MAINSTORMING 2018

ECONOMICS & AGRICULTURE I

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MAINSTORMING – 2018
ECONOMIC AND AGRICULTURE - I

INDEX

1. INDIAN ECONOMY ........................................ 4
   1.1 Ease of Doing Business in India Report 2018 ........ 4
   1.2 Assessing Ease of Doing Business Ranking .......... 4
   1.3 NITI –IDFC Report on Ease of doing business ....... 5
   1.4 Oil Companies - Pricing Policy ............................ 6
   1.5 OPEC Meeting ............................................... 7
   1.6 Global Financial Development Report ................. 8
   1.7 Usefulness of WPI ......................................... 9
   1.8 Problems in Inflation Targeting .......................... 9
   1.9 Comparing PMI and IIP ................................... 10
   1.10 Demonetization - Impact after an year ............... 11
   1.11 RBI report on Demonetization ......................... 13
   1.12 National Anti-Profitsteering Authority ............... 14
   1.13 New Exim Regime ........................................ 15
   1.14 Reverse Charge Mechanism .............................. 16
   1.15 GST e-way bill ........................................... 17
   1.16 GST Compensation Cess ................................ 18
   1.17 GST & Cash less economy ............................... 18
   1.18 Inclusion of Electricity in GST .......................... 19
   1.19 Report on CBDT and Income tax ....................... 20
   1.20 Reviewing Income Tax Act .............................. 21
   1.21 Export Subsidy Issue ...................................... 22
   1.22 SEBI’s order on Shell Companies ...................... 22
   1.23 National Financial reporting agency ................. 23
   1.24 Tussle between the regulators .......................... 24
   1.25 RCEP - Tariff Wars ..................................... 24
   1.26 U.S plans to roll back QE ............................... 26
   1.27 Initial Coin Offering .................................... 27

2. EMPLOYMENT AND RELATED ISSUES .......... 28
   2.1 Widening job deficit ..................................... 28
   2.2 Unemployment in India ................................... 29
   2.3 Towards a Payroll Reporting in India' Report ....... 30
   2.4 Global Human Capital Index ............................. 31

3. MOBILISATION OF RESOURCES .................. 32
   3.1 Municipal Bonds in India ............................... 32
   3.2 Air India Disinvestment .................................. 33
   3.3 Bharat-22 ETF ........................................... 34
   3.4 Land Borrowing - A Viable Solution .................. 34
   3.5 Easing of FDI Norms ..................................... 35
   3.6 Concerns with FPI ....................................... 36
   3.7 Quick facts ................................................. 37

4. INVESTMENT MODELS .................................. 38
   4.1 HAM Project ............................................... 38
   4.2 Srikrishna Committee - BIT Disputes Resolution .... 38

5. BANKING .................................................. 39
   5.1 Failure of Bank Board Bureau .......................... 39
   5.2 PSBs Recapitalization Plan ............................... 40
   5.3 Consolidation of Banks ................................... 41
   5.4 Problems with MCLR ................................. 43
   5.5 WLTF Banks ............................................. 44

6. INFRASTRUCTURE ........................................ 44
   6.1 Infrastructure Status to Logistics Sector .............. 44
   6.2 Bharatmala Project ...................................... 45

7. ENERGY .................................................. 51
   7.1 Concerns in Power Sector ............................... 51
   7.2 Renegotiating Power Purchase Agreements ............ 52
   7.3 Viability of Indian Solar Projects amid Trade Shocks .. 53
   7.4 Safeguard Duty on Solar Cells .......................... 53
   7.5 Need for Nuclear power .................................. 55
   7.6 Open Acreage Licensing Policy ........................ 55
   7.7 Saubhagya scheme ..................................... 56
   7.8 GAIL Pipeline in Kerala ................................. 57

8. AGRICULTURE .......................................... 58
   8.1 Preventing Post Harvest Losses ....................... 58
   8.2 Doubling Farmer Income by 2022 ...................... 59
   8.3 Stubble Burning - An Economic solution ............ 60
   8.4 NITI Aayog’s Agriculture Agenda ....................... 61
   8.5 Assessing Farm Policies ................................ 62
   8.6 Issues in India Horticulture ............................ 63
   8.7 Initiatives for Vidarbh Farmers ......................... 64
   8.8 Reviving water management practices .................. 65
   8.9 Kaleshwaram Lift Irrigation Project (KLIP) .......... 66
   8.10 Rising the Height of SardarSarovar’s Dam ........... 67

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8.11 Need for Structural Reforms in Agri-Marketing .......................... 68
8.12 e-NAM Initiative ........................................................................ 69
8.13 Market Assurance Scheme ......................................................... 70
8.14 Targeted Agricultural Lending .................................................... 71
8.15 Agri Future Markets .................................................................... 72
8.16 Concerns with Agri Import policies ............................................. 73
8.17 Falling Agri Prices ....................................................................... 73
8.18 Managing Pulses Prices ............................................................... 74
8.19 Centre on GM Mustard crop ....................................................... 75
8.20 Rebirth of Indian Cotton ............................................................ 76
8.21 Toxic Farming ............................................................................. 76
8.22 Limitations with Organic Farming .............................................. 77
8.23 Reforming the Sugar Industry ..................................................... 78
8.24 Rationalizing Cane Pricing Policy ............................................... 79

9. direct and indirect farm subsidies and minimum support prices .................. 80
9.1 Targeted Public Distribution System ......................................... 80
9.2 Ineffective MSP .......................................................................... 81
9.3 Price Deficiency Payment ......................................................... 82
9.4 WTO - Fisheries Subsidies ....................................................... 85

10. HIGHLIGHTS OF ECONOMIC SURVEY 2017-2018 .......................... 85
10.1 New Economic Facts on Indian Economy ............................... 85
10.2 Economic Growth ................................................................. 86
10.3 Inflation .................................................................................... 87
10.4 Monetary Management ............................................................ 87
10.5 Tax Collections ......................................................................... 88
10.7 External Sector .......................................................................... 88
10.8 Foreign Direct Investment ...................................................... 89
10.9 Trade Policy ............................................................................ 90
10.10 Industrial Sector ................................................................. 90
10.11 Ease Of Doing Business ....................................................... 91
10.12 Services Sector ................................................................. 92
10.13 Infrastructure ......................................................................... 92
10.14 Agriculture ............................................................................. 94
10.15 Climate Change ....................................................................... 96
10.16 Sustainable Development ...................................................... 96
10.17 Air Pollution .......................................................................... 97
10.18 Social Expenditure ............................................................... 98
10.19 Education .............................................................................. 98
10.20 Labour Reforms And Participation ........................................ 98
10.21 Pink-Colour Economic Survey - Gender Issues ...................... 99
10.22 Health .................................................................................... 100
10.23 Sanitation ................................................................................ 101
10.24 Fiscal Federalism ..................................................................... 102
10.25 Financial Savings & Investment ........................................... 103
10.26 Science & Technology ......................................................... 104
10.27 Net Producer Of Knowledge ............................................... 105
10.28 Late Converger Stall ............................................................. 105

11. MISCELLANEOUS ..................................................................... 106
11.1 Nobel Prize for Economics 2017 .............................................. 106
11.2 Paradise Papers - Offshore Companies ................................... 107
11.3 Why MNEs need to recalibrate their strategies? .................. 108
11.4 Bitcoins in India ................................................................. 109
11.5 Change in Financial Year ....................................................... 112
1. INDIAN ECONOMY

1.1 Ease of Doing Business in India Report 2018

Why in news?
India recently ranked at 100 out of 190 countries in World Bank Group’s Doing Business 2018 report.

What are the findings of the report?

- The recent ranking is an improvement of 30 positions over last year’s ranking.
- After improving by a mere 1 spot in last year’s report, the Niti Aayog was tasked with ensuring a better ranking this year and the Niti Aayog delivered.
- This improvement made India to enter in the set of 10 “most improved” economies and a step ahead to breach the top 50 economies worldwide in terms of this index.
- The factors most responsible for the jump in India’s ranking is
  1. Greater ease in the payment of taxes online.
  2. The possibility of submitting building plans in advance of applying for a construction permit.
  3. Business incorporation that combines the permanent account number (PAN) with the tax account number (TAN).
  4. Reduction in the time required to complete provident fund and state insurance applications.
  5. Passage and implementation of the new insolvency and bankruptcy code.
- The World Bank rankings have not taken the GST into account since it was not implemented in the period being evaluated.

What are the challenges with interpreting the report?

- Numbers concerned - Once the report releases the governments are only focusing more on improving their ranking as opposed to fixing ground realities.
- Over time, however, these rankings became a popular tool for nudging countries towards business-friendly reforms.
- Methodological challenges - India’s 30-point improvement in one year is not unique.
- Russia gained 30 spots in the Doing Business 2014 report compared to the 2013 report.
- This came after Russia’s plan to improve its ranking from 118 in 2012 to 50 by 2015 and 20 by 2018.
- Russia currently sits in the 35th spot just one spot below Japan and ahead of several Western European economies.
- But this high ranking should be seen in the context of Russia’s dismal 114th rank in the Heritage Foundation’s Index of Economic Freedom (India ranks 143rd) and 131st rank in Transparency International’s Corruption Perceptions Index (India ranks 79th).
- Ranking mechanism - In India’s case, the business environment in only Delhi and Mumbai are used to compile the national ranking. This has always been the case, even though there will be more cities included in future rankings.
- These rankings also focus a lot more on the laws and rules that are on the books and do not necessarily capture the daily experiences of businesses.

1.2 Assessing Ease of Doing Business Ranking

What is the issue?
World Bank’s chief economist recently claimed that the bank’s flagship “Ease of Doing Business” ranking might have been unfairly manipulated.

What is the Ease of Doing Business ranking?

- ‘Ease of Doing Business’ ranking is a rank list published by the World Bank.
- It rates various countries on the basis of their pro-business policies.
• The rankings maps regulations in a country on parameters such as the ease of “starting a business, enforcing contracts and securing construction permits”.

What are the shortfalls?
• Introduced in 2003, the report is premised only on the legal setup.
• It falls short of reflecting the practical aspects of how things move on the ground.
• Moreover, the methodology has not remained the same and now doubts have been expressed from within the bank.
• Notably, the question raised is not about the technicality of continuously changing methodology but about the very integrity behind it.
• Besides, over the years, several national governments have made making good ranks a top priority.
• The governments, at times, are merely tailoring their policies to secure a better rank based on WB’s parameters.
• Genuinely framed pro-business policy frameworks are thus not happening.

What is Chile’s case?
• The immediate case in point was Chile, which saw its ranking sway massively over the years, from 25 (2006) to 49 (2010) to 34 (2014) to 55 (2017).
• The apprehension that Chile’s rankings were manipulated based on ‘which political faction ruled the country’, has taken root.
• Researchers from the “Centre for Global Development (CGDev)” have shown how changes in the methodology were employed to obtain such rankings.
• It is possible that certain regimes make it easier to do business than others.
• However, repeated revision in methodology clearly seems to have nudged results to attain desired rankings.

What is the case with India?
• Analysing the trend of rankings bring out huge illogical variations in rankings of many countries.
• Notably, India’s rank has risen from 142 to 100 between 2014 and 2018.
• Even though the World Bank has clarified that it stands by India’s ranking, questions on the authenticity of the country’s achievements continue.
• Significantly, India’s ranking was already under criticism, as the WB ranking had limited its assessment to only the cities of Delhi and Mumbai.
• World Bank has to address the shortfalls and integrity questions, to restore its credibility.

1.3 NITI –IDFC Report on Ease of doing business

What does the report state?
• The criterion adopted for determining the ease of doing business is the efficacy of these reforms.
• The “NITI-IDFC Report” studies this based on an enterprise survey of 3,500 manufacturing firms across Indian.

Single window clearance: This system was introduced under “Make in India” initiative in 2014.
• It involves routing of all approvals required by an enterprise to set up a business through a hassle free common application window.
• Only 20% of the enterprises surveyed were found to have used this, which suggests either lack of awareness on the part of enterprises or ineffective implementation.

Access to finance: Most enterprises rely on borrowings from banks and financial institutions as sources for finance.
• 61% of the enterprises surveyed reported that access to finance has either remained the same or worsened over the last year.

• **Clearance Time:** The survey finds that the average time taken to set up a business in India is 118 days, varying widely across states from 63 days in Tamil Nadu to 248 days in Assam.

• On an average, the time incurred for land allotment is 156 days and for getting a construction permit it is 112 days.

• The average number of days for completing labour-related compliances is 74 and for renewal of such compliances it is 62.

• **Dispute resolution:** The survey showed that the time taken for dispute resolution by enterprises varied across states, from less than one year to 13 years.

• For pending legal disputes, the enterprises surveyed reported an average duration of four years once the matter is taken to court.

• **Sector Specifics** - Start-ups & younger enterprises are found to have taken lesser time than older ones.

• Furthermore, labour-intensive industries were found to face major challenges than capital-intensive industries.

**Where are the areas that need improvement?**

• The reforms and their impact were pronounced in big cities but not clearly noticeable in smaller cities & rural areas.

• The government needs to work for effective implementation of the reforms introduced across all states uniformly.

• Creating awareness of the reforms introduced is needed to enable the enterprises to avail these benefits.

• Labour compliances need to be further eased.

• In this context, the proposed Model Shops and Establishments (Regulation of Employment and Conditions of Service) Bill, 2016 is a step in the right direction.

### 1.4 Oil Companies - Pricing Policy

**What is the issue?**
The pricing policy adopted by oil companies for petrol and diesel needs review and they should be brought under GST at the earliest.

**What is the need?**

• While announcing a price cut recently, the Centre urged States to reduce their levies on the fuels (petrol and diesel).

• Despite some states making rate cuts, Bihar has appealed to the Centre to reduce the base price of petrol and diesel.

• It has pointed out that VAT on petrol and diesel in Bihar was among the lowest.

• This highlights the need for shifting the focus to the pricing policy followed by the oil companies for the two fuels.

**What is the flaw in the pricing policy?**

• **Change in policy** - Prices of petrol and diesel were deregulated in 2010 and 2014 respectively.

• Consequently, prices are market-determined i.e. by the forces of supply and demand rather than input costs.

**Trade Parity Price**

• Trade Parity Price (TPP) is the weighted average of import parity price (IPP) and export parity price (EPP) with weights of 80 and 20 respectively.

• IPP is the price importers would pay in case of actual import at Indian ports, while EPP is the price oil companies would realise on export.

• In short, the pricing assumes that 80 per cent of the petrol and diesel is imported and 20 per cent is exported.

• Rather than showing the daily changes in the TPP and the rupee values, oil companies are adjusting price differences in the daily prices charged to dealers.
Since deregulation, the Public Sector Oil Marketing Companies (OMCs) are allowed to take appropriate decisions on petrol and diesel.

From June 2017 dynamic daily pricing is being followed.

Under this, the retail selling prices of petrol and diesel is revised daily, based on average international price and the currency exchange rate.

**Flaw** - Despite the changes, oil companies still follow policies dating back to the controlled pricing era.

According to this formula, retail prices are linked to imported landed cost and export parity price of the two fuels.

This is despite the fact that petrol and diesel are not imported but refined within the country, with imported crude oil.

This trade parity pricing being followed is unsuitable in the current free pricing regime.

This only results in offering undue protection to domestic refineries.

**Anomaly** - The prices of fuels refined from crude oil should be linked to the cost of crude plus the refining and transportation costs and margins.

By this, ideally, coastal States and those with refineries in their vicinity should be paying a lower price.

States in the hinterland where transportation costs involves should pay a higher price.

However, this is not the case at present, due to unregulated pricing by companies.

**What should be done?**

- The Centre should get the oil companies to review their pricing strategies and align them with the free market approach.
- Besides, inclusion of petrol, diesel and other fuels under the GST would benefit oil companies and aid them in reforming the fuel pricing strategies.

### 1.5 OPEC Meeting

**Why in news?**

OPEC meeting for November was held in Austria.

**What are the Challenges OPEC is facing?**

- Saudi Arabia and Iran have been arch-rivals for a long time, while Iraq and Iran fought a multi-year war in the 1980s.
- The Saudis and the Qatars are not on talking terms now, and Venezuela is in financial dire straits.
- Technological advancements horizontal drilling and fracturing (fracking) enabled shale oil exploration and production on an industrial scale in the US.
- This upended the dynamics of the oil industry and precipitated the rout of oil since mid-2014.
- Mega producers such as Russia that are also not part of OPEC, too now command significant influence in the oil market.

**What are the significances?**

- OPEC initially tried to out-price US shale oil producers and wrest market share by maintaining output, this exacerbated the price rout.
- But US shale producers held on with lower prices and it eventually teamed with major non-OPEC producers such as Russia late last year to cut production by 1.8 million barrels of oil a day.
- The cuts helped halt oil’s rout and aided its 40 per cent rally since June to about $64 a barrel now.

**Organisation of Petroleum Exporting Countries (OPEC)**

- OPEC, cartel of oil exporting nations had four major West Asian producers Saudi Arabia, Iran, Iraq and Kuwait, Venezuela as its founding members.
- As of now OPEC has 14 members besides the founding members, the group comprises UAE, Qatar, Nigeria, Libya, Gabon, Ecuador, Angola, Algeria and the latest entrant Guinea.
- They account for more than 40% of the world’s oil supply, of which Saudi Arabia accounts for more than 30%.
- OPEC aims to coordinate and unify the petroleum policies of its member countries to stabilise oil markets.
- Member countries together increase or decrease oil production to try to achieve desired supply levels and prices, based on a unanimous vote.
• OPEC meeting is expected to approve extension the production cuts by another 9 months until December 2018 with Russia also on board.
• The meeting is crucial as OPEC will decide whether to continue with output cuts in force since January this year beyond March next year.

What are the implications for India?
• India imports more than 80 per cent of its oil requirement.
• Oil prices halving since 2014 has been a fiscal boon for the government and oil companies.
• But higher oil prices will invariably mean costlier petrol and diesel and higher inflation in India.
• If OPEC gets aggressive on output cut programme, it could mean trouble for India.
• As US shale oil would come back to the market a big way to take advantage of higher prices, resulting in a cap on prices.
• There is hope that oil prices will not go up too much from current levels.

1.6 Global Financial Development Report

Why in news?
World Bank’s has released its annual “Global Financial Development Report 2017/18: Bankers without Borders”.

What is the global financial development report?
• It provides a unique contribution to financial sector policy debates, building on novel data, research, and wide-ranging country experience, with emphasis on emerging markets and developing economies.
• The report’s findings and policy recommendations are relevant for policy makers, staff of central banks, ministries of finance, and financial regulation agencies.
• The report tracks financial systems in more than 200 economies before and during the global financial crisis.

What are the findings of the report?
• Restrictions imposed on foreign banks in developing countries are hampering prospects of growth by limiting the flow of much needed finance to firms and households.
• International banking does create risks of exporting instability especially for countries with poor regulations and institutions, and those risks need to be mitigated.
• But without a competitive banking sector, the poor will not be able to access basic financial services.
• Many businesses will be locked out of markets, and growth in developing countries will stall.

What are the implications for India?
• Indian banking has become more competitive over the last couple of decades have largely to do with the opening up of this sector to local private banks in 1993-94.
• The larger policy goal that the government and the central bank had in mind could not perhaps be achieved immediately because of the public ownership and governance structure of state-owned banks.
• Besides public and private banks, Non-Banking Financial Companies (NBFCs) and Microfinance Institutions (MFIs) too have rapidly enlarged their footprint over the past decade.

What measures India had taken so far?
• India adopted a guiding principle of consolidating public and private banks before opening up to foreign banks in a synchronised manner.
• The approach has been to have foreign banks form fully owned subsidiaries, or to convert existing branches into a subsidiary.
• Foreign banks at various growth cycles have shrunk their businesses in a downturn or when there is turmoil, and the need for credit is acute.
• India has sought to limit the share of foreign banks in the total assets of banks in the country to less than a fourth.

1.7 Usefulness of WPI

What is WPI?

• The wholesale price index is an index that measures and tracks the changes in the price of goods in the stages before the retail level.
• WPI is used as a measure of inflation in some economies.
• WPI includes three components viz,
  1. Manufactured products - 64.2%
  2. Primary articles - 22.6%
  3. Fuel and power - 13.1%
• Instead of the earlier 2004-05, base year for the WPI will be 2011-12.
• The number of items covered in the new series of the WPI has increased from 676 to 697.

What are the issues with WPI?

• Following the Urjit Patel Committee recommendations, the RBI Act has been amended and flexible inflation targeting (FIT) has been put in place with CPI inflation as the nominal anchor.
• Under the FIT, as the RBI has been mandated to achieve price stability measured in terms of CPI inflation, the use of WPI inflation has been completely done away with.
• All projections relating to inflation are currently done in terms of CPI.
• As of now, WPI is predominantly used for converting GDP/GVA at current prices to the same at constant prices.
• In fact, the GDP deflator (often argued as the true indicator of inflation), which is defined as a ratio of GDP at current prices to GDP at constant prices multiplied by 100, closely tracks WPI inflation.
• The sharp decline in the GDP deflator and the dramatic decline in WPI inflation coincided. This contributed significantly to real GDP growth in India.
• Also, separate services sector input/output price indices are required to deflate services sector GDP for which WPI is anyway not appropriate.
• One of the striking features of the new WPI series is that the item level averaging is being done by using geometric mean. This is as per international best practice.
• The geometric mean itself has significantly moderated WPI inflation, besides other factors such as change in the composition of basket.
• Moderation of WPI as per revised base has pushed up real GDP considerably during recent years.
• Exclusion of excise duty from the computation of WPI has also partly contributed to lower WPI inflation during recent years, which in turn has pushed real GDP up to some extent.

What could be done?

• A better way to estimate GDP accurately is to deflate input and output prices through separate indices, popularly known as double deflation.
• When output prices move relatively faster than the input prices, the single deflation method overestimates GDP/GVA and vice versa.
• In order to ensure accuracy, it is high time to discard the single deflation method to estimate GDP/GVA by using WPI as a deflator.

1.8 Problems in Inflation Targeting

What is the issue?

• There has been demand to lower the interest rates since the inflation slipped to 1.54%.
• Economists suggest that the monetary policy should not formulated based upon inflation.
What is the flaw in the existing model?

- India opted for the Monetary Policy Committee to deal with inflation targeting.
- Developing countries such as India have an economic structure different from the developed ones of the West for which inflation targeting was first devised.
- The problem with this model is that the potential level of output is unobservable, uncertain and is highly variable.
- e.g. Agriculture sector of India. The production fluctuates to a large extent with subsequent fluctuation in prices.
- When the relative price of agricultural goods rises due to slower growth of agriculture, the inflation rate rises.
- Such inflation has nothing to with an economy-wide imbalance gap as visualised in the ‘output gap model’.
- With this perception, the slow growth in other sector of economy, manufacturing, is going unnoticed.
- Rising interest rate as a response to rising agricultural prices would only be at the cost of output loss in the non-agricultural sector.

What should be done?

- RBI and the MPC have to acknowledge that they have erred in taking real rates in India to the highest levels.
- Inflation targeting should be based on a proper understanding of inflation in the Indian context.

1.9 Comparing PMI and IIP

What is the issue?

- The PMI for December 2017 is a highly encouraging 54.7, which along with a 6.8% growth in the “core sector” also indicates a big positive for IIP.
- While PMI and IIP have both been used for gauging the health of the economy, it is prudent to understand what they actually stand for.

What is “Purchasing Managers Index” (PMI)?

- PMI is calculated on the basis of information received on a monthly basis from companies on various factors that represent demand conditions.
- A standard questionnaire is administered to 500 private companies (PSUs are excluded) and the comprehensive score is arrived at.
- 5 parameters in PMI are - new orders (30% weightage), output (25%), employment (20%), supplier’s delivery (15%) and stock of purchases (10%).
- The respondents can either give a “Positive, Neutral or Negative” response and each resposnse is marked as “1, 0.5 or 0” on the score card respectively.
- Hence, if there is unanimous positivity across all parameters, then the PMI score would be 100 (percentage) and an unanimous negative would mean 0.
- While an absolute score of 50 would mean neutrality, anything above it is perceived as an improvement and less than it would mean deterioration.
- Intuitively, it can be seen that the purpose of the PMI is to indicate some degree of confidence level in manufacturing based company perspectives.
- Notably, as PMI is a market sentiment tracker that compares the current month with the previous, it is season sensitive.

What is “Index of Industrial Production” IIP?

- IIP measures actual production output across the industrial sector.
- Significantly, IIP for December 2017 would be reckoned with the same month in 2016, unlike PMI, which is monthly comparision.
- As it is a comparison over the previous year, it is season neutral.
• Therefore, as the basis of IIP and PMI are different, a comparison between the two is really not appropriate.
• However, as the PMI is released on the 1st of every month and the IIP is known on the 12th, the PMI score is assumed to be a precursor to the IIP.
• But the correlation between PMI and IIP isn’t strong and the relationship between the two variables is quite low and insignificant.

What is the reason for the lack of correlation?

• A sample of 500 companies for PMI is too small to be representative of what is happening at the aggregate level.
• Also, as these companies tend to be the bigger ones, SMEs are under-represented in PMI, whereas IIP is more comprehensive.
• The responses in PMI are of an ‘either or’ variety and is not graded to any number, which inherently marks 2% positivity and 20% positivity as same.
• Also, PMI has only one component, namely “output” (with a weight of 25%) which can be directly related with IIP.
• Also, even with the PMI new orders increasing, it would not necessarily mean that output would increase in a subsequent period.
• Exclusion of the PSUs is another significant aspect as there is a very high contribution by this segment, especially in capital goods and infra areas.

What is preferable?

• Hence, it may be said that the PMI is not a leading indicator of the state of industry which is better represented by IIP growth.
• While the IIP growth calculation has its challenges, it is to be noted that the number is used for GDP calculations to account for the unorganised sector.
• But nonetheless, there is room for both concepts in the set of economic indicators that have to be tracked continuously.

1.10 Demonetization - Impact after an year

Why in news?
November 8th marks one year anniversary since the Demonetisation.

What were the objectives?

• 86% of the currency in circulation was withdrawn in one fell stroke.
• This was done to achieve -
  o a lower cash-to-GDP ratio
  o subsequent reduction of black money
  o cutting fake currencies
  o curbing terror funding
  o pushing digital transactions
  o Increasing the tax net.

What are the positive effects?

• DeMo has rung in a climate of tax compliance, even if through coercive means.
• Deposits worth nearly Rs. 3 lakh crore are under the scanner.
• According to the Finance Minister, an additional 9 million people have come under the tax net.
• Over 200,000 shell companies have been deregistered.
• Real estate shenanigans have been reined in.

What are the negative effects?

• Growth - Growth has been slowed down since DeMo.
• GDP growth in Q1 of 2017-18 was at 5.7%, against 7.9% in 2016.
• Rural sector was affected the most with 2.3% growth in Q1 2017-18, against despite record food grain output in 2016-17.
• Earlier a rapid recovery from the slowdown was predicted. But the narrative has now been changed into ‘short-term pain for long-term gain’.
• **Price** - Prices have crashed in major markets for kharif crops such as maize, green gram, groundnut, soyabean and sunflower despite their output being either flat or marginally lower than last year.
• It is primarily because of the disruptive impact of the withdrawal of cash on supply chains and inventories.
• **Unemployment** - The rate of loss of jobs registered in the trade sector and industries was “almost” 55% in the two months after the note ban.
• The job loss is significant in the middle-age group (40 to 50), among people with limited options.
• Job creation was zero in November-December 2016.
• It improved to a growth rate of 10%-15% in January-March 2017, and to 20%-25% in April and June, but again, between July and October, fell to 5%-10%.
• **Return of cash** - Though cashless transactions prevailed initially, cash has returned.
• The major reasons for this are connectivity issues with POS, the transaction charge and security concerns.
• **Logical flaw** - To say that a 12% cash-to-GDP ratio for India is too high, when compared with other countries, is incorrect.
• This comparison is not valid as India has a large informal sector.
• So its cash needs are also higher.

A lower cash-to-GDP ratio could mean that the informal sector has shrunk due to demonetisation thereby needing lower cash.
• This indicates rise in unemployment.
• **Ignoring Other Factors** – Government projects that it achieved a lower cash-to-GDP ratio of 9% after demonetisation, from over 12% earlier.
• This might be due to a combination of factors apart from a shift towards digital transactions.
• It might be due to lower currency supply, shrinkage in cash-dependent enterprises due to the note ban, and shortage of cash in pockets of the economy.
• **Terror Funding** - Since demonetisation, the number of infiltration attempts in the Valley has reached a high
• The number of civilians killed has trebled.
• In the theatres of Left Wing Extremism, more security personnel have been killed in Naxal attacks but in fewer incidents, which have dropped 21%.
What should have been done?

