 12 circular – India's banks had the freedom to initiate the resolution process any time after 60 days from default-day. With the SC's order now, defaulters are likely to get more time now before being sent to the bankruptcy court (or say, NCLT).

Aim behind this circular

- To break the nexus between banks and defaulters, both of whom were content to evergreen loans under available schemes.

- It introduced a certain credit discipline banks had to recognise defaults immediately and attempt resolution within a six-month timeframe.

- The borrowers risked being dragged into the insolvency process and losing control of their enterprises if they did not regularise their accounts.

- RBI data prove the circular had begun to impact resolution positively.

- It is this credit discipline that risks being compromised now.

- It is not surprising that international ratings agency Moody's has termed the development as "credit negative" for banks.

- It is true that the circular failed to take into account the peculiarities of specific industries or borrowers and came up with a one-size-fits-all approach. It is also true that not all borrowers were deliberate

Setback for RBI

What did the Feb. 12, 2018 circular from RBI say?

- Banks to classify large loans as stressed within a day of default
- Banks to frame a resolution plan within **180 days**, failing which, insolvency proceedings would begin

Why was the circular brought in?

- Existing schemes such as Corporate Debt Restructuring (CDR), Sustainable Structuring of Stressed Assets (S4A), Strategic Debt Restructuring (SDR) and the Joint Lenders' Forum (JLF) were proving ineffective

- Bad loans were pushing **10%** of total advances

- With the enactment of the IBC, the RBI wanted a harmonised and simplified framework for debt resolution

Who did the circular affect?

- Mainly power sector firms, and those in telecom, steel, infrastructure, sugar etc

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defaulters, and sectors such as power were laid low by externalities beyond the control of borrowers.

Immediate challenges for the RBI

◉ To see whether it would like to use or revive any of its old debt-restructuring schemes.

◉ It will now have to come up with a new framework on dealing with stressed assets (or bad loans).

◉ The latter challenge is likely to take some time, meaning one may expect it to rely more or less on conventional monetary policy instruments to regulate and strengthen credit dissemination processes.

Last warning to RBI

◉ The policy was found to be directly contrary to the court's judgment of December 2015 that the Reserve Bank could not withhold information sought under the RTI Act.

◉ The 2015 judgment had rejected the RBI's argument that it could refuse information sought under the RTI on the grounds of economic interest, commercial confidence, fiduciary relationship or public interest.

◉ The court had observed that there was "no fiduciary relationship between the RBI and the financial institutions".

◉ The court, in 2015, reminded the RBI that it had the statutory duty to uphold the interests of the public at large, the depositors, the economy and the banking sector.

Why did RBI refuse?

◉ The RBI had refused to provide information to the petitioner, claiming "fiduciary relationship" between itself and the banks in question.

◉ Such information, the regulator had then said, was exempted from being revealed under Section 8(1)(d) and (e) of the RTI Act.

◉ Section 8 allows the government to withhold from public some information in order to "guard national security, sovereignty, national economic interest, and relations with foreign states".

◉ The information to the petitioners was denied by the RBI despite orders from the Central Information Commissioner (CIC) to do so.

◉ It had forced banks to recognize defaults by large borrowers with dues of over ₹2,000 crore within a day after an instalment fell due; and if not resolved within six months after that, they had no choice but to refer these accounts for resolution under the Insolvency and Bankruptcy Code.

◉ WAY FORWARD:

◉ The RBI should study the judgment closely, and quickly reframe its guidelines so that they are within the framework of the powers available to it under the law. Else, the good work done in debt resolution in the last one year will be undone.

◉ The RBI could have addressed these concerns when banks and borrowers from these sectors brought these issues to its notice.

◉ By taking a hard line and refusing to heed representations, the RBI may only have harmed its own well-intentioned move.

◉ That said, it is now important for the central bank to ensure that the discipline in the system does not slacken.

◉ The bond market does not allow any leeway to borrowers in repayment, and there is no reason why bank loans should be any different.

📰 Practice Question

◉ **The recent tussle between the RBI and the SC points out to the delicate balance RBI has to maintain in its functioning. Comment.**

BELT AND ROAD INITIATIVE (BRI)

CONTEXT

- Recently, China held its 2nd Belt and Road Forum (BRF) to showcase its trillion-dollar Belt and Road Initiative (BRI) without India's presence for the second consecutive time, while 37 heads of the state and government, including from Pakistan, attended the three-day grand event.

- India has been boycotting the BRI to protest over the USD 60 billion China-Pakistan Economic Corridor (CPEC) being laid through the Pakistan-occupied Kashmir.

- Besides India's protests over the CPEC, China's doling out of huge sums of money specially to smaller countries raised concerns after Beijing acquired Sri Lanka's strategic Hambantota port on a 99-year lease as a debt swap.

⊙ ANALYSIS:

What is BRI?

- The Belt and Road Initiative (BRI) is a development strategy adopted by the Chinese government involving infrastructure development and investments in countries and international organizations in Europe, Middle East, Central Asia, Gulf Region, Africa, South Asia and Southeast Asia.

- "Belt" refers to the overland routes for road and rail transportation, called "the Silk Road Economic Belt". Beside the historical silk road through Central Asia, West Asia, the Middle East, and Europe this new silk road includes South Asia and Southeast Asia. The "Road" refers to the sea routes or the "21st Century Maritime Silk Road".

- The project was launched by Chinese President Xi Jinping when he came to power in 2013. Earlier it was known as One Belt One Road.

- The project has a targeted completion date of 2049, which coincides with the 100th anniversary of the People's Republic of China.

- This project is seen as a competitor to the two US-centric trading arrangements, the Trans-Pacific Partnership and the Transatlantic Trade and Investment Partnership.

- Theme of this year: Belt and Road Cooperation, Shaping a Brighter Shared Future

BRF 2017 vs BRF 2019:

- When it was announced in 2013, the BRI was an initiative focused solely on building infrastructure projects; it now has a much broader framework, which includes financial and humanitarian aid projects.

- In the first BRF in 2017, more than 60 countries and international organisations were involved. That figure in 2019 now is - 126 countries and 29 international organisations i.e. it is more than double now.

- New countries such as Italy (the first G7 Nation to join) and Luxembourg have brought into the project, concerns raised by other European Union countries notwithstanding.

- The funding model has this year undergone changes. Initially funds were sought from the China-headed Asian Infrastructure Investment Bank, and several other financial institutions within the country, Beijing is now pushing for "third-party market cooperation" under which investments are shared by more than one country.

Progress of the project:

- The trade volume between China and countries joining the BRI has surpassed 6 trillion US dollars, with more than 80 billion US dollars of Chinese investment in the countries.

- 82 overseas cooperative parks had been jointly built by China and the countries along the route, creating nearly 300,000 jobs for local people.

Concerns of the project:

- **Sri Lanka:**

  ➤ China's main investment in Sri Lanka was the Magampura Mahinda Rajapaksa Port, mostly funded by the Chinese government and built by two Chinese companies.

  ➤ It claims to be the largest port in Sri Lanka after the Port of Colombo and the biggest port constructed on land to date in the country.

  ➤ It was initially intended to be owned by the Government of Sri Lanka and operated by the Sri Lanka Ports Authority, however it incurred heavy operational losses and the Sri Lankan government was unable to service the debt to China.

  ➤ In a debt restructuring plan on 9 December 2017, 70% of the port was leased and port

operations were handed over to China for 99 years, the deal gave the Sri Lankan government $1.4 billion that they will be using to pay off the debt to China. This led to accusations that China was practicing debt-trap diplomacy.

- **Malaysia:**
  - ➤ PM Mahathir Mohamad expressed disapproval of Chinese investment in Malaysia, comparing it to selling off the country to foreigners.
  - ➤ He labelled the China-funded projects as unfair deals authorized by former PM Najib Razak and would leave Malaysia indebted to China.
  - ➤ In August 2018, at the end of an official visit to China, Mahathir cancelled the East Coast Rail Link project and two other pipeline projects that were awarded to the China Petroleum Pipeline Bureau, citing a need to reduce debt incurred by the previous government.
  - ➤ The project undergo negotiations for several months and close to be cancelled off. After rounds of negotiation and diplomatic mission, the ECRL project is resumed after Malaysia and China agreed to continue the project with reduced cost.

- **Nepal:**
  - ➤ Nepal is delaying on signing an agreement worth $56 billion to establish a Trans-Himalayan Multi-dimensional Connectivity Network under the BRI, which also includes a cross-border railway.
  - ➤ Nepal is apprehensive of signing the commercial agreement because of concerns over the financing of the project and environmental issues in the Himalayan region.
- ◉ **Pakistan:** It has walked out of the $14 billion Diamer-Bhasha dam project that was part of the CPEC, citing stringent monetary conditions imposed by Beijing.

India's position:

- **CPEC:**
  - ➤ Amongst the first countries to oppose the project, India had signalled its strong displeasure ahead of the second BRF over the inclusion of the China-Pakistan Economic Corridor (CPEC) as a BRI project.
  - ➤ The CPEC passes through Pakistan-Occupied Kashmir and is the main reason for India not participating in the BRI.
  - ➤ CPEC which is being projected as the flagship project of the BRI ignores our core concerns on sovereignty and territorial integrity. Connectivity projects must be pursued in a manner that respects sovereignty and territorial integrity.
  - ➤ While China has painted CPEC as a commercial project, it has also deployed security personnel over the years to protect the corridor. This makes it an active participant in domestic politics in the subcontinent.

- **Hambantota port:**
  - ➤ The port's strategic location and subsequent ownership by China spurred concern over China's growing economic footprint in the Indian Ocean and speculation that it could be used as a naval base for the Chinese Navy.
  - ➤ However, the Sri Lankan government promised that it would be "purely intended for civilian use".

◉ WAY FORWARD:

- ◉ The CPEC passes through Pakistan-Occupied Kashmir and is the main reason for India not participating in the BRI. No country can accept a project that ignores its core concerns on sovereignty and territorial integrity. The best way forward is China should respect other country's sovereignty issues.

- ◉ China should make this Belt and Road Initiative sustainable and prevent debt risks. It should support financing via multiple channels. One step it has already taken in this direction by using third-party market cooperation in addition to earlier funding from AIIB only.

- ◉ Local currencies should be used for investments to curb exchange rate risks.

- ◉ China should follow market principles and rely on commercial funds for Belt and Road financing.

📰 Practice Question

- ◉ What are the concerns arising due to implementation of BRI projects? Why India is not joining this initiative and what is the way forward?

IMPOSITION OF US SANCTIONS ON BUYING IRANIAN OIL AND END OF SANCTION WAIVERS

CONTEXT

- India has significantly reduced importing crude oil from Iran following the US move to end sanction waivers, and will use alternate supply sources such as Saudi Arabia and Iraq to make up for the lost volumes.

- Impact of the end of US waivers for imports of Iranian oil was part of discussions between senior Turkish presidential advisor Ibrahim Kalin and India's National Security Advisor. Both of them met recently.

- For India, the decision came as a double blow, as US has also imposed sanctions on its other top supplier, Venezuela.

⊙ BACKGROUND:

Timeline of major events over the timespan of the Iran nuclear deal:

- ◎ **June 2006:** The United States, Russia and China join Britain, France and Germany to form the P5+1 group of nations trying to persuade Iran to curb its nuclear program.

- ◎ **December 2006:** The UN Security Council imposes the first set of sanctions on Iran, banning the sale of sensitive nuclear technology.