- Cash plays a significant role even in developed economies such as Japan.
- So the criminalisation of the entire cash economy seems unfair.
- Hence the debate on Demonetisation is about ends and means.
- The same outcomes could have been achieved with less pain.
- Demonetisation could have been implemented in a gentler way — with ‘nudging’ rather than bureaucratic diktat.

1.1 RBI report on Demonetization

Why in news?

The Reserve Bank of India’s annual report has revealed the data on amounts retrieved after the recent demonetisation drive.

What are the highlights of the report?

- The report brings out that as much as Rs. 15.28 lakh crore of the demonetised high-value currency returned to the banking system.
- This is around 99% of the total value of the withdrawn currency at the time of demonetisation.
- The bank has not received a part of the demonetised sum which is equal to Rs 16,050 cr.
- The final deposit figures could still rise with influx of money from District Central Cooperative Banks.
- This is because, these banks were very recently allowed to deposit withdrawn notes that they had accepted for a few days after demonetisation after which it was stopped.
- Also, RBI is in discussions with the government to further accept the demonetised notes held by citizens and financial institutions in Nepal.

What are the favourable outcomes of demonetisation?

- The whole process has brought more accountability to money and the anonymity with cash transactions is reduced.
- Big data analytics of deposits and increase in suspicious transaction reports have thrown better light on holdings of black money.
- The reports by banks are also helping in identification of shell firms and taking necessary actions against money laundering activities.
- This could possibly lead to an increase in future tax revenues with better tax compliance.
- The recent surge in digital transactions, inflows into mutual funds and insurance companies, the rise in new income tax assesses are evident of transformation to a modern economy.
- The drive has promoted more formalisation of the economy and financialization of savings.

What are the contentious outcomes?

- As against the government’s expectations on the impact the exercise would have on illegal money, the return of almost 99% of devalued currency raises doubts on the purpose of the drive.
- Banking - This is the first time since 1952-53 that reserve money for the whole year contracted, by 13 per cent due to demonetisation impact.
• The RBI incurred a **loss in seigniorage** i.e. the profit made by the central bank on account of issuing currency.

• Also, **processing and destruction of old** Rs 500 and Rs 1,000 notes kept in various currency chests and regional offices of the RBI pose a challenge.

• It has cost the government around Rs 8000 crore for **printing new notes** during the period July 2016-June 2017.

• **Economy** - Worsening business conditions are significantly bringing down private investment.

• Demonetisation considerably made a hit on the **unorganized supply chains** that were dependent on cash transactions.

• How efficiently were they able to rebuild after the economy was remonetised is still doubtful.

• The figures and outlook on **consumption**, which has long been the main driver of the economy, is also not very optimistic with demonetisation impact.

• Overall, the growth prospects look dull due to the impact of demonetisation.

**What lies ahead?**

• The challenge now is to ensure that the creation of new black money is minimized.

• A committed government plus tax reforms such as the GST will be part of the solution.

• Government has to analyse the pros and cons of the demonetisation impact to take lessons for future reforms.

**National Anti-Profiteering Authority**

**What is the issue?**

• National Anti-profiteering Authority (NAA), as part of the GST Act was approved by the Cabinet.

• Subsequently, the fear of NAA becoming a tool of harassment looms large among businesses.

**What are the powers of NAA?**

• It is empowered to crack down on firms that fail to pass on the ‘benefits’ of the tax regime to consumers.

• The authority can order businesses to reduce product prices or refund the undue benefits earned back to customer.

• In extreme cases it can even impose a penalty on errant firms and cancel their registration with GST.

• If the consumers are difficult to trace, then the money attained from undue benefits will be deposited in a consumer welfare fund.

• The authority will have its own bureaucracy and a screening committee in each State that consumers can lodge complains with.

• It will also have an investigating wing and a standing committee to take up profiteering allegations with a pan-Indian impact.

**What are the challenges?**

• **Establishing Guilt** - Clarity on how the difference between undue profit and fair play will be ascertained is missing.

• This discretionary space available to the NAA could be misused or abused by the authority.

• **Irrationality** - Companies have been urged to ensure that new MRPs are inscribed even on products that have already reached markets.

• While wholesalers can still implement this, reaching every last retailer is a challenge.

• But firms have been warned that the entire retail chain must reflect revised prices in order to avoid anti-profiteering action.

• The expectation is that there will be some exemplary action soon to make industry fall in line.
What is the way forward?

- In the name of protecting consumer interest, the prospect of the government monitoring prices is not desirable.
- Placing the burden on businesses to justify pricing decisions instead of letting market forces play out is uncomforting.
- The NAA could rather partner with the Competition Commission of India and focus on select firms raising prices indiscriminately.
- This usually happens only in markets where some businesses enjoy a dominant position, or where pricing cartels are formed.
- Hence, the authority should use its powers transparently and only where there is genuine consumer/public interest at stake.

1.13 New Exim Regime

What is the issue?

Exporters will benefit from the subsuming of 17 central and state taxes in the GST and a comprehensive set-off of input tax on goods and services.

How will GST help Export and Import?

- The provisions in GST would reduce the cost of manufactured goods and services and make exports competitive.
- In addition, the exports will be exempted from payment of GST and, if paid, the tax would be refunded.
- This tax exemption/refund policy is in keeping with the WTO rule that no taxes should be exported.
- Accordingly, exports have been treated as “zero-rated supply” under the IGST Act.
- Supplies made to a SEZ developer or SEZ unit have also been accorded the same status.
- Exporters can avail credit of the input tax on the inputs procured for the production of such zero-rated supplies.
- An exporter would get the refund of GST paid on inputs and exemption from payment of GST on the final product.
- It has been agreed that 90 per cent of the refund amount would be granted within seven days of the filing of an application.
- Refund of the balance would be granted after verification of documents.
- The GST route of refund on taxes paid would not be available to exporters who procure goods from the firms (a) not registered with GST on account of low turnover, or (b) opting for GST under the composition scheme.
- **Import will be treated as inter-State supplies and IGST** will be levied as the additional duty of customs in addition to the basic customs duty on import.
- Customs duty will now have only two components in most cases: basic customs duty and IGST.
- However, other duties such as anti-dumping or safeguard duties, etc., wherever applicable, will be levied as before.
- Tax paid (IGST) on imported goods will be eligible for credit as input tax credit to the importer.
- GST would affect the efficacy of all export promotion schemes.
- Till now, the facility of exemption from the payment of all duties is available to exporters under export schemes like Advance authorization or the Export Promotion Capital Goods.
- Post GST, the exemption only from the basic customs duty would be available.
- Similarly, 100 per cent Export Oriented Units would lose the duty exemption privilege and be like any DTA unit that will get exemption only from payment of basic customs duties on exports.
- Also, no supplies would be treated as deemed exports.
• This means the supplies to EOU/STPI/mega power projects that are currently exempt from central taxes will become taxable.

• The new Duty Drawback scheme under GST will refund only the Basic Customs Duty and Central Excise duty paid on the exempted inputs.

• But the exporter would pay GST at the time of buying of inputs and will get the refund after the exports that would take place after 6-12 months.

• High-interest rates would increase the working capital cost and make exports expensive.

• However, these increased expenses would be partly offset by the lower tax rates and reduced cascading effect.

1.14 Reverse Charge Mechanism

What is the issue?

• The reverse charge mechanism of GST is an additional check that every business has to ensure that its suppliers, of both goods and services, are paying the right amount of taxes on time.

What is Reverse Charge Mechanism?

• The GST has to be typically paid by the supplier of goods and services. But in some cases, the liability to pay the tax falls on the buyer.

• This reverse charge is, however, applicable only under certain circumstances.

• The most common instance is when a business buys goods or services from a supplier who is not registered to pay GST.

• Example: Let’s assume that business A that is GST-compliant buys goods worth ₹100 from business B that is not registered to pay GST.

• If the GST on the goods supplied is ₹5, then business A, instead of business B, will have to pay ₹5 to the Government.

• Business A can, however, claim input tax credit of the GST payment of ₹5, when it sells the goods to its client.

What are the other implications?

• Besides purchases from an unregistered supplier, the reverse charge kicks in other circumstances as well.

• An importer is liable to pay the GST under the reverse charge mechanism.

• Also government departments making payments to vendors above a specified limit (₹2.5 lakh under one contract) are required to deduct tax (TDS) and e-commerce operators are required to collect tax (TCS) on the net value goods or services supplied through them.

Why is it important?

• GST has self policing mechanism and the Centre is trying to check tax evasion and expand the tax net through couple of clauses in this tax regime.

• Seamless flow of input tax credit is possible only when all the suppliers of a business pay GST.

• So each business will make sure that its suppliers have paid the GST so that they can take input tax credit.

• By putting the burden of paying the tax on the buyer, in cases where the supplier does not pay GST, the Government is gently coercing all businesses to sign up for GST.

How this self-policing mechanism helps tax department?

• The major hindrance for the tax department in going after tax evaders is shortage of man-power and as all resources being allocated to chase large tax evaders, it’s difficult to check the small evaders.

• This self-policing mechanism is, therefore, expected to do the trick for the government, helping it grow the tax base as well as tax collection.

How does it affect the business?

• If one runs a business, he/she need to hurry and ensure that all the entities who supply goods and services are registered for GST.
• If they aren’t, then he/she will have to pay the GST on their behalf. This will increase paper-work of the person who pays and can cause cash-flow issues as well.

• With the reverse charge falling on the buyer, his/her order book might shrink as companies would prefer to deal with only those entities who are registered for GST.

1.15 GST e-way bill

What is the issue?
E-way bill proposed by GST council is complex to understand and posing a challenge to the industry.

How tariff issues are addressed by GST?
• Under the VAT system many states collected VAT on subsequent sales and imposed entry tax and a road permit system.

• Under GST, this problem is addressed to a large extent, through an elaborate online reconciliation mechanism on GSTN.

• It is the objective of GST to remove all non-tariff barriers, such as check posts, entry tax etc. so that the smoother movement of goods across states is ensured, ultimately reducing the prices of commodities.

What is e-way bill?
• The e-way bill can be electronically generated (on the government portal) either by the supplier or recipient of the consignment, before the movement of goods.

• The transporter needs to carry an electronically generated way bill or a permit, with every consignment having value exceeding INR 50,000.

• It may possibly subject to few exemptions such as agricultural commodities

• Till then, the states have been allowed to follow their own way bill/road permit system, including the ones used prior to GST.

What are the complexities with e-way bills?
• The e-way bill, once generated, is valid for one day for consignment up to 100 km and then one additional day for every 100 km thereafter.

• If e-way bill is generated, but the goods are not transported then it has to be cancelled electronically.

• If the transporter transfers goods from one vehicle to another in the course of transit, then he will be required to generate a new e-way bill, before commencement of the movement.

• Transporters may be required to obtain a unique Radio Frequency Identification Device (RFID) and get it imbedded on the vehicle and map the e-way bill to the RFID prior to the movement of goods.

• It is important to note that e-way bill is required even in case of intra-state movement (beyond 10 km), which was not the case earlier.

• Also, there were many states which did not have a system of way bill or a road permit in the erstwhile regime.

What are the issues with E-way bill?
• The industry is sceptical that this could result in Inspector Raj and the associated corruption, which GST was otherwise supposed to eliminate.

• There is a fear that the e-way bill system could undo reduction in commodity prices

• The GST rates are uniform across states against this backdrop; e-way bill would serve limited purpose.

• The mechanism proposed requires a certain level of maturity in terms of technology, systems and processes.
• Large proportion of transport sector is still unorganised and may not be equipped to deal with technology-led compliances.
• It appears to be too stringent in terms of the reporting requirement.

1.16 **GST Compensation Cess**

**What is the issue?**

GST Compensation Cess intended to compensate the losses of states for the first 5 years of GST doesn’t stand on strong constitutional ground.

**What is a Cess?**

- A cess is a tax on tax, levied by the government for a specific purpose.
- The contributor and beneficiary of a cess must be relatable.
- Under Article 270 of the Constitution, proceeds of a cess can be retained exclusively by the Union and need not be shared with States.
- The objective is to ensure that expenditure goes for that specific purpose.

**What is GST compensation cess?**

- As part of the GST reforms, this Cess has been introduced through the GST (Compensation to States) Act, 2017.
- It is levied on inter- and intra-State supply of notified goods such as aerated drinks, coal, tobacco, automobiles for 5 years.
- The proceeds will be distributed to loss-incurring States on the basis of a prescribed formula as compensation.

**What are the shortcomings?**

- Once the money is transferred to State governments, it can be used to fund any scheme.
- It may even be used to fill the government’s fiscal deficit.
- Further, there is no relation between the persons contributing to the cess and the recipients, the State governments.
- The goods earmarked for the cess, such as aerated drinks, coal, tobacco, automobiles and “other supplies”, do not form a distinct category deserving the liability to pay this cess.
- The sin goods argument also fails as the luxury goods & jewellery are not covered.
- The term “other supplies” leaves much to the discretion of the government.

**Is it constitutionally valid?**

- The 122nd Constitution Amendment Bill initially proposed a 1% additional tax to compensate States but this was later withdrawn.
- Article 271 has been amended to state that an additional tax/surcharge cannot be imposed over and above the GST rates.
- The GST Council’s power to recommend a special rate is confined to raising resources only during any natural calamity or disaster.
- So this cess cannot be justified under such power either.

1.17 **GST & Cash less economy**

**Why in news?**

Union government is now proposing to offer a 2% point GST rebate for consumers who make digital payments instead of cash.
What does this move signifies?

- GST Council has taken this step in order to make the taxation simpler which means that the effective tax rate for items of 18 per cent GST slab will come down to 16 per cent for those paying through the digital mode.
- The reason for the proposed incentive is to encourage Indians to move towards a cashless economy.
- By this GST council have taken steps to sort out the problems in the technological architecture and filing of returns. In that sense, the GST is a work in progress.

What are the issues with this new plan?

- Regardless of the noble intentions, this proposed intervention is likely to create another round of confusion for all concerned.
- The tricky part here, implementing this will result in customers being offered two prices one with the normal GST rate and the other with a 2% lower rate.
- The move will require altering both the tax computation process as well as return-filing templates.
- This will only complicate the ground-level implementation of the GST as sellers will need to segregate digital and cash transactions from the beginning.
- What further complicates matters is that this concession will be limited to Rs100 per transaction and will not apply to retailers who have registered in the composition scheme, wherein they only face a single tax rate instead of the normal GST structure.

What are the expected challenges?

- Providing a 2 per cent rebate is going to further reduce collections from GST which could impact the coffers of the Centre and the States.
- In turn, this would force the Government to tap into the Compensation Cess for monetary comfort.
- The taxpayers with turnover of less than Rs. 1.5 crore are most likely to conduct some transactions in cash.
- The condition not to extend the scheme to taxpayers registered under the composition scheme could actually turn out to be counter-productive.

1.18 Inclusion of Electricity in GST

What is the issue?

With transitional implementation challenges with the GST being sorted out, it is a high priority now that electricity is included in GST.

What is the current status?

- Currently, there is a confusing multiple electricity taxes.
- Notably, the taxes vary by states and across user categories, low for consumers, high for industrial users, etc.
- Taxes levied by the states vary from 0 to 25% and is an important source of revenue for them.
- On average, electricity taxes account for about 3% of own tax revenues of the states, going up to close to 9% in some states.
- States are, therefore, reluctant to give up the right to levy these taxes.

What are the concerns?

- **Costs** - The most serious concern is that costs to industrial users of electricity are higher.
- This is because they include the taxes on inputs that have gone into the supply of electricity.
- These include taxes on raw materials (coal, renewables) and other equipment (solar panels and batteries).
- Not being part of GST means that no inputs tax credit can be claimed.
- This certainly results in embedding of the tax in the final price.
- **Embedding of taxes** - This clearly hurts manufacturers selling to the domestic market.
• In particular, this affects the exporters of electricity-intensive products.
• It is because they are not liable to any duty drawback i.e. relief for taxes embedded in exports.
• **Industrial buyers of electricity** bear the impact of this in an indirect way.
• Populist politics has long ensured that consumers (and other users in agriculture) pay either nothing for electricity or very little.
• Ultimately, discoms cross-subsidise and charge higher prices to industrial users to make up for under-charging others.
• But the **embedding of taxes adds an extra layer of cross-subsidisation**.
• Totalling up all of these effects could lead to **increased costs and lower margins for several industries**.
• These margins are significant, especially for **exporters** who face strong **international competition**.
• **GST** - Currently, there is a large bias in favour of renewables in GST policy.
• Inputs to renewables generation attract a GST rate of 5% while inputs to thermal generation attract higher rates of 18%.
• Supporting renewables might be a conscious policy.
• But subsidisation is proliferating across policy instruments, making it difficult to quantify the overall support and is thus distorting.
• Thus, support for renewables should be direct and transparent.
• GST should not become the instrument for adding non-transparently to that support.

**What could possibly be done?**

• **GST** - If electricity is included in GST, there would be no discrimination between renewables and thermal energy.
• This is because all inputs going into both forms of electricity generation would receive tax credits.
• Including electricity in GST would also reduce or eliminate embedded taxes in electricity-using products.
• **Loss** - But both the central and state governments would lose revenues that would now accrue as input tax credits to the private sector.
• In addition, state governments would lose taxes from electricity use itself.
• The Centre could thus compensate the states only for the direct loss of revenues.
• However, benefits of the reforms would be greater to be shared between the Centre and the states.
• **Implementation** - To ensure that Centre does not suffer fiscal losses, the implementation with electricity should perhaps wait until GST revenues have stabilised.
• **Inclusion of electricity in the GST would thus** -
  i. reduce the costs for manufacturing
  ii. improve the competitiveness of exporters
  iii. reduce the cross-subsidisation of electricity tariffs that further undermines the competitiveness of manufacturers and exporters
  iv. eliminate biases and restore neutrality of incentives in electricity generation

### 1.19 **Report on CBDT and Income tax**

**Why in news?**

Comptroller and Auditor General of India (CAG) has tabled its report on Central Board of Direct Taxes and the income tax department.

**What are the findings of the report?**

• CAG has find out that there has been persistent and pervasive irregularities in respect of corporation tax and income tax assessment cases over the years.
• The latest audit report takes note of 457 high-value cases of such irregularities.
• The asseesees (Tax payers) include some the best-known entities in the public and the private sectors.
• The CAG has detailed various ways in which tax officials have bungled in collecting these taxes.

**What are the irregular ways used by tax officials?**

• **Exaggerated demands** - Income tax department had raised exaggerated demands to the tax payers to achieve its revenue collection target.
• Usually a tax payer after filing taxes will get reimbursement from the income tax department after his tax filing is verified.
• The reimbursement paid include substantial amount of interest for the amount which is collected in excess.
• This interest amount is need to be paid by the income tax authorities, it is causing financial burden to them and to handle this expenditure they claim an exaggerated demand from the tax payers.
• At the same time tax payers are not given full credit for the taxes already paid.
• **Differential approach** - Many taxpayers for tax exemption use the way of donations to charities which actually do not exists and produce fake purchase documents of items which give them reimbursement.
• Income tax department did not adopt a uniform approach in dealing with such cases, in many instances they are favourable to such tax payers.
• **Exemptions** - Tobacco is the second highest revenue yielding commodity in India, abnormal excess production tobacco products over and above the deemed production had led to loss of revenue.
• Central Board of Excise and Customs had taken inadequate action against tobacco industry, but in case of other industries it had taken its action.

What are the implications of the report?
• Corporation tax and income tax together constitute 33 per cent of the Union government’s revenues.
• Wide-scale discrepancies in such taxes could upset the overall budgetary calculations and also affect trust among honest taxpayers.
• The CAG has stated that “recurrence of such irregularities, despite being pointed out repeatedly” in earlier audit reports points to structural weaknesses on the part of the tax administration.
• Lack of transparency in taxation is also a massive disincentive for business in the formal Sector.

What measures needs to be taken?
• The tax department must ensure that taxpayers do not need to submit multiple returns and have quicker options of redress should a dispute arise.
• This is important as a huge amount of money is locked in litigation due to complicated tax rules and varying interpretations.
• Costly compliance and loopholes keep majority outside the income tax net, and this can be sorted out by implementing electronic assessments.

1.20 **Reviewing Income Tax Act**

Why in news?
Union government has decided to set up a panel to review the Income Tax Act, 1961.

What is Income Tax Act 1961?
• The Income-tax Act, 1961 is the charging Statute of Income Tax in India.
• It provides for levy, administration, collection and recovery of Income Tax.
• However, the bill was later scrapped because of wealth tax act being repealed.

What is a need for review of the act?
• There is a controversial section in the Income Tax Act in India which states the Special provision relating to incomes of political parties.
• It states that any income of a political party which is chargeable under “Income from house property” or “Income from other sources” or any income by way of voluntary contributions received by a political party from any person shall not be included in the total income of the previous year of such political party.
• Recently, there has been lot of uproar by the civil society against this act, as Political parties have deposited huge cash after demonetization.
• The current law is unwieldy, and multiple court rulings over the past five decades have made Indian tax law confusing and opaque.
What are practical difficulties with review panel?

- The recommendations of panel will go through close scrutiny by all stakeholders. It is unlikely that the new Direct Tax Code Bill can take final shape before 2019, which is an election year.
- This means the next government will have to take a call on piloting the Bill, leading many to question the timing of the constitution of the committee.
- Previous governments diluted several of recommendations by earlier panels, notably in terms of ignoring the proposals to reduce exemptions, and the added complication of multiple cesses.
- There is a critical demand from trade and industry is for a sea change in the nature of the tax administration, from being enforcement-oriented to focusing on simplicity and clarity.

1.21 Export Subsidy Issue

What is the issue?
India’s rising per capita income has created a problem for export subsidies.

What is the status India’s per capita income?
- Income per capita is a measure of the amount of money earned per person in a certain area.
- It can be calculated for a country by dividing the country's national income by its population.
- India’s per capita income is above $1000 formally qualifying it as a middle income country.

How India is responsible to WTO on this situation?
- According to WTO rules, now India is ineligible to provide direct export subsidies.
- Under WTO, production-based subsidies such as technological upgradation, capacity building and infrastructure development are permissible.
- Even for countries below the $1,000 per capita threshold, product-specific subsidies may be questioned if the export of the product concerned accounts for over 3.25% of the global exports for over two consecutive years.
- In that case, the country concerned will have to phase out subsidies over eight years.
- It can be reasonably expected that India will be dragged to the WTO for its subsidies regime.

What are the issues with Indian actions in this regard?
- India is recording consistent growth but centre failed to predict this issue.
- Instead, the Centre announced the Merchandise Export from India Scheme, providing a flat export benefit across 5,000 tariff lines at a cost of over ₹22,000 crore.
- Meanwhile, explicit export subsidy schemes such as duty drawback (reimbursement of import duty on inputs) continue.

What actions should India take?
- India needs to plan according to the global trends and frame its policies.
- The commerce and industries ministry should push for a new regime of support to exports, one that is based on improving ease of doing business.
- The Government needs to reach out exporters struggling with GST and resolve their concerns while telling them that direct subsidies cannot be continued.

1.22 SEBI’s order on Shell Companies

Why in news?
SEBI recently decided to suspend trading of 331 listed companies that it suspected were “shell companies”.

What are shell companies?

- Shell companies are serves as a medium for business transactions without itself having any significant assets or operations.
- They often indulge in, and enabling, tax evasion
- This is done by either rigging the share prices upwards or downwards.
- Share prices can indeed be manipulated to absorb black money and launder it via circular trades with the connivance of the promoter-broker nexus.
- SEBI is mandated with the task of preventing such money laundering & insider trading activities & protecting the interests of minority share holders.
- Since demonetisation the Centre has deregistered well over 1,60,000 dormant companies, identified over 37,000 shell firms and over 3,00,000 firms engaged in suspicious dealings.

What are the drawbacks of SEBI’s move?

- Taking a drastic measure on mere suspicion and without any criteria being publicly declared is not called for.
- SEBI seems to have acted in haste and has violated some of the basic principles of natural justice.
- The accused were not given a chance to defend themselves before trading was suspended.
- All these action has knocked down investor sentiment
- Due to the suspension of trading without notice, minority investors did not get a chance to assess the situation and, possibly, exit these stocks in an orderly fashion.

1.23 National Financial reporting agency

Why in news?

Centre is likely to institute a new independent regulator the National Financial Reporting Authority (NFRA).

What are the issues with ICAI?

- The Institute of Chartered Accounts for India (ICAI) the professional association of chartered accountants.
- The ICAI’s has a poor regulatory record; it serves as an argument against self-regulation.
- The prosecution rate of the offenders is too low, and the whole process drags on for years with thousands of pending cases with the ICAI,
- E.g. only around 25 auditors have faced action in over a decade and around 1,400 cases were pending.

What is NFRA?

- The NFRA have adequate powers to enforce compliance of accounting standards and punish violations.
- From the earlier agency the National Advisory Committee on Accounting Standards (NACAS) the powers are to be transferred to NFRA.
- The proposed NFRA could have as many as 15 members charged with regulating the profession.
- The chairman is mandated to advise on issues related to audit and accounting standards and be the regulator for the profession.
- The law provides for NFRA to look into matters of professional or other misconduct and also suspend CAs and firms from practising for six months to 10 years.

What is the need for such agency?

- The demand for the NFRA is not a new one, the Companies Act of 2013 already provides for such a regulatory body, but it is not efficient.
- Instituting a separate body to enforce discipline, the government will be removing a clear conflict of interest.
Many charted accountants help tax evaders hassle free, this agency will help to have check on such people. The credibility of accounting professionals is a critical component of market functioning.

1.24 Tussle between the regulators

What is the issue?

- TRAI came up with a consultation paper on “Regulatory principles of tariff assessment” which has questions on delineating relevant markets, assessing dominance, and predatory pricing.
- Following this, the chairman of CCI has argued that the CCI is better placed to look into matters related to predatory pricing.

How is predatory pricing usually handled?

- Predatory pricing is a strategy where the dominant market player prices its products or services below costs to undercut its rival.
- Recent offers by Reliance Jio have led to allegations of predatory pricing.
- Usually, the ex-ante competition matters i.e anticipated issues based on forecasts fell in the domain of TRAI.
- The ex-post matters i.e issues based on actual results such as predatory pricing fell in domain of CCI.
- Predatory pricing is a highly specialized field of competition assessment.

Why does the existing mechanism need change?

- In the present mandate, only a dominant position holder can be punished for engaging in predation.
- The dominant position is determined based on market share.
- Reliance Jio is not in a dominant position.
- Hence the recent complaints before CCI bore no results, in spite of Reliance Jio using unfair competition measures in its “promotional offer” which went on for several months.
- Thus, the way CCI understands and acts against predatory pricing in the present scheme of legislative mandate is bound to leave an enforcement gap.

What is the way out?

- These enforcement gaps can be filled by TRAI, which can fix ex-ante to ensure fair competition.
- Through this TRAI can ensure fair competition through means other than acting against mandated predatory pricing.
- TRAI could also limit the duration of promotional offers, which include below cost pricing, so that a level playing field is ensured for all market players.
- It could increase the interconnect usage charges (IUC) to a point where below cost pricing becomes unsustainable.
- TRAI could be given the mandate to specify the duration and features of promotional offers.
- The highly technical nature of this telecom sector issue has necessitated that CCI, a competition regulator consults with TRAI, a sector-specific regulator to ensure consumer welfare.

1.25 RCEP - Tariff Wars

Why in news?
The ministerial level meeting for RCEP, scheduled currently is expected to see tough negotiations on tariff duties.
What is the background?

- Regional Comprehensive Economic Partnership (RCEP) is a proposed free trade agreement (FTA) between the members of ASEAN and the six other countries - Australia, China, India, Japan, South Korea and New Zealand.
- RCEP negotiations were formally launched in November 2012 at the ASEAN Summit in Cambodia.
- The agreement is scheduled to be finalized by the end of 2017.
- RCEP is viewed as an alternative to the Trans-Pacific Partnership.

What are the problems?

- Rigid stands of other nations demanding India to remove import duties on more than 92% of all goods (both agricultural & industrial) is presently making negotiations unsustainable.
- This would mean almost entirely dismantling the wall protecting Indian industry and farmers from indiscriminate competition.
- Considering the disastrous consequences of such a move & the rigidity of others, India would find it difficult to reach a compromise and risks being isolated.

What are India's concerns?

- While New Delhi was willing to eliminate tariffs on a considerable number of items on a country to country basis, it is being pressured into treating all members equally, along with almost complete tariff elimination.
- For a country like India, with a large ‘sensitive agricultural setup’ and labour-intensive industrial sector, bending to such exorbitant demands is impossible to meet.
- China Fear - The biggest of worry is the unhindered flow of goods from China with which India already has an annual trade deficit of over $50 billion.
- A Free Trade Agreement (FTA) with no duties on most products could increase this deficit significantly.