- ◎ **November 2007:** The number of uranium-enriching centrifuges assembled by Iran reaches about 3,000 from just a few hundred in 2002. Its stockpile of low-enriched uranium also grows, giving it the ability to, theoritically, make enough-weapons grade uranium for an atomic bomb.

- ◎ **February 2010:** Iran announces it has started to enrich uranium to near 20 percent, a technical step away from weapons-grade material.

- ◎ **November 2013:** Iran and the six powers announce an interim agreement that temporarily curbs Tehran's nuclear program and unfreezes some Iranian assets. The deal sets the stage for extended negotiations on a comprehensive nuclear accord.

- ◎ **October 2015:** Iran conducts its first ballistic missile test since the nuclear deal. The US accuses Iran of violating a UN Security Council resolution.

- ◎ **January 2016:** The IAEA acknowledges Iran has met its commitments under the nuclear deal, which sees most sanctions on Iran lifted. It takes time but Iran re-enters the global banking system and begins selling crude oil and natural gas on the international market.

- ◎ **October 2018:** US pulls out of Iran nuclear deal unilaterally.

⊙ ANALYSIS:

What is Iran nuclear deal?

- ◎ It is deal between Iran and six major powers – US, UK, France, Russia, China and Germany and European Union signed in 2015 under which Iran agreed to limit its nuclear program in return for the relief from US and other economic sanctions.

- **Limitations imposed on Iran:**

  - ➤ Iran could only maintain a stockpile of 300 kilograms of low-enriched uranium, compared to the 100,000 kilograms of higher-enriched uranium it once had.

  - ➤ It could enrich uranium to 3.67 percent, which can be used to fuel a reactor but was far below the 90 percent needed to produce a weapon.

  - ➤ The deal limited the number of centrifuges Iran can run and restricted it to an older, slower model.

  - ➤ It asks Iran to reconfigure a heavy-water reactor so it couldn't produce plutonium and to convert its Fordo enrichment site into a research centre.

  - ➤ Under it Iran granted more access to International Atomic Energy Agency inspectors and allowed it to inspect other sites.

- **Benefits given to Iran:**

  - ➤ In exchange, world powers lifted the economic sanctions that had kept Iran away from international banking and the global oil trade.

  - ➤ It allowed Iran to make purchases of commercial aircraft and reach other business deals.

  - ➤ It also unfroze billions of dollars Iran had overseas.

Why US pulled out of Iran nuclear deal and reimposed sanctions?

- ◎ The deal has a provision that fifteen years after the deal, restrictions on Iran's uranium enrichment and stockpile size will end.

- ◎ US argued it allows Iran to build a bomb after it expires, something Iran had explicitly promised in the accord not to do.

- In theory, Iran could have an array of advanced centrifuges ready for use, the limits on its stockpile would be gone, and it could then throw itself wholeheartedly into producing highly enriched uranium.

- US withdrew from the deal in October 2018, and revived a range of sanctions against the countries buying oil from Iran.

Why were waivers given?

- US, however, granted a six-month waiver from sanctions to eight countries - China, India, Japan, South Korea, Taiwan, Turkey, Italy, and Greece.

- Waivers were given to these countries to give them flexibility and time to end their dependence on Iranian oil imports. These countries had showed that they have made important moves toward reducing Iranian oil imports to zero.

- The waiver began in November 2018 and was to expire on May 2.

What are the consequences of sanctions?

- **International trade:** Imposition of sanctions would hinder international companies working in Iran as they could not access US market for their business activities.

- **Oil prices:** US sanctions would reduce Iran's oil exports and put pressure on global markets resulting in rising oil prices. Further in response, Iran has threatened to shut the Strait of Hormuz, a key maritime chokepoint for Persian Gulf producers, a third of the world oil passes through it. This will further reduce the oil supply to the world.

- **Nuclear threat:** Sanctions would prompt Iran to restart its nuclear programme. It will also affect the denuclearisation efforts taken so far.

- **West Asia:** The sanctions would aggravate the already existing instability in West Asia. It will further bitter the Iran - Israel and Iran - Saudi Arabia relations.

What are the consequences on India?

- Iran in 2017-18 was India's third-largest supplier after Iraq and Saudi Arabia and meets about 10 per cent of total needs. The sanctions will significantly reduce the crude supply to India.

- The substitute crude suppliers — Saudi Arabia, Kuwait, Iraq, Nigeria and the US — do not offer the attractive options that Iran does, including 60-day credit, and free insurance and shipping. The challenge is to secure an alternative supplier at competitive terms in an already tightening global situation.

- **Current account deficit:** Higher crude oil prices will widen the trade deficit and current account deficit, given that the value of imports goes up with crude oil, and that the quantity imported tends to be sticky in general.

- **Rupee:** The currency could be impacted if the trade and current account deficits were to widen. An increase in the import bill will tend to put pressure on the rupee.

- **Inflation:** There could be significant impact on inflation, given how crude oil prices move and the extent to which the government allows the pass-through to the consumer.

- **Fiscal impact:** There could be a two pronged impact on government finances — both on the revenue side and on the expenditure side. On the revenue side, higher oil prices mean more revenue for the states as tax is a percentage of base prices. The expenditure impact would primarily be on account of fuel subsidy outlays-the government has to allocate more funds for subsidy.

⊙ WAY FORWARD:

- India should make all efforts for a second waiver, keeping in view the close strategic partnership and the new role New Delhi is acquiring in the India-Pacific as a counter-balancing power vis-a-vis China.

- Indian refiners should increase their planned purchases from the Organisation of the Petroleum Exporting Countries (OPEC), Mexico, and even the US to make up for the loss of Iranian oil.

- India should diversify its source of energy from oil to liquefied natural gas and renewable sources like- solar energy, wing energy, hydro power and geothermal energy.

📰 Practice Question

- **How will the US sanctions on buying Iranian oil affect the energy and economic security interests of India?**

THE THREAT OF MAOISM

CONTEXT

- In one of the worst retaliatory attacks on the anti-naxal security forces, Maoist insurgents blew up an Improvised Explosive Device (IED) killing 15 jawans and a civilian in Maharashtra's Gadchiroli district recently.

⦿ ABOUT:

More on news

- A unit of the Quick Response Team (QRT) of the Gadchiroli police was on its way to provide reinforcements to a police station, when the blast was triggered six kilometres from the police station.

- The attack occurred in spite of beefing up of security by Maharashtra police in the taluka following an attack the previous night in which naxals had torched 36 vehicles meant to assist road construction work.

- This latest ambush on police seems to be in retaliation for the killing of two senior women cadre of the rebels by the anti-naxal forces during an encounter in the forests of South Gadchiroli a few days earlier.

- 100-150 Maoists from a neighbouring Chhattisgarh village entered Gadchiroli. They asked drivers hired by contractor of road construction to hand over the keys. The diesel was pilfered and the same was used to set them ablaze.

- A quick response team (QRT) was sent to help police station in the panchanama formalities into the arson case. A team of 15 men jostled and sat in a private vehicle.

- When the vehicle was navigating through a culvert, the Maoists who used the tree cover as an ambush detonated the explosives, killing all 16.

- This was a classic Maoist trap — first carry out arson and then compel the police to reach the spot and place landmines on the route for maximum casualty.

- IEDs at this culvert weren't the only one that the Maoists were planning to plant. Maoists had planted IEDs at two other locations, basically on all the routes that could have been taken by the police stations.

⦿ ANALYSIS:

Similar attacks conducted by Maoists earlier:

- **2009:** The Maoists set on fire some vehicles at a road construction site in Dhanora tehsil. The police, aware of the possibility of an ambush, waited a couple of days before setting out on foot for the site of the arson. On reaching near the village, however, they came under fire from all directions, and lost 15 men.

- **2012:** The Maoists set off a landmine again in Dhanora, killing 13 CRPF personnel, and injuring 29. The CRPF men were travelling in a vehicle to a village which their then Director General of Police was to visit. No road-opening operation had been carried out to ensure safe passage for the vehicle, and the CRPF personnel proved easy targets for the Maoists.

- **2014:** The Maoists set off an explosion under a vehicle carrying policemen in Chamorshi tehsil. The men were returning to Gadchiroli from a combing operation, and had chosen to get on the vehicle on the assumption that the area was safe. Seven personnel were killed.

Rise of Maoist insurgency in India:

- The first Communist Party of India (CPI) was formed in 1920 under the aegis of the Soviet regime.

- After India's independence in 1947, the Soviet supported both the centrist Indian National Congress and the left CPI. This led to a bitter split, from which the Communist Party of India (Marxist) was formed 1964.

- The CPI(M) declared its distance from the Chinese Communist Party (CPC) as well. But within three years of the split, the CPC managed to cause a split. Led by a man named Charu Majumdar, this new group rejected elections and opted for Mao Zedong's "protracted people's war" doctrine.

- The group's first altercation with police took place in a small sub-Himalayan hamlet called Naxalbari during a violent protest of peasants against a landlord said to be extracting heavy rates of interest from them. The 1967 Naxalbari uprising was quelled quickly. Majumdar was captured and killed in police custody in Calcutta soon after. But the movement had electrified hundreds inside the ranks of the party and soon groups emerged across the country pledging themselves to the Naxalbari path.

- Following Mao's death and China's abandonment of sponsoring international revolution, the movement broke down into a chaos of splinters and

factions. As many 149 Naxalite parties functioned independently, with each claiming to be the true flag-bearers of the Naxalbari legacy.

◉ Two major groups which were most organized and best-armed were: the Maoist Communist Centre (MCC) in areas adjoining Nepal and the People's War Group (PWG) in the areas that made up the princely state of Hyderabad (modern day Andhra Pradesh and Telangana).

◉ A bloody territorial feud between the two parties, combined with a state crackdown, kept them apart, and each occupied their own territory. This situation lasted until September 21, 2004, when the two groups merged and formed the new Communist Party of India (Maoist). The combined force is now the single largest armed group operating inside India.

Causes of spread of Maoism:

◉ The fight in Naxalbari in 1967 was about who had the right to farm produce. The same is the essence for Maoism–farm produce has been replaced with minerals and the landlord with mining corporations.

◉ The land, the forests, the rivers have been exploited for resources. The Chota Nagpur and Orissa plateaus are loaded with 93 percent of the country's iron ore, and 84 percent of its coal have become home to mining behemoths turning up every square mile of the plateaus hills, forests and rivers. And it is these exact areas that form the core zone of Maoist conflict.

◉ There has been no development for the tribal. At the behest of the mining corporations, the government takes away the land and the forests of the tribal people and thereby their livelihoods away from them. But when the corporations set up shop, they don't even employ the local people.

Salwa Judum:

◉ As a workaround, the government sponsored counter-militias and split tribes into those for and against Maoists. Those willing to fight the Maoists were offered guns, money and an honorary rank of special police officer.

◉ Salwa Judum (meaning purification hut) militia, headed by tribal leader Mahendra Karma, was a result of this move. Karma had been a former member of the Communist Party of India but

had rapidly risen through the ranks of power by switching sides and going over to the centrists, the Indian National Congress.

◉ Before long, violence spiraled out of control and the Salwa Judum came under international scrutiny for gross violations of human rights and employment of child soldiers. Acting on a petition moved by the People's Union of Civil Liberties in India, the Indian Supreme Court declared it illegal in 2011.

◉ WAY FORWARD:

◉ The mining industries which are using the resources of the region have moral responsibility for the development of the local people there. They should provide them with employment opportunities which will raise their standard of living and they should also develop the region with good infrastructure.

◉ It is seen that there is rising aspirations for urban life among the younger generations of the tribal people. This has in turn catalyzed the shedding of past cultures in favor of the more homogenized, pan-Indian one. We should use this opportunity to bring the tribals in mainline society.

◉ Tired of an itinerant life in the jungle, scores of mid-level leaders and fighters have deserted their brigades in the past five years and chosen salaried wages and family life instead. This alienation and disillusionment can be gauged from the rising number of surrenders among the Maoist fighters. We should plan to accommodate these tribals.

◉ Besides the above soft approach we should also have some hard approach as elements of last resort. We should press in more battalions of CRPF in these regions to maintain peace and order. We should train personnels specialising in Maoist areas.

◉ The forces should strictly follow the standard operating procedure (SOP) which performing any action. This will put control in casualties.

◉ The forces should learn from the earlier attacks and improve their skills.

◉ The intelligence agencies should be more proactive. They should always be ahead of the Maoists.

📰 Practice Question

◉ Several efforts have been taken by government to control the violence by Maoists but the recent IED attack on C60 commandos killing 15 personals shows more need to be done. Discuss the causes of continued Maoism and what efforts need to be taken to curb it.

ARTIFICIAL INTELLIGENCE

CONTEXT

- Industry 4.0, also known as the intelligent industry, is considered to be the fourth industrial revolution, a term coined by Professor Schwab and seeks to transform a company into an intelligent organization to achieve the best business results.

- To some, it will seem too soon to talk about the next industrial revolution, i.e., the fourth industrial revolution, but the adoption of Artificial Intelligence has reached a point where we are ready for another radical change, the digital transformation of the industry or what we call industry 4.0.

- The change is based on the adoption of Artificial Intelligence for the progressive automation of the production process.

⦿ ABOUT :

Artificial Intelligence (AI)

- AI is the science of building computers that can solve problems the way humans do. With intelligent machines enabling highlevel cognitive processes like thinking, perceiving, learning, problem solving and decision making, coupled with advances in data collection and aggregation, analytics and computer processing power, AI presents opportunities to complement and supplement human intelligence and enrich the way people live and work.

- The term was coined in 1956 by John McCarthy at the Dartmouth conference, Massachusetts Institute of Technology.

- It encompasses everything from robotic process automation to actual robotics.

- Recently it has become widely popular and gained prominence due to its multifaceted application ranging from healthcare to military devices.

- AI is a constellation of technologies that enable machines to act with higher levels of intelligence and emulate the human capabilities of sense, comprehend and act.

- The natural language processing and inference engines can enable AI systems to analyse and understand the information collected.

- An AI system can also take action through technologies such as expert systems and inference engines or undertake actions in the physical world.

Machine Learning Deep Learning

- This term was coined by Artur Samuel in 1959, meant "the ability to learn without being explicitly programmed."   It is a technique for implementing Machine Learning. It was inspired by the structure and function of the brain, specifically the interconnecting of many neurons.

- It involves the use of algorithms to parse data and learn from it, and making a prediction as a result. Artificial Neural Networks (ANNs) are algorithms that are based on the biological structure of the brain.

- The machine gets "trained" using large amounts of data and algorithms, and in turn gains the capability to perform specific tasks. In   ANNs, there are 'neurons' which have discrete layers and connections to other "neurons". Each layer picks out a specific feature to learn. It's this layering that gives deep learning its name.

⦿ ANALYSIS

What is the philosophy and ethics of Artificial Intelligence?

- The R&D of AI started with the intention of creating intelligence in machines that we find and regard high in humans.

Applications of Artificial Intelligence (AI)

- **Self-driving Cars:** Advances in artificial intelligence have brought us very close to making the decades-long dream of autonomous driving a reality. AI algorithms are one of the main components that enable self-driving cars to make sense of their surroundings, taking in feeds from cameras installed around the vehicle and detecting objects such as roads, traffic signs, other cars, and people.

- **Digital assistants and smart speakers:** Siri, Alexa, Cortana, and Google Assistant use artificial intelligence to transform spoken words to text and map the text to specific commands. AI helps digital assistants make sense of different nuances in spoken language and synthesize human-like voices.

- **Translation:** For many decades, translating text

between different languages was a pain point for computers. But deep learning has helped create a revolution in services such as Google Translate. To be clear, AI still has a long way to go before it masters human language, but so far, advances are spectacular.

◉ **Facial recognition:** Facial recognition is one of the most popular applications of artificial intelligence. It has many uses, including unlocking your phone, paying with your face, and detecting intruders in your home. But the increasing availability of facial-recognition technology has also given rise to concerns regarding privacy, security, and civil liberties.

◉ **Medicine:** From detecting skin cancer and analyzing X-rays and MRI scans to providing personalized health tips and managing entire healthcare systems, artificial intelligence is becoming a key enabler in healthcare and medicine. AI won't replace your doctor, but it could help to bring about better health services, especially in underprivileged areas, where AI-powered health assistants can take some of the load off the shoulders of the few general practitioners who have to serve large populations.

◉ **Agriculture Sector:** AI can be used to predict advisories for sowing, pest control, input control can help in ensuring increased income and providing stability for the agricultural community. Image classification tools combined with remote and local sensed data can bring a revolutionary change in utilisation and efficiency of farm machinery, in areas of weed removal, early disease identification, produce harvesting and grading.

◉ **Business Sector:** To take care of highly repetitive tasks Robotic process automation is applied which perform faster and effortlessly than humans. Further, Machine learning algorithms are being integrated into analytics and CRM platforms to provide better customer service. Chatbots being used into the websites to provide immediate service to customers. Automation of job positions has also become a talking point among academics and IT consultancies such as Gartner and Forrester.

◉ **Education Sector:** AI can make some of the educational processes automated such as grading, rewarding marks etc. therefore giving educators more time. Further, it can assess students and adapt to their needs, helping them work at their own pace. AI may change where and how students learn, perhaps even replacing some teachers.

◉ **Financial Sector:** It can be applied to the personal finance applications and could collect personal data and provide financial advice. In fact, today software trades more than humans on the Wall Street.

◉ **Legal Sector:** Automation can lead to faster resolution of already pending cases by reducing the time taken while analyzing cases thus better use of time and more efficient processes.

◉ **Manufacturing sector:** Robots are being used for manufacturing since a long time now, however, more advanced exponential technologies have emerged such as additive manufacturing (3D Printing) which with the help of AI can revolutionize the entire manufacturing supply chain ecosystem.

◉ **Intelligent Robots:** Robots can perform the tasks given by a human because of sensors to detect physical data from the real world such as light, heat, temperature, movement, sound, bump, and pressure. Moreover, they have efficient processors, multiple sensors and huge memory, to exhibit intelligence. Further, they are capable of learning from their errors and therefore can adapt to the new environment.

◉ **Gaming:** AI has a crucial role in strategic games such as chess, poker, tic-tac-toe, etc., where the machine can think of a large number of possible positions based on heuristic knowledge.

◉ **Cyber Security:** In the 20th conference on e-governance in India it was discussed that AI can provide more teeth to cyber security and must be explored.

◉ **Smart Cities and Infrastructure:** Use of AI to monitor patronage and accordingly control associated systems such as pavement lighting, park maintenance and other operational conditions could lead to cost savings while also improving safety and accessibility.

Global Developments

◉ China and U.K. estimate that 26% and 10% of their GDPs respectively in 2030 will be sourced from AI-related activities and businesses.

◉ There has been tremendous activity concerning AI policy positions and the development of an AI ecosystem in different countries over the last 18 to 24 months.

◉ Infrastructural supply side interventions have been planned by various countries for creating a larger ecosystem of AI development.

◉ Not just national governments, but even local city governments have become increasingly aware about the importance and potential of AI and have committed public investments.

◉ For building the future workforce for AI, countries are also significantly increasing the allocation of resources for Science, Technology, Engineering and Maths (STEM) talent development through investment in universities, mandating new courses (e.g., AI and law), and offering schemes to retrain people.

◉ AI technology development and applications are evolving rapidly with major implications

Disadvantages of AI	Disadvantages of AI
• No leisure time required • Lower error rate compared to humans. Better precision and accuracy. Eg: Robotic radio surgery • Better speed • Not affected by surrounding environment • Replace humans in repetitive, tedious tasks • Better user experience through predictive technology e.g. Help in predicting what a user will type, ask, search, and do. Can easily act as assistants and recommend actions. • Interact with humans for entertainment or a task. E.g. Sophia robot • Logical – devoid of emotions. Can make rational decisions with less or no mistakes.	• The decrease in demand for human labour due to machines and intelligent robots taking over the jobs in the manufacturing and the services sectors. For Example: In China some customs officers are now robots, In Japan robots as housemaid is emerging trend. • Existential risks: Stephen Hawkins has once said "The development of full artificial intelligence could spell the end of the human race. Once humans develop artificial intelligence, it will take off on its own and redesign itself at an ever-increasing rate. Humans, who are limited by slow biological evolution, couldn't compete and would be superseded". • AI technologies falling into terrorist hands may unleash modern terror network including machine and therefore vulnerability of humans may magnify. • It may lead to moral degradation in society due to decreased human to human interactions.

for economies and societies. A study by EY and NASCCOM found that by 2022, around 46% of the workforce will be engaged in entirely new jobs.

Possible areas for AI applications in Indian conditions

◎ India has the potential to position itself among leaders on the global AI map – with a unique brand of #AIforAll.

◎ It can complement Digital India Mission by helping in the big data analysis which is not possible without using AI.

◎ Targeted delivery of services, schemes, and subsidy can be further fine-tuned.

◎ Smart border surveillance and monitoring to enhance security infrastructure.

◎ Weather forecasting models may become proactive and therefore preplanning for any future mishaps such as floods, droughts and therefore addressing the farming crisis, farmer's suicide, crop losses etc.

◎ By analyzing big data of road safety data and NCRB (National Crime Record Bureau) data for crimes, new policies can be formulated.

◎ Disaster management can be faster and more accessible with the help of robots and intelligent machines.

◎ In the counterinsurgency and patrolling operations, we often hear the loss of CRPF jawans which can be minimized by using the robotic army and lesser human personnel.

◎ AI can be used to automate government processes, therefore, minimizing human interactions and maximizing transparency and accountability.

◎ It can be applied to study ancient literature upon medicines and therefore help in modernizing the health care with the juxtaposition of modern machines and ancient techniques.

◎ In the remotest areas where the last leg of governance is almost broken, AI can do the job. For Example: in the tribal areas and the hilly areas of the northeast.

Nodal organization of the government for the research work on AI

◎ Centre for artificial intelligence and robotics (CAIR), is the primary laboratory of DRDO for research and development in different areas of defense, Information and Communication Technology (ICT) and is located in Bangalore. It is involved in the Research & Development of high-quality Secure Communication, Command, and Control, and Intelligent Systems.

◎ Projects: NETRA- software to intercept online communication, SECOS- Secure operating system.

Challenges India's Artificial Intelligence Development is facing

◎ Lack of enabling data ecosystems

◎ Low intensity of AI research

◎ Inadequate availability of AI expertise, manpower and skilling opportunities

◎ High resource cost and low awareness for adopting AI in business processes

◎ Unclear privacy, security and ethical regulations

◎ Unattractive Intellectual Property regime to incentivise research and adoption of AI.

⊙ WAY FORWARD

- ◉ Incentivising creation of jobs that could constitute the new service industry.