How has the negotiations progressed thus far?

- The gradual cornering of India by RCEP partner countries is reflected in the how the negotiations have progressed.
- **1st Proposal** - India initially proposed a three-tier system for tariff elimination that was country specific.
  - The proposal vouched a reduction of - 42.5% of tariff lines for China, New Zealand and Australia, 65% for South Korea and Japan and 80% for ASEAN.
  - This was rejected by all members including the ASEAN.
- **2nd Proposal** - India was then forced to give up its initial proposal in favour of a single offer for all with only a small caveat for addressing its vulnerabilities with minimum deviations.
  - Over the past year, New Delhi has indicated to RCEP members that it could offer to eliminate tariffs on about 70-75% of items for all members with certain minor deviations.
  - These too failed to satisfy the RCEP members & an increased market access for items like wheat and dairy was demanded.

What does India stand to gain for RCEP?

- India’s expected gains in goods from the RCEP pact are not significant, given the fact that the existing tariffs in member countries are already relatively low.
While India’s gains in RCEP are to mainly come from services liberalisation, including easier work visa norms, the offers in that area have been almost non-existent.

Moreover, many RCEP members are now insisting on inclusion of substantial commitments in the area of e-commerce and investment facilitation — the two areas where India wants to preserve its sovereign right for policymaking.

What are India’s options?

• A free trade pact between the RCEP countries accounting for 45% of the world population and over $21 trillion of GDP does seem attractive, but not at the price India is being asked to pay.

• India should not run the risk of putting the future of its industry and farmers at stake while getting almost nothing in return.

• There is a world of wisdom in exiting while there is still time rather than signing a bad deal.

1.26 U.S plans to roll back QE

Why in news?

U.S. Federal Reserve recently announced that it would begin to gradually roll back quantitative easing (QE).

What is quantitative easing?

• Quantitative easing is an unconventional monetary policy in which a central bank purchases government securities or other securities from the market in order to lower interest rates and increase the money supply.

• It increases the money supply by flooding financial institutions with capital in an effort to promote increased lending and liquidity.

• Quantitative easing is considered when short-term interest rates are at or approaching zero, and does not involve the printing of new banknotes.

• Central banks like the European Central Bank, U.S. Federal Reserve have adopted this policy to boost their respective economies.

What is the significance of QE?

• It is a nine year long program implemented as aftermath of the 2007-2008 financial crisis.

• QE has been carried out in the hope that increased money supply would help stimulate the economy.

• Under the programme, the central bank has been buying bonds and other debt instruments like mortgage-backed securities from the open market.

• US also printed fresh dollars to buy these securities, it helped the nation to pump more dollars into their economy.

What are the reasons for roll back?

• The Fed’s balance sheet currently stands at $4.5 trillion, now US has grown more confident about its economy recovery.

• As the result of QE policy the quarter ending June grew at its fastest pace since 2015 and Inflation has shown some signs of strength.

• U.S is clear in rolling back its QE, as modern central banks are in the business of keeping inflation and growth at manageable levels.

How will it impact the world economy?

• Lower demand from the Federal Reserve should cause interest rates on U.S. bonds to rise from their current, historically low levels.
• This is likely to make these bonds more attractive to investors, as they can now be purchased at lower prices in order to earn higher yields.

• Investors are likely to sell their other investments offering lower returns to invest in U.S. bonds, which could cause some turbulence in global financial markets.

How this will impact India?

• The Indian stock market has witnessed a steady outflow of foreign capital as foreign institutional investors have sold out their holdings to invest elsewhere.

• The rupee has also shown weakness as investors pull money out of India.

• This trend is likely to continue until the risk-adjusted returns on various investments equalise.

1.27 Initial Coin Offering

What is the issue?

• Globally, there has been a silent boom in ICO fund-raising, with much of the action focussed on Europe and North America.

• With global regulators issuing warnings about this sprawling market, it is essential to understand its working and the risks associated with it.

What is an Initial Coin Offering (ICO)?

• An Initial Coin Offering (ICO) is used by the startups to bypass the rigorous and regulated capital-raising process required by venture capitalists or banks.

• More accurately known as token sales, ICOs are unregulated means of raising money from public investors, to finance a startup.

How does it work?

• When a startup firm wants to raise money through an Initial Coin Offering (ICO), it usually creates a plan on a whitepaper.

• It specifies the following:
  i. what the project is about
  ii. what need(s) the project will fulfil upon completion
  iii. how much money is needed to undertake the venture
  iv. how much of the virtual tokens the pioneers of the project will keep for themselves
  v. what type of money is accepted
  vi. how long the ICO campaign will run for

• During the ICO campaign, interested public investors buy some of the distributed cryptocoins with fiat or virtual currency.

• These coins are referred to as ‘tokens’.

• These are much similar to shares of a company sold to investors in an Initial Public Offering (IPO) transaction.

What are the different kinds?

• Two kinds of ICOs are active in the market.

• One type raises money to fund a new virtual currency or blockchain project that aims to reflect the success of the Bitcoin or Ether.

• These ICOs are attractive with the fact that the tokens can be exchanged for the new virtual currency, once it takes off.

• The other set of ICOs simply raise money to fund tech startups.

• Simply, a percentage of the cryptocurrency is sold to early supporters of the project.

• This is in exchange for legal tender or other cryptocurrencies, but usually for Bitcoin.
• It represents an informal ownership share in the business they fund.
• The expectation is that the tokens will appreciate in value with the underlying business.

How is it different from the IPOs?
• Essentially, while IPOs deal with investors, ICOs deal with supporters that are keen to invest in a new project.
• The word ‘informal’ is key to understanding the concept of ICOs.
• In an IPO, the rights in the case of shares bought are legally protected by the elaborate securities market regulations.
• On the other hand, the legal status of ICO ‘tokens’ is uncertain because many countries, including India, haven’t yet framed any regulations in this regard.
• Also, companies that raise money through IPOs are required to file and get approval for a detailed prospectus from regulators.
• They are also required to provide ongoing disclosures to investors.
• ICOs, however, evade all these rules and simply issue a white paper sketching out business plans.

What is the concern?
• One of the reasons for the recent interest in ICOs is certainly the multifold rise in prices of virtual currencies such as bitcoins.
• India is also seeing a spell of startup action around the virtual currency and blockchain ecosystem.
• However, the regulatory status of ICOs is not firmly established in India.
• The RBI has warned investors of the risks of experimenting in virtual currencies and is considering regulating cryptocurrencies.
• On the other hand, SEBI is yet to express its official views on ICOs.
• Notably, even SEBI’s global counterparts are still grappling with the issue of whether to treat digital tokens as ‘securities’.
• Given the absence of any kind of regulatory framework in place, venturing into ICOs would be risky for the public investors.
• Notably, funds that are lost due to fraudulent initiatives may not be recoverable.

2. EMPLOYMENT AND RELATED ISSUES
2.1 Widening job deficit

Why in news?
• The Confederation of Indian Industry on 09th June released a study of India’s employment requirements in the coming years.
• The study pointed out that the jobs deficit is greater than is generally understood.

What is the background of the issue?
• Not only are 10-12 million young people joining the labour force every year, but millions more are seeking to leave the increasingly unprofitable and precarious existence provided by the agricultural sector.
• The report estimated that 17-20 million jobs needed to be created annually much higher than the rate at which jobs grew until 2012.
• The government’s own figures say that just 135,000 jobs were created in the frontline sectors of textiles, leather, metals, automobiles, gems and jewellery, transport, information technology, and handlooms in 2015.
• It is clear that the government is failing on the jobs front.
• It was recently reported that the Skill India mission will no longer set itself targets on how many young people it has imparted skills to it had set an ambitious target of 500 million by 2022, which is unlikely to be achieved.

What are the reforms taken by the government?
• Providing skills to India’s relatively unskilled workforce is an important component in moving them up the value chain and making them eligible for formal employment
• The government at few instances admitted itself that it was “impossible” to provide employment through jobs to a country of 1.25 billion people, and that instead the government has “tried to create self-employment opportunities for 80 million people”.

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• the MUDRA (Micro Units Development Refinance Agency) scheme, which provides collateral-free loans of up to Rs 10 lakh to small borrowers to start small businesses or otherwise hedge uncertainties in the agricultural sector.
• About 40 million MUDRA loans were taken out in the recently concluded financial year.
• There are about 80 million such loans overall, Some of course are repeat borrowers turning over loans or topping them up.
• Others may be the product of rebranding microfinance loans and microcredit from banks may have been redesignated MUDRA loans.

What is the way forward?
• The amount of additional lending under the MUDRA scheme is not clear in any case.
• Schemes that promote self-employment in this manner can simply not be scaled up to the level needed in India at this time of demographic transition.
• There is no substitute for mass employment and thus for manufacturing.
• While the government must certainly promote self-employment, it must recognize that an economy dominated by such small and micro enterprises will not provide the stability and prosperity for 17-20 million additional people a year that is needed.
• It must re-focus its energies on fundamental structural reform that will aid the creation of an export-oriented manufacturing sector, and thus jobs.

2.2 Unemployment in India

Why in news?
Surveys by the Centre for Monitoring the Indian Economy (CMIE) have highlighted that employment in India is not expanding in par with the growth of the economy.

What are the concerns?
• Unutilised employment potential in the phase of demographic transition will only lead to a demographic catastrophe.
• Despite consistent growth in GDP, corresponding job creation has not taken place.
• Jobless growth is a dangerous trend as it furthers social inequality.

What are the possible causes?
• The root cause of the problem is the shortage of skills.
• Labour-intensive sectors are suffering from slowdown in private investment particularly after demonetisation.
• Unfavourable incentives that do not allow companies to grow and take advantage of abundant cheap labour.
• One of the other probable reasons for jobless growth is automation in most economic activities which has reduced labour requirements.

What has been done by the government?
• National Career Service portal was launched serving as a common platform connecting job-seekers, employers, skill providers, placement organisations and counsellors.
• PradhanMantriKaushalVikasYojana(PMKVY) a skill development scheme to help young people learn industry-relevant skills.
• MGNREGA has contributed to lowering unemployment in rural areas.
• Start Up India, Stand Up India, National Skill Development Mission.
What should be done?

- **Structural reforms** to labour, land and capital markets for sustainable job creation so as to boost the Indian manufacturing sector.

- The government should make its teaching and academic **curricula** more **employable-driven** to address shortage of skills.

- Reforming archaic **labour laws** which currently proliferate only contractual jobs instead of permanent employment.

- **Infrastructure investment** can be utilised as an engine of job-creation.

- India also needs to bargain hard with the **US** for **easier work visa norms** so that pressure of some unemployment can be eased out to an extent.

### 2.3 'Towards a Payroll Reporting in India' Report

**What is the issue?**

- A report titled “Towards a Payroll Reporting in India” was released recently, to have a better payroll reporting system in India.

- The overt claims made by the study on the country’s job creation scenario call for a relook.

**What was the report on?**

- The study was authored by SBI group Chief Economic Advisor and a professor with the Indian Institute of Management, Bangalore.

- It calculated the number of jobs in enterprises from the membership of:
  
  i. Employees' Provident Fund Organisation (EPFO)
  
  ii. Employees' State Insurance Corporation
  
  iii. General Provident Fund
  
  iv. National Pension System (NPS)

- This is notably the first study to estimate job creation using these kinds of data sets.

**What are the key findings?**

- **Job Creation** - As per EPFO data, 55 lakh new jobs would be created in 2017-18.

- It has found that around 600,000 jobs were being created a month in formal sector in FY18.

- The study found that there were around 90 million employed people in the formal sector as of March 2017.

- The top 10 sectors of the economy contribute about 75% of total employment in the formal sector in India.

- **Labour Force** - The study estimated that around 15 million are added to the labour force every year.

- It says by 2040 or so, it is expected that India’s demographic dividend will be conclusively over.

- Evidently, the total fertility rate is already down to 2.2 children for every woman and expected to reach the replacement fertility rate of 2.1 by 2025. (Refer Quick Fact below for explanation)

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**Fertility Rate and Demographic dividend**

- **FR** is the average number of children per woman if she lives to the end of her child-bearing years.

- The replacement fertility rate is the birth rate at which the population level remains constant, taking into account the mortality rate and other factors.

- With fewer births each year, a country’s young dependent population grows smaller in relation to working-age population.

- This offers opportunities for rapid economic growth with more earning people and fewer dependent people to support for.

- However, a fall in fertility below replacement levels signals moving towards the closure of demographic dividend phase.

- In India, for another 25-plus years falling death rates will compensate for falling birth rates.

- However, as per the study, by 2040 or so, it is expected that India’s demographic dividend will be conclusively over.
What are the suggestions made?

- The study suggests the government to undertake a trend analysis of EPFO data across 190 industries and across geographies.
- This is to reorient the country's skill development programmes towards such industries.
- Also, a detailed analysis of labour on contract under the contract labour Act should be done to estimate the total number of people on contract.
- The other suggestions include:
  - Mandating professional bodies, hospitals, nursing homes, etc to submit details of new joinees every 3 months to the local government offices
  - Making every GST filer to provide total number of permanent employees and total number of contract employees
  - Giving some tax deduction (per person) for domestic help, if the employing households register the details with tax authorities
  - Continuing with NPS subscriber extra tax deductions and providing new incentives to encourage people to join NPS

What are the flaws in the study?

- **EPFO data** - The study took into account the 18-25-year-old who registered with the EPFO to arrive at the 55 lakh new jobs number.
  - This however does not automatically mean net new jobs.
  - Also, EPFO only registers employees from the formal sector for provident fund benefits.
  - Moreover, EPFO does not make deletions if a person loses his/her job and only makes additions on new registrations.
  - This highlights that the EPFO data reflects the gross jobs picture and not the supposed to be net new jobs in the economy.
- **DeMo/GST** - The Indian economy underwent large-scale formalisation forced by the twin forces of demonetisation and GST.
  - The fund crunch due to demonetisation and tax credits claimable only by registered business entities under GST were the reasons.
  - It coerced many small and medium businesses to transition at least a part of their workforce from informal to formal employment.
  - This formalisation led to a massive drive in EPFO registrations.
  - However, it is to be noted that an informal job that turns formal with an EPFO registration does not mean it is a new job.
  - The costs of formalisation may have resulted in many firms cutting costs or even shutting down, actually leading to some job loss.
  - However, the EPFO-based study fails to capture these costs of forced formalisation and projects only the new formal employees.
  - In all, the selective projections of ‘EPFO’ data for the selective period of 'FY-2017 and FY-2018', bearing many effects of the structural changes in the economy, seem to be misleading.
  - India’s jobs situation is a grim challenge that must be acknowledged by understanding the true picture, for formulating appropriate policies.

2.4 Global Human Capital Index

**Why in news?**

Global Human Capital Index was recently released by World Economic Forum.
What did the report say?

- It ranked India at a 103rd among 130 countries.
- The Global Human Capital Index 2017 ranks countries on how well they are developing their human capital.
- The rankings are based on four thematic dimensions — capacity, deployment, development, and know-how.
- The index is led by Scandinavian nations Norway, Finland and Switzerland, followed by large economies such as the US and Germany.
- In South Asia, the race is led by Sri Lanka at rank 70 and Nepal at 98, while India has a slightly better standing than Bangladesh & Pakistan.
- With the exception of Sri Lanka, the other South Asian countries are yet to reach the 60% threshold in HDI.

What are the implications for India?

- This is a scathing commentary on how India is handling its demographic dividend.
- India stands at the bottom among the G20 nations, is the lowest among BRICS nations.
- Dragged down by its poor labour participation and a big gender gap, India seems to be struggling against huge challenges.
- It has been noted that although India’s current educational attainment rate has improved over past generations, its youth literacy rate stands at a paltry 89%.

What are the positives for India?

- Despite the low ratings, the report notes that India is showing signs of slowly moving in the right direction.
- The primary way to realise the full human potential is by increasing inclusivity and expanding access to education and employment opportunities.
- On that note, the country scores well on the ‘know-how’ parameter that measures the use of specialised skills at work - such as economic complexity, availability of skilled employees.
- The other markers are that India ranks well on are its improving education system, skill diversity of graduates and high-skilled employment share.

What are the worldwide trends?

- The world average was only 62% on human capital development.
- Only 25 nations were found to have tapped at least 70% of their human capital, while for 14 countries was below 50%.
- South Asia’s overall score was behind the Middle East and North Africa but ahead of Sub-Saharan Africa.
- China was ranked an impressive 34th and its rapid expansion of educational attainment across its younger generations is poised to be an asset in preparing the future workforce.

3. MOBILISATION OF RESOURCES

3.1 Municipal Bonds in India

What is the issue?

- Pune Municipal Corporation recently succeeded by issuing municipal bonds.
- It may not be easy to replicate, but it can serve as a role model for local bodies.

What is municipal bond?

- A municipal bond is a debt security issued by a state, municipality or county to finance its capital expenditures, including the construction of highways, bridges or schools.
• Municipal bonds are mostly exempt from federal taxes and from most state and local taxes, making them especially attractive to people in high income tax brackets.

What is the history of municipal bonds?
• Between 1997 and 2010, the city corporations of Ahmedabad, Nashik and Bengaluru experimented with bond issues but barely managed to raise ₹1,400 crore.
• The poor investor response was due to the fact that these bonds were not tradable and lacked regulatory clarity.
• SEBI’s detailed guidelines for the issue and listing of municipal bonds in March 2015, clarified their regulatory status and rendered them safer for investors.

What is the recent incident?
• The municipal bond market in India is coming alive with
• Pune Municipal Corporation (PMC) raised ₹200 crore in the first set of a proposed ₹2,264-crore offer.
• It also listing the bond on BSE recently.
• It is a ten-year bond offer carrying a coupon of 7.59%.
• It received a good reception raising hopes that future offers will be well-received.

What is the significance of municipal bond market?
• The take-off of the municipal bond market is critical for India’s large cities and towns to upgrade their creaking infrastructure.
• The ability of municipal bodies to be self-sustaining is also critical to the success of the Centre’s pet projects such as Smart Cities and AMRUT.

3.2 Air India Disinvestment

Why in news?
The Union Cabinet gave its approval for disinvestment of government equity in Air India.

What was the rationale behind the move?
• The airline had reported losses for six straight years.
• Air India’s debt, now about $8 billion, is growing unsustainably.
• Air India has been surviving on a Rs. 30,000-crore bailout package put together in 2012 to help its turnaround, and the debt relief provided by public sector banks.
• More than 18,000 workers were on its rolls for a fleet of just about two dozen planes.
• It continues to post heavy annual losses and has a massive outstanding debt of Rs 46,500 crore.
• What are the problems in the proposal?
• It is not yet clear whether the airline will be fully privatised or how its eventual sale will be executed.
• A clear timeline for implementation has not been framed.
• The idea of selling Air India’s assets one at a time, by unbundling them to secure better valuation, could lead to delays.

What could be done?
• Both domestic and foreign buyers should be allowed to bid freely for stakes.
• Government should tune its FDI policy to allow foreign investors to buy a stake in Air India.
• To achieve a relatively quick exit, the best option would be to transfer all unrelated assets such as subsidiaries and real estate to a special purpose vehicle (SPV) at zero value.
• The name SPV is given to an entity which is formed for a single, well-defined and narrow purpose.
• All debt, other than that related to aircraft, should be transferred to this SPV.
• Thus, the airline, with a relatively clean balance sheet, would be available to be sold.
3.3 Bharat-22 ETF

Why in news?
Recently government has launched new Exchange Traded Fund Bharat-22.

What is ETF?
- ETF is an investment fund traded on stock exchanges, much like stocks.
- An ETF is a type of fund that owns the underlying assets which can be shares of stock, bonds, gold bars, foreign currency, etc.
- It divides ownership of those assets into shares.

What are the highlights of Bharat 22 ETF?
- Bharat 22 is an ETF that will track the performance of 22 stocks, which the government plans disinvest.
- It is the second ETF from Govt. of India after CPSE ETF.
- It will span six sectors, such as basic materials, energy, finance, FMCG, industrials and utilities and some of the government’s holdings in SUUTI (Specified Undertaking of Unit Trust of India).

Why did the government choose the ETF route?
- Earlier disinvestment is done through a series of follow-on offers and offers for sale in the market.
- Frequent visits to the market by disinvestment candidates led to an oversupply of public sector paper.
- This made for sub-optimal timing of the issues and depressed valuations, as their stock prices were inevitably hammered in the run-up to such offers.
- ETFs act as a superior alternative to this method of PSU stake sales.
- It allows the Centre to sidestep these issues through a one-shot offer.
- The government managed to raise ₹8,500 crore via the second tranche of the CPSE ETF in FY17.

How Bharat 22 is different from CPSE-ETF?
- CPSE ETF had exposure of over 62% in the public sector energy giants, with marginal weights in other firms.
- This single sector concentration made it quite a risky portfolio to own.
- With 22 firms drawn from six different sectors, Bharat 22 fund offers a more diversified, mutual fund-like basket to retail investors.
- Bharat 22 also blends sectors with secular growth prospects (like FMCG and utilities), and cyclical ones (like energy, metals, industrials).
- The addition of equity stakes held by the SUUTI in private sector blue-chips such as L&T, Axis Bank and ITC should also help Bharat 22 garner better response.

What should be done?
- Good packaging is merely not enough to make PSU stakes attractive.
- Many investors in India are reluctant of investing on PSUs owing to the Government’s unwillingness to allow them to operate on wholly commercial lines.
- e.g irrational dividend and buyback norms, or structuring deals including the recent ONGC-HPCL merger to appropriate their cash coffers.
- Repairing this investor-unfriendly image is critical for State-owned firms.

3.4 Land Borrowing - A Viable Solution

What is the issue?
- For development related infrastructures land acquisition is being a major challenge across the nation.
• Land borrowing by the government can be a viable solution for India.

**How land borrowing can be a viable solution?**

• The government can borrow land for particular project, uses it for that project and returns it to the owner after it is no longer used for the purpose for which it was borrowed.

• The state can borrow land from the owner under certain conditions such as

  1. When the assigned use by the state ends, temporarily or permanently, it is returned to the owner, who is then free to use it the way he chooses.

  2. The owner continues to use that part of the land till it is required for the purpose it is intended for, say a road or bridge or a power plant.

  3. Only that much piece of the land is lent that is required for the project and the owner continues to use the remaining part in way he wishes, including renting out.

  4. When the financial life of a project (typically 20 years) ends, the lease is renewed or re-negotiated

**Has this idea ever worked in practice?**

• In the State of Hyderabad historically and till date this idea is being followed.

• Being a land-locked state with one river, between 1724 and 1947 the State of Hyderabad did not have enough water for irrigation.

• Bunds or low walls were built by the then Nizam along the river and streams of the river, to save water in tanks.

• The Nizam of the State of Hyderabad “borrowed” private land for a specific purpose and under predefined conditions.

• The land continued to be owned by the land owners and they had papers to prove it.

• These are not very large-sized tanks, hence, no count is kept in the government records, but they are many and ran into over 500-plus in the metropolitan area alone in 1901.

• While the tanks lasted, this system worked to everyone’s advantage.

• However, after Hyderabad became a state capital, it urbanised rapidly. The tanks dried up or just vanished as the city grew.

• The pieces of land were reclaimed by the owners and the judiciary respected their property rights.

### 3.5 Easing of FDI Norms

**Why in news?**

The Centre has recently eased several foreign direct investment norms.

**What are the highlights?**

- **Approval** - In the single-brand retail, the Centre has allowed 100% FDI through the automatic route, from the 49% at present.

- 100% FDI is allowed in construction development relating to building townships, housing and infrastructure and real estate broking services.

- **Local Sourcing** - The mandatory 30% requirement could be relaxed for companies with 'state-of-the-art' or 'cutting edge' products, for which local sourcing was not possible.

- However, the absence of a definition for 'state-of-the-art' or 'cutting edge' technology has stalled the applications of global companies.

- The mandatory local sourcing is now relaxed for the first five years.

- Thereafter, single-brand retailers will be required to meet the 30 per cent local sourcing norm.

- Local sourcing requirement mandates that a global company contract the goods or services delivered or manufactured within the domestic country.

- Companies, under the new norms, will be allowed to set off purchases of goods from the country for their global business against the 30% requirement for the first five years.

- The offset amount will be equal to the annual increase in the value of goods purchased from India for global operations in rupee terms.

- The relaxed time frame for local sourcing is conducive for global companies to develop good suppliers as partners.
• **Power sector** - The government has removed the restrictions on investment in power exchanges through the primary market.
• This applies to foreign institutional investors and portfolio investors.
• Till now they could do so only through the secondary market.
• **Air India** - Importantly, the Centre has allowed foreign airlines to invest up to 49% under the approval route in Air India.
• These are subject to the conditions that -
  i. foreign investment(s) in Air India, including that of foreign airline(s), shall not exceed 49% either directly or indirectly
  ii. substantial ownership and effective control of Air India shall continue to be vested in an Indian national

**What is the rationale for Air India decision?**
• The move comes in the backdrop of Singapore Airlines and Tata Group evincing interest in bidding for the debt-laden national carrier.
• As per the present policy, foreign airlines are allowed to invest under the government approval route up to the limit of 49% of their paid-up capital.
• The investments are made in the capital of Indian companies operating scheduled and non-scheduled air transport services.
• However, this provision was not applicable to Air India, and the government has now decided to do away with this restriction.
• The move is aimed at bringing Air India on par with other Indian airline operators with respect to FDI norms.

**What is the significance?**
• The move regarding airlines was much needed in light of the proposed privatization of Air India.
• The changes to the FDI norms would trigger significant interest in Air India from foreign airlines and thus increase the number of interested bidders and the valuation.
• However, the actual terms of the offer and conditions attached would determine the level of participation in the bids.
• The possible divestment would help spur more jobs and growth in Air India.
• The amended norms, in general, have cut the red tape and ensured a more predictable and easier policy structure.
• The automatic approval will save companies from the delaying procedures with the Department of Industrial Policy and Promotion.
• The changes gains significance with India’s goal of making it to the top 50 countries in the World Bank’s ease of doing business ranking.

3.6 **Concerns with FPI**

**What is the issue?**
• Singapore stock exchange and Dubai Gold and commodities exchange are planning to expand their portfolios in India.
• These decisions are taken in a backdrop of uncertain environment for Foreign Portfolio Investments in India.

**What are recent portfolios decisions about?**
• A portfolio is a grouping of financial assets such as stocks, bonds and cash equivalents, as well as their funds counterparts, including mutual, exchange-traded and closed funds.
• Portfolios are held directly by investors and/or managed by financial professionals.
• Usually an investors should construct an investment portfolio in accordance with risk tolerance and investing objectives.
• Recently Singapore Exchange (SGX) has decided to offer single-stock futures (SSF) on Indian stocks.
- The Dubai Gold and Commodities Exchange (DGCX) is also considering expanding its portfolio of Indian SSF.
- Volumes in India’s derivatives trading segment is expected to be adversely affected by these decisions.

**How these decisions would hurt India?**

- Unlike the National Stock Exchange (NSE) and the BSE, the SGX and the DGCX are open 24x7 and these are hard-currency environments.
- There are no transaction taxes akin to India’s securities transaction tax (STT) and the local regulators also place no restrictions on foreign portfolio investors (FPIs).
- Given that the SGX and the DGCX offer comfortable regulatory environments, a lot of the derivatives trading volume will likely shift to these offshore centres.
- India will lose out on tax revenue and brokerage income and traders will face disadvantage of being responsive.

**What are the barriers for FPI in India?**

- In July, SEBI banned trading in derivatives via P-Notes and demanded direct registration of FPIs carrying out derivatives trades.
- The regulator said derivatives trading via P-Notes would be allowed only to hedge underlying cash positions.
- At the time of the ban, P-Note holders had open positions of over Rs 40,000 crore in the futures and options segment of the NSE, all of them where closed out after this move.
- A further barrier for US-based funds was that they cannot take direct exposure to derivatives offered by Indian exchanges, which are not approved by America’s Commodity Futures Trading Commission (CFTC).
- Many used P-Notes to bypass that requirement, as both SGX and DGCX are CFTC-approved and Indian exchanges are not.
- High Securities Transaction Tax (STT) in India is being another source of friction for FPIs, which are being significant cost for high-volume traders.

**3.7 Quick facts**

**FPI**
- Foreign portfolio investment (FPI) consists of securities and other financial assets passively held by foreign investors.
- It does not provide the investor with direct ownership of financial assets and is relatively liquid depending on the volatility of the market.
- Foreign portfolio investment is different from foreign direct investment (FDI).

**Participatory Notes (P-Notes)**

- These are financial instruments used by investors or hedge funds that are not registered with the Securities and Exchange Board of India (SEBI) to invest in Indian securities.
- Any dividends or capital gains collected from the underlying securities go back to the investors.
- Indian regulators are against participatory notes because they fear that hedge funds acting through participatory notes will cause economic volatility in India’s exchanges.