- ◉ Recognition and standardisation of informal training institutions.

- ◉ Creation of open platforms for learning and financial incentives for reskilling of employees.

- ◉ Lack of qualified faculty that poses a serious problem in the present scenario can be addressed through innovative initiatives like creditbearing MOOCs (Massive Open Online Courses).

- ◉ Acceptability and adoption of these decentralised teaching mechanisms can be ensured through prescribed certification in collaboration with the private sector and educational institutions.

- ◉ Additional investment and collaboration with the private sector and educational institutions in order to meet the market demand.

- ◉ To encourage the development of sustainable AI solutions at an appropriate price point for sectors such as health, education, and agriculture, it is necessary that a level playing field be ensured and a supportive environment be created for all players in the value chain.

- ◉ AI is a highly collaborative domain, and any framework aimed at promoting AI needs to be aligned accordingly. A multipronged approach, involving various stakeholders and promoting a collaborative approach is required for promoting development of AI tools as well as adoption of AI in different fields of activity.

📰 Practice Question

- ◉ **What do you understand by the term "artificial intelligence"? Give an account of its potential utilities for the mankind?**

MINORITY PROTECTION ISSUE

CONTEXT

- **According to a news report, Sri Lanka's Easter Sunday bombings were retaliation for a recent attack on mosques in New Zealand.**

- **Attacks at both the locations involved minorities of the respective territories.**

- **Hence, the article will only take a cue from these attacks/incidents and comprehensively focus on laws and other safeguards available for protection of the minorities and the extent of their violations.**

- **The article will also touch base on certain Human Rights reports.**

⊙ ABOUT:

- Generally, the word minority is linked to numerical religious strength based population. While this methodology helps one to arrive quickly at the "minority identification".

- It fails to include regional (like non-dominant tribe groups in the North East), linguistic(Bengali speakers in erstwhile East Pakistan) and other "pattern of life follower" (ethnic) minorities.

⊙ BACKGROUND:

- Cambridge dictionary defines the word minority as any small group in society that is different from the rest because of their race, religion, or political beliefs, or a person who belongs to such a group.

- There is no internationally agreed definition as to which groups constitute minorities.

- The UN Sub-Commissions in Prevention of Discrimination and Protection of Minorities define minority as a group numerically inferior to the rest of the population of a state which possess and wish to preserve stable ethnic, religious or linguistic traditions.

- The Oxford Dictionary of English language defines 'minority' as a smaller group representing "less than half of the whole or predominant population".

- In Kerala Education Bill, the Supreme Court through S.R.Das, Chief Justice, while suggesting the technique of arithmetic tabulation held that the minority means a "community which is numerically less than 50 percent of the total population.

- The National Commission for Minorities Act, 1992 in the Section 2(c) of the act defined a minority as "a community notified as such by the Central government"

- Acting under the provision on October 23, 1993, the Central government notified the Muslim, Christians, Sikhs, Buddhist and Parsis (Zoroastrian) communities as minorities for the purpose of the Act. Sometimes ago, Jains' were also added in the minorities list.

- When the Central government listed these communities as minority it appears that numerical criterion was taken into consideration.

⊙ ANALYSIS

Minority and India: a backgrounder

- The Constitution of India uses the word 'minority' or its plural form in some Articles viz Article 20 to 30 and 350 A to 350 B, but does not define the word 'minority'.

- The Motilal Nehru Report (1928) showed a prominent desire to afford protection to minorities, but did not define the expression.

- According to the Census 2011, of the total population of 121 crore, the Hindus make up 79.8 percent.

- Muslim constitutes 14.2, Christians 2.3, Sikh 1.7, Buddhists 0.7 and Jains 0.4 percent.

- The Census 2011 data indicated that Hinduism is professed by the majority of the population in India.

- The Hindu is majority in most States and UTs except in Manipur, Arunachal Pradesh, Mizoram, Nagaland, Meghalaya, Lakshadweep, Punjab and Jammu & Kashmir.

- As regards religious minorities at the national level, all those who profess a religion other than Hinduism are considered minorities.

- The Muslims are the largest religious minority followed by Christians, Sikhs, Buddhists, Jain and Parsis.

- The SC in TMA Pai Foundation & ors vs. State of Karnataka & ors consider the question of the unit for the purpose of determining the definition of 'minority' within the meaning of Article 30(1).

- It held that 'a minority either linguistic or religious is determinable only by reference to demography of the State and not by taking into consideration the population of the country as a whole.

- In another case, D.A.V College Bhatinda vs. State of Punjab and Ors the Court explained the observation in the above case and it was stated that, "what constitutes a linguistic or religious

minority must be judged in relation to the State in as much as the impugned Act was a State Act and not in relation to the whole of India.

- The SC rejected the contention that since Hindus were a majority in India, they could not be a religious minority in the State of Punjab, as it took the State as the unit to determine whether the Hindus were a minority community.

- The application of numerical test with reference to religion in states like Punjab, Jammu & Kashmir and Nagaland makes Sikhism, Islam and Christianity the majority religions in those States respectively (DAV College vs. State of Punjab AIR 1971 SC 1731).

Chequered Past of minority protection (here, minority has a broad connotation)

- Mob attacks by extremist Hindu groups affiliated with the ruling class against minority communities, especially Muslims, continued throughout the year amid rumors that they sold, bought, or killed cows for beef.

- Instead of taking prompt legal action against the attackers, police frequently filed complaints against the victims under laws banning cow slaughter.

- Tribal communities remained vulnerable to displacement because of mining, dams, and other large infrastructure projects.

- Authorities in India continued to use sedition and criminal defamation laws against government critics. In June, police in Madhya Pradesh state arrested 15 Muslims on sedition charges for allegedly celebrating Pakistan's victory over India in a cricket match, despite Supreme Court directions that sedition allegations must involve actual violence or incitement to violence.

- Nearly five years after the government amended laws and put in place new guidelines and policies aimed at justice for survivors of rape and sexual violence, girls and women continue to face barriers to reporting such crimes, including humiliation at police stations and hospitals leading to lack of protection.

- Hence, the minority context must not be limited to religion/region/linguistic characterization - but must include other marginalized groups as well.

- In October, the Supreme Court ruled that sex with a girl younger than 18 was unlawful, regardless of whether she is married or not, saying the exception for married girls was arbitrary and discriminatory.

- In August, the Supreme Court, in its ruling that privacy is a fundamental right, gave hope to lesbian, gay, bisexual, and transgender (LGBT) people in India by stating that section 377 of India's penal code had a chilling effect on "the unhindered fulfillment of one's sexual orientation, as an element of privacy and dignity.

- Transgender Persons (Protection of Rights) Bill: The report recommended that the bill adopt a 2014 Supreme Court ruling, guaranteeing transgender people the right to self-determine their gender identity. The committee also recommended the bill recognize transgender people's right to marriage, partnership, divorce, and adoption.

- Rights of Persons with Disabilities: India enacted a new mental health law that provides for mental health care and services for everyone and decriminalizes suicide. However, disability rights groups say much remains to be done to ensure that the law is properly enforced.

Foreign Policy and Minority Protection:

- Despite concerns over China's influence, India intervened in Nepal to persuade the government to adopt inclusive policies that accommodated minority communities in the southern part of the country.

- India committed to providing aid for large-scale infrastructure and socio-economic development projects in Rakhine State, but did not call on the government to check abuses by its security forces or to amend its discriminatory citizenship law that effectively keeps the Rohingya stateless.

◉ WAY FORWARD:

- The global governance network must recognizes that effort to promote and protect the rights of minorities must be multidimensional and engage the entire System.

- Discrimination is often at the root of identity-related tensions. Such tensions have a potential to develop into crises that could ultimately lead to conflict, forced displacement and, in the worst cases, to atrocity crimes, including genocide.

- Hence, before these instances develops into a broken window syndrome, these must be allayed as early as possible.

- What the communities and civil societies need to look after is the sense of developing an integrative humanistic framework which allows for affirmative discrimination in favor of minorities at the same time ending avenues for potential abuse.

📰 Practice Question

- **Contributing to India's diversity are a multiplicity of intersecting identities, including caste, language, ethnicity and tribe, as well as degrees of religious syncretism which belie rigid understandings of identity formation and affiliation. Critically examine status of minority protection in India?**

SECTION: B
(PRELIMS)
CURRENT AFFAIRS

BS IV AND BS VI NORMS

⊙ **CONTEXT:**
- **Bringing an end to a segment that accounts for almost a quarter of its total sales, Maruti Suzuki announced that it will stop selling diesel cars next year.**
- **Industry experts and company sources said that the company's decision to stop sales of diesel cars is in line with the mandatory upgrade for auto makers from BS-IV to BS-VI beginning April 1, 2020.**
- **In the wake of rising pollution levels, the Supreme Court had said that March 31, 2020, would be the last date for the registration of BS-IV compliant vehicles.**

⊙ **ABOUT:**

Bharat Stage Norms:
- These are emission control standards introduced by government in 2000 to check air pollution.
- These are based on the European regulations (Euro norms).
- They set limits for release of air pollutants from equipment using internal combustion engines, including vehicles.
- Typically, the higher the stage, the more stringent the norms.

BS IV norms:
- The BS IV norms were introduced in 13 cities apart from the National Capital Region from April 2010 onwards. According to the roadmap, the entire nation was covered under BS IV by April 1, 2017.
- BS IV norms stipulate only 50 parts per million sulphur compared with up to 350 parts per million under BS III. Also, hydrocarbon, carbon monoxide, nitrogen oxide and particulate matter emissions are lower under BS IV.

BS VI norms:
- India is lagging behind even after implementation of BS IV norms. To compensate for this, BS V standards will be skipped and BS VI norms are proposed to come in by April 2020.
- Vehicles must be fitted with DPF (diesel particulate filter) for Particulate Matter (PM) reduction. It is a cylindrical object mounted vertically inside the engine compartment.
- Vehicles also have to be equipped with an SCR (selective catalytic reduction) module to reduce oxides of nitrogen.
- To attain the specified super low emissions, all reactions have to be precise, and controlled by microprocessors.
- Manufacturers will also need to make petrol engines more fuel-efficient as CO emission levels will also need to be controlled. This may lead to a shift towards gasoline direct injection engines.
- Engine downsizing will get big thrust. Smaller engines means lower fuel consumption, especially at lower speeds where most cars spend most of their times.
- Hybrids will get more and more popular, as this is a good way to cut down on emissions, maintain performance levels and boost fuel economy.

BS VI norms will have more impact on diesel vehicles than petrol ones:
- It will be easier for petrol engines to meet BS VI emission standards engine mapping along with some exhaust after-treatment, the diesel cars will need a whole new type of technology in order to reduce emissions.
- These new add-ons are said to increase the prices of diesel cars and increase the gap between a new petrol car and a new diesel car by nearly 2.5 lakh rupees.

- The increase in cost will mainly be because of the fact that new diesel cars will have to add several new layers into the diesel after treatment such as a DPF or a Diesel Particulate Filter and more importantly, the SCR system or Selective Catalytic Reduction system.

1 MILLION ANIMAL AND PLANT SPECIES ARE AT RISK OF EXTINCTION

⊙ **CONTEXT:**
- **The report Global Assessment published by Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), found that up to one million of Earth's estimated eight million plant, insect and animal species is at risk of extinction, many within decades.**

- **The report said, this loss is a direct result of human activity and constitutes a direct threat to human well-being in all regions of the world.**

⊙ **ABOUT:**

Major findings of the report:

- 75% of Earth's land surface and 66% marine environments have been "significantly altered", and that "over 85%" of wetland area had been lost. But, on an average, these trends were less severe on areas controlled or managed by indigenous people and local communities (like tribal communities in India).