**SSF**

- Single Stock Futures (SSF) are derivatives instruments that give investors exposure to price movements on the underlying share.
- A futures contract is a legally binding agreement that gives the investor the ability to buy or sell an underlying listed share at a fixed price on a future date.

**STT**

- Securities Transaction Tax is levied on every purchase or sale of securities that are listed on the Indian stock exchanges.
- This would include shares, derivatives or equity-oriented mutual funds units.
- The rate of tax that is deducted will vary with different types of transactions and securities.
- STT is deducted at source at the time of the transaction itself, the net result is that it pushes up the cost of the...
4. INVESTMENT MODELS

4.1 HAM Project

Why in news?
Transport ministry is promoting the Hybrid-Annuitiy Model or HAM

What is HAM?
- HAM is a mix of the Engineering, Procurement and Construction (EPC) and Build, Operate, Transfer (BOT) models.
- HAM combines 40% EPC and 60% BOT-Annuitiy.
- It was introduced in January 2016 to recover investments in road infrastructure projects.
- About 30 highways projects have been awarded under HAM by the National Highway Authority of India (NHAI).

How does it work?
- Under the EPC model, NHAI pays private players to lay roads.
- The private player has no role in the road’s ownership, toll collection or maintenance.
- Under the BOT model, private players have an active role.
- They build, operate and maintain the road for a specified number of years, before transferring the asset back to the government.
- The toll revenue collection arrangement is known as BOT-Annuitiy.
- Essentially, the toll revenue risk is taken by the government, while the private player is paid a pre-fixed annuity for construction and maintenance of roads.

What is its significance?
- It helped to have a better financial mechanism for road development.
- It is a good trade-off, spreading the risk between developers and the Government.
- This helps cut the overall debt and improves project returns.
- The annuity payment structure means that the developers aren’t taking ‘traffic risk’, that is they are not depending on the toll traffic alone for their returns.
- From the Government’s perspective, it gets an opportunity to flag off road projects by investing a portion of the project cost.

4.2 Srikrishna Committee - BIT Disputes Resolution

Why in news?
The Srikrishna committee’s report was recently released, with a focus on recalibration of the Indian BIT regime.

What is BIT?
- It is an agreement establishing the terms and conditions for private investment by nationals and companies of one state in another state.
- Government of India has signed BITs with 83 countries.
- They are based on a model BIT formulated by India in 2016.
• The model BIT provides the framework for new negotiations with its trading partners.

What were the key recommendations?
• It was constituted to prepare a road map to make India a hub of international arbitration.
• It recommended the creation of the post of an ‘international law adviser’ (ILA) to advise the government on international legal disputes, particularly BIT disputes.
• Creation of an inter-ministerial committee (IMC), with officials from the Ministries of Finance, External Affairs and Law for better managing BIT disputes was also called for.
• It also recommended establishing a BIT appellate mechanism and a multilateral investment court.
• It suggested hiring of external lawyers and appointing counsels having expertise in BITs to boost the government’s legal expertise and creating designated fund to fight BIT disputes.

What are the shortcomings?
• Framework - The call for appointing an ‘Law Adviser’ will amount to duplicating the existing arrangement.
• Presently, the Legal and Treaties (L&T) division of the External Affairs Ministry is mandated to offer legal advice to the government on all international law.
• It would be sensible to have a member from the Commerce Ministry in the proposed IMC as it works for investor protection but it was not recommended.
• Narrow window - The report named the investor-state dispute settlement (ISDS) mechanism as robust.
• But it provides for only a narrow 90 day window for filing of BIT arbitration.
• The report is also silent on many other jurisdictional limitations given in Article 13 in the ‘Indian model BIT’ that also limit the usefulness of ISDS.
• The commission’s mandate was to focus on all the three parts of BIT arbitration namely –
  • BIT arbitration has three aspects namely:
    1. Jurisdictional (such as definition of investment)
    2. Substantive (such as provision on expropriation)
    3. Procedural (ISDS mechanism).
• But it focussed only on the procedural aspect.

5. BANKING
5.1 Failure of Bank Board Bureau

What is the issue?
• India’s public sector banks are going through a severe bad loans crisis caused primarily by poor governance.
• The bank board bureau setup created to monitor public sector banks is being irrelevant.

What are the duties of bank board Bureau?
• The government step towards reform, public sector bank formed Bank Board Bureau headed by former Comptroller & Auditor General.
• It been set up to examine how the functioning and governance of PSBs could be reformed.
• The Bureau was entrusted with the task of choosing the top leadership of PSBs and improving governance norms.
• It is seen as a step towards increasing PSBs’ independence and raising their level of competence.
• Its main purpose was to separate the day-to-day governance and supervision of the banks from the concerns of their ultimate owner, the government.

What are the issues with bank board bureau?

• The Bureau when it was eventually formed did not have the power to oversee all senior appointments, including board-level choices.
• It was reduced essentially to recommending names of the heads of PSBs and financial institutions.
• Some new members of boards “non-official directors” are also members of the ruling, who act according to political desires.
• The Power, to choose the heads of institutions such as IIFCL, IFCI, SIDBI and Exim Bank, was taken away from it and given to the finance ministry.

What is the reason of its ineffectiveness?

• In many instances, its recommendations being simply ignored by the government.
• Rather than going to the Cabinet for approval, its recommendations are re-scrutinised and sometimes overruled by the finance ministry.
• Its incomplete control over the choice of members of bank board is also clearly visible.
• The government began the process of PSB reform with convening meetings of bank heads and launching Indradhanush reform programme.

5.2 PSBs Recapitalization Plan

Why in news?
The government recently announced the details of the earlier said Rs. 2.1 lakh crore recapitalisation plans for public sector banks.

What are the provisions?

• Package - The recapitalisation package will be spread across current financial year 2017-18 and the next year 2018-19.
• The government will infuse around Rs 88,000 crore into 20 public sector banks.
• These banks account for more than 80% of the bad loans.
• Themes - The plan includes a reforms package across six themes.
• They are:
  1. customer responsiveness
  2. responsible banking
  3. credit offtake
  4. PSBs as Udyami Mitra (friends of entrepreneurs)
  5. deepening financial inclusion and digitalisation
  6. developing personnel for brand PSB
• The whole-time directors of the PSBs would be assigned theme-wise reforms to oversee.
• Their performance on the themes would be evaluated by the boards of the banks.
• Differential approach - The recapitalisation package would follow a differentiated approach for banks.

Prompt Corrective Action (PCA)

• PCA is primarily to take appropriate corrective action on weak and troubled banks.
• The RBI has put in place some trigger points to assess, monitor and control banks.
• The trigger points are on the basis of CRAR (a metric to measure balance sheet strength), NPA and ROA (return on assets).
• Based on each trigger point, the banks have to follow a mandatory action plan.
• RBI could take discretionary action plans too apart from these.
• RBI has initiated prompt corrective action (PCA) in as many as 11 PSBs.
• It prohibits them from undertaking fresh business activities such as opening branches, recruiting talent or lending to risky companies.
The capital infusion for the PSBs would be dependent on banks' performance.

Accordingly, the government will give more money to the weakest ones.

These are the 11 lenders under the Reserve Bank of India’s Prompt Corrective Action (PCA).

In financial year 2017-18, PCA banks would get around Rs. 50,000 crore.

The comparatively healthier non-PCA banks would get around Rs. 35,000 crore.

**Recapitalisation bonds** - The capital infusion will be done partly by recapitalisation bonds and partly by budgetary support.

The bonds are to have a maturity period of 10-15 years and would be issued in six different slots.

They will not have a statutory liquidity ratio (SLR) requirement and would be non-tradeable.

The government has set strict terms for issuing the recapitalisation bonds to PSBs.

The terms include:

i. creating a stressed asset management vertical

ii. tying up with agencies for specialised monitoring of loans above Rs 2.5 billion

iii. strict surveillance on big loan defaulters

iv. appointing a whole-time director for monitoring reforms every quarter

**Will there be a fiscal impact?**

- There are apprehensions that the recapitalisation bonds would affect the fiscal consolidation efforts by the government.

- The government however assured that it would not have any substantial impact on the fiscal deficit.

- This is because the recapitalisation bonds would be "cash neutral" (does not need net cash for a transaction).

- The fiscal deficit will be impacted only by the interest cost on the bonds that the government pays every year.

**What are the benefits?**

- The recapitalisation package will create an incremental **lending capacity** with the banks.

- This is expected to catalyze the revival of the capital investment cycle in the economy.

- Banks will now be sufficiently capitalised to maintain **regulatory capital requirements** and also to lead growth.

- Banks would have to subject themselves to reform, become more professional, and do prudent and clean lending.

- The government would bring out a report card on compliance of these measures.

### 5.3 Consolidation of Banks

**What is the issue?**

- The government is working on a consolidation plan for public sector banks, in order to create a three-tier structure.

- While the earlier objective of mergers was strengthening the risk-taking ability of banks, the demand now is created with increasing bad assets.
• Experts are however emphasizing the need for more small finance banks, regional and local banks despite mergers.

How do mergers happen?
• Bank consolidation procedures are laid out in the Banking Regulation Act, 1949.
• Any two public sector banking entities can initiate merger talks, but the scheme of the merger must be finalized by the government in consultation with the central bank and it must be placed in Parliament.
• Parliament reserves the right to modify or reject the scheme. In case of a merger between a public sector bank and a private bank too, parliamentary approval is a must.

What are the grounds for mergers?
• Most bank mergers have been an offshoot of the central bank’s efforts to protect the financial system and depositors’ money.
• A few of them are also driven by the need for consolidation and growth.
• Mergers expect weak banks to sell assets, reduce overheads and shut loss-making branches.

What are the implications of mergers?
• Recently, five SBI associate banks have been merged with their parent, catapulting the entity in the league of top 50 global banks in terms of assets.
• However even SBI has not been able to escape the pain of merging its associates with itself. Its gross NPAs have gone up, and the merger entity has also reported a loss.
• The key to success of any merger will be large-scale shutting of branches in urban centres, reduction in staff strength and exploring the right business synergy and work culture.
• Government should be ready to make massive fund infusion.
• Given the mounting bad assets and the increased need for capital infusion, it is ideal to start the consolidation process after the banks bounce back to healthy status.

Case Study: Merger of 5 associate banks with SBI

What is the impact?
• The consolidation has weakened the original standalone entity of the SBI in terms of NPAs.
• The merger took a heavy toll on the bank’s recovery.
• The deterioration in asset quality was essentially because of the merger.
• SBI’s lending growth has slowed down.

Is consolidation the right choice?
• In SBI’s case the conflicts and disparities of work culture might have been fewer.
• But in case of an increased geographical reach for a merged entity in future, bridging the work culture gap at operational level would be challenging.
• The problems faced by Indian public sector banks run deeper, and mergers cannot provide a quick fix.
• The solution requires better recapitalisation as well as governance reforms so that the banks' shortcomings are sorted out.
5.4 Problems with MCLR

Why in news?
While cutting the repo rate by 25 basis points, RBI called on banks to reduce rates for existing borrowers too.

How does the repo rate work?
• Repo rate is the interest rate at which the RBI lends money to commercial banks.
• It is a monetary policy instrument which can be used to control the money supply and thereby inflation.
• By reduction the rate, borrowing becomes cheaper for the banks.
• So the banks will end up with more money which can be lent to its customers.
• More money with the public will result in higher economic activity thus pushing the growth of the country.

How were banks subverting this?
• Base rate is the minimum rate set by the Reserve Bank of India below which banks are not allowed to lend to its customers.
• Banks calculate the lending rates to its customers based on the base rate.
• It does not consider ‘repo rate’ in their calculations. So the effect of Repo rate is not reflected in this.
• Banks often does not reduce their lending rate even after the reduction of repo rate, to increase their profits.

How was this rectified?
• In April 2016 MCLR was introduced. It includes Repo rate with it.
• So any change in repo rate will be reflected in lending rates too.

What is the current problem?
• The central bank has reduced the repo rate by 200 bps since January 2015.
• While banks cut the marginal cost of funds based lending rate (MCLR) by up to 90 bps, the reduction in the base rate.
• MCLR has been operational only from April 2016.
• So a large proportion of loans are still linked to the base rate and such borrowers have not benefited to the extent of the new borrowers.
• The difference between the base rate and MCLR, for some banks, is as high as 90-100 bps.
• The commercial banks also have a tendency to reduce interest rates only for prospective customers in order to push new business.
• They reduce rates for segments where competition was high as in the case of home loans and personal loans.
• So the RBI pushed the lenders to pass on lower loan costs to borrowers who had not received the full benefit of the reductions in the policy rate.

Components of base rate system
1. Cost of funds (interest rates offered by banks on deposits)
2. Operating expenses to run the bank.
3. Minimum Rate of return i.e. margin or profit Cost of maintaining CRR

Components of MCLR–
1. Operating Expenses
2. Cost of maintaining CRR
3. Marginal Cost of funds
  a) After considering interest rates offered on savings / current / term deposit accounts.
  b) Based on cost of borrowings - short term borrowing rate i.e repo rate& also on long-term borrowing rates.
  c) Return on Net-worth
4. Tenor Premium - based on the loan tenure & commitments.
5.5 WLTF Banks

What is the issue?
RBI specified eligibility criteria of projects that can be funded by WLTF

What are WLTF banks?
- In April 2017, the RBI released a discussion paper on setting up of wholesale and long-term finance (WLTF) banks.
- The objective of these banks is to fund long-term infrastructure and corporate projects.
- These banks will fill the funding gaps which are left by the commercial banks.

What is the need for this new type of banks?
- The Indian banking system has significantly high percentage of non-performing assets (NPAs).
- Recently, the RBI also identified 12 insolvent accounts, which are responsible for 25 per cent of the NPAs in the Indian banking system.
- Due to the ongoing NPA issues, commercial banks are already wary to take further long-term exposures, thus creating a critical funding gap for huge projects.

How are these banks designed?
- The RBI proposes an initial minimum capital of Rs 1,000 crore.
- In the long term, these banks are funded appropriately to the risk in their assets.
- The promoter group for WLTF banks has deep expertise in appraising long-term credits and tackling associated challenges.

What are the issues with WLTF banks?
- This bank will be counter-productive for the commercial banks.
- There will be greater challenges for payment banks and small finance banks.
- The funds which are received by small marginal banks from RBI will be diverted due to this new banks.

How WLTF banks can be made successful?
- These banks can raise current account and deposits above Rs 10 crore as one of the funding sources.
- The best-suited source of capital for WLTF banks would be insurance companies, pension funds, sovereign wealth funds, international capital markets and long-term bond markets.
- Selecting the right promoter group for granting the licence holds the efficiency of this banks.
- Framing suitable financial structures for raising long-term funds would go a long way in making WLTF banks a success.

6. INFRASTRUCTURE

6.1 Infrastructure Status to Logistics Sector

Why in news?
The government has recently granted infrastructure status to the Indian logistics sector.

What was the need?
- India is home to leading industries such as automotive components, pharmaceuticals, cement, textiles, FMCG and e-commerce.
- Their operations depend hugely on warehousing and logistics.
- But India is ranked 35 out of 160 countries on the World Bank’s Logistics Performance Index (LPI).
The logistics spend in India also is almost 13% of the GDP, compared to well below 10% for the advanced countries.

**What is the significance of Infrastructure status?**

- It includes the logistics sector in the master list of infrastructure sub-sectors under a new head ‘Transport and Logistics’.
- Minimum investment and area requirements to get the infrastructure tag for each category like multi-modal logistics park, cold chain facility and warehousing facility have been clearly defined.
- **Easy Credit** - This makes it easier for companies operating within these segments to raise long-term credit from banks and other financial institutions at lower rates.
- The inclusion also makes it easier for logistics companies to:
  1. Access larger amounts of funds as External Commercial Borrowings (ECB)
  2. Access longer-tenure funds from insurance companies and pension funds
  3. Be eligible to borrow from India Infrastructure Financing Company Limited (IIFCL)
- It also helps attract foreign investments.
- **Lower cost of logistics** - This also means that development firms with larger land parcels can utilise their excess land holdings to develop more infrastructure facilities, thereby boosting the supply of warehousing facilities.
- The coupled with easier access to capital will eventually bring down the cost of logistics.
- The LPI measures the state of trade and logistics based on parameters like customs, infrastructure, international shipments, logistics quality and competence, tracking and tracing and timeliness.

**What are the immediate impediments?**

- An inadequate road network and losses that occur during transportation are huge problems.
- Improvement of India’s road infrastructure at a much faster pace is critical to minimise losses, both economic and environmental.

### 6.2 Bharatmala Project

**Why in news?**
The Union government recently launched Bharatmala project.

**What can be positive outcomes of the project?**

- It will subsume unfinished parts of National Highway Development Program (NHDP).
- National Highways Development Project (NHDP) to potentially generate 10 million jobs and result in a 3 per cent bump-up in the gross domestic product.
- In Bharatmala programme, the focus is on economic corridors (9,000 km) is expected to ensure that investments are targeted at economic returns.
- The ambitious project also plans to create new industrial corridors and urban centres, which should enhance economic activity in the country.
- Against the 300 districts that are linked to national highways at present, Bharatmala will connect 550 more to the national grid.
- The government also expects that 70-80 per cent of freight traffic will move on national highways, up from 40 per cent now.

**What are the challenges?**

- Earlier similar plans execution suffered due to problems of funding and delays in approval and execution.
- But typically, governments in the past have struggled with several operational issues such as land acquisition and other approvals.
• The big concern is funding, the plan depends more on government funding, and as much as 15 per cent of the total investment is expected from the private sector.

• Given the patchy record of public-private partnership schemes in India, there is no clarity on private sector investments.

• Big construction companies such as Larsen & Toubro, GMR and GVK have been missing from auctions for highway projects.

How the challenges can be addressed?

• To speed up the process of approvals, the government has already empowered National Highways Authority of India to approve all engineering, procurement and construction projects.

• To rope private sector in, the government need to draw a definitive road map for timely completion, fund mobilisation as well as streamline other bottlenecks in the form of land acquisition.

• To achieve dramatic changes, the government will have to improve its execution skills manifold by working closely with state governments.

• The plan should go a long way towards improving connectivity, not just to the coastal and border areas but to backward areas as well.

6.3 CAG Report on Indian Railways

Why in news?

CAG has recently released a report revealing that there are major lapses in Indian Railways catering services.

What are the highlights of the report?

• Articles unsuitable for human consumption, contaminated food stuffs were offered for sale in the railway stations.

• No reduction in the number of complaints over the years and the major complaints was related to overcharging and quality issues.

• Unauthorised vendors were operating in platforms and trains.

• Unfair practices were being followed in the execution of catering services at stations and trains.

• Hygiene was greatly compromised. The food and water sold at the railway stations and trains are unfit for human consumption.

What are the factors behind these unhygienic practices?

• In its report, CAG held that the Policy shifts in catering are mainly responsible for this mess in catering services.

• Even the new catering policy launched recently is not clear on how zonal railways will be held accountable.

• In 2005, the Railways gave all catering contracts to IRCTC, its PSU, but took it back in 2010. It gave the contract back to IRCTC under the new policy this year.

6.4 Rail safety concerns

What is the issue?

Railways safety record comes under scrutiny in the wake of series of accidents.

What is the status of railways safety?

• Rail mishaps are not an uncommon occurrence in India, but rarely does one see heads roll at the very top.

• The deaths due to derailments were 193 in 2016-17.
• One accident near Kanpur alone claimed over 140 lives in November 2016, it was highest in at least a decade.

• The number of accidents has been steadily on the decline, from nearly 200 in 2007-08 to 104 in the last fiscal.

• The number of derailments and casualties has been on the rise in the last three years even as the total number of accidents has fallen.

What are the reasons for derailment?

• Derailments occur due to wear and tear of track, rolling stock and human error.

• There is a persistent shortage of loco pilots, with nearly 19,000 vacancies out of over 95,000 posts.

• As a result, loco-pilots are overworked and prone to error in signals.

• About 25% posts for safety remain vacant, rationalisation of railways’ staff does not seem to have worked.

• As for damaged tracks, 1.15 lakh km length should be renewed annually, but no more than half of that is generally carried out.

How these issues can be addressed?

• Budget 2017-18 announced the creation of Rashtriya Rail Sanraksha Kosh with a fund of ₹1 lakh crore to be used over five years.

• Proposed safety fund will be utilised for track improvement, bridge rehabilitation, and rolling stock replacement, human resource development, improved inspection system and safety work at level crossing, among other things.

• It is important to focus on operational aspects such as allowing maintenance staff flexibility to hold up traffic even if that implies train delays.

• A separate post for Member (Safety) needs to be created in the Railway Board.

6.5 Introduction of HSR

What is the issue?

Bullet trains are expected to transform rail travel and boost the economy.

What is the status of HSR in India?

• High speed rail or HSR, which basically means trains running on dedicated lines at 250 km/h or highest.

• India’s pioneering 500-km ‘bullet’ train corridor between Mumbai and Ahmedabad.

• It is being executed in collaboration with Gujarat and Maharashtra,

• Japan’s offer of the $12 billion assistance at highly concessional terms is not transferable to other rail projects.

What are the advantages of HSR?

• Climate Change - A high-speed electric train emits an eight and a fifth of carbon dioxide as against automobiles and airplanes per passenger km, respectively.

• Efficient land usage - A double-track rail line has more than thrice the passenger carrying capacity of a six-lane highway while requiring less than half the land.

• Faster connectivity - HSR helps bring settlements 500 km apart within two hours of each other.

• Affordable - Designed to be faster than a car, while also cheaper and more convenient than a plane.
- **Economic growth** - It stimulus for the development of satellite towns, helping alleviate migration to metropolises.
- **Safety** - HSR’s unblemished safety record is an important benefit, ever since its inception in 1964 has maintained a unique record of no fatal accident.

**What is the financial viability?**

- A project viability report was done, but the details haven’t been shared with the public.
- Projections have shown that the train service will need to carry nearly 1 lakh passengers a day to keep fares at a reasonable levels.
- The current traffic is only about 18,000 per day.
- This means that either fare will have to be raised well above air fares, or that the system will have to be subsidised perpetually.

**Has Japanese funding been really generous?**

- Japan’s loan is claimed to be “virtually interest-free”.
- While the interest rate of 0.10% being offered to India sounds great, according to a financial analyst, the average Indian inflation at 3%, and Japanese at 0% has serious implications.
- The rupee will hence depreciate 3% every year vis-a-vis the yen.
- So over 50 years, the sum to be repaid will be well over twice of Rs 88,000 crore.
- This will be a huge burden on future generations.

**Is this advantageous for our passenger needs?**

- 95% of rail users in India do not use even the present fast trains like Shatabdi as they find the fares to be costly.
- So, the bullet trains can address only a small population that already has the option of air travel.
- The cost of the Mumbai-Ahmedabad bullet train project is almost as much as the entire annual rail budget which stood at Rs 1,21,000 crore last year.
- The Indian railway system, with over 13,000 trains running every day, carries more than 8 billion passengers per year plus 1,000 million tonnes of freight over the whole country.
- A big bang bullet for the few, or a large, improved and safer system for all is the choice that we need to make as finances are limited.
- Notably, there is no mention of transfer of technology anywhere in the agreement, which is the norm for big projects.

### 6.6 Concerns with Sagarmala project

**Why in news?**
The government has approved creating 14 coastal economic zones (CEZs) in JNPT, Maharashtra under Sagarmala Project.

**What is recent announcement about?**

- The Jawaharlal Nehru Port Trust in Maharashtra has approved for creating 14 CEZs.
- Reports suggest that 45 companies from the telecom, technology, and automobile industries are expected to bid for 200 hectares, or 2 S.q km.
- Since the JNPT accounts for 40 per cent of India’s trade, the zone expects to attract investment worth Rs 15,000 crore and create 150,000 jobs in the first phase.
What are the challenges with these Economic Zone Models?

- **SEZ** - It is difficult to gauge the real performance of SEZs, and they highlight the risk that creating islands of “Doing business”.
- The model’s excellence is unlikely to generate the kind of all-round economic development that India urgently needs.
- Political and Social dynamics differ significantly to make Chinese developmental model the least optimum solution for India.
- The enthusiasm for SEZs waned considerably once the government imposed the minimum alternate tax and the dividend distribution tax.
- **CEZ** - Sagarmala project which is based on CEZ seems to have become a casualty of the chronic problem of Land acquisition.
- For Sagarmala Land requirement could extend 300 km to 500 km adjacent to deep-water ports.
- Reports suggest that several projects have hit roadblocks either on account of high prices or limited land availability.
- Investors much cautious about CEZs because they do not attract the provisions of “Eminent domain”.
- It excludes some 13 exceptions such as railways and coal-bearing tracts from requirement of prior consent.
- This raises the larger question about the advisability of CEZs in the first place as investor community expects Tax concessions and relaxations in labour laws.
- The dangers of encouraging investors to go “Concession Shopping” were inherent in “Backward area Schemes”, which companies promptly abandoned when the sops were withdrawn.

### 6.7 Fund Crunch for UDAN

**What is the issue?**
- The government’s flagship “UDAN aviation scheme” is facing a fund crisis.
- This is largely because the number of participating airlines has increased manifold.

**What is the UDAN Scheme?**
- UDAN - “Ude Desh Ki Aam Nagrik” literally translates to a call for the common man to fly.
- It is an aviation scheme to enhance air connectivity to smaller towns.
- It focuses on previously “un-served or sub-served” destinations, and provides operating subsidies for airlines interested in operations.
- The government gives “Viability Gap Funding” (VGF) support for three years.
- This is to attract airlines to fly even to remote areas which may be commercially unviable.
- Besides, other concessions like that on parking charges at airports and exempting these operations from the GST net are provided.
- While the general central and state contributions for VGF are 80:20, it is 90:10 for the north-eastern states and union territories.

**What is the concern?**
- Two bidding rounds have been completed and the government received bid proposals in substantial numbers.
- But the Ministry of Civil Aviation has not awarded the routes for the 2nd round.
- This is because of lack of funds to pay the “viability gap funding” (VGF) to the operators.
- Notably, the initial assessment for the scheme was Rs 3 billion, but the cost has escalated to over Rs 12 billion currently.
- The paucity of funds is said to be due to the increase in the number of airlines that had bid for the routes and the criticality of VGF for the operations.

**How does the future look?**
- The aviation ministry has asked the finance ministry for more funds but the sufficient budgetary support is uncertain.
• Considering the present fiscal constraints of the government, the sustainability of the scheme may need resources from within the sector.
• There may hence be a requirement to increase the regional connectivity levy; but this has been contested by the airline operators.

6.8 Public Wi-Fi Hotspots

What is the issue?
• TRAI has recently invited interested firms to establish nationwide, pay-as-you-go PDOs (Public Data Offices).
• It aims at providing affordable and wide access to data to citizens.
• However, there are certain issues to be addressed to make the initiative more consumer friendly.

What are PDOs?
• Public Data Offices are conceived more as PCOs that were used for making phone calls by public on paid basis.
• The firms are intended as ‘aggregators’ and are invited to set up, on a pilot basis, PDOs to function as public Wi-Fi hotspots.
• Any entity can purchase, self-register, set-up and operate a PDO.
• They offer products for consumption, with low denominations ranging from Rs 2 to Rs 20, etc based on data used.
• It is based on an open architecture based Wi-Fi Access Network Interface (WANI).
• It allows users to do one-time enrolment into the service through KYC and mobile one time password, and access data.
• Public Wi-Fi hotspots aim at decongesting telecom networks and ensuring last-mile delivery of broadband to users.

What are the concerns with this?
• Licensing - Department of Telecom has raised concerns with allowing non-telecom companies to operate public Wi-Fi hotspots.
• It argues that Telegraph Act mandates that such entities take licences from the government for selling data.
• Also India’s biggest mobile carriers are concerned that the entry of aggregators without licence would undermine the level-playing field conditions.
• Cyber Space - the privacy and security concerns with cyber space in India, leaves scope for doubting the safety of using public wi-fi.
• Gender - common places like the tea shops and bakeries are currently emerging as favoured locations to host PDOs.
• The limited geographical reach of Wi-Fi make these places over-crowded to utilise spots of maximise signal strength.
• Given the social characteristics of these urban spaces, and the social norms with using public spaces, how gender inclusive these places could be is highly uncertain.

6.9 Telecom Sector – IMG Recommendations

Why in news?
Inter-Ministerial Group (IMG) constituted for resolving the crisis in the telecom industry recently published its report.

What is the situation in the Telecom Sector?
• The industry has an outstanding loan of over Rs 4.6 lakh crore to various financial institutions.
• It has also deferred payment liabilities of about Rs3.1 lakh crore to the government.
• Also, as over Rs 9 lakh crore has been spent on capex, the industry needs around Rs 140,000 crore to merely survive.