- **Forests:**
  ◉ 50% agricultural expansion that occurred was at the expense of forests.
  ◉ There is 68% global forest area today compared with pre-industrial level.

- **Urbanisation:**
  ◉ There is 100% growth in urban areas since 1992.
  ◉ There is 105% growth in human population since 1970.
  ◉ There have been greater than 2500 conflicts over fossil fuels, water, food and land worldwide.

- **Ocean and fishing:**
  ◉ It is projected that there will be 3-10% decrease in ocean net primary production due to climate change alone.
  ◉ There will be 10-25% decrease in fish biomass by the end of the century in low and high warming scenarios.

- **Climate Change:**
  ◉ There has been an increase in global average temperature by 1 degree as compared to pre-industrial level.
  ◉ More than 3mm of sea level rise over last two decades.

What is IPBES?

- The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) is an independent intergovernmental body, established by member States in 2012.

- The objective of IPBES is to strengthen the science-policy interface for biodiversity and ecosystem services for the conservation and sustainable use of biodiversity, long-term human well-being and sustainable development.

- UNESCO is an institutional co-sponsor of IPBES, together with UNEP, FAO and UNDP.

What does IPBES do?

The work of IPBES can be broadly grouped into four complementary areas:

- **Assessments:** On specific themes (e.g. Pollinators, Pollination and Food Production); methodological issues (e.g. Scenarios and Modelling); and at both the regional and global levels (e.g. Global Assessment of Biodiversity and Ecosystem Services).
- **Policy Support:** Identifying policy relevant tools and methodologies, facilitating their use, and catalyzing their further development.
- **Building Capacity & Knowledge:** Identifying and meeting the priority capacity, knowledge and data needs of our member States, experts and stakeholders.
- **Communications & Outreach:** Ensuring the widest reach and impact of our work.

⊚ **SIGNIFICANCE:**
- Biodiversity and nature's benefits to people underpin almost every aspect of human development and are key to the success of the new Sustainable Development Goals.
- They help to produce food, clean water, regulate climate and even control disease. Yet they are being depleted and degraded faster than at any other point in human history.
- IPBES is unique – harnessing the best expertise from across all scientific disciplines and knowledge communities – to provide policy-relevant knowledge and to catalyze the implementation of knowledge-based policies at all levels in government, the private sector and civil society.

FANI IS COUNTRY'S STRONGEST APRIL CYCLONE IN 43 YEARS

⊚ **CONTEXT:**
- **Cyclonic storm Fani, which is lying about 600 km east of Vishakapatnam and 800 km south of Puri, is the first severe, cyclonic storm to have formed in April in India's oceanic neighbourhood since 1976, according to records from the India Meteorological Department (IMD).**

⊚ **ABOUT:**
- Cyclone Fani is expected to graduate to an 'extremely severe cyclonic storm' and make landfall in Orissa (as a very severe cyclonic storm) by May 4, according to a forecast by the IMD.
- Heavy rains are expected in north Andhra Pradesh and Odisha and light rains in West Bengal under the influence of the cyclone.
- Strong winds are expected in Kerala, Tamil Nadu, Puducherry and south Andhra. Fishermen have been advised to stay away from the sea.
- It is equivalent in intensity to a Category 4 hurricane in the Atlantic, or a supertyphoon in the Pacific.
- With winds expected to be 240 kilometers per hour (150 mph) at landfall, Tropical Cyclone Fani would be the strongest storm to hit the region since a similar system struck Odisha in 1999, resulting in at least 10,000 deaths.

Steps taken by India:

- As Fani has been classified as an "extremely severe cyclonic storm" in India, the country's coast guard and navy deployed ships and helicopters for relief and rescue operations.
- Army and air force units have also been put on standby in Odisha, West Bengal and Andhra Pradesh states.
- Flights have been canceled at Bhubaneswar Airport in Odisha and for Kolkata Airport.
- Evacuations have also begun in neighboring Andhra Pradesh, while those in West Bengal have been told to be ready to leave.
- Fishermen have been warned not to venture out to the sea due to the extreme conditions.

Impact:

- Fani is expected to bring large storm surges and significant wind damage near the landfall location.

- Inland flooding will also be a major threat.

- Portions of eastern India and Bangladesh can expect 150 to 300 millimeters (6 to 12 inches) of rain, with locally higher amounts regardless of the intensity.

- Fani will move nearly parallel to the coast as it approaches India. A slight move to the east or west would have a significant impact on the timing of landfall as well as its intensity.

- A more easterly track means that landfall would be farther north in India, perhaps even into Bangladesh.

Tropical Cyclone:

- The southwest monsoon season lasts from June through September and provides India with the vast majority of its annual rainfall. Tropical cyclone activity during the monsoon season is extremely rare because the monsoon is characterized by high wind shear, which makes it difficult for tropical storms to form.

- The cyclone's name, Fani, is Bengali for the hood of a snake. The word cyclone itself is said to be derived from the Greek word meaning "coiling of a snake", and was coined by British administrator Henry Piddington.

NAMING OF CYCLONES

⊙ **CONTEXT:**

- **The recent cyclone to emerge out of the Bay of Bengal has been named Fani. It has made landfall in Odisha causing the most destruction in 2 cities- Puri and Bhubhneshwar.**

- **Before this, there were cyclones Hudhud in 2014, Ockhi in 2017 and Titli and Gaja in 2018.**

- **The first cyclone after the list was adopted was given the name in the first row of the first column — Onil, proposed by Bangladesh. The next cyclone will have name- Vayu.**

⊙ **ABOUT:**

Naming of cyclones:

- Each Tropical Cyclone basin in the world has its own rotating list of names.

- For cyclones in the Bay of Bengal and Arabian Sea, the naming system was agreed by eight member countries of a group called WMO/ESCAP and took effect in 2004.

- These eight countries are – Bangladesh, India, Maldives, Myanmar, Oman, Pakistan, Sri Lanka and Thailand.

NORTHERN INDIAN OCEAN CYCLONE NAMES

Contributors	List 1	List 2	List 3	List 4	List 5	List 6	List 7	List 8
Bangladesh	Onil	Ogni	Nisha	Giri	Helen	Chapala	Ockhi	Fani
India	Agni	Akash	Bijli	Jal	Lehar	Megh	Sagar	Vayu
Maldives	Hibaru	Gonu	Aila	Keila	Madi	Roanu	Mekunu	Hikaa
Myanmar	Pyarr	Yemyin	Phyan	Thane	Nanauk	Kyant	Daye	Kyarr
Oman	Baaz	Sidr	Ward	Murjan	Hudhud	Nada	Luban	Maha
Pakistan	Fanoos	Nargis	Laila	Nilam	Nilofar	Vardah	Titli	Bulbul
Sri Lanka	Mala	Rashmi	Bandu	Viyaru	Ashobaa	Maarutha	Gaja	Pawan
Thailand	Mukda	Khai Muk	Phet	Phailin	Komen	Mora	Phethai	Amphan

- The first cyclone after the list was adopted was given the name in the first row of the first column — Onil, proposed by Bangladesh.

- Subsequent cyclones are being named sequentially, column-wise, with each cyclone given the name immediately below that of the previous cyclone.

- Once the bottom of the column is reached, the sequence moves to the top of the next column.

- So far, the first seven columns have been exhausted, and Fani (again proposed by Bangladesh) is the top name in the last column.

- The next cyclone will be named Vayu. When all the names in list are exhausted, the eight countries will propose fresh lists of names.

- The lists for storms in the Atlantic and Eastern Pacific basins are, however, rotated when the names in the list get exhausted. Exception are, however, made in certain cases — if a storm causes excessive death and destruction, its name is considered for retirement and is not repeated; it is replaced with another name.

Why naming of cyclones is done?

- Appending names to cyclones makes it easier for the media to report on these cyclones, heightens interest in warnings, and increases community preparedness.

- Names are easier to remember than numbers and technical terms and hence can reach greater masses.

- If public wants to suggest the name of a cyclone to be included in the list, the proposed name must meet some fundamental criteria. The name should be short and readily understood when broadcast. Further, the names must not be culturally sensitive and should not convey any unintended and potentially inflammatory meaning.

ZOJI LA PASS

⊙ **CONTEXT:**

- **The 434-km strategic Srinagar-Leh National Highway, connecting the Kashmir Valley with the Ladakh region, was thrown open for traffic after being closed due to heavy snowfall.**

- **Zoji La Pass, connects the picturesque Kashmir Valley with the cold Indus valley desert through this 434-km long Srinagar-Leh road. Border Road Organisation is involved in the snow clearance operation.**

⊙ **ABOUT:**

Zoji La pass:

- It is a high mountain pass in Jammu and Kashmir, located on National Highway 1 connecting Srinagar in Kashmir Valley to Leh in Ladakh region.

- It runs at an elevation of approximately 3,528 metres (11,575 ft), and is the second highest pass after Fotu La on the Srinagar-Leh National Highway.

- Every year due to heavy snowfall, vehicle flow stops for 4 months during winter from December to April.

- During the Indo-Pakistani War of 1947, it was seized by Pakistani supported invaders in 1948 in their campaign to capture Ladakh. The pass was re-captured by Indian forces on 1 November in an assault codenamed Operation Bison, which achieved success primarily due to the surprise use of tanks, then the highest altitude at which tanks had operated in combat in the world.

Zoji La Tunnel:

- It is a 14.2 km long road tunnel under Zoji La pass on the Himalayas between Sonmarg and Dras town of Kargil district of Jammu and Kashmir. It is currently under construction.

- The project was approved by the government of India in January 2018 and the

construction commenced from May 2018. The construction period is 5 years.

- The tunnel along with 6.5 km long Z-Morh Tunnel, (which is 22 km before Zoji La tunnel towards Srinagar) will ensure year-long road connectivity between Srinagar and Leh which currently remains closed for about 4 months due to heavy snowfall on the Zoji La pass.

- It takes more than 3 hours to cross the pass but the tunnel will reduce the time to only 15 minutes. This tunnel was a strategic requirement of the army and the Ladakhi people as the pass is close to LOC and vulnerable to hostile actions by terrorists.

- Once built, this will be the longest bi-directional road tunnel in Asia.

BANKING OMBUDSMAN SCHEME

⊙ **CONTEXT:**
- **Recently, the Reserve Bank of India released the banking ombudsman annual report for 2017-2018.**

⊙ **ABOUT:**

Banking Ombudsman Scheme

- This scheme is an expeditious and inexpensive forum for bank customers for resolution of complaints relating to certain services rendered by banks, which was introduced under the Banking Regulation Act of 1949 by RBI with effect from 1995.

- Presently the Banking Ombudsman Scheme 2006 (As amended upto July 1, 2017) is in operation.

- The Banking Ombudsman is a senior official appointed by the Reserve Bank of India to redress customer complaints against deficiency in certain banking services.

- Currently, twenty Banking Ombudsmen have been appointed with their offices located mostly in state capitals.

- All Scheduled Commercial Banks, Regional Rural Banks and Scheduled Primary Co-operative Banks are covered under the Scheme.