What are the reasons?
• The reason for such high financial crisis in the sector is due to the exorbitant government levies.
• The old system of high-taxation which was followed when spectrum was given for free is continued even today.
• As a result, the share of revenue going to the government through licence/spectrum charges rose from 11% in FY07 to 32.4% in FY17.
• Also, TRAI’s auctioning process that involved releasing only a small band of spectrum ensured that bids stayed exorbitantly high.
• Also, the reserve prices which are fixed based on the previous auctions wasn’t sensitive to the existing market conditions.
• This made it harder for the telcos as they had to pay huge sums for voice spectrums similar to 4G, although demand was not supportive.

What are the IMG recommendations?
• Reserve price of spectrum may be modified to make it more reasonable and in line with international best practices.
• Automatic annual renewal of spectrum for existing telecos like in the US can be considered.
• This will prevent sky rocketing of spectrum prices due to irrational annual competitive bidding.
• Also, reducing the high annual license fee obligations needs to be considered.
• Although IMG studied the sector and made some suggestions, it has largely left it for the awaited ‘New Telecom Policy’ for making structural changes in levies.

7. ENERGY

7.1 Concerns in Power Sector

What is the issue?
Concerns in discoms and power prices call for the government to make the right intervention to regulate the market and production pattern.

What are the concerns to be addressed?
• Debt - The much publicised UDAY programme called for a reduction of debts in the discom balance sheets.
  However, in many ways, this only meant a transfer of debt from discoms to the state treasury.
  This has thus resulted in a superficial reduction in the cost of power at the discom level.
  Despite giving the impression of a new lease of life for discoms, there is little change in their tariff structure and losses continue to pile up.
• Cost - Discoms pay pre-agreed fixed cost to generating companies.
  However, this is based on the plant availability criteria and even if they do not take off the contracted capacity, the pre agreed cost is paid.
  This results in discoms far fewer units to purchase and lead to pushing up the power purchase cost per unit.
  Hence, the average cost of supply for discoms is higher.
• Oversupply - The Electricity Act 2003 opened up the power sector to a number of players for offering choices and boosting competition.
  Henceforth, industrial and commercial consumers could buy cheap power from the open market, rather than being limited to buy from the local utility monopoly.
  Open Access has led to the entry of many new private players.
  The resultant increased installed capacity is leading to oversupply in open market capacities.
  This forces the generators to supply power at near-variable costs which are just enough to keep the plant running.
  As prices fall, plants shut down, causing stranded assets and creating NPAs in the banking system.

What are the possible solutions?
• India should focus on
  i.  maximising capacity utilisation of existing thermal assets
  ii.  promoting renewables and hydros
  iii.  lowering power generation costs
  iv.  gradual retirement of inefficient plants
  v.  addressing existing excess capacities
• The issues of shortage of water and fuel for under-used plant capacities should be addressed by the government.
The Government should also work towards creating a level playing field for discoms and generators.

Equitable clauses in the model Power Purchase Agreement should be created for securing the interests of both.

Government regulation of State-owned discoms should be reduced to let them have control over the power pricing and market play.

Prioritising the interventions, to adopt renewable and to suspend thermals at the right time, should be the government's mandate.

7.2 Renegotiating Power Purchase Agreements

Why in news?

Many states including Andhra Pradesh & Tamil Nadu have sought to renegotiate power purchase agreements (PPAs) which were signed a couple of years ago with producers of wind & solar power.

What is PPA?

- It is a contract between the one who generates electricity and one which is looking to purchase it.
- It defines all of the commercial terms for the sale of electricity between the two parties, including when the project will begin commercial operation, schedule for delivery of electricity, penalties for under delivery, payment terms, and termination.
- e.g Andhra Pradesh’s electricity discoms signed PPAs with various wind power generators at between Rs 4.76 and Rs 4.84 per unit in 2015.
- These tariffs looked competitive at that time.
- Now, Solar Energy Corporation of India (SECI) managed to get bids as low as Rs 3.46 per unit.
- So several State Electricity Boards (SEBs) want to revisit their tariff agreements.

Why is the demand a bad one?

- Investor Sentiment - The cancellation of contracts and arm-twisting of agreements will ruin investor sentiments & discourage new investments.
- The key to the ease of doing business is enforceability of contracts which needs to be protected.
- Such calls by SEBs could come at ruinous costs, ultimately affecting their power sufficiency in the long run.
- NPA Build-up - With banks having lent heavily to the developers, the Indian Banks Association has written to the Union power ministry to intervene.
- They’ve warned that projects could turn unviable if states default on agreements, leading eventually to NPAs.
- Banks that had assessed the projects for loans had done so keeping in mind the costs of technology then and the tariffs agreed to.

Is the comparison with private players a fair one?

- Some argue that if the government allows private players like Tata or an Adani to renegotiate contract for power projects and so the same should be allowed for SEBs.
- This argument is frivolous as it compares two different issues.
- The agreement on coal based power projects of Adani & Tata was renegotiated as the ‘Indonesian coal prices’ on which these projects were dependent, had shot up unexpectedly.
- On the contrary, falling costs of technology for solar and wind can’t be considered the same.
- So the Centre must get states to realise the range of effects this could have.
7.3 Viability of Indian Solar Projects amid Trade Shocks

Why in news?
Rise in Chinese solar module prices could hurt India’s solar parks.

What is the background?
- A recent assessment was made by “Investment Information & Credit Rating Agency” (ICRA) on solar investments.
- It says that the recent rise in China’s Photo-Voltaic (PV) module prices could make the costing of India’s solar sector unviable.
- Solar projects in India is now seeing bids well below ₹3/kwh, with the lowest being ₹2.44/kwh at Bhadla phase III in Rajasthan.
- The rise in imported PV module prices between May and August, has been from 30-32 cents per watt to 35-37 cents per watt.
- This is expected to impact the viability of all projects where bid tariff is below ₹3.5 per unit.

Why has this unexpected price spike emerged?
- It has been attributed to the sudden spurt in buying in the US, as a trade ruling against China’s solar module makers is anticipated.
- Two US panel manufacturers, Suniva and Oregon World, have moved the US International Trade Commission for protection against Chinese imports.
- If the President intervenes, the US may see a slowdown in demand for Chinese panels.
- That could lead to lower prices for Indian panel buyers.
- But uncertainty prevails currently since it cannot be said whether these price spike will last for months or years.
- In this backdrop, some Chinese suppliers are reported to be delaying on supplies and are seeking renegotiation of contracts.

How does the future look?
- For solar power to raise its presence, the industry will have to step up installations and improve panel efficiencies.
- The annual imports of solar equipments, amounts to over $2 billion at present.
- India is touted to emerge as one of the world’s largest markets for PV modules in future.
- Hence, indigenous solar equipment production capacity needs to be enhanced to cope with financial and trade shocks even if costs go up a little.

7.4 Safeguard Duty on Solar Cells

Why in news?
The Directorate General of Safeguards (DGS) has proposed a 70% safeguard duty on solar cells and modules imported from China and Malaysia.

What is a safeguard duty?
- The provision is facilitated in GATT (General Agreement on Tariffs and Trade), 1994.
- It allows a WTO member to restrict temporarily, imports of a product if its domestic industry is affected by a surge in imports.
- In contrast to antidumping duties and countervailing duties, safeguard measures are, in principle, applied regardless of the exporting country.
- The Central Government after conducting an enquiry, if satisfied of a potential impact, may by notification impose a safeguard duty.
What is the rationale for DGS proposal?

- While solar cells are imported from Malaysia, Singapore and Taiwan as well, a major quantity is being imported from China.
- China’s huge production and excess capacities of solar cells faced with hindrances in exports to the EU and USA recently.
- It naturally had to find an alternative outlet and thus shifted its export focus towards India.
- The DGS move thus comes after a plea was filed by Indian Solar Manufacturers Association (ISMA) before the DGS.
- It claimed that the surge in imports in solar cells had led to many domestic production facilities lying idle and incurring heavy loss.

What are the concerns?

- **Cost** - There are apprehensions that the duty, if levied, would shoot up the project cost by about 40%.
- The Indian solar industry is thus concerned about the project costs and solar tariffs going up on account of the proposed duty.
- Notably, the burden on account of the above would fall on solar original equipment manufacturers (OEMs).
- Sadly, the ultimate burden gets passed on to the end consumer.
- **Solar Mission** - The Indian government has set a target of installing 175 GW of renewable energy capacity by 2022.
- Notably, an ambitious 100 GW of this is to come from solar projects.
- There are fears that the proposed safeguard duty on imported solar cells would thwart India's solar mission.
- **Domestic players** - India recently lost a case in the WTO brought on by a US complaint against the domestic content requirement programme.
  - The requirement mandated that only locally manufactured cells and modules could be used to build solar projects.
  - The ability of the local players to compete has already been weakened by losing in WTO.
  - Given this, while the proposed duty may help the domestic manufacturers in the short term, its sustained benefits are uncertain.
  - Also, for domestic manufacturers situated on special economic zones, the safeguard duty would yield counterproductive results.
  - Notably, solar cell makers in special economic zones account for about 60% of the installed capacity.
- **Discoms** - Chinese imports have played a vital role in enabling bidders to quote progressively lower tariffs.
  - If the proposed duty is levied, the Discoms will be further dissuaded from signing power purchase agreements on account of the resultant tariffs rise.

What is the way forward?

- The decisions on duty should consider the country's manufacturing capacity and the prevailing energy requirements.
- The government has to ensure that the duty is prospective in nature and not impact the ongoing solar projects.
- The government should thus be aware of the possibility of a policy paralysis leading to slow down in new investments.
- Chinese imports are a threat to Indian manufacturers, but a lasting solution lies in reassessing domestic duty structures and addressing other impediments to the sector.

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**DGS**

- The Directorate General of Safeguards works under the Ministry of Finance, Department of Revenue.
- It has been created to conduct investigations for imposition of Safeguard Duty, Specific Safeguard Duty as specified under the Customs Tariff Act, 1975.

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7.5 Need for Nuclear Power

Why in news?

- Nuclear power is in need as the renewable power is subject to weather.
- What are the issues with renewable power sources?
- Solar power is available only when the sun is shining unless it is stored in some way.
- In a year, a solar PV plant of one KW capacity generates no more than 2,000 KWh of electricity.
- A coal-based or nuclear plant can generate around 7,000 KWh/year per KW of capacity
- The hydro power is unevenly distributed across months.
- There is a need of balancing Power source even there is a fully developed renewable power source.

What are the problems with coal power?

- There is a threat of climate change and the concern for environmental pollution.
- The plants to reduce air pollution will increase the cost of coal power.
- The cost of carbon capture and storage (CCS) is quite high and requires more energy.
- The cost of coal power would be some 30 to 50 per cent higher in coming days.

What is the need for Nuclear Power in India?

- To provide power when the sun is not shining, this balancing power is needed.
- In India, more than 70 per cent of petroleum products are based on imports.
- India’s known extractable coal reserves will run out in about 40 years.
- For India, renewable energy is inevitable and nuclear option should be retained as an insurance.
- Nuclear power helps diversify the system and adds to energy security.

How Nuclear Power can be generated effectively?

- India announced an agreement with international companies to set up 7,000 MW of nuclear plants based on our domestic technology.
- Nuclear plants have been run in the past with more or less constant load.
- Design change will assure to run the power plants in a required load.
- The cost of nuclear electricity will depend on how it is financed and cheap storage systems should be developed.
- India can install the nuclear plants without delay and within budget, they are economically attractive.

7.6 Open Acreage Licensing Policy

Why in news?

The government has replaced the New Exploration and Licensing Policy (NELP) with the Open Acreage Licensing Policy (OALP).

What is Open Acreage Licensing?

- OALP gives an option to a company to select the exploration blocks on its own, without waiting for the formal bid round from the Government.
- Under OALP, a bidder intending to explore hydrocarbons may apply to the Government seeking exploration of any new block which was not already covered by exploration.
• The Government will examine the interest and if it is suitable for award, then the govt will call for competitive bids after obtaining necessary environmental and other clearances.

• OALP was introduced as part of the new fiscal regime in exploration sector called Hydrocarbon Exploration and Licensing Policy (HELP).

• So that, it will enable a faster survey and coverage of the available geographical area which has potential for oil and gas discovery.

• Successful implementation of OALP requires building of National Data Repository on geo-scientific data.

What are the positives of OALP over NELP?

• By placing greater discretion in the hands of explorers and operators, the OALP attempts to address a major drawback in the NELP that forced energy explorers to bid for blocks chosen by the government.

• Companies can now apply for particular areas they think is attractive to invest in, because in the past, the blocks chosen by the government often had only a small fraction of hydrocarbon reserves.

• By offering companies the freedom to choose exactly the areas they want to explore, and their size, the government has a better chance to woo serious energy investors.

• The govt also introduced National Data Repository (NDR).

• It is envisaged as a centralised database of geological and hydrocarbon information that will be available to all.

• It will allow potential investors to make informed decisions and will open up a new sector in India.

• There are a number of companies that simply explore hydrocarbon basins and sell the information they gather. Thus via NDR, the govt seeks to incentivise such prospectors.

• Companies may also submit applications through the year and not just at designated and often infrequent points, as was the case earlier.

• Also, from now on, the auctions will be held twice a year. This, will lend more flexibility to the industry.

What are the concerns with OALP?

• The policy awards an extra five points to bidders for an acreage if they have already invested in the exploration and development of that area.

• But, it is highly doubtful if this is an acceptable incentive, since the investment needed to simply explore is significant.

• Also, no such preference is given to mineral explorers while auctioning mining rights.

• Instead, a revenue-share from mining operations is their recompense for exploration efforts.

• Another concern is whether India can attract enough investment to meet the government’s objective of reducing oil imports by 10% by 2022, since there are already proven reserves in other parts of the world.

7.7 Saubhagya scheme

Why in news?

PM recently launched Pradhan Mantri Sahaj Bijli Har Ghar Yojana, also known as Saubhagya scheme.

What are the fundamental problems in Indian power sector?

• The power generation utilities in India remain vastly under-utilised, and investments in the sector is drastically falling.

• The plant load factor (PLF) an indicator of capacity utilisation of power generation units, has dropped consistently over the decade.

• The Ujwal DISCOM Assurance Yojana (UDAY) has failed to make enough of a difference to this state of affairs.
• Demand for electricity from State distribution companies is dropping with their deteriorating financial status.
• Distribution agencies have very little incentive to demand more electricity from power generators, and they cannot make profits.

What are the highlights of the scheme?
• It aims to make electricity accessible to every household by the end of 2018.
• Under the scheme poor households who have no access to electricity will be provided electricity connections free of cost.
• The beneficiaries for free electricity connections would be identified using Socio Economic and Caste Census (SECC) 2011 data.
• This scheme hopes to improve electricity access within villages that are already classified as “electrified”, according to the criterion that 10% of households enjoy access to electricity.
• The solar power packs with battery bank for un-electrified households located in remote and inaccessible areas will be provided.
• The Rural Electrification Corporation Limited (REC) will remain the nodal agency for the operationalisation of the scheme throughout the country.

What are the shortcomings?
• The scheme doesn’t address structural issues that plague the broken power sector.
• It does very little to address the real problem of affordability i.e. the recurring burden of power bills.
• It fails to account illegal connections taken by households which find it difficult to afford legal access to power.

What are concerns with Saubhagya scheme?
• Payment of Bills - It expects the poor to pay the bills without providing any subsidy to ease their burden.
• Expecting poor households to bear the recurring burden of bills as per the prevailing tariff of DISCOMs is unimaginable.
• The government has conveniently overlooked the fact that for the poor in some States, the inability to pay an electricity bill is a big impediment
• Efficiency - Even if 90% of households are electrified in villages, there is no promise of minimum hours of supply.
• There is a power shortage even at this moment leading to scheduled and unscheduled load shedding, often up to 10 hours or more.
• Additional capability - This scheme would potentially require an additional 28,000 MW and additional energy of about 80,000 million units per annum, which is roughly 7% of India’s current installed power capacity.
• Considering these huge lapses managing this additional demand would prove to be challenging.

7.8 GAIL Pipeline in Kerala

Why in news?
Kozhikode in north Kerala recently witnessed violent protests against the laying of a pipeline by the Gas Authority of India Ltd (GAIL).

What is the project?
• The Kochi LNG terminal was meant to ensure natural gas supply for domestic and industrial use in Kerala and in South India.
• GAIL envisaged a pipeline to transport natural gas from Kochi to Mangaluru and Bengaluru.
• The Kochi-Koottanad-Bengaluru-Mangaluru Pipeline (KKBMPPL) project was thus conceived in 2007.
• The first phase aimed at linking the terminal with local industrial users, including Bharat Petroleum Corporation Limited.
• The second phase of the pipeline was to go through seven districts of Kerala, besides covering parts of Tamil Nadu and Karnataka.

What are the concerns?

• The project has been delayed considerably because of resistance to acquisition of land under the Right of Use (RoU) agreement.
• The compensation for farmers and landowners who allow GAIL to lay the pipeline through their property is a contentious issue.
• The government has however doubled the compensation, and said it will be fixed by pegging the market rate at 10 times the fair price.
• Also, despite GAIL stressing that the LNG is both safe and essential for the state’s development, the agitators have serious safety concerns.
• Consequently, GAIL had to terminate the contracts it entered into with construction firms to lay the pipeline.
• The protesters demand that the pipeline be relocated from populated areas and taken through the sea route, instead.
• This has been rejected by GAIL, which reportedly fixed the alignment with minimising impact on populated areas.
• Also, as of the land required in Kerala, 70% is under paddy cultivation.
• The Kerala section also requires 75 major horizontal drillings at the beds of water bodies to take the pipeline across rivers.
• Thus, so many factors surrounding the pipeline poses challenges for its unhindered implementation.
• Despite the disruption attempts, GAIL has managed to continue laying the pipeline, though under heavy police protection.
• However, the project, which should have been commissioned in 2013, now has a revised deadline of February 2019.
• Meanwhile, the delay is causing huge losses to the Kochi terminal and re-tendering is resulting in cost escalations.

Quick Fact

How does Right of Use (RoU) work?

• GAIL acquires the Right of Use from landowners and/or farmers.
• Owners are then paid compensation as per the Petroleum and Mineral Pipelines (Acquisition of Right of User in Land) Act, 1962.
• Ownership remains with the landowners but they shouldn’t cultivate deep-rooted trees at a distance of 10 metres, or carry out constructions.
• GAIL pays compensation as per the amount fixed by the state revenue department.

8. AGRICULTURE

8.1 Preventing Post Harvest Losses

What is the issue?
Despite India's considerable agricultural produce, the inadequacies in harvest and post-harvest stages lead to huge losses.

What are the concerns?

• India is one of the largest producers of over 80% of agricultural products, including some cash crops.
• Conversely, harvest and post-harvest losses are a constraint in reaping the full benefits of the produce.
• Post-harvest losses vary depending on crops, agricultural practices, climate, etc.
• However, inadequate storage and transportation facilities are primary reasons in most cases.
• **Storage** - Most harvested grains, fruits and vegetables are stored in traditional structures, made of grass, wood or mud.

• Lack of scientific design makes them susceptible to pest attack and decay.

• Only 10-11% of fruits and vegetables cultivated in India use cold storage, due to the financial and infrastructural inadequacies.

• Resultantly, a bulk of stored commodities is lost to insect infestation, rotting and mould growth.

• **Financing** - Due to excess supply in the market immediately after harvest, farmers do not realise the best price.

• But to prevent storage loss, farmers are compelled to sell their produce immediately, within days of harvest, at any prevailing rate.

• **Transport** - Transferring goods from cultivation centres to processing centres or markets is another impediment.

• Inadequate transportation infrastructure lead to damage of commodities.

• Also, heat and humidity, in the absence of cold chain transportation, spoil the produce.

**What should be done?**

• **Storage** - Technology intervention is essential to improve the storage structures and logistics.

• Adequate cold chain and scientific storage infrastructure facilities are required.

• It prevents storage losses and facilitates funding of post-harvest activities.

• **Funding** - Warehousing receipts, from certified warehouses, can be used as collateral for funding from banks, etc as provided by Warehousing (Development and Regulation) Act of 2007.

• Access to funds can enable farmers meet the consumption and working capital requirements.

• They can also monitor market prices and sell their produce as per their preference, when prices reach profitable levels.

• **Transport** - Use of enclosed structures and cold chain transport facilities can reduce post-harvest losses due to transportation.

• Freshness of fruits and vegetables and seed viability can be ensured.

• In all, preventing post harvest losses can increase farmers’ revenues and can also notably aid the food security initiatives.

**8.2 Doubling Farmer Income by 2022**

**What is the issue?**

• The government has released a seven-point plan to double farmer income by 2022.

• The package has some glaring deficiencies.

**What are the flaws?**

• **No New Ideas** - The plan is little more than a mere repackaging of the ongoing agricultural development schemes.

• **Productivity** - It is focused more on raising farm productivity than on improving the profitability of farming.

• This disregards the fact that higher farm output does not necessarily lead to higher income.

• Bumper harvests have in fact often caused a slide in prices.

• **Marginal Farming** - Income from increasing output can at best be only marginal because land holdings of most farmers are too small.

• Thereby, they can’t produce sizeable marketable surpluses.
• **Growth Rate** - Doubling of income by 2022, from current levels would require an estimated income growth of over 10% annually.

• Such acceleration is hard to come by through the productivity route alone.

**What are priority areas?**

• More emphasis on various lucrative farm and not-farm economic activities that find a passing mention in the plan is needed.

• These can include, among others, high-value farming involving horticulture, floriculture, herbal farming and farm forestry.

• Allied activities, including novel ventures such as rabbit and quail rearing can also be promoted.

• Waste reduction and value-addition of farm produce with effective market support could help enhance incomes.

• Also, the creation of off-farm employment in rural sectors needs to be established.

**What are the policy changes required?**

• A stable policy regime governing agricultural pricing and trade needs to be established.

• **Trading** - The current pricing policies seem to have a pro-consumer bias, dictated chiefly by the need to keep inflation down.

• This spurs uncalled for interventions such as frequent opening and shutting of imports and exports of farm goods and imposition of stockholding and other curbs on trade.

• This needs to change to ensure a balance of produce and consumer interests.

• **Prices** - As minimum support price (MSP) mechanism has failed to show results, it needs to be supplemented with other measures.

• One such is the price deficit reimbursement scheme of Madhya Pradesh that seeks to compensate farmers for any shortfall in realising the MSP.

**8.3 Stubble Burning - An Economic solution**

**What is the issue?**

• The practice of burning crop residue is harmful.

**Why is stubble burned?**

• There is usually an urgency to plant the next crop.

• So, farmers generally do not have time to let the previous crop’s residue (stubble) to decompose in the field to turn into compost.

• The high labour cost makes harvesting the stubble to clear the fields undesirable.

• Burning them in the field itself is the quickest and the cheapest way to get rid of them.

• Most farmers, therefore, prefer to defy the ban on burning and pay the penalty for it - which is usually less than the removal cost.

**What are its implications?**

• About 35 million tonnes of crop waste is burnt in Punjab and Haryana alone.

• This releases enormous amounts of particulate matter, ash and environment and health injurious gases such as carbon monoxide.

• These contaminants contribute majorly to air pollution in north India, including the national capital region of Delhi.
This happens during the early winter months of November & December which coincides with the kharif harvesting season.

How has the government handled this situation?

- **Monitoring** - Delhi High Court recently ordered concerned governments to use satellite imagery to prevent burning.
- But despite collection of penalties imposed by governments, preventing burning has not been effective.
- **Rewards** - Environment Pollution Control Authority (EPCA) has conceived a new reward mechanism for not burning stubble.
- EPCA is trying to get bio-power producers and other waste utilising industries to purchase this crop residue for use as supplementary feedstock.
- The response from companies seems fairly encouraging with “National Thermal Power Corporation” - NTPC as well as some private entities having expressed willingness.
- NTPC seems ready to even harvest stubble on its own cost and then pay the farmers an amount for the stuff collected.
- Hence, instead being a legally barred activity requiring penal action, it is now expected to be viewed as an additional source of income.

What are some noteworthy possibilities for the future?

- **Mechanisations** - Machines that can gather the stubble and sow seeds in one go are already available.
- Some machines sow without even the removal of previous residue.
- Such technologies need to be encouraged regardless of their high costs.
- This is possible by facilitating the emergence of a vibrant services sector that provide such equipments to farmers.
- **Targeted Subsidising** - Some states are already offering up to 40% subsidy currently on versatile machinery.
- Such production enhancing incentives for bio-power producers and farm machinery manufacturers could also be considered.
- The Centre should also contribute to this effort along with states as this would help protect both the environment and human health.

8.4 NITI Aayog's Agriculture Agenda

What is the issue?

- NITI Aayog recently released its three-year action agenda (TYAA) for the government for reforming various sectors of the economy including agriculture.
- An examination at the major issues plaguing the agriculture sector thus becomes vital.

What are the problems in this regard?

- The government has taken initiatives like forming High Level Committee (HLC) on Management of Foodgrains, Task Force on Agriculture, Committee on Doubling of Farmers’ Income and restructuring the FCI.
- However, these have had mixed results and problematic issues still persist.
- **MSP** - Minimum Support Prices scheme has not improved profitability in cultivation in the last three years.
- The situation is worse for producers of basic vegetables like potatoes, onions and tomatoes as prices at harvest time plunged to low levels.
• **Market** - Attempts to reform APMC markets on the lines of model Act of 2003, and now of APLM, 2017, have not succeeded much.

• The e-NAM scheme, which is supposed to create an all India market ensuring better prices to farmers, also has some bottlenecks.

• It is still installing software in mandis to switch auctions to electronic ones, and also Inter-mandi and inter-state transactions are very rare.

**What should be done?**

• NITI Aayog’s TYAA basically talks of action for:
  1. increasing productivity of land and water
  2. reforming agri-markets on the lines of e-NAM
  3. reforming tenancy law
  4. relief measures in the event of natural disasters

• However, there is a need for prioritising policy actions and emphasising the role of trade policy in agriculture.

• **Market** - Government should devise plans to buy directly from farmers’ group such as Farmer Producer Organisations (FPOs).

• The necessary logistics for grading, storage, movement, and linking them to organised retail (including e-retail) has to be set up.

• Government should also change certain laws including ECA (Export Credit Agency) laws to facilitate easy credit to local exporters of agri products.

• These would make market initiatives to have a more pro-farmer approach.

• **Profitability** - one way to improve farmers’ profitability is to open up exports of all agri-products, without any restrictions.

• Government can allow storage by private trade to build global value chains.

• Government should ensure that Pradhan Mantri Fasal Bima Yojana (PMFBY) delivers its objectives on compensation to farmers well in time to reduce loss in times of disaster.

• **Irrigation** - Government should ensure that Pradhan Mantri Krishi Sinchayee Yojana and NABARD’s Long-Term Irrigation Fund are carried out as per the plan.

• However, besides these, government should take forward the micro-irrigation (drip and sprinklers) projects to have a high water-use efficiency.

• Enhancing Direct Benefit Transfer (DBT) of food and fertiliser subsidies to targeted beneficiaries is needed, as this can release resources for investments.

• A firm, wholesome action on all these fronts can bring the desired growth in the agriculture sector.

**8.5 Assessing Farm Policies**

**What is the issue?**

• India is witnessing continued farmer agitations in different states and the country’s capital.

• It is vital at this juncture to assess the structural and policy concerns that plague India’s agricultural sector.

**What are the policy shortfalls and possible solutions?**

• **PMFBY** - The Pradhan Mantri Fasal Bima Yojna (PMFBY) was designed to provide crop insurance.

• The Central government shares part of the premium subject to certain conditions.

• The states have to wait for the Central government’s share, irrespective of the cropping density in the region and irrespective of whether the region is rain-fed or irrigated.
• Allowing states to design their own crop insurance schemes and yet providing the Central government share of the premium would yield better results.

• **E-NAM** - An incentive of Rs 75 lakh/mandi is given by the Centre to the states for linking each market with E-NAM.

• However, some states log in all FCI purchases as E-NAM transactions and so, much of the recorded turnover is made up and not real.

• Incentivising each state to have the electronic platform which meets the basic criteria of interoperability with other states would be better.

• **Trade negotiations** - As per the Constitutional provisions, trade negotiations are under the purview of the Centre.

• However, the anomaly is that agriculture is in the domain of the states.

• The Central government should try bringing the states into the decision making forum if international trade treaties involve agricultural aspects.

• **Trade policies** - Every time food prices rise, the Centre intervenes to rein in inflation.

• It responds by facilitating the unhindered import of agricultural commodities.

• However, increased imports work against the profitability of the farmers.

• The Centre should instead set a floor price for all such farm produce to reduce the impact of price fluctuations on farmers.

• Bringing in place the “Price Deficiency Payment” mechanism, whereby the central government makes for the shortfall between the market price and floor price can help.

• **Credits** - Scrutiny of the farm loan data, after a series of farm loan waivers, revealed that public and private sector banks have indiscriminately given loans to less credible farmers.

• Evidently, loans were provided based on their asset value rather than economic viability.

• The loans were arbitrarily given by the banks to also meet their own priority-sector lending target.

• In all, the “one-size-fits-all” policy is becoming irrelevant for the farm sector and necessitates a more decentralised system for decision making, implementation and performance appraisal.

### 8.6 Issues in India Horticulture

**Why in news?**

• Market inefficiencies and faulty policies are the present situation of Horticulture in India.

• At a time when there is considerable farm unrest in the country, there is a paradigm shift happening in Indian agriculture in the shape of a horticulture revolution.

**What is the background of the issue?**

• Latest data from the ministry reveals that the production of horticultural crops in 2016-17 outstripped food grain output for the fifth year in a row.

• The fact that the record horticultural harvest of 295 million tons has been gathered from just one-fifth of the area under food grain is a significant aspect.

• It is also noteworthy that this surge has come about without the kind of government support and funding that triggered the cereals-based green revolution in the 1960s and 1970s.

• Horticulture has received merely 3.9 to 4.6 per cent of the broad agriculture sector’s annual plan outlay since the Ninth Five-Year Plan.

• However, if the prices of horticultural produce are allowed to slide unabated, the way they have done this year, the uptrend in output may be difficult to sustain.
What is the situation of the Horticulture in India?

- It is well known that the growers of several fruits and vegetables, especially onions, potatoes and tomatoes, have failed to recover even their production costs.
- Frustrated, some of them even resorted to dumping their produce on the roadside instead of selling it at ridiculously low prices.
- The most likely fallout will be a dip in production in the next cycle.
- The blame lies as much with market inefficiencies as with ill-advised government policies.
- An enduring horticultural revolution is, indeed, vital for several reasons.
- For one, horticulture now accounts for more than one-third of the agriculture sector’s gross domestic output (GDP).
- Besides, it holds the key to the much-needed diversification in agriculture.
- Moreover, horticulture is more suited to millions of India’s small and marginal farmers as fast-growing crops, such as vegetables, ensure a quicker cash flow to the producer.
- Lastly, horticulture has tended to expand in the areas which had been slow to adopt green revolution technologies.
- The top 10 vegetable growing states now include Bihar, West Bengal, Odisha, Madhya Pradesh and Karnataka.
- But exempting vegetables and fruits from the purview of the agricultural produce marketing committee (APMC) laws, as some states have done, too, has not resulted in either better market access or higher prices.

What is the way forward?

- In this regard, vegetable and fruit producers’ cooperatives, formed on the lines of the milk cooperatives, or private enterprises can be incentivized to bridge the gap between producers and consumers.
- The indigenously developed milk marketing model may suit these crops because, much like milk, horticultural crops, too, are produced in small quantities by tiny landholders and have to be disposed of without much delay.
- Simultaneously, post-harvest processing and value-addition, which is rather low at present, needs to be stepped up substantially to prolong the shelf life of such products and ensure their year-round availability.
- Also needed is an extensive network of refrigerated warehouses to store horticultural products and minimize wastage.
- The government needs to put in place a stable policy regime, particularly with respect to the domestic and external trade of vegetables and fruits, to prevent violent price fluctuations that hurt the interests of both producers and consumers.
- In the absence of timely reforms, the horticultural revolution might fizzle out.

8.7 Initiatives for Vidarbha Farmers

What is the issue?

- Cotton and soybean farmers of Vidarbha and marathwada region are in debt trap.
- Diversifying to dairy is giving way to the farmers a way out of their problems.

What is the situation of the farmers in these regions?

- The two regions Vidarbha and marathwada have more than half of cotton area of the state, which itself accounts for a third of the country’s share.
• But only 2.7% of Maharashtra's cotton is irrigated compared to nearly 60% of Gujarat's.
• There is a wide gap in average per hectare cotton yield 289 kg and 606 kg, respectively, in 2015-16.
• The farmers of these regions used to grow jowar and bajra but with food habits changing, their cultivation has declined.
• A greater portion of this region's agriculture will have to be climate resilient as both these are regions are rain deficient.
• Farmers in the regions are going for long-duration hybrids, for better quality cotton.
• To meet the operation costs farmers are getting into debt traps which in much cases leads to self-engineered deaths.

What measures has been taken by the government?
• **Dairy initiatives** - In October 2016, the National Dairy Development Board commenced operations.
  - The National dairy development board does not intend to stay for the long-haul.
  - It will exit once farmer producer companies it will help set up gain the capacity to take over the operations and marketing.
  - It now has a footprint in five of 11 districts of Vidarbha and two of Marathwada eight districts.
  - Milk collection averages 1.25 lakh litres per day which is processed at a refurbished dairy in Nagpur, given by the state government.
  - Money is credited to the seller bank accounts. So far they have earned Rs.68 cr.
  - This is a steady source of income which takes care of their daily needs.
• **Bamboo Initiatives** - The farmers of these regions can also supplement their income by growing bamboo.
  - Bamboo is a versatile crop and can be put to 23 uses, including paper and engineered timber.
  - The Maharashtra Bamboo Development Board was set up last year to promote cultivated bamboo, using tissue cultured seedlings.

What are the issues with dairy initiative?
• **Use of technology** - With the help of an Android-based app, farmers can know whether they are giving their animals the right diet, overdosing them with some nutrients and under-providing others.
  - For this, they have to tag their animals and feed data regarding weight, lactation stage and current milk yield.
  - The usage of modern technologies for monitoring animals has not been widely understood by the farmers.
• **Ideological clashes** - The growth of the dairy industry is tied to the meat industry, unless non- and post-lactating animals are culled, farmers will not be able to give proper care to the productive ones. This is where ideology clashes with economics.

8.8 Reviving water management practices

What is the issue?
Amidst drought and looming water crisis, the need for practices like 'Kudimaramath' is increasingly felt.

What is Kudimaramath?
• In ancient India water was managed through a system of patronage and community control through village councils, particularly in South India.
  - In Tamil Nadu, during the Chola rule, parts of the Grand Anicut canal system which were maintained by the government were known as “sarkari”.
  - The lower parts maintained by farmers were known as 'Kudimaramath' i.e. people's maintenance by donation of labour.
  - Under ‘Kudimaramath’, the users were expected to contribute labour for the upkeep and repair of irrigation facilities from time to time.
  - Works on deepening of tanks, strengthening bunds, desilting supply channels and repairing sluices are taken up under 'Kudimaramath'.
  - The institution of 'Kudimaramath' witnessed a gradual decay with the advent of the British rule as the management of tanks shifted to a centralised channel namely PWD.
  - Post-Independence too, successive governments failed in their attempts to revive the ‘Kudimaramath’ works.

What is significance of tank irrigation?
• **Tanks** have been an important source of irrigation in southern India.
• They are -
  1. Less capital-intensive.
  2. Capture the run-off resulting from the unpredictable monsoon rains.
  3. Conserve water for multifarious uses like irrigated agriculture, drinking water for cattle and domestic uses.
  4. Augment groundwater resources through sub-surface recharge.
• Rapid urbanisation, dumping community resources into tanks, declining community maintenance, and encroachments have degraded the condition of tanks.
• Reports suggest that out of 5.56 lakh tanks in the country, only 4.71 lakh tanks are in use leading to a loss of about one million hectares of irrigation potential.
• Fewer rainy days with increased magnitude are predicted by climate experts in the days to come.
• Restoring tanks and ponds will ensure adequate water supply even during drought.

**What should be done?**
• The cost-effective method of repairing, renovating and restoring the age-old tanks and other small water bodies should be given top priority.
• It is more likely to succeed if panchayats play a pro-active role in the exercise as in Kudimaramath system.
• Proper consultation with the stakeholders including the farmers and gram sabhas is essential.
• The responsibility, authority and control over the development of water bodies could be vested with the beneficiaries or the panchayats which can ensure accountability as well.

**8.9 Kaleshwaram Lift Irrigation Project (KLIP)**

**What is the issue?**
The execution of the Kaleshwaram Lift Irrigation Project (KLIP) is very significant for Telangana.

**What is Lift irrigation?**
• When the main source is at the lower level than the supply level, then water cannot be transported by natural flow.
• So when water is supplied through some mechanical means, then it is known as lift irrigation.
• Pumps are used to lift the water from canals or rivers at lower level to the area at higher level for irrigation purpose.

**What is Kaleshwaram project?**
• In 2007, when Andhra Pradesh was not divided Pranahitha-Chevella Lift Irrigation Scheme taken up to utilise the water of Pranahita tributary of Godavari river.
• After the formation of Telangana in 2014, the present government redesigned the project.
• The reason they stated for doing it was that the original plan had too many environmental obstacles and had very low water storage provision.
• After conducting Light Detection and Ranging (LiDAR) survey, the government separated the project into two.
• The original component serving the Adilabad area was called the Pranahitha project.
• The rest was renamed as Kaleshwaram by redesigning the head works, storage capacity and the canal system.
• The Kaleshwaram project has provision for the storage of about 148 tmcft with plans of utilising 180 tmcft by lifting at least 2 tmcft water every day for 90 flood days.

**Why it is important?**

• It has the longest tunnel to carry water in Asia - 81 km between the Yellampally barrage and the Mallannasagar reservoir.
• It has the estimated cost of ₹80,500 crore, the costliest irrigation project to be taken up by any State.
• The project is designed to irrigate around 7.4 lakh hectares lands.

**What are the problems?**

• The project requires a total of 32,000 hectares.
• A section of farmers have been opposing the land acquisition.
• Also it needs various clearances and permissions simultaneously from the Union Ministry of Environment and Forest and the Central Water Commission.

**8.10 Rising the Height of Sardar Sarovar’s Dam**

**Why in news?**

The Narmada Control Authority recently decided to raise the height of the SardarSarovar dam to its full height, by ordering the closure of 30 gates.

**What will be the impact?**

• The dam will generate hydro-energy, extend irrigation and bring drinking water to drought-affected, arid areas of Rajasthan and Gujarat.
• Once the dam is at its full height, it will submerge one town and at least 176 villages.
• This might displace close to 20,000 families and deprive them of flood productive agricultural land, and destroy hundreds of acres of bio diverse forest.
• Ecologists, hydrologists and engineers have also produced detailed documentation that brings into doubt the claims of water provisioning, economic growth and safety made by the project.

**What are the challenges?**

• **Siltation** - It is one of the biggest challenges faced by dams worldwide, and constitutes one of the biggest challenges to the long-term success of this dam.
• Apart from directly reducing water storage capacity, siltation also decreases water capacity due to increased evaporation loss.
• As a result, the capacity to generate hydropower is affected.
• A dam choked with silt creates a river prone to risky situations of potential flooding in the backwaters.
• **Erosion** - The steep slopes of the Narmada valley are prone to erosion.
• They have been protected so far because of the dense forests that line the sides of the valley.
• If these trees are cleared, soil from the denuded slopes will flow unchecked into the river, turning the water muddy.
• **Biodiversity** - The Narmada valley is one of the most fertile ecosystems in India, brimming with biodiversity, and with abundant fish, birds and trees.
• Blocking normal water flow, leading to downstream habitat change and impacting biodiversity.
• The Narmada estuary, where the river meets the sea, has become increasingly saline because of the decrease in fresh water flow after the dams came up.
• Fish catch of some species has now declined by as much as 75%.
• **Rehabilitation** - Compensation to the displaced has often come in the form of land unsuitable for farming or living, located either on riverbeds at the risk of flooding, or in rocky areas which cannot be ploughed.
• Resettlement sites lack basic facilities like wells, drinking water pipelines, or grazing land for cattle, let alone schools or road facilities.
• This leaves the once self-reliant people of the valley with no option but to work as daily wage labour and crowd into urban slums.

**What should be done?**

There has to be a clear, transparent public accounting of livelihoods lost and jobs created, of profits accrued at the expense of great misery and injustice.

**8.11 Need for Structural Reforms in Agri-Marketing**

**What is the issue?**

• Although food production has increased tremendously, farmer incomes have not been impacted positively.
• This calls for massive structural reforms on the lines proposed by Niti Aayog.

**What is the proposal?**

• The central government is pitch for restructuring agricultural marketing to double farm income by 2022.
• NITI Aayog member Ramesh Chand recently said that bringing agriculture marketing into the Concurrent or Union list is imperative to benefit farmers.
• While many states too have welcomed this, some are sternly opposed to it and argue that it would be a disaster for agriculture and co-operative federalism.
• Significantly, the “Committee on Doubling Farmer’s Income” (Dalwai Committee) has supported the Niti Aayog’s stand.
• Besides this, the committee has also recommended rolling out the model Agriculture Produce Marketing Committee (APMC) Act 2017.
• This, it believes is needed to facilitate pan-India operations, through single-point levy of taxes.
• These are touted to promote direct interface between farmers and end-users, and give farmers greater freedom to sell their produce for better prices.

**Why is focus on markets needed?**

• The country’s food production has increased tremendously from just 51 million tonnes in 1950-51 to about 252 million tonnes in 2014-15.
• However, farm income did not grow much, which was also highlighted by the National Commission on Farmers (NCF) headed by MS Swaminathan.
• On an average, the income realised from cultivation at current prices worked out to be only about Rs.101 a day during 2012-13.
• Significantly, as early as 1976, the “National Commission on Agriculture” had noted that higher output alone will not provide higher income to farmers.
• This anomaly is due to the lack of proper marketability for agro-produce, and becomes amply clear in the usual distresses that follows bumper harvests.
• Had the markets been integrated, the surplus produce would have been transferred to deficit regions to help easy the “Pleanty Paradox”.

What is the current situation?
• Farmer’s participation in agri-markets is equally worrisome and their share as a percentage of the Consumer Price is merely in the range of 15-40%.
• Middlemen dominance is primarily responsible for farmers not getting a reasonable price for their produce, which lowers farm income and profitability.
• Significantly, The Committee of State Ministers, in charge of Agricultural Marketing, has noted that of the regulated markets only:
  1. two-thirds have covered and open auction platforms
  2. one-fourth have common drying yards
  3. less than one-tenth have Cold storage units
  4. less than one-third grading facilities
  5. Very few have electronic weigh-bridges
• The committee also noted that the post-harvest losses of various commodities ranged from 6 to 18%.
• All these conditions therefore, leaves the farmers with no choice but to demand higher minimum support price (MSP) and procurement.

What is the way ahead?
• The country will achieve sustained food security only when the farmer incomes are secured and “production and marketing” to achieve the same.
• While farmers need to be empowered with greater autonomy for marketing, the intermediary culture needs to be systematically scrapped.
• Also, the seasonal spike in prices of perishable commodities that pushes up the food inflation cannot be addressed without improving the supply chain.
• Significantly, almost 40% of all fruits and vegetables are lost annually in India between the grower and the consumer.
• This is mainly due to lack of storage facilities, a weak transportation system, and bad roads, which needs to be addressed by inviting massive investments.
• Also, as climate change is expected to pose more challenges, states alone can’t handle these effectively due to technological shortcomings.

8.12 e-NAM Initiative

What is the issue?
e-NAM is expected to solve the problems surrounding agrarian output market.

What are the existing problems in farmers market?
• Competition in labour, input prices are increasing.
• Market domination by organised traders.
• Friction between inefficient markets for agri-output and efficient markets for their inputs.
• Farmers must buy and sell only in the government-designated Agricultural Produce Marketing Committee (APMC) market-yards.

What is the e-NAM?
• The electronic National Agriculture Market (e-NAM) platform seeks to create a common national market, for enhancing farmers’ access to buyers.
• It will make price discovery and trading transparent.
• So far, 417 mandis in 13 states have joined the e-NAM platform
• There is a target of connecting 585 mandis with e-NAM by March 31, 2018.

What are the advantages of e-NAM?
• Transparent and robust electronic physical markets.
• Greater standardisation and quality awareness.
• Easier access of buyers by the producers.
• Reduced price of products due to reduced costs of intermediation.
• Open market and competitive price fixing is possible.
• Easier taxation of agricultural income.

How effectively e-NAM can be implemented?
• With wide participation and perfect sync between markets and stakeholders e-NAM can be successful.
• e-NAM authorities can work to encourage farmers to produce better quality crop and meeting exchange standards.
• Price distribution alerts through mobile phones could serve as a reliable reference price for farmers.
• Monitoring the warehouses for the incoming and outgoing stocks will make the initiative stronger.
• The profiles of the farmers linked with e-NAM can be used for credibility reports by financial institutions.
• Indian agriculture needs robust and transparent institutions for e-NAM to deliver long-term benefits.

8.13 Market Assurance Scheme

What is the issue?
• Central government proposes to launch the new “market assurance scheme” (MAS).
• Given the shortfalls with similar systems already in place, the proposal needs a relook.

What is the market assurance scheme?
• It is a new price support scheme under which states would be free to procure from farmers all crops for which MSP is announced.
• States can procure any quantity of coarse grains, millets, pulses and oilseeds, except rice and wheat.
• As, rice and wheat are already being procured by the centre for the public distribution system.
• Under MAS, the centre will compensate states for any losses due to procurement, capped at 30% of the procurement cost.
• For hill states and those in the north-east, the ratio of compensation will be 40%.
• It will be the concerned states’ responsibility to dispose of the procured crops.

What is the need?
• The proposal comes in the backdrop of protests and demands by farmer groups for remunerative crop prices and loan waivers.
• Currently MSPs are announced for 23 crops but only paddy and wheat procurement is effective.
• Procurement by the centre of pulses and oilseeds in small quantities calls for a better system in place to address farmer distress.
• Under MAS, states are given the freedom to choose which crop to procure and in what quantities, when wholesale prices drop below MSPs.
• States will also be free to use the procured crops for targeted nutrition support programmes or sell them in the open market.
• The scheme proposes to strengthen the procurement mechanism by ensuring farmers do not suffer from marketing inefficiencies.

What are the concerns?

• Markets - Poorly functioning agriculture markets with lack of competition, cartelization and opaque price discovery which are causes of price distortions stand unaddressed.
• Infrastructure - The scheme will require the deployment of huge manpower and creation of massive infrastructure for purchasing, transporting and storing.
• Ensuring these may not be affordable for the state governments.
• Agri practices - The earlier physical market intervention-based system of price assurance in the case of wheat and rice has not been without its own disadvantages.
  It has resulted in:
  i. distortion of the cropping pattern
  ii. alienation of the private trade from the grain market
  iii. unwarranted accumulation of stocks on the government account
• Replicating the same in other crops would be ill-advised.
• Fiscal - There is a concern that the scheme could place fiscal pressures on the Union government.
• There are also some unfulfilled preconditions in place for the successful functioning of a scheme that spends public money.

What should be done?

• A lasting solution lies in making farming profitable by reducing production costs and improving returns on the produce.
• In this context, MAS is a more temporary measure and an eventual solution is to bring in greater competition in agricultural markets.
• Agricultural marketing reforms wooing private investment in setting up crop mandis to enhance competition must be expedited.
• The price deficiency payment mechanism is another novel way to address price distress.
• There is also a need to put in place stable policies for agricultural pricing and trade, both external and domestic.
• In all, the Centre should take lead to put a proper system in place instead of passing on the responsibility to the states.

8.14 Targeted Agricultural Lending

What is the issue?

• There is a trend of actual loan disbursements to the farm sector outstripping the liberally hiked annual targets year after year.
• Yet agrarian distress and farmers’ dependence on moneylenders are showing no signs of easing.

What is the concern?

• The total credit flow has surged over 10-fold since the early 2000s.
• Institutional credit to the farm sector is set to exceed the target of Rs 10 trillion for the current year.
• However, nearly 40% of rural credit demand is still met by the informal sector, including commission agents and moneylenders.
• Clearly, the purpose for which institutional credit to the farm sector was stepped up steadily has not been served adequately.
• Interest subvention by the government has resulted in cheaper bank credit.
• However, it is not reaching the small and marginal farmers due to poor targeting and large-scale diversion to other destinations.

How is the credit distribution scenario?

• **Credit scale** - The proportion of loans of less than Rs 200,000 which normally go to genuine farmers has been over 90% in the 1990s.
  
  • This proportion has now shrunk sharply to less than half.
  
  • Contradictorily, the share of larger loans of up to Rs 10 million and more has surged.
  
  • **Time** - Besides, roughly about half of the total farm credit is disbursed between January and March.
  
  • But this is when farmers’ loan requirements are the least with rabi sowing already over and kharif planting being months away.
  
  • **Farmers** - Nearly a fourth of direct agricultural lending is accounted for by banks located in semi-urban, urban and metro towns.
  
  • Frequent farm loan waivers have marred the loan repayment culture in rural areas.
  
  • Evidently, banks find it much safer and convenient to lend to agri-related enterprises rather than to the more risk-prone farmer.
  
  • Highly subsidised agricultural loans are thus largely reaching only the non-farmers or the same set of farmers with good repayment record.
  
  • **Cooperative credit sector** - Non-performing assets of the primary cooperatives and the agricultural and rural development banks have risen to 37% by the end of 2015-16.
  
  • Political interference in the day-to-day functioning of these bodies is adding to their woes.
  
  • Also, many of the CEOs in these have non-banking background which is contributing to the overall failures of cooperative banks.

8.15 Agri Future Markets

What is the issue?

• The Indian agri-futures remained at low levels forming only 2% of 1.6 billion global agri-futures contracts.
  
  • It remains unsupportive of farmers.

What are agri-futures?

• Derivatives are financial instruments with a price that is dependent upon or derived from one or more underlying assets.
  
  • Futures and options represent two of the most common form of "Derivatives".
  
  • In futures contract buyer has the obligation to purchase a specific asset, and the seller has to sell and deliver that asset at a specific future date.
  
  • Agri-futures markets are one way to ensure that farmers’ planting and selling decisions are forward-looking, and not based on past prices.

What are the issues with Indian agri-future markets?

• **Governance** - They are often disrupted by sudden bans or suspensions by the government as many policymakers have deep mistrust in the functioning of these markets.
  
  • The basic distinction between feed and food commodities is missing.
  
  • There is less variety of goods to choose from the market.
  
  • **Participation** - Very few farmers or farmer-producer organisations (FPOs) trade on such markets, due to the mistrust with the policymakers.
• **Implementation** - The creation of an all-India spot market/(e - NAM) for farmers is operating at a slow place.

**What India can learn from china?**

• State participation in the futures markets through the State Trading Enterprises.
• No abrupt suspensions of commodities.
• Focus on choice of commodities, which are not very sensitive from food security point of view.
• The Chinese volume of contracts is much higher in soya, mustard, and corn complexes, which are basically for feed.
• India being the largest importer of edible oils, especially palm and soya oils, these are promising candidates for agri - futures provided global players are allowed to trade in these.

**8.16 Concerns with Agri Import policies**

**What is the issue?**

• Union government is at risk in tackling the problem of low agri commodity prices and high imports.
• Indian market lacks intelligence to take informed decisions on international tariff changes.

**What are the concerns with Indian agri Imports?**

• Major imports include vegetable oils, pulses, fresh fruits and vegetables, raw cashew as also wheat and sugar from time to time.
• Over the last three years these products were worth Rs. 17-19 lakh crore (about $ 30 billion).
• The import of essentials such as edible oil and pulses is inevitable for Indian population.
• The Indian oilseeds and oils market is well integrated with the global market through the trade route, any change in world market prices will get reflected here.

**What are the issues with government polices?**

• Export-Import policy ignores India’s role in the global marketplace.
• Exim policy for oilseeds and oils is being counter-productive because India is import-dependent for edible oil.
• This makes frequent tariff changes seem like a logical alternative.
• On the pulses front, the Government is planning trade and tariff changes to lift the price of domestic pulses, but this is not a viable solution.
• A hike in customs duty on imported oils has had no effect on oilseed rates in India.
• A long credit period 90 to 150 days encourages over-trading and many importers are delayed due to ‘import debt trap’.

**What needs to be done?**

• Trade policy must be fixed by considering international sensitivities and trade relations.
• A progressive foreign trade policy is one where export and import windows both are open.
• In the case of vegetable oil, it is possible to restrict trade without imposing trade or tariff barriers.
• Excessive import can be curbed by reducing the credit period for payment against imports.
• Imposing a maximum credit period of 30 days will remove the incentive to indulge in over-trading.
• Affirmative action in the form of strong procurement and distribution of pulses (after milling) through the PDS is a best available option before the government.
• Holistic approach covering production, processing, consumption and trade will address the issues.

**8.17 Falling Agri Prices**

**What is the issue?**

• Despite bumper harvests the agrarian prices are falling, this is aggravating agrarian distress.
It is a pointer to institutional failure in addressing farmers’ issues.

What are the reasons behind falling prices?

- The impact of demonetisation has disrupted the supply chains and contributed to traders not holding stocks at their normal levels.
- The surge in imports of pulses and oilseeds, which only added to a bumper crop last year, aggravated the supply glut.
- Sluggish global prices of soyabean and maize contributed to domestic prices falling well below MSP.
- Export curbs on pulses, lifted recently (besides stocking limits) made matters worse.
- Due to absence of higher public investment in the rural economy Support prices, price deficiency payments and higher credit are not working.

Why higher outputs are not favourable to farmers?

- It is significant that higher output has generally had no role to play in the case of Kharif crops this season.
- Kharif food grain output in 2016 was 138 million tonnes, it is estimated at 134 million tonnes this time.
- Kharif oilseeds output is estimated at 20.6 million tonnes this year, against 22.4 million tonnes in 2016.
- The effects of export curbs and higher imports to control consumer inflation in pulses in early and mid-2016, are being felt by farmers now.

What can be done?

- **Storage** - Modern cold storages, as being set up by companies like ‘Allround India’ can bring down wastage within the 10-15% range.
- Hence, promoting modern cold storages and developing a system akin to that of the warehouse receipt system for farmers is needed.
- While encouraging the private sector to take the lead, the state can do some stocking under a ‘Price Stabilisation Fund – PSF’.
- **Trade Policy** - An effective trade policy that is responsive to production realities is necessary for price stabilisation.
- Promoting exports in case of a bumper crop and encouraging imports in case of deficits should be primary to any trade policy.
- This has to be done well in advance — as soon as one comes to know the advance estimates of production.
- **Processing** - Encourage the setting up of onion dehydrating units and promote demand for dehydrated onions can be considered.
- Currently, Gujarat has already emerged as the main centre for dehydration units with 85 out of 100 units located there.
- Dehydrated onions are being exported to Japan, Europe, Russia, US and some African countries.
- Ministry of Food Processing and state governments should encourage entrepreneurs to setting up onion processing units.
- While a subsidy of up to 35% with a cap of Rs 5 crore is currently being provided, the budget of the scheme is just Rs 95 crore.
- This needs to go up manifold if we are serious about encouraging food processing and stabilising prices

8.18 Managing Pulses Prices

What is the issue?
The ironical condition of increasing pulses production and decreasing prices is calling for governmental intervention to make farming remunerative.

What is the concern?

- Amidst fall in pulses production in last few years, a number of market support measures were taken to enhance productivity.
- Coupled with these, a good monsoon in 2016-17 in much of the country led to a good harvest.
• Resultantly, there was an increased production in pulses.
• However, the increased output led to the fall in pulse prices.
• This ultimately resulted in the steep fall in nominal income of the farming sector.

What is the cause?
• Policies have attempted to address the challenge of achieving the twin goals of raising food production and ensuring a minimum price impact.
• This is done through a variety of price support, procurement and public distribution policies.
• But, weak price support mechanisms are failing to balance between the production output and the resulting prices.
• Large scale procurements at times reduce supplies in the market and impact market prices for all the farmers.

What could possibly be done?
• **Procurement** - The procurement policy could be fine-tuned to the market conditions so as to stop procurements if market prices touch the MSP.
• A procurement system for absorbing ‘excess production’ from the market, departing from the ‘open-ended’ procurement approach has to be designed.
• The objective should be to stabilise prices when prices fall below a certain level, on account of increased production.
• It is essential to complement the system by a good marketing infrastructure for making it accessible to all farmers.
• Also, the procurement system has to be supplemented by an efficient distribution system for it to be effective.
• **Alternative scheme** - An alternative Price Deficiency Support Scheme is where farmers are paid the difference between market price and the MSP.
• This does not envisage procurement by the government but only payment in cash to the farmers.
• Thus, procurement-effected price fluctuations in the market can significantly be reduced.

8.19 Centre on GM Mustard crop

Why in news?
Indian government don’t have any policy decision on the commercial release of Genetically Modified (GM) mustard crop.

Why GM mustard is opposed?
• Hybrids are normally obtained by crossing two genetically diverse plants from the same species, but there is no natural hybridisation system in mustard.
• The new technology for GM mustard has used a “Barnase” gene isolated from a soil bacterium.
• The resultant hybrid mustard plant will be high-yielding.
• This incorporation of alien genes led to the opposition.
• This same technology has been used in GM cotton.
• The opponents of GM mustard point out that cotton is not a food crop, while mustard is India’s largest edible oil-yielding crop.