- One can file a complaint before the Banking Ombudsman if the reply is not received from the bank within a period of one month after the bank concerned has received one's complaint, or the bank rejects the complaint, or if the complainant is not satisfied with the reply given by the bank.

- Complaints can be made online and one does not need to make a physical complaint.

- The RBI introduced an NBFC Ombudsman scheme to redress complaints with regard to NBFCs in 2018.

The RBI has listed around 25 areas where the customers can raise complaints with the Banking Ombudsman. Some of them are:

- Non-payment/ inordinate delay in the payment or collection of cheques, drafts, bills etc.;

- Non-payment/delay in payment of inward remittances;

- Failure/delay to issue drafts, pay orders or bankers' cheques;

- Non-adherence to prescribed working hours;

- Refusal to open deposit accounts without any valid reason for refusal;

- Levying of charges without adequate prior notice to the customer;

- Refusal/delay in closing the accounts;

- Non-observance of Reserve Bank guidelines on engagement of recovery agents by banks.

Major highlights of this report are:

- It stated about the Low number of complaints pertaining to mis-selling of third party

products by banks. Its reasons are investors may not be aware that they can approach banking ombudsman for such cases.

● According to latest report, 0.4% of the total complaints were received by the ombudsman in 2017-18 regarding mis-selling. The major cause behind it is that customers are not aware of how they can make complaints.

Way Forward

● RBI needs to disseminate more information about the grievances, especially relating to mis-selling that can be handled by the banking ombudsman.

● The facility of making online complaints and the process must be highlighted properly.

IRDAI FORMS PANEL TO REVIEW MICRO-INSURANCE FRAMEWORK

◉ **CONTEXT:**

● **The Insurance Regulatory and Development Authority of India (IRDAI) has set up a committee to review the regulatory framework on micro-insurance and recommend measures to increase the demand for such products.**

◉ **ABOUT :**

IRDAI and its composition

● Following the recommendations of the N. Malhotra Committee report (1994), IRDAI was setup as an autonomous body under the IRDA Act, 1999. Its headquarters is in Hyderabad.

● The committee has been formed in the backdrop of a less- than-desired off take of micro-insurance products despite their inherent benefits. Its market penetration remains low.

● The 13-member panel comprising officials of the IRDAI, insurers and NGOs is chaired by IRDAI Executive Director Suresh Mathur.

● The committee has representatives from life, general and health insurance companies in the public and private sectors.

Functions: Section 14 of the IRDA Act, 1999 lays down the functions of IRDA.

● Regulating the insurance industry and protects the customers

● Promotion of competition to enhance customer satisfaction

● Promoting professional organizations in insurance

● Licensing and establishing norms for insurance intermediaries

● Lowering premiums for ensuring the financial security of the insurance sector.

● Specifying financial reporting norms of insurance companies

● Regulating investment of policyholders' funds by insurance companies

● Ensuring the maintenance of solvency margin by insurance companies

● Ensuring insurance coverage in rural areas and of vulnerable sections of society

● It will also suggest changes in the distribution structure, if any, including mobile-based and technology driven solutions.

> **Micro-insurance Policy:**
>
> ● Micro-insurance refers to products offering coverage to low-income households or to individuals who have little savings and is tailored specifically for lower valued assets and compensation for illness, injury or death.
>
> ● Though it promises to support sustainable livelihoods of the poor, its market penetration remains low.

- A general or life insurance policy with a sum assured of Rs.50,000 or less is covered under micro-insurance policy.

BMIC

⊙ **CONTEXT:**

- **In an annex tagged with the Joint Communiqué of the Leaders' Roundtable of the Belt and Road Forum, which concluded in Beijing recently, the Chinese Foreign Ministry website has not listed the BCIM as a project covered by the BRI.**

- **Instead, South Asia is covered by three major undertakings — the China-Myanmar Economic Corridor (CMEC); the Nepal-China Trans-Himalayan Multi-dimensional Connectivity Network, including Nepal-China cross-border railway; and the China-Pakistan Economic Corridor (CPEC).**

⊙ **ABOUT:**

Possible causes for exclusion of this project from BRI:

- Citing "sovereignty" concerns, India, for the second time, did not participate in the BRF, as the CPEC passes through Pakistan occupied Kashmir (PoK).

- India's decision to skip the Belt and Road Forum (BRF) may have led to the exclusion of the Bangladesh-China-India-Myanmar (BCIM) economic corridor from the list of projects covered by the Belt and Road Initiative (BRI) umbrella.

BCIM:

- The Bangladesh–China–India–Myanmar Forum for Regional Cooperation (BCIM) is a sub-regional organisation of Asian nations aimed at greater integration of trade and investment between the four countries.

- This is a multi-modal corridor -combination of road, rail, water and air linkages in the region.

- It will be the first expressway between India (Kolkata) and China (Kunming) and will pass through Myanmar (Mandalay) and Bangladesh (Dhaka).

- **The benefits of this cooperation are:**

  ⊚ greater market access for goods, services and energy,

  ⊚ elimination of non-tariff barriers,

  ⊚ better trade facilitation,

  ⊚ investment in infrastructure development,

  ⊚ joint exploration and development of mineral, water, and other natural resources,

  ⊚ development of value and supply chains based on comparative advantages, by translating comparative advantages into competitive advantages, and through closer people to people contact.

- The concept of economic cooperation within the BCIM region was first developed by Rehman Sobhan whose pioneering ideas would eventually lead to the development of the platform in the 1990s which came to be known as the "Kunming Initiative". Over the years, the Kunming initiative developed into what came to be popularly known as the BCIM Forum.

- Through linking the ASEAN Free Trade Area, ASEAN–China Free Trade Area and the ASEAN–India Free Trade Area, the corridor would constitute as one of the largest free trade areas.

INDIA-SEYCHELLES RELATIONS

⊙ **CONTEXT:**

- **At a time when India is developing the Assumption Island in Seychelles as a naval base to expand its strategic footprint in the Indian Ocean, the government has decided to appoint former Army chief Dalbir Singh Suhag as India's next High Commissioner to Seychelles.**

⊙ **ABOUT:**

India-Seychelles relations:

- Diplomatic ties between India and Seychelles have existed since Seychelles gained independence in 1976. A resident high commissioner of India has been in Seychelles since 1987 while Seychelles opened its resident mission in India in 2008.

- Relations between the two countries have been warm and cordial with regular high level exchange visits between the countries. These relations have been around a host of sectors including defence, culture, trade and technical cooperation.

Economic Relations:

- Trade between India and Seychelles amounted to only US$40 million in 2010-11 with the balance of trade heavily in India's favour.

- Tourism, fishing, petroleum exploration, communications and IT, computer education and pharmaceuticals have been identified as areas of economic cooperation between the two countries.

- Both the countries signed a bilateral investment promotion agreement in 2010 and in 2012.

- India extended it a $50-million line of credit and a grant of $25-million.

Defence Cooperation:

- In 1986, the Indian Navy deployed the INS Vindhyagiri at the Seychelles Port of Victoria to abort an attempted coup against President Rene by Defence Minister Berlouis in what was called Operation Flowers are Blooming.

- India helped avert a further attempted coup by Berlouis in 1986, when Indian Prime Minister Rajiv Gandhi lent President René his plane so that he could fly back from an international meeting in Harare to the Seychelles.

- In 2009, India acted upon a request of the Seychelles and dispatched naval ships to patrol the exclusive economic zone of Seychelles and to guard it against piracy. India has provided Seychelles with monetary support and equipment such as Dornier Do 228s and Chetak helicopters for meeting its defence needs.

- The Seychelles government has leased the Assumption Island to the Indian Navy to build an overseas base of operations there. The Indian Army is helping to renovate the airfield while the navy has taken permission from the Seychelles government to make a new deep sea port by dredging sand for the same instead of using the ruined, old jetty which is already present. The residents of the island were relocated to another island by the help of Indian Government.

- Developing infrastructure on Assumption Island in Seychelles is a key piece in India's proactive maritime strategy as it counters China's moves in the Indian Ocean region. Developing its infrastructure is being regarded a "strategic asset" in India's arsenal.

Technical Cooperation:

- India has been working on human resource development and capacity building with the Government of Seychelles under the Indian Technical and Economic Cooperation Programme since the early 1980s.

- India is a medical tourism destination for the Seychellois and the Government of Seychelles has tied up with MIOT Hospitals and Madras Medical Mission in Chennai for providing healthcare to its citizens.

- The two nations have also been working together in the areas of environment protection and renewable energy and India is to set up a solar power cluster in Seychelles.

UMBRELLA MOVEMENT

⊙ **CONTEXT:**

- **Four prominent leaders of Hong Kong's democracy movement- Umbrella Movement, were jailed for their role in organising mass protests in 2014 that paralysed the city for months and infuriated Beijing.**

⊙ **ABOUT:**

What was Umbrella Movement?

- The Umbrella Movement started as a spontaneous social movement for democratic development in Hong Kong in September 2014. It was a large movement in terms of duration, location and reach and also very much empowered by digital media.

- Its name arose from the use of umbrellas as a tool for passive resistance to the Hong Kong Police during a 79-day occupation of the city. The umbrellas were used for defence against police pepper spray.

Background for building up of movement:

- Hong Kong used to be a British colony, but since the handover of 1997 it is a city of China.

- According to the constitutional principle-One Country, Two Systems, the Chinese Communist Government ensured Hong Kong will retain its own currency, legal and parliamentary systems (democratic institutions which have been developed since the British colonial period) and people's existing rights and freedoms for fifty years.

- However, critical voices have emerged in Hong Kong to protest against actions by the government which have been seen as prioritizing the interests of the Chinese Communist Government for instance through the spending of public funds for pro-China white elephant projects.

- At the same time, many citizens have expressed dissatisfaction and anger over the neo-liberal economic policies of the Hong Kong government which have been seen as producing new social inequalities in the society.

- Thus, protests and social movements against the government policies already existed, and the unsolved political and social problems can be seen as the long-term causes for the appearance of the Umbrella Movement.

Major cause of movement:

- In 2007, the Standing Committee of the National People's Congress of China (NPCSC) empowered Hong Kong to implement, through reforms, universal suffrage in view of the 2017 Hong Kong Chief Executive election and 2016 Legislative Council election.

- On June 22, 2014, an electronic Civil Referendum was conducted organized by the Secretariat of the 'Occupy Central with Love and Peace' (an organization active in the discussion regarding the electoral system in Hong Kong).

- As a result of the referendum, the organization launched a campaign demanding that the electoral reform should fulfil the international standards of universal suffrage, the rights to vote, to be elected and to nominate, and about 700,000 voters agreed that the Legislative Council should veto the government proposal if it would not satisfy international standards of universal suffrage allowing genuine choices by electors.

- However, on August 31, 2014, the NPCSC decided to set a framework for the election reforms which limited the rights to vote, to be elected and to nominate.

- Considered a violation of the One Country, Two Systems, the decision caused reactions and disagreements in Hong Kong. Several groups and organisations demanded a withdrawal of the decision by NPCSC and establishment of universal suffrage. This led to the Umbrella Movement.

NSCN-IM

⊙ **CONTEXT:**
- **Recently, the Assam Rifles started sending reinforcements to Sihai, which is a Naga village located in Manipur, on learning that the rebels of National Socialist Council of Nagaland Isak-Muivah (NSCN-IM) faction had set up an "unauthorised" camp.**

- **After five days of a standoff that left people panic-stricken, Assam Rifles personnel and NSCN-IM insurgents have agreed to withdraw from two remote villages of Ukhrul in Manipur.**

⊙ **ABOUT:**

What were the causes of standoff?

- The standoff was triggered by the setting up of an "unauthorised" camp by the rebels at Sihai village near the India-Myanmar border.

- The NSCN-IM has been in a peace mode since 1997 following its signing of a ceasefire agreement with the Central Government.

- According to ceasefire ground rules, members of the outfit cannot venture outside their designated camps which are located in Nagaland.

- The paramilitary force had learnt about the presence of the camp during a routine aerial recce. Subsequently, it had urged the locals and church leaders to tell the insurgents to vacate the camp as it was set up in gross violation of the ceasefire ground rules.

NSCN-IM:

- It is one of the largest militant groups fighting for an independent Naga homeland.

- Late Isak Chishi Swu and Thuingaleng Muivah, the founding fathers of NSCN-IM, was Chairman and General Secretary of NSCN-IM respectively.

- They have been engaged in guerrilla warfare against successive Indian administrations since the 1950s.

- One of the main demands of NSCN-IM has been the creation of a sovereign Naga territory that includes Naga-inhabited parts of neighbouring states like Manipur, Assam and Arunachal Pradesh as well as a portion of Burma across the international border, and leaders from those states have long been wary of any accord that would allow the annexation of parts of their land.

- Lack of infrastructure development in the region is one of the perceived reason for the decades' long insurgency.

- On the political front, the NSCN-IM has divided its area of influence into 11 regions based on sub-tribe considerations and administrative convenience.

- In many areas, it runs a parallel government. There are four major 'Ministries' – Defence, Home, Finance and Foreign Affairs.

- Moreover, there are five other Ministries including Education, Information and Publicity, Forests and Minerals, Law and Justice and Religious Affairs.

- The most prominent among the Ministries is the 'Home ministry', which is considered as a replacement of the Indian State government machinery.

- In August 2015, NSCN-IM had entered into an historic Peace Accord (Framework Agreement) with Union government to bring lasting peace in Nagaland.

KHASI KINGDOMS TO REVISIT 1947 AGREEMENTS

⊙ **CONTEXT:**
- **A federation of 25 Himas or Khasi kingdoms plan to revisit the 1947-48 agreements that made present day Meghalaya a part of India.**

◉ **ABOUT :**

Background :

- The 25 Khasi states had signed the Instrument of Accession and Annexed Agreement with the Dominion of India between December 15, 1947 and March 19, 1948.
- The conditional treaty with these states was signed by Governor General Chakravarty Rajagopalachari on August 17, 1948.
- The Khasi states, though, did not sign the Instrument of Merger unlike most other states in India.
- During the British period, the Khasi domain was divided into the Khasi states and British territories.
- At that time, the British government had no territorial right on the Khasi states and they had to approach the chiefs of these states if they needed land for any purpose.
- After independence, the British territories became part of the Indian dominion but the Khasi states had to sign documents beginning with the Standstill Agreement that provided a few rights to the states.
- Though the Constitution has provided self-rule to a considerable extent through tribal councils, there has been an increasing demand for giving more teeth to the Khasi states.

◉ **AIM :**

- To safeguard tribal customs and traditions from Central laws in force or could be enacted, such as the Citizenship (Amendment) Bill.
- The Citizenship bill would grant citizenship to non-domicile of north east which in turn bring assimilation that could diminish the cultural value of tribal areas.
- The bill is one of the factors to strengthen the Federation of Khasi states that were ruled by a Syiem (king like head of a Hima).

BT BRINJAL

◉ **CONTEXT:**

- **India banned Bt brinjal in 2010 but, nine years on, the genetically modified (GM) crop is still in circulation, said activists recently.**
- **They cited the example of a farmer from Haryana's Fatehabad who allegedly has been cultivating the crop for a couple of years now.**
- **Representatives of the activists- Coalition for a GM-Free India have demanded immediate action from the central and state governments.**

◉ **ABOUT:**

What are Genetically Modified (GM) crops?

- GM is a technology that involves inserting DNA into the genome of an organism.
- To produce a GM plant, new DNA is transferred into plant cells. Usually, the cells are then grown in tissue culture where they develop into plants. The seeds produced by these plants will inherit the new DNA.
- One of the methods used to transfer DNA is to coat the surface of small metal particles with the relevant DNA fragment, and bombard the particles into the plant cells.
- Another method is to use a bacterium or virus. The viruses and bacteria transfer their DNA into a host cell as a normal part of their life cycle. For GM plants, the bacterium most frequently used is called Agrobacterium tumefaciens. The gene of interest is transferred into the bacterium and the bacterial cells then transfer the new DNA to the genome of the plant cells.

What is Bt Brinjal?

- BT Brinjal is a GM crop created by inserting Cry 1Ac gene from the soil bacterium Bacillus thuringiensis into Brinjal.

- The insertion of the gene gives Brinjal plant resistance against lepidopteron insects like the Brinjal Fruit and Shoot Borer (Leucinodes orbonalis) and Fruit Borer (Helicoverpa armigera).

- Upon ingestion of the Bt toxin by the insect, there would be disruption of digestive processes, ultimately resulting in the death of the insect.

- This was to bring down the economic cost of brinjal production in the country. As per studies, the Shoot Borer and Fruit Borer cause up to 20% damage in the crops. The introduction of Bt Brinjal would add to annual production and it would be good for farm economy in the country.

Why Bt Brinjal was banned?

- Despite of the claims of the Mahyco (Maharashtra Hybrid Seeds Co) company that it has done all Biosafety tests, there were concerns over potential health hazards and problem of terminator seed in Brinjal, which would compel farmers to by seeds from Monsanto.

- The matter reached to Supreme Court and an expert committee, appointed by Supreme Court recommended a 10-year moratorium on field trials of all genetically modified (GM) food crops and a complete ban on field trials of transgenics in crops which originate in India.

- The result was that the government imposed a moratorium on field trials of Bt Brinjal in 2010.

NASA'S INSIGHT SPACECRAFT

⊙ **CONTEXT:**
- **NASA's Mars Lander InSight has recorded its first 'Marsquake.' It has recorded a quake of 2 or 2.5 magnitude which is hard to predict on Earth's surface.**

⊙ **ABOUT:**

InSight — Studying the 'Inner Space' of Mars

- InSight, short for Interior Exploration using Seismic Investigations, Geodesy and Heat Transport, is a Mars lander designed to give the Red Planet its first thorough checkup since it formed 4.5 billion years ago. It is the first outer space robotic explorer to study in-depth the "inner space" of Mars: its crust, mantle, and core.

- Studying Mars' interior structure answers key questions about the early formation of rocky planets in our inner solar system - Mercury, Venus, Earth, and Mars - more than 4 billion years ago, as well as rocky exoplanets. InSight also measures tectonic activity and meteorite impacts on Mars today.

- The lander uses cutting edge instruments, to delve deep beneath the surface and seek the fingerprints of the processes that formed the terrestrial planets. It does so by measuring the planet's "vital signs": its "pulse" (seismology), "temperature" (heat flow), and "reflexes" (precision tracking).

InSight Science Goals

- The InSight mission seeks to uncover how a rocky body forms and evolves to become a planet by investigating the interior structure and composition of Mars. The mission will also determine the rate of Martian tectonic activity and meteorite impacts.

- The InSight Mars lander has two science objectives that support the Mission's science goals:

  ⊙ Formation & Evolution: Understand the formation and evolution of terrestrial planets through investigation of the interior structure and processes of Mars.

  ⊙ Tectonic Activity: Determine the present level of tectonic activity and meteorite impact rate on Mars.

Why Mars?

- Previous missions to Mars have investigated the surface history of the Red Planet by examining features like canyons, volcanoes, rocks and soil. However, signatures of the

planet's formation can only be found by sensing and studying its "vital signs" far below the surface.

- In comparison to the other terrestrial planets, Mars is neither too big nor too small. This means that it preserves the record of its formation and can give us insight into how the terrestrial planets formed. It is the perfect laboratory from which to study the formation and evolution of rocky planets. Scientists know that Mars has low levels of geological activity. But a lander like InSight can also reveal just how active Mars really is.

NASA / JPL-Caltech

RARE RADIOACTIVE DECAY CAPTURED BY DARK MATTER DETECTOR

◉ **CONTEXT:**

- **Scientists have found the first direct evidence of a rare radioactive decay reaction, known as the two neutrino double electron capture.**

◉ **ABOUT:**

- There are four fundamental forces in the Universe: gravitational force, electromagnetic force, strong forces and weak forces.

- Among these, the weak forces act at the shortest distance and aid in the disintegration of atomic nuclei. This happens through a process known as beta decay.

- One of the processes of beta decay is an electron capture — in which the nucleus captures an electron, in turn converting a proton in the nucleus into a neutron and emitting a neutrino.

- The disintegration of some atomic nuclei happens through a double electron capture (two electrons are captured by the nucleus instead of one) which is very slow, and hence the longer half life.

Observations:

- The observation was made in the decay of xenon 124 nuclei, which were part of the XENON1T dark matter detector experiment, to tellurium 124.

- This detection is an important step towards knowing the constituents of dark matter, which makes up 27 per cent of the Universe.

- Researchers have theorised that dark matter could be made up of yet unfound particles known as Weakly Interacting Massive Particles (WIMP).

- Such particles will display rare radioactive reactions such as neutrino-less double beta decay, one example of which is a neutrino-less double electron capture.

- The current observation of a neutrino double electron capture is the first step towards the neutrino-less version of the reaction.

Dark Matter:

- Everything else, on Earth or elsewhere that we can see and observe constitutes less than 5 per cent of the Universe. The rest of the Universe, around 68 per cent, is dark energy and remains unknown.

- Scientists have come to this conclusion as the rate of expansion of the Universe cannot be explained with the existence of ordinary matter alone.

- Only by taking dark matter and dark energy into account can this rate be explained. But apart from this, not much is known about these two mysterious entities.

- The majority of dark matter is thought to be non-baryonic in nature, possibly being composed of some as-yet undiscovered subatomic particles.

- Its presence is implied in a variety of astrophysical observations, including gravitational effects that cannot be explained by accepted theories of gravity unless more matter is present than can be seen.

WORLD MALARIA DAY, 2019

⊙ **CONTEXT :**

- **April 25 is observed as World Malaria Day. This World Malaria Day, make the effort of spreading as much awareness about malaria as possible and take up tips for prevention at all times. This year the theme is "Zero malaria starts with me".**

⊙ **ABOUT :**

What is Malaria ?

- Malaria is caused by a Plasmodium Parasites that is transmitted from one human to another by the bite of infected Anopheles mosquitoes.

- In humans, the parasites (called sporozoites) migrate to the liver where they mature and release another form, the merozoites.

- The majority of Malaria symptoms are caused by the massive release of merozoites into the bloodstream such as anaemia is caused by the destruction of the red blood cells.

- There are five parasites that can cause Malaria in humans and the deadliest of all is Plasmodium Falciparum.

- Children under the age of 5 and pregnant women are most susceptible to the disease.

- More than 70 per cent or two thirds of total malaria deaths constitute children under the age of 5.

- Symptoms of Malaria :

- People who have malaria usually have high fever, experience shaking chills and feel very sick.

- Apart from fever and chills, malaria also causes headaches, nausea, vomiting, muscle pain, fatigue, chest pain, cough and sweating.

- Spread

- If an infected mosquito bites one person then that person becomes infected with malaria parasites and can spread them to other people.