What is the status of commercial release of GM Mustard?
• The apex court had on October 17 last year gave the stay on the commercial release of GM mustard crop until further orders.
• The court had asked the Centre to seek public opinion on such seeds before releasing it for cultivation purposes, even as government approval is awaited.
• Recently, the Union government informed the Supreme Court that it has no policy decisions on GM mustard.

Why SC demands for a well-informed view on GM mustard?
• Mustard is one of India’s most important winter crops, which is sown between mid-October and late-November.
• The government sowing the seeds in various fields and the bio-safety dossier has to be put on the website, which has not been done yet.
• The field trials were being carried out by the government without conducting the relevant tests.
• The contamination of germ plasm will happen with mustard HT (Herbicide Tolerant) DMH 11, it will be irremediable and irreversible making our food toxic at the molecular level without recourse.
• A Technical Expert Committee (TEC) report has pointed out that the entire regulatory system on GM mustard is a messes and a 10-year suspension should be given.

8.20 Rebirth of Indian Cotton

What is the issue?
Indian farmers started to return towards the traditional cotton cultivation from the Bt-cotton.

What is the reason for the return?
• Bt-cotton’s gradual lost resistance against the devastating bollworm insects.
• It has failed to resist new pests like whiteflies.
• Indian cotton, can withstand most of these pests, besides some common diseases.
• Technology developers and seed companies have failed to diversify pest-repellent traits in BT-cotton.

What are the advantages of Indian cotton over Bt-Cotton?
• It has evolved indigenously and better acclimatised to local agro-ecological conditions
• It needs lower amounts of inputs like fertilisers and pesticides and is, on the whole, less costly to cultivate.
• It is early maturing and can be harvested before pests like bollworms and whiteflies become active.
• It is amenable to closer planting to accommodate more plants in a field, it is an easy way to raise crop yields and net profits.
• Due to the small staple length and absorbent nature of its fibre, it is in demand for surgical and medical use.

What are the other issues in Indian cotton cultivation?
• There is no diversity in the cotton cultivation carried out in India.
• Lack of diversity has led to the development of immunity among pests.
• The GM cotton occupying nearly 95 per cent of the crop area.
• Seed approval protocols discouraged public sector research bodies from entering this field.
• With respective to this few companies are becoming the monopoly in the selling the seeds.

8.21 Toxic Farming

What is the issue?
• Around ten farmers have reportedly died after spraying ‘Profex Super’ insecticide on Bt cotton plantations in Yavatmal district of Maharashtra.
• This has raised the demand for stronger regulation of insecticide sale and use in India.
What are the causes?

- **Guidance** - Cotton growers rely on high volumes of insecticides to prevent severe pest attacks.
- This is increasingly due to the pressure to protect the investments made.
- There is a lack of agricultural extension officers to advise farmers on the proper use of pesticides.
- Resultantly, they rely on the advice of unscrupulous agents and commercial outlets for pesticides use.
- Also, they do not take precautions such as wearing masks and covering themselves and checking the wind direction while spraying.

- **Regulation** - The system of regulation of insecticides in India is obsolete.
- Pesticides Management Bill introduced in 2008 studied by the Parliamentary Standing Committee is still pending.
- It is to be noted that agricultural products from India, including fruits and vegetables, have been subjected to import restrictions internationally for safety concerns.

- **Other causes** - The increasing intensity of pesticide use is suspected to be due to the loss of efficacy of some genetically modified cotton in warding off pests.

What should be done?

- Focus on pesticide regulation is as important as focus on growth in agricultural production and exports.
- Clearly, there is a need for a high-level inquiry into the nature of pesticides used across the country.
- A forward-looking farm policy would minimise the use of toxic chemicals.
- More importantly, the regulatory system should be enhanced.
- It is imperative that a Central Pesticides Board be formed to advise on the proper use and disposal of pesticides.
- This will strengthen the oversight of registration, distribution and sale of toxic chemicals.
- The Insecticides Act of 1968 should be updated and a new law should come in its place.
- This can eliminate the shortfalls in the current rules that govern enforcement and introduce penalties where there are none.
- Aligning the new pesticides regulatory framework with food safety laws and products used in health care will make it broad-based.
- Encouraging organic methods of farming where they are efficacious could benefit both the farmer and the consumer.

### Pesticide Management Bill - 2008

- The bill seeks to improve the regulations in the manufacture, inspection, testing and distribution of pesticides.
- It proposes a system of licensing and also sets the criteria for classifying pesticides as misbranded, sub-standard, or spurious.
- Constituting a Central Pesticides Board to advise the government on pesticide related regulation is also among its provisions.
- Fixation of tolerance limits by FSSAI for pesticide residues on crops and commodities is touted to become mandatory.
- State governments are envisioned to implement the set-up.

8.22 Limitations with Organic Farming

What is the issue?
Organic farming, which is increasingly being promoted in recent days, has many limitations for it to be taken on a large scale.

What are the challenges?

- **Manure** - Huge quantities of manure would be needed to replace the chemical fertilisers.
- Notably, tribal farmers do not own plots large enough to keep cattle.
- It is also not possible to free the landscape for enough quantities of the dung of free-range cattle to supply crops the nutrients they need.
• **Impact of green revolution** - The practices employed as a result of Green Revolution have delved deeper into the agricultural system.

- Certainly, it has now become harder for true traditional farming because the country’s agricultural system is engulfed in high-input agriculture.
- However, it is felt that traditional farming would thrive, if subsidies offered for high-input agriculture is graded down.
- This can probably help the small scale farmers to be self-contained with the traditional, non-chemical agriculture.
- **Consumers** - Organic produce in the markets along with the non-organic produce make their prices highly unaffordable for many.
- E.g. Organic produce with higher prices from Sikkim, certainly faces competition with low priced non-organic produce from nearby West Bengal.
- It is thus still uncertain if customers are willing to spend more, for organic farming to be taken on a large scale.

**What lies before the policy makers?**

- The varied efforts and campaigns for organic farming may not all sustain it, unless it is consistently remunerative for the farmers.
- The whole discussion on organic farming should take into consideration, apart from agriculture, the business and livelihood aspects as well.

**8.23 Reforming the Sugar Industry**

**What is the issue?**

- The sugar sector is faring well in terms of production, prices and other factors in recent years.
- It thus calls for taking forward the reforms based on recommendations of the Rangarajan committee on sugar deregulation.

**What are the problems and recommendations?**

- **Sugarcane Price** - The Centre fixes a minimum price, the FRP (fair and remunerative price) paid by mills to farmers.
- States can also intervene in sugarcane pricing with an SAP (state advised prices) to strengthen farmer’s interests.
- Notably, some States such as UP and TN have set SAPs higher than FRPs.
- The Committee thus recommended that states should not declare an SAP as it imposes an additional cost on mills.
- It thus suggested a uniform FRP for farmers.
- And also suggested determining cane prices according to scientifically sound and economically fair principles.
- **Levy sugar** - Levy sugar is the 10% of production that every sugar mill mandatorily surrenders to the centre, at a price lower than the market price.
- This enables the central government to get access to low cost sugar stocks for distribution through the Public Distribution System.
- The centre saves a huge sum on account of this policy, the burden of which is borne by the sugar sector.
- The Committee recommended doing away with levy sugar.
- States wanting to provide sugar under PDS would have to procure it directly from the market.
- **Regulated release of non-levy sugar** - Sugar is produced over the four-six-month sugar season.
- The Centre allows the release of non-levy sugar into the market on a quarterly basis, to ensure distribution evenly across the year.
- Mills can neither take advantage of high prices to sell the maximum possible stock, nor dispose it to raise cash in need.
• It also impacts the ability of mills to pay farmers and thus regulated release imposes costs on both mills and farmers.
• The Committee recommended removing the regulations on release of non-levy sugar to address these problems.
• **Trade policy** - The government has set controls on both export and import of sugar in line with availability, demand and price.
• Even though India contributes 17% to global sugar production (second largest), its share in the world trade of sugar is meagre.
• It is thus recommended to removing the existing restrictions on trade in sugar and converting them into tariffs.
• **Revenue Sharing Mechanism** - It stipulates 70-75% of the total revenue earned by sugar mills to be shared with farmers.
• The revenue may accrue from the sale of sugar and its by-products such as molasses, bagasse and co-generated power.
• Being fair to both cane growers and sugar producers, this can also balance sugarcane and sugar output with demand.
• As returns depend on the sugar recovery from cane, it spurs farmers to grow better varieties and improve efficiency of cane cultivation.
• However, a fair and transparent assessment of sugar recovery and revenues of sugar mills is essential.
• **Cane area reservation** - It mandates cane farmers to supply their sugarcane to the specific sugar mill.
• It is recommended that cane area reservation be phased out.
• **Contracting between farmers and mills** should be allowed for enabling a competitive market for assured supply of cane.
• On discontinuing area reservation, the Centre should remove the stipulation of minimum distance criteria between two mills.

**What lies ahead?**
• Barring a few financially distressed mills, most sugar companies have been in profit.
• More than 99% of the cane price dues based on FRP have been cleared by the Centre.
• There is, therefore, little reason for delaying the completion of the reforms process recommended by the Rangarajan panel.
• In particular, some proposals that were left to the states to carry out have not made much headway.
• The other pending or partially done reforms need to be executed.

8.24 Rationalizing Cane Pricing Policy

**What is the issue?**
The mismatch between price of sugarcane and that of sugar calls for implementing the suggestions of CACP.

**What is the anomaly in price support?**
• The Cabinet Committee on Economic Affairs approves the Fair and Remunerative price (FRP) for sugarcane.
• FRP is the minimum price that the sugar mills have to pay to farmers.
• FRP does protect the farmers by deciding the price of sugarcane.
• But on the other hand, sugar prices are determined by market sentiments and market forces, causing unfavourable effects.

**How does it impact?**
• **Farmers** - The high FRP of sugarcane results in over-production of cane and ultimately surplus sugar.
• This could, in turn, cause sugar prices to fall below cost levels.
• The resultant burden of the loss falls on the sugar mills.
• This eventually leads to delays or defaults in making payments to the farmers.
• **Export** - Too high a price for cane makes Indian sugar uncompetitive globally.
• E.g. Indian cane prices are 70-80% higher than that in Brazil.
• Thus, exporting the surplus from India too becomes harder.

**What is desired?**
• The government’s protection with a remunerative cane price and assured buyer is unquestionable.
• However, the anomalies call for rationalisation of the cane-pricing policies in tune with global practices.
• This is especially to facilitate Indian sugar industry to export the surplus favourably.
• The governments (including states) should take roles beyond cane-price fixing.
• The government will have to offer interest-free loans, subsidies and incentives, etc for production.
• Special efforts would also be needed to dispose off the surplus sugar.
• This is essential to keep sugar prices at adequate levels and ensure cane-price payments on time.

**What are the recommendations of the CACP?**
• Some of the suggestions made by the Commission for Agricultural Costs and Prices (CACP) in this regard include the following:
  • Farmers should be guaranteed a minimum cane price at the level of FRP.
  • In addition, the liability of sugar mills will be restricted as per a revenue sharing formula (RSF).
  • Accordingly, 75% of revenue realised from sugar will be the cane price payable by mills.
  • If the cane-price, as per RSF, is more than FRP, the farmers get a second instalment over and above the FRP.
  • When sugar prices are depressed, the price as per RSF may work out to below FRP.
  • The gap would then be paid directly to the farmers from a fund created by the government (government is yet to approve it).
  • **Benefits** - The sugar mills will pay farmers as per their revenue realisation and pay on time.
  • Farmers get cane price at least at the level of FRP, or more with better sugar prices, instead of the current system of giving farmers only FRP.
  • It will also keep cost of production reasonable, ensuring that Indian sugar is competitive globally to allow exporting the surplus.

**9. DIRECT AND INDIRECT FARM SUBSIDIES AND MINIMUM SUPPORT PRICES**

**9.1 Targeted Public Distribution System**

**What is the issue?**
From providing minute digital records to seeding out fake claims, the targeted public distribution system is visibly reforming.

**How is the PDS reforming?**
• With 2011-12 National Sample Survey (NSS) data, two-thirds of the population (75 per cent rural, 50 per cent urban) is entitled to subsidized foodgrain through the Antodaya Anna Yojana (AAY) and Priority Households (PHH) schemes.
• There are other provisions on the Integrated Child Development Services, ICDS, Mid Day Meal Scheme, MDMS, and maternity benefits.
• Though the NFSA came into force on July 5, 2013, because states needed to evolve criteria and identify beneficiaries, its adoption by states was staggered, with Nagaland, Kerala and Tamil Nadu the last to join, in 2016.
• All states and/or Union Territories (UTs) are now part of the NFSA.
• The reforms in NFSA include doorstep delivery of foodgrains to the Targeted Public Distribution System outlets.
• Application of information and communication technology tools including end-to-end computerisation in order to ensure transparent recording of transactions at all levels, and to prevent diversion.
• Leveraging “Aadhaar” for unique identification, with biometric information of entitled beneficiaries for proper targeting of benefits under this Act.
• Full transparency of records.
• Preference to public institutions or public bodies such as panchayats, self-help groups, co-operatives, in licensing of fair price shops and management of fair price shops by women or their collectives.
• Diversification of commodities distributed under the Public Distribution System over a period of time.
• Support to local public distribution models and grains banks.
• Introducing schemes, such as cash transfer, food coupons, or other schemes, to the targeted beneficiaries in order to ensure their foodgrain entitlements.

How the reforms help in better targeted approach?
• For subsidized grain, there are 186.6 million ration cards, 23 million AAY and 163.5 million PHH.
• If these are digitized and seeded with Aadhaar numbers, duplication is reduced.
• Ghost ration cards are eliminated.
• All 36 states and UTs have digitized ration cards now.
• For some states, there are live links or reports on digitization.
• As of March 31, 2017, 77.04 per cent of ration cards (178.2 million) have been seeded with Aadhaar numbers.
• Between 2013 and 2016, 23.3 million bogus ration cards were identified and removed.
• Once records and databases have been fixed, one moves to the online allocation of food grains, down to the FPS (fair price shop) level — 30 states/UTs have done this.
• Since Chandigarh and Pondicherry (and partly Dadra and Nagar Haveli, in urban areas) opted for direct benefit transfers (DBTs), with an equivalent cash transfer into seeded bank accounts.
• Now, 2,33,520 households are covered by such cash transfers, the bulk in Pondicherry.
• The “equivalence” is worked out by multiplying the minimum support price (MSP) by a factor of 1.25 and subtracting the central issue price (CIP).

9.2 Ineffective MSP

Why in news?
• Market prices of some crops have gone below the MSP which could discourage sowing, thus latest MSPs for crops may aggravate farm distress.

What is the present status of MSP?
• Except in the case of paddy and wheat, minimum support price has yet to offer remunerative prices
• The government’s pricing policy for the 2017 kharif crops might worsen the farmers demand
• The new minimum support prices (MSPs) for major kharif crops, communicated discreetly to the states instead of being announced formally from New Delhi, are only marginally higher than those of the previous season.

What makes the new MSPs worse?
• Notably for cotton, moong and sunflower seed, are lower than the actual expenses incurred in cultivation, as calculated by the Commission for Agricultural Costs and Prices (CACP).
• This essentially means farmers are staring at a net loss in the coming season.
• Such low increases in MSPs are unlikely to pacify irate farmers or ease their distress.
• The overall value of farm produce has also been on a slide for several years.
Data from the National Accounts Statistics 2017 indicate that between 2011-12 and 2015-16 the total value of cereals and pulses fell by 3 per cent, oilseeds by over 13 per cent, and sugar by 1 per cent.

Clearly, the costs incurred by farmers on inputs such as seeds, fertilisers, pesticides and labour are rising faster than the prices of their produce.

**How this issue can be addressed?**

- A few states such as Gujarat and Madhya Pradesh have begun offering small amounts by way of cash subsidy on these crops, but even this offsets barely a fraction of the losses.
- Government can fix support prices at 50 per cent above actual costs.
- The progress in agriculture should be measured in terms of the rise in farmers’ incomes instead of the quantity of farm output.
- Extending market intervention-based price support to other crops should be considered after evaluating what steps are needed to make it effective and successful.
- One such possibility could be the “price deficiency payment mechanism” mooted by a task force of the NITI Aayog.
- This involves setting floor prices for crops and compensating growers for any shortfall in realising these rates.
- Being a non-procurement based system, it can be applied to all crops and in all areas without accumulating unwanted stocks.
- Trying out such a setup on a pilot basis would be a reasonable starting point.

9.3 Price Deficiency Payment

**Why in news?**

The Niti Aayog, has recently released a three-year action agenda for the Centre suggesting the 'Price Deficiency Payment' (PDP) system among other reforms.

**What is Price Deficiency Payment system?**

- Under this, farmers will be compensated for the difference between the MSPs for select crops and their actual market prices.
- For crops such as rice and wheat where MSP is effective now, the same will continue.
- For other targeted crops, price deficiency payments system will be introduced.
- However, notably there may be a cap on the extent to which the Centre will bridge the gap between MSP and market price.
- A farmer would have to register with the nearest APMC mandi and report the total area sown, to avail this benefit.
- The subsidy would be paid via Direct Benefit Transfer (DBT) into the farmer's Aadhaar-linked bank account.

**What is the need for this?**

- **Unremunerative** - It blamed the MSP system for **distorting agricultural markets** and cropping pattern in favour of two main staple cereals - rice and wheat.
- Also, the post-harvest peak marketing season and the resultant price fluctuation lead to **inadequate price realisation** for farmers.
- In many cases, prices received by growers fail to cover even their production costs due to a bumper harvest-driven price crash.
- **Coverage** - MSP is largely confined to wheat and rice and to some extent to cotton and sugarcane.
• Also region wise, it is confined to parts of a handful of states where the procurement, transportation and storage infrastructure exists.

• For other crops and other places, MSP is seeming irrelevant and growers are forced to go in for distress sales.

• Reach - NSSO survey reveals that a very few percentage of farmers knew of MSP and that only a few within that managed to sell their produce at MSP.

• Besides these, MSP causes needless accumulation of stocks in the government coffers, involving huge maintenance costs and storage losses.

What are the benefits?

• Subsidy Bill - The government has been accumulating large food grain stocks in its godowns over and above the buffer requirement, leading to storage and wastage costs.

• Under the new system, the government can pay in cash to farmers, the difference between the support and market prices.

• This will actually reduce the need for the government to procure food crops, transport and store them, and then dispose of them under PDS.

• Resultantly, as Niti Aayog proposes, this system can keep India’s bill on food subsidies, and storage and wastage costs under check.

• It can also address to an extent the world nations’ concern on India’s procurement subsidies being trade-distorting.

• MSP - The MSP system has many flaws in execution which include:
  i. Limited graphical coverage.
  ii. Actual procurement being restricted to a few crops such as paddy and wheat despite announcements for 20-plus crops.
  iii. skewed cropping pattern in favour of rice and wheat as a result of this.
  iv. soil degradation and susceptibility of crops to pest as a result of this monoculture, leading to higher usage of chemical fertilisers and pesticides.

• As, it could be more effective than MSPs in ensuring that cropping patterns in India respond to consumer needs and that farmers actually benefit from price support.

Case Study

• In line with the NITI Aayog’s earlier suggestion, Madhya Pradesh government has announced a new price deficiency payment mechanism.

• Initially, the scheme will cover some selected pulses and oilseeds, where the official procurement is typically low, unlike in rice and wheat.

What is the way forward?

• As production costs vary from region to region and even from farmer to farmer, the present concept of “one nation, one MSP” should be modified to address the regional concerns.

• Farmers should be made aware of the various schemes that the government run for their benefit.
• The risks associated with price fluctuations can be addressed with the new non-market intervention-based system.
• The proposed new system has also the potential to avoid physical handling and warehousing of commodities.
• The price deficiency payment mechanism thus can go a long way in making farming remunerative.

**Fertilizer Subsidy in India**

**What is the issue?**

There is a delay in the implementation of a new system of disbursal of fertiliser subsidy by the present government.

**What is fertiliser subsidy?**

• Fertilizer subsidy is the difference between the holding price of fertilizers and the price at which fertilizers are made available to consumers.
• For sustained agricultural growth and to promote balanced nutrient application, the fertilizers are made available to farmers at affordable prices.
• Financial support is also given on both indigenous and imported urea.

**How fertiliser subsidy is provided in India?**

• At present, subsidies are paid to fertilizer companies on the basis of receipt of fertilizer at identified godowns in districts.
• India has decided implement new subsidy reforms across the country from June
• Fertilizer subsidies would be transferred to manufacturers on the basis of actual sales.
• With the new system, a PoS machine would be installed in every fertiliser godowns.
• It capture the buyer’s identity based on Aadhaar biometric authentication, with the quantities purchased.
• This move which will pave the way for implementation of the direct benefit transfer (DBT) system.

**What are the issues with older system?**

• The Subsides were not exactly received by the farmers, it benefited the fertilizer companies.
• The beneficiaries have been the large farmers and not small & marginal farmers.
• Distorted subsidy regime, depleted the NPK use ratio (Nitrogen, Prosperous, Potassium), the normally accepted ratio is 4:2:1.

**What are the advantages of the new system?**

• The data generated from PoS machine sales would make it possible to both weed out non-farmers.
• It restrict the subsidy to a maximum of 30-35 bags of all fertilisers per farmer.
• This will automatically cover all small and marginal farmers.
• The subsidy is directly credited into Aadhaar-seeded bank accounts of the farmers.

**What is the reason for the delay of the new system?**

• The official reason for not going ahead in the current Kharif season, as earlier planned, has been the lack of availability of the PoS devices.
• They have been installed in only half of the country’s nearly 2 lakh fertiliser retail points
• Technical malfunctions in their integration with the central server that may have to track over 50 crore transactions.
• There are issues of network connectivity in remote rural areas.
9.4 WTO - Fisheries Subsidies

What is the issue?

- WTO is considering proposals on prohibiting certain fisheries subsidies in its upcoming Ministerial Conference in Buenos Aires, Argentina.
- However India and many developing countries are certainly concerned with this.

What are the concerns?

- An informal grouping of members called “Friends of Fish” demanded for curbing fisheries subsidies.
- The group included Argentina, Australia, Chile, and Colombia, New Zealand, Norway, Iceland, Pakistan, Peru & US.
- They highlighted that subsidies to the fisheries sector have led to over-capacity and overfishing.
- Countries including Japan, South Korea and Chinese Taipei have expressed uncertainty over the link between subsidies and over-fishing.
- On the other hand, many developing countries such as India and Philippines seek flexibility in granting subsidies.
- India provides subsidies in the form of support for motorisation of fishing boats, fuel rebates and infrastructure support.
- Notably all of this fall under the targeted subsidies list at the WTO.

What is India's proposal?

- **Subsidies** - India has proposed the members to agree to apply prohibitions only outside territorial waters.
- This would leave the management of territorial waters to their respective national authorities.
- This provision is exceptional of the prohibition in cases of IUU (illegal, unreported, unregulated fishing).
- Such an arrangement would not disturb the benefit of subsidies offered to small scale fishers, and continue to protect subsistence and artisanal fishing.
- The proposal has generated a lot of interest from members including the ones pushing seriously for a prohibiting pact.
- **Over-fishing** - India has suggested a flexibility clause for the concern on over-fishing.
- Accordingly, when a fish stock is found to be over-fished, developing countries must be given some flexibility in terms of time period.
- Within a specified number of years, the country should withdraw the related subsidies.
- And this rule should only cover areas beyond the territorial waters.

10. HIGHLIGHTS OF ECONOMIC SURVEY 2017-2018

10.1 New Economic Facts on Indian Economy

- The Economic Survey highlights 10 new economic facts on the Indian economy based on the new data. They are as follows:
  - **Goods and Services Tax** - GST has led to a 50% increase in the number of indirect taxpayers.
  - There has been an increase in individual income tax filers as well.
  - There has also been a large increase in voluntary registrations.
  - This is especially in regards with small enterprises that buy from large enterprises.
  - Availing the benefit of input tax credits was a major reason.
  - The fear of undermined tax collections for states due to GST transition is allayed.
Accordingly, the distribution of the GST base among the states got closely linked to the size of their economies.

**Formal Sector payroll** - India's formal sector, especially formal non-farm payroll, is substantially greater than believed.

"Formality" was earlier defined in terms of social security provisions like EPFO/ESIC.

It is now being defined in terms of being part of the GST net.

This has increased the formal sector payroll share to 53% from the earlier 31% of the non-agricultural work force.

**Exports of states** - Economic Survey, for the first time, deals with data on the international exports of states.

The data indicates a strong correlation between export performance and states’ standard of living.

States that export internationally and trade with other states were found to be richer.

5 States of Maharashtra, Gujarat, Karnataka, Tamil Nadu and Telangana account for 70% of India’s exports.

India’s internal trade is about 60% of the GDP.

This is comparatively greater than last year’s survey as well as other large countries.

**India’s exports** - The largest firms in India account for a much smaller share of exports than in other comparable countries.

Evidently, top 1% of Indian firms accounts only for 38% of exports.

This is unlike the 50-70% as in countries like Brazil, Germany, Mexico and USA.

### 10.2 Economic Growth

**Projections** - The survey forecasts real GDP growth to reach 6.75% this fiscal.

It is projected to rise to 7 - 7.5% in 2018-19.

There was a reversal of the declining trend of GDP growth in the second quarter of 2017-18, led by the industry sector.

This could re-instate India as the world’s fastest growing major economy.

The Gross Value Added (GVA) at constant basic prices is expected to grow at 6.1% in 2017-18, as against the 6.6% in 2016-17.

**Factors** - The growth projections were based on the various reform measures undertaken in the recent years.

It includes GST, resolution of the Twin Balance Sheet (TBS) problem through IBC, recapitalization package for PSBs.

Also, with liberalization of FDI and export uplift from the global recovery, the economy began to accelerate in the second half.

**Comparative performance** - India’s average GDP growth during last 3 years is around 4 percentage points higher than the global growth.

India’s growth averaged to 7.3% in 2014-15 to 2017-18 period.
Lower inflation, improved current account balance and reduction in the fiscal deficit to GDP ratio are notable factors behind.

The survey thus points out that India can be rated as among the best performing economies in the world.

**Way Ahead** - The agenda for the next year to ensure a favourable growth trend has been charted out as:

i. stabilizing the GST
ii. completing the TBS actions
iii. reducing unviable banks and allowing greater private sector participation
iv. privatizing Air India
v. staving off threats to macro-economic stability

Over the medium term, three areas of policy focus are spelt out:

i. Employment - for the young and burgeoning workforce, especially women
ii. Education - creating an educated and healthy labour force
iii. Agriculture - raising farm productivity and strengthening agricultural resilience

### 10.3 Inflation

- **Headline** - The Consumer Price Index (CPI) based headline inflation averaged to **3.3%** during 2017-18.
- Many states have also witnessed a sharp fall in CPI inflation during 2017-18.
- **Trend** - This is notably the lowest in the last six financial years.
- It has been below 4% for twelve straight months, from November, 2016 to October, 2017.
- It indicates a gradual transition from a period of high and variable inflation in the last four years to more stable prices.
- **Food** - The CPI food inflation averaged around 1% during April-December in the current financial year.
- This has been possible due to Good agricultural production coupled with regular price monitoring by the Government.
- However, the recent rise in food inflation is mainly due to factors driving prices of vegetables and fruits.
- **Factors** - The decline in inflation was broad-based across major commodity groups except Housing and Fuel & Light.
- In rural areas food was the main driver of CPI inflation.
- In urban areas, housing sector contributed the most.

### 10.4 Monetary Management

- **Repo Rate** - Monetary policy during 2017-18 was conducted under the revised statutory framework that provided for the MPC.
- The Monetary Policy Committee (MPC) decided to reduce the policy Repo Rate by 25 basis points to **6%**, in August.
- Monetary policy has remained steady during 2017-18 with only one policy rate cut made in August.
• **Liquidity** - Post the demonetisation in November 2016, the re-monetisation process began from November, 2017.
• This set in a favourable base effect.
• Resultantly, the Y-o-Y growth of both Currency in Circulation and Mo turned sharply positive.
• This is higher than their respective growth rates in the previous year.
• Liquidity conditions largely remain in surplus mode.

**10.5 Tax Collections**

• The data on central finance is made available by The Controller General of Accounts (CGA).
• Accordingly, the growth in *direct tax collections* of the Centre was at 13.7% during April-November 2017.
• The *indirect taxes* growth rate was 18.3% during the same period.
• The *States' share* in taxes grew by 25.2%.
• This is much higher than the growth in net tax revenue (to Centre) at 12.6% and of gross tax revenue at 16.5%.
• There is a 50% increase in the number of indirect tax payers.
• In all, the *Gross Tax Collections* during the first 8 months of 2017-18 period are reasonably on track.
• There was a slow pace in *non-tax revenue* but the robust progress in disinvestment compensated for this.