- Malaria can also spread from mother to unborn child, through blood transfusions and by sharing needles used to inject drugs.
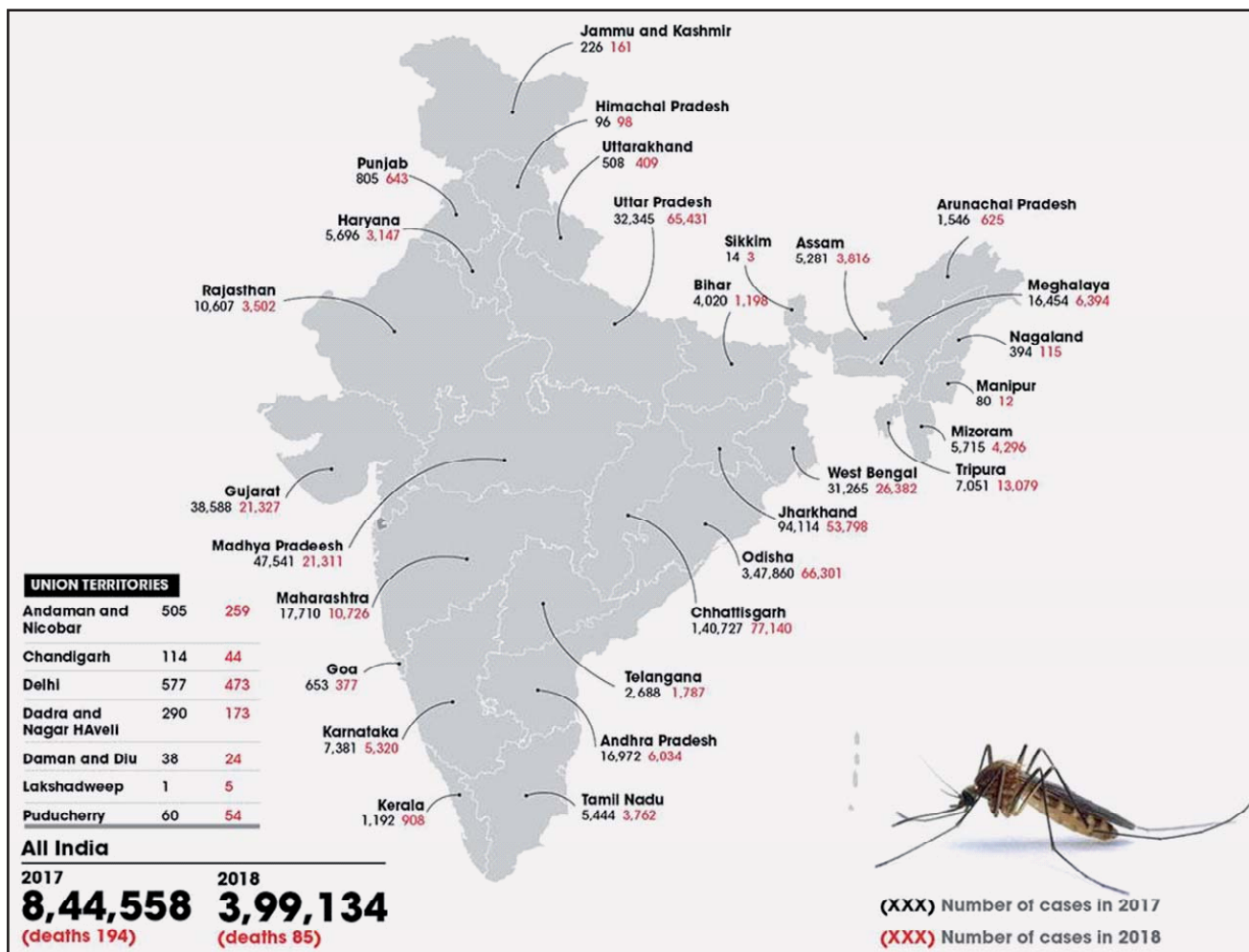
Malaria prevention

- Malaria can be prevented by avoiding travelling to place where incidence of the disease is high - like tropical and sub tropical areas. Those who are at high risk of malaria include older adults, young children and infants, pregnant women and their unborn children, travellers coming from areas where there is no malaria.

- Wear clothes that cover the whole body properly, especially if going to damp areas where mosquitoes can breed.

- Apply insect repellents on skin and even on clothes. In times when malaria incidence is high in surroundings, sleep under a net.

- Anyone who exhibits signs of malaria should go for diagnosis immediately. A parasitological test is important for malaria diagnosis.

Reports

- India has the third-highest burden of malaria cases in the world and contributes to more than 89 per cent cases in the south-east region.

Jammu and Kashmir	226	161
Himachal Pradesh	96	98
Uttarakhand	508	409
Punjab	805	643
Haryana	5,696	3,147
Uttar Pradesh	32,345	65,431
Arunachal Pradesh	1,546	625
Sikkim	14	3
Assam	5,281	3,816
Bihar	4,020	1,198
Meghalaya	16,454	6,394
Nagaland	394	115
Rajasthan	10,607	3,502
Manipur	80	12
Mizoram	5,715	4,296
Tripura	7,051	13,079
West Bengal	31,265	26,382
Gujarat	38,588	21,327
Jharkhand	94,114	53,798
Madhya Pradesh	47,541	21,311
Odisha	3,47,860	66,301
Maharashtra	17,710	10,726
Chhattisgarh	1,40,727	77,140
Goa	653	377
Telangana	2,688	1,787
Karnataka	7,381	5,320
Andhra Pradesh	16,972	6,034
Kerala	1,192	908
Tamil Nadu	5,444	3,762

UNION TERRITORIES

Andaman and Nicobar	505	259
Chandigarh	114	44
Delhi	577	473
Dadra and Nagar HAveli	290	173
Daman and Diu	38	24
Lakshadweep	1	5
Puducherry	60	54

All India

2017	2018
8,44,558	**3,99,134**
(deaths 194)	(deaths 85)

(XXX) Number of cases in 2017
(XXX) Number of cases in 2018

ICMR LAUNCHES MERA INDIA TO ELIMINATE MALARIA

⊙ **CONTEXT :**
- **The Indian Council of Medical Research (ICMR) on April 25, 2019 launched the 'Malaria Elimination Research Alliance (MERA) India', a gathering of partners working together to plan and scale up research to eliminate Malaria from India by 2030.**

⊙ **ABOUT :**
- MERA India alliance holds utmost importance to the Union Ministry of Health and Family Welfare for the operational research. The World Health Organisation (WHO) had earlier appreciated India's research in malaria and hence, the country now aims to ensure its elimination by 2030.

- The alliance was launched on the occasion of the World Malaria Day 2019.

Objectives

- The principal motive of the 'MERA India' alliance is to prioritise, plan, conduct, and scale up research in a coordinated way to have a solid impact on the population who are at risk of malaria.

- India has made impressive progress in malaria control in the recent years. The malaria burden in India declined by over 80 percent from 2.03 million cases in 2000 to 0.39 million in 2018. Deaths by malaria also declined by over 90 percent from 932 deaths in 2000 to 85 in 2018.

Highlights of 'MERA India' alliance

- The National Vector Borne Diseases Control Program (NVBDCP) developed a comprehensive framework to achieve "Malaria free India by 2030".

- The NVBDCP's National Strategic Plan recognises the critical role of research to support and guide malaria elimination efforts.

- The MERA India does not duplicate the international efforts to eliminate Malaria rather complement the efforts on a national scale.

- The alliance will facilitate trans-institutional coordination and collaboration around a collaborative research agenda.

INTERNATIONAL WORKER'S DAY

⊙ **CONTEXT:**

- **May 1 is celebrated as International Workers Day, a day of celebration of the working class. In India, it was first celebrated in 1923 in Madras.**

- **This year's theme is "Sustainable Pension for all: The Role of Social Partners".**

⊙ **ABOUT:**

Background

- International Workers' Day is celebrated to commemorate the 4th of May of 1886, the Haymarket affair (Haymarket Massacre) in the Chicago, when workers were on the general strike for their eight-hour workday. Suddenly, a bomb was thrown over the crowd by an unidentified person and then police started firing over the workers and four demonstrators were killed.

- It was decided to be celebrated on annual basis as a May Day in the meeting (in 1889) of Paris through a proposal by the Raymond Lavigne.

- In the year 1891, May Day was officially recognized by the International's second congress to be celebrated as an annual event.

- The Communist Manifesto written by Karl Marx and Engels in 1848 had a great impact on workers across various countries that were feeling the heat of industrialisation.

Why is May Day celebrated?

- It is celebrated to promote the requirement of eight-hour work day. After the lots of efforts made by the workers and socialists, eight-hours was declared as the legal time for the workers in the national convention at Chicago in 1884 by the American Federation of Labour.

- It commemorates the event of Haymarket Massacre as well as to promote the social and economic achievements of the working group people.

Celebration in India:

- The country witnessed the first celebration of Labour Day in 1923 in Madras. It was led by Singaravelar, leader of the Labour Kisan Party of Hindustan who held two meetings, one at Triplicane Beach and one near the Madras High Court.

● It was at these meetings that a resolution was passed urging the British government to declare May 1 as a Labour Day and also a government holiday. It was the first occasion in India on which the red flag was used.

International Labour Organization (ILO)

● ILO is an agency located in the United Nations, established to deal with labour issues on international level. It has around 185 members of the total (193) UN member states.

● It deals with all the complaints violating the international rules for labour class people. It has tripartite governing structure in order to create free and open debate between the social partners and governmental body. International Labour Organization secretariat works as an International Labour Office.

● It organizes an International Labour Conference on annual basis in the Geneva in the month of June to make general policies, planning programmes and deciding budget.

◉ **SIGNIFICANCE:** ● It is celebrated on international level to promote and encourage the international labour associations.

WORLD INTELLECTUAL PROPERTY DAY, 2019

◉ **CONTEXT:** ● **The World Intellectual Property Day is observed all over the world on April 26th. Creators and inventors such as artists, developers, content creators, musicians, actors and producers, among others connect with each other to talk about how intellectual property rights contribute to the world we live in.**

◉ **ABOUT:** ● World Intellectual Property Day is also known as World IP Day. It was established by World Intellectual Property Organization (WIPO).

● On this day, the WIPO works together with various government agencies, non-government organizations, community groups and individuals to hold different events and activities to promote the day.

Background

● In October 1999, the General Assembly of the WIPO approved the idea of declaring a particular day as a World Intellectual Property Day.

● In 2000, the WIPO designated 26 April as an annual World Intellectual Property Day to address the perceived gap between Intellectual Property as a business/legal concept and its relevance to people's lives.

● April 26 was specifically chosen as the Convention Establishing the World Intellectual Property Organization, first entered into force in 1970 on this date.

● Intellectual property involves laws around trade secrets, trademarks, copyrights, and patents. Safeguarding one's intellectual property is a necessity in this ultra-competitive digital world.

Aim:

● It promotes the role of IP in stimulating innovation and creativity.

Theme of 2019 :

● The theme for this year is 'Reach for Gold: IP and Sports.' This year's theme dives into the world of sports. It explores how innovation, creativity and the IP rights support the development of sport and its enjoyment around the world.

Why Sports?

- Lately, sports have become an industry of its own, generating multi-billion dollars and employing millions of people around the world. Sports businesses use patents and designs for development of new sports technologies, materials, training, and equipment. Business relationships built on IP rights help to secure the economic value of sports.

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