**10.6 Banking Sector**

• **NPA** - Banking sector performance, the PSBs in particular, continued to be subdued in the current financial year.
• The Gross Non-Performing Advances (GNPA) ratio of Scheduled Commercial Banks increased from 9.6% to 10.2% (Mar-Sep 2017).
• The new *Insolvency and Bankruptcy Code* mechanism is being used actively to resolve the NPA problem of the banking sector.
• **Credit** - Non Food Credit (NFC) grew at 8.85% in November 2017 as compared to 4.75% in November 2016.
• Non Food Credit refers to credit or loan provided other than to the FCI (Food Corporation of India).
• Bank credit lending to *Services and Personal Loans* (PL) segments continues to be the major contributor to overall NFC growth.
• The NBFC sector, as a whole, accounted for 17% of bank assets and 0.26% of bank deposits as on Sep 30, 2017.
• **Primary market** - The year 2017-18 (April-November) witnessed a steady *increase in resource mobilisation* in the primary market segment.
• The 10 year G-sec yield has risen sharply in the recent period.
• The stock markets also hit record highs this financial year.

**10.7 External Sector**

• India’s external sector continued to be resilient and strong in 2017-18.
• **International Developments** - The global economy is expected to accelerate from 3.2% in 2016 to 3.6% in 2017 and 3.7% in 2018.
• It reflects an upward revision of the earlier projections by IMF.
**BoP** - India’s balance of payments situation continued to be favourable in the first half of 2017-18 as since 2013-14.

**CAD** - This is despite some rise in the Current Account Deficit (CAD) in the first quarter (Q1).

India’s CAD stood at US $7.2 billion in Q2 of 2017-18.

This translates to 1.2% of the GDP.

It is a sharp decline from 2.5% of GDP in the preceding quarter.

**Trade Deficit** - India’s trade deficit (on custom basis) had widened.

It stood at US $ 74.5 billion in the first half of 2017-18.

This is against a declining trend in CAD observed since 2014-15.

In 2017-18 (April-December) trade deficit (on custom basis) shot up by nearly 46%.

It now stands at US$ **114.9 billion**.

The POL (petroleum, oil and lubricants) deficit and non-POL deficit has grown by nearly 27% and 65% respectively.

**Composition of Trade** - 2017-18 (April-November) witnessed a mixed growth trend in terms of major sectors.

Engineering goods, and petroleum crude and products registered a good export growth.

Chemicals & related products and textiles & allied products witnessed a moderate growth.

However, a negative growth was recorded by the gems and jewellery.

**Prospects** - The prospects for India’s External Sector in this and coming year look bright.

The world trade is projected to grow at 4.2% and 4% in 2017 and 2018 respectively, as against 2.4% in 2016.

The trade of major partner countries is improving, and India’s export growth is also picking up.

However, rise in oil prices is emphasized as a huge challenge in the coming period, posing a downside risk to trade.

However, this could also lead to higher inflow of remittances which have already started picking up.

Supportive policies like the GST, logistics and trade facilitation policies could help balance the risks.

**10.8 Foreign Direct Investment**

FDI equity inflows registered a 0.8% growth in total during 2017-18 (April-October).

But FDI Equity Inflows to the Services sector grew by **15%**.

This is mainly due to higher FDI in two sectors i.e. Telecommunications and Computer Software and Hardware.

25 sectors also including services activities and covering 100 areas of FDI policy have undergone reforms recently.

At present, more than 90% of FDI inflows are through automatic route.
• The reforms have positively contributed to higher FDI inflow.

10.9 Trade Policy

• Two important developments on the trade policy front during the year relate to:
  i. mid-term review of Foreign Trade Policy (FTP)
  ii. multilateral negotiations of WTO in December 2017

• Besides, some developments on the trade logistics front and anti dumping measures are worth mentioning.

• **Foreign Exchange Reserves** - India’s foreign exchange reserves reached **US$ 409.4 billion** on end-December 2017.
  
  • It is a growth by nearly 14% on a y-o-y basis from end December 2016.
  
  • Major economies are running a current account deficit.
  
  • Given this, India is **6th largest foreign exchange reserve holder** among all countries of the world.
  
  • The import cover of India’s foreign exchange reserves was **11.1 months** at end-Sep 2017 (11.3 months at end March 2017).
  
  • Import cover is the number of months of imports that could be supported by a country's international reserves.

10.10 Industrial Sector

• **IIP** - Index of Industrial Production (IIP) (base year 2011-12) indicates industrial output increase of **3.2 %** (April-Nov 2017-18).
  
  • This was a composite effect of robust growth in **electricity generation** and moderate growth in both mining and manufacturing sectors.
  
  • The IIP registered a **25-month** high growth of **8.4%** with manufacturing growing at 10.2%.
  
  • **Core Industries** - The 8 Core Infrastructure Supportive Industries had a cumulative growth of **3.9%** (Apr-Nov 2017-18).
  
  • They eight core industries are:
    1) Coal
    2) Crude Oil
    3) Natural Gas
    4) Petroleum Refinery Products
    5) Fertilizers
    6) Steel
    7) Cement
    8) Electricity
• The production growth of Coal, Natural Gas, Refinery Products, Steel, Cement and Electricity was positive during this period.
• While the production of crude oil and fertilizers fell marginally.
• **Upgrade** - International ratings agency Moody’s upgraded India’s sovereign bond rating for first time in more than a decade.
• India ranked 100 out of 190 countries in *Ease of Doing Business of the World Bank Report 2018*.
• This is an increase of 30 positions over last year’s rank.
• The upgrades are attributed to recent reform measures.
• **Reforms** - These include the GTS, IBC, and announcement of bank recapitalization.
• Make in India programme, Start-up India and Intellectual Rights Policy to boost industrial growth are also the reasons.
• Notable sectoral initiatives include anti-dumping duty, Minimum Import Price (MIP) on a number of items for the steel sector and Pradhan Mantri Mudra Yojana for the MSMEs.
• **Suggestions** - The survey calls for promoting inclusive employment-intensive industry.
• This, along with building resilient infrastructure are said to be vital factors for economic development.

### 10.11 Ease Of Doing Business

• **Status** - *India jumped 30 places* to enter the *top 100* for the first time in the World Bank’s *Ease of Doing Business Report, 2018*.
• It leaped 53 and 33 spots in the taxation and insolvency indices, respectively; an outcome of taxation reforms and IBC, 2016.
• India also registered uptrends in protecting minority investors and obtaining credit, facilitation of electricity, etc.
• **Concerns** - High number of delays and pendency of economic cases in Supreme Court, Economic Tribunals and Tax department.
• This is reflecting in terms of stalled projects, mounting legal costs, contested tax revenues and reduced investment.
• These concerns hamper dispute resolution and contract enforcement.
• **Government Measures** - The Government has taken a number of actions to improve the contract enforcement regime including:
  i. Scrapping of over 1,000 redundant legislations
  ii. Amending the Arbitration and Conciliation Act, 2015
  iii. Commercial Courts Commercial Divisions and Commercial Appellate Division of High Courts Act, 2015
  iv. Expanding the Lok Adalat Programme
• The Judiciary has also expanded the National Judicial Data Grid (NJDG).
• This is near to ensuring that every High Court is digitized.
• **Suggestions** - The Survey suggests coordinated action between government and the judiciary.
• It calls for a *Cooperative Separation of Powers* between judiciary on one hand and executive/legislature on the other.
• This is a horizontal variant of the vertical cooperation between the Centre and States (Cooperative Federalism) in case of GST.
• The Survey also suggests to consider efforts for alleviating pendency in the lower judiciary as a performance-based incentive for States.
• Other suggestions in this regard include:
  1) expanding judicial capacity in lower courts and reducing existing burden on HCs and the SC
  2) limited appeals by tax department considering its low success rate
  3) increasing state expenditure on judiciary, especially for modernization and digitization
  4) focussing on internal specialization and efficiencies of SC by creating more subject-matter and stage-specific benches
  5) prioritizing stayed cases, and imposing stricter timelines by courts, especially when involving government infrastructure projects
  6) improving Courts Case Management and Court Automation Systems

### 10.12 Services Sector

- **State-wise** - The Survey gave a unique State-wise comparison of the performance of the Service sector in India.
- Out of the 32, in 15 states and UTs, the Services Sector is the dominant sector.
- It has contributed more than half of the Gross State Value Added (GSVA).
- However, there is wide variation in terms of share and growth of services GSVA in 2016-17.
- Services GSVA share ranges from over 80% in the case of Delhi and Chandigarh to around 31% in Sikkim.
- Services GSVA growth ranges from 14.5% as in Bihar to 7% in UP.

- **National** - The services sector continued to be the key driver of India’s economic growth.
- It has a share of nearly 55% in India’s Gross Value Added (GVA).
- Evidently, it contributed almost 72.5 % of GVA growth in 2017-18.
- Some of the notable areas include Tourism, Information Technology-Business Process Management, Real Estate, R&D, and Space.

- **Exports** - India’s services sector registered an export growth of 5.7% in 2016-17.
- India remained the 8th largest exporter in commercial services in the world in 2016.
- It comes with a share of 3.4% globally.
- This is double the share of India’s merchandise exports in the world which is 1.7%.
- Both growths in services exports and services imports were robust.
- Resultantly, the Net services receipts rose by 14.6% during first half of 2017-18.
- The Net surplus in the services financed about 49% of India’s merchandise deficit in this period.
- Increase in incentives under Services Exports from India Schemes (SEIS) contributed to services growth considerably.
- Enhanced global uncertainty, protectionism and stricter migration rules would be key challenges in shaping future services exports.

### 10.13 Infrastructure

- **Status** - The Economic Survey draws attention to the Global Infrastructure Outlook.
- It forecasts around US$ 4.5 trillion worth of investments for India till 2040 to develop infrastructure.
- This is said to be essential for both economic growth and community wellbeing.
- India certainly lags behind many emerging economies in terms of providing qualitative transportation related infrastructure.

- **Roadways** - The primary agenda has been building new National Highways (NHs) and converting State Highways (SHs) into NHs.
• But, States with lower Per capita GSDP have low density of Other Public Work Department (OPWD) Road/District Road.

• Addressing this is essential to provide better access and thereby enhancing economic activities.

• Government has taken steps for streamlining of land acquisition and environment clearances to expedite delayed projects.

• The umbrella programme 'BharatmalaPariyojana' aims to achieve optimal resource allocation for holistic highway development.

• Railways - Railways showed an increase of over 5% in revenue- earning freight traffic carrying during 2017-18 (upto Sep 2017).

• The pace of commissioning Broad Gauge (BG) lines and completion of electrification have been accelerated.

• Over 400 kms of metro rail systems are operational across the country.

• And another 680 kms (appx.) are under construction in various cities across India.

• Ports - The port-led development along Indian coast line is undertaken under SagarmalaProgramme.

• Almost 289 Projects worth over Rs. 2 Lakh Crore are under various stages of implementation and development.

• The cargo traffic handled at Major Ports has shown a marginal increase in the last year, valuing to around 500 million tonnes.

• Telecommunication - The Survey made mention of programmes like ‘Bharat Net’ and ‘Digital India’.

• It expressed hope that these could convert India into a digital economy.

• Out of around 1200 million total subscribers, roughly 500 and 700 million connections were in the rural and urban areas respectively.

• Civil Aviation - Domestic airlines has showed a growth rate of 16% in 2017-18 (April - Sep 2017) over the previous year period.

• This is in terms of increase in passenger carrying.

• Initiatives like liberalization of air services, airport development and regional connectivity through scheme like UDAN are being taken up.

• Power - All-India installed power generation capacity has reached well over 3.3 lakh MW till Nov, 2017.

• The Ujjawal DISCOM Assurance Yojana (UDAY) has focused on enhancing the financial health of DIStribution COMpanies.

• It has reduced their interest burden, cost of power and aggregated technical and commercial losses.

• Electrification in 15,183 villages has been completed.

• Saubhagya (Pradhan Mantri Sahaj Bijli HarGhar Yojana), was launched in September 2017.

• This is to ensure electrification of all remaining willing households in the country in rural and urban areas.

• Logistics - The Indian logistics industry has grown at a compound annual growth rate (CAGR) of 7.8% during the last five years.

• The logistics sector provides employment to more than 22 million people.

• In World Bank's 2016 Logistics Performance Index India improved to 35th rank in 2016 from 54th in 2014.

• Housing - India's housing policies have been mostly focused on building more homes and on home ownership.

• The Economic Survey suggests a more holistic approach taking into account rentals and vacancy rates.
In turn, this needs attention on contract enforcement, property rights and spatial distribution of housing supply vs. demand.

10.14 Agriculture

Feminisation

- **Feminisation** - The Economic Survey points to a trend of ‘feminisation’ of agriculture sector.
- This is a consequence of growing rural to urban migration by men.
- There is an increasing number of women in multiple roles as cultivators, entrepreneurs, and labourers.
- They make presence at all levels of the agricultural value chain.
- It includes production, pre-harvest, post-harvest processing, packaging, and marketing.
- **Significance** - Globally, empirical evidence suggests the decisive role of women in ensuring food security and preserving local agro-biodiversity.
- Rural women are responsible for the integrated management and use of diverse natural resources to meet the daily household needs.
- Importantly, the entitlements of women farmers will be the key to improve agriculture productivity.
- **Measures** - The following measures have been taken to ensure mainstreaming of women in agriculture sector:
  i. earmarking at least 30% of the budget allocation for women beneficiaries in all ongoing schemes and initiatives
  ii. initiating women centric activities to ensure benefits of various beneficiary-oriented programs/schemes reach them
  iii. focusing on women self-help groups to connect them to micro-credit, ensuring representation in decision-making bodies
  iv. declaring 15th October of every year as Women Farmer’s Day, acknowledging the role of women in agriculture
- **Way ahead** - Women farmers’ enhanced access to resources like land, seeds, water, credit, markets, technology and training is a necessity.
- India needs an ‘inclusive transformative agricultural policy’ aimed at gender-specific intervention.

Mechanisation

- **Trend** - The survey highlights that Indian Farmers were adapting to farm mechanization at a faster rate in comparison to recent past.
- Indian tractor industries have emerged as the largest in the world.
- They account for about 1/3rd of total global tractor production.
- The sale of tractors to a great extent reflects the level of mechanization.
- In 1960-61, about 93% farm power was coming from animate sources, which has reduced to about 10% in 2014-15.
- On the other hand, mechanical and electrical sources of power have increased from 7% to about 90% during the same period.
• **Need** - According to the World Bank estimates, half of the Indian population would be urban by the year 2050.
• It is estimated that the percentage of agricultural workers in total work force be around 25% by 2050.
• This is a huge drop from about 58 in 2001.
• Moreover, intensive involvement of labour in different farm operations makes the cost of production of many crops quite high.
• All these call for a more enhanced level of farm mechanization in India.
• **Suggestion** - Institutionalization through custom service or a rental model is suggested for availing high cost farm machinery.
• It could be adopted by private players or State or Central Organization in major production hubs.
• This is significant to reduce the cost of operation.

**Land Holdings Consolidation**

• There is predominance of small operational holding in Indian Agriculture.
• The survey thus stresses the need for land holdings consolidation.
• This is especially essential for reaping the full benefits of agricultural mechanization.

**Interest Subvention**

• A sum of around Rs.20,000 crore has been approved in 2017-18 to meet various obligations arising from interest subvention.
• This includes those provided to the farmers on short term crop loans and also loans on post-harvest storages.
• These credits meet an important input requirement, especially those of small and marginal farmers who are the major borrowers.
• The Survey adds that institutional credit helps delinking farmers from non-institutional sources of credit (at high rates of interest).
• Moreover, the crop insurance under Pradhan Mantri Fasal Bima Yojana (PMFBY) is being linked to availing of crop loans.
• Both of this would give farmers the combined benefit.

**Market Reforms**

• **e-Nam** - The electronic National Agriculture Market (e-NAM) was launched by Government on April, 2016.
• It aims at integrating the dispersed APMCs (Agricultural Produce Market Committee) through an electronic platform.
• It enables price discovery in a competitive manner to offer remunerative prices to farmers for their produce.
• **KCC** - The Survey stresses the need for small and marginal farmers to hold their Kisan Credit Card (KCC).
• This is to avail post-harvest loans by storing their produce in the accredited warehouses.
• **Loans at interest subvention of 2%** on such storages for a period of upto 6 months are offered.
• This is essential to supplement the market reforms and sell when the market is buoyant, and avoid distress sale.
Farmers' Income

- Economic Survey emphasizes the Government’s goal to double farmers' income by 2022.
- The credit from institutional sources will complement all government initiatives in this regard.
- These include Soil Health Card, Input Management, Per Drop More Crop in Pradhan Mantri Krishi Sinchai Yojana (PMKSY), PMFBY, e-Nam, etc.

Innovation

- Agricultural R&D is reiterated as the main source of innovation for sustaining agricultural productivity growth in the long-term.
- The actual expenditure of Department of Agricultural Research and Education/ICAR has increased during 2010-11 to 2017-18.
- The compound annual growth rate of expenditure has been 4.2% over the years.
- During the current year (2017-18), investment in Agriculture Research and Education protected new Agricultural innovation.
- Evidently, there was significant number of patent applications at Indian patent Office (IPO).
- Also, copyright and trademark applications filed by ICAR for products and processes.
- New Varieties/hybrids tolerant to biotic and abiotic stresses were released for cultivation in different agro-ecologies of the country.
- These have been developed for Cereals, Pulses, Oilseeds, commercial crops and Forage crops (for use as feed for animals).

10.15 Climate Change

- Commitments - Survey lays emphasis on India’s commitment to environment and response to the threat of climate change.
- This is in accordance with the principles of equity and Common But Differentiated Responsibilities.
- Also, with the “Paris Pledge” to reduce the emission intensity of GDP by 33-35% over 2005 levels by the year 2030.
- Measures - The survey mentions the establishment of 8 Global Technology Watch Groups to keep track of the state-of-the-art technologies emerging globally.
- It is part of the National Mission on Strategic Knowledge for Climate Change (NMSKCC).
- This is one of the 8 missions under the National Action Plan on Climate Change.
- Also, the extension of Climate Change Action Programme launched in 2014 for the period 2017-18 to 2019-20.
- It also make note of the continuation of National Adaptation Fund on Climate Change till 31st March 2020 with additional financial allocation.

10.16 Sustainable Development

- Urban India - India’s urban population is projected to grow to about 600 million by 2031.
- How cities, the centres of economic activity, deliver on varied basic services will determine the path and progress of sustainable development.
• The survey thus suggests Urban Local Bodies to generate resources through varied financial instruments.
• These include municipal bonds, PPPs and credit risk guarantees.
• **Renewable energy** - The Survey states access to sustainable, modern and affordable energy as the basis of achieving Sustainable Development Goals.
• The increasing share of renewables has tripled in the last 10 years.
• As on 30th November 2017, the share of renewable energy sources was 18% in the total installed capacity of electricity in the country.
• International Solar Alliance (ISA) entered into force in December, 2017.
• The coalition paves the way for future solar generation, storage and good technologies for each member country’s individual needs.

**10.17 Air Pollution**

• **Delhi** - The Survey expresses concern over air pollution in Delhi with the onset of winter due to various factors.

  It ascribes four main reasons for Delhi’s worsening air quality:
  
  i. crop residue, biomass burning 
  ii. vehicular emissions and redistributed road dust 
  iii. industries, power plants 
  iv. winter temperature inversion, humidity and absence of wind 

• **Suggestion** - Coordination between agencies and Central and State, sustained civic engagement is recommended.

• Using satellite-based tools to detect fires, penalties on burning of agricultural waste, congestion pricing for vehicles are taken up.

• Improving public transport system and modernized bus fleets, phasing out old vehicles, accelerating BS-VI are other measures.

• Further, use of technology to convert agricultural waste into usable fodder or bio-fuels, shift to non-paddy crops, straw management system are also suggested.

• Agricultural cooperatives and local bodies are called for increased roles in implementation.

• **Indoor pollution** - The survey mentions the adverse impact of indoor pollution on women and children.

  It accentuated the need for access to modern energy sources.

• **Measures** - Pradhan Mantri Ujjwala Yojana was launched in 2016 to provide 80 million LPG connections by 2020 to BPL households.

  Ujjwala Plus complements the above, to address the cooking needs of deprived people not covered under the Socio-Economic Caste Census (SECC) 2011.

  The Deen Dayal Upadhyaya Gram Jyoti Yojana was launched in 2015 to achieve 100% village electrification.
10.18 Social Expenditure

- **Expenditure on Social services** by the Centre and States as a proportion of GDP stands at 6.6% in 2017-18 (BE).
- Components-based expenditure on social services in relation to GDP in 2017-18 (BE):
  i. **Education** - 2.7%
  ii. **Health** - 1.4%
  iii. **Others** - 2.6%
- **Significance** - Priority to social infrastructure are stated as essentials to inclusive and sustainable growth.
- Bridging the gender gaps in education, skill development, employment earnings, reducing social inequalities find mention in the survey.
- These are emphasized as underlying goals of development strategy and to grow as a leading knowledge economy.

10.19 Education

- The Survey highlights India’s commitment to achieve the Sustainable Development Goal (SDG- 4) for education.
- **RTE Act, 2009** is an initiative towards the goal of universalization of elementary education.
- There is substantial improvement in the enrolment and completion rates of education in both primary and elementary school.
- There is also an increased percentage of schools which comply with **Student Classroom Ratio (SCR)** and **Pupil Teacher Ratio (PTR)** at the all India level.
- However, there are inter-state variations in adherence to SCR and PTR norms.
- **Gender Parity Index (GPI)** at the primary and secondary levels of school has shown improvement.
- This is attributed to the success of programmes like Beti Padhao, Beti Bachao in addressing gender bias in access to education.

10.20 Labour Reforms And Participation

- **Initiatives** - The Survey mentions the technology enabled transformative initiatives such as:
  i. Shram Suvidha Portal (facilitate reporting of Inspections, and submission of Returns)
  ii. Ease of Compliance (to maintain registers under various Labour Laws/Rules)
  iii. Universal Account Number
  iv. National Career Service portal (linking all employment exchanges)
- These aim at reducing complexity in compliance and bringing transparency and accountability in labour laws enforcement.
- **Maternity Benefit (Amendment) Act, 2017**, offers women entitlement to enhanced maternity leave for a period of 6 months.
- **Mahila E-Haat** is launched to provide e-marketing to products made/manufactured/sold by women entrepreneurs/SHGs/NGOs.
- **Legislation** - The legislative reforms in Labour sector include rationalizing 38 Central Labour Acts into 4 labour codes.
• They are the Codes on Wages, Safety and Working Conditions, Industrial Relations, Social Security and Welfare.

• Creation of employment opportunities and providing sustainable livelihoods for those in informal economy are the prime objectives.

• **Gender Gap** - India's gender gap in labour force participation rate is more than 50 percentage points.

• This is relatively high among many developing countries.

• Women workers are the most disadvantaged in the labour market as they:
  
  i. constitute a very high proportion among the low skilled informal worker category
  
  ii. engaged in low-productivity and low paying work

• The lower participation of women in economic activities adversely affects the growth potential of the economy.

• **Political participation of women**, in a country like India with around 49% of women in the population, has been low.

• As per the 'Women in Politics' 2017 report:
  
  i. Lok Sabha - 11.8% women MPs
  
  ii. Rajya Sabha - 11% women MPs

• Moreover, only 9% of MLAs across the country are women.

• Notably, there are developing countries like Rwanda which has more than 60% women representatives in Parliament.

• **Nai Roshni** (leadership development programme for benefiting the women belonging to minority communities) is operational.

• **Mahila Shakti Kendra** scheme has been launched for leadership development and to address women's issues at village levels.

• **MGNREGA** - The Survey mentions that there has been highest ever budget allocation under MGNREGA during 2017-18.

• About 4.6 crore households were provided employment under the Mahatma Gandhi National Rural Employment Guarantee Act.

• Out of this, 54% were generated by women, 22% by Schedule Castes and 17% by Schedule Tribes, indicating the social reach.

### 10.21 Pink-Colour Economic Survey - Gender Issues

• **Pink** - The colour was chosen as a symbol of support for the growing movement to end violence against women.

• The survey lays special emphasis on Gender and Son meta-preference.

• Implicit in adopting pink is the assumption that it is the colour preferred by women.

• However, this in itself is argued as a gender stereotype.

• Various studies have proven wrong the notion that pink colour was the favoured colour of women.

• **Multi-dimensional Assessment** - Assessments have been made based on three specific dimensions of gender namely:

  i. **Agency** (women’s ability to make decisions on reproduction, spending on themselves and on their households, their own mobility and health).
• **Attitudes** (attitudes about violence against women/wives, ideal number of daughters preferred relative to the ideal number of sons).

• **Outcomes** ('son preference' measured by sex ratio of last child, female employment, choice of contraception, education level, age at marriage, age at first birth, physical or sexual violence experienced by women).

• In the last 10-15 years, India’s **performance improved on** 14 out of 17 indicators of women’s agency, attitudes, and outcomes.

• **India lags on indicators such as** employment, son preference and use of reversible contraception (contraception for an extended period without requiring user action).

• **Heterogeneity** - The North-Eastern states continue to be a model for the rest of the country.

• **Hinterland states are lagging** behind in aspects of gender equality.

• Worryingly, some southern states do less well than their development levels would suggest.

• **Son preference** - 'Son Meta-Preference' is where parents continue to have children until they have the desired number of sons.

• Meta-preference was measured using an indicator called **sex ratio of the last child (SRLC)**.

• Certainly, SRLC was heavily skewed in favour of boys.

• This meta-preference leads to the notional category of ‘unwanted’ girls which is estimated at over 21 million.

• The **adverse sex ratio** of females to males has led to 63 million "missing" women (difference in actual and expected number of women).

• Beti Bachao, Beti Padhao, Sukanya Samridhi Yojana schemes, and mandatory maternity leave rules are all steps in addressing these shortfalls.

### 10.22 Health

• The Survey reiterates India’s commitment to achieve the targets under Sustainable Development Goals-3 (SDG-3).

• Some of the goals are aligned with the National Health Policy 2017.

• The Policy recommends increasing **State sector health spending** to more than 8% of the States’ Government Budget by 2020.

• Strengthening **health delivery systems** and achieving **universal health coverage** are the objectives.

• **Expenditure** - **Government healthcare providers** accounted for about 23% of the Current Health Expenditure (CHE).

• This reflects the prominence of private hospitals and clinics among health care providers.

• **OoPE** - **Out of Pocket Expenditure** (OoPE) has declined approximately 7 percentage points during 2004-05 to 2014-15.

• However, its share is still around 62% in total health expenditure.

• The higher levels of Out of Pocket Expenditure (OoPE) on health adversely impact the poorer sections and widen then inequalities.

• Lack of **affordable diagnostic facilities** consumes a significant part OoPE.

• **Average prices of diagnostic tests** widely vary across cities, despite government’s efforts to regulate prices of Drugs and Diagnostics.
**DALYs** - The concept of Disability Adjusted Life Years (DALYs) helps analyse the disease burden and associated risk factors.

- It is the sum of years of potential life lost due to premature mortality and the years of productive life lost due to disability.

- The Survey advocates understanding the efficiency of public spending with respect to DALYs behaviour across major States.

- This is to assess whether high spending by States on health results in better health outcomes.

**LEB** - There has been significant improvement in the health status of individuals in India.

- Evidently, life expectancy at birth has increased by 10 years during the period from 1990 to 2015.

- States with higher life expectancy are reflecting lower DALYs rates i.e. lower incidence of diseases and vice-versa.

**Risk factors** - Malnutrition still remains the most important risk factor, despite the drop in rate from 1990.

- Integrated Child Development Services, Pradhan Mantri Matru Vandana Yojana, National Nutrition Mission are efforts at addressing this.

- The contribution of air pollution to disease burden is high in India with levels of exposure remaining among the highest in the world.

**Pradhan Mantri Ujjwala Yojana** is a measure in this regard.

- The other key risk factors include dietary risks, high blood pressure and diabetes etc.

- The Survey points to a shift in disease burden from Communicable Diseases to Non-Communicable Diseases over last two decades.

**Way Ahead** - The disease burden can be reduced substantially, if the risk factors related to health loss are addressed effectively.

- Also, ensuring the efficiency in use of resources towards health care is essential to translate expenditure into improved outcomes.

- In this context, the increase in use of antibiotics and resultant Antimicrobial resistance is a cause for concern.

### 10.23 Sanitation

- The Survey asserts the importance of quality of hygiene and sanitation for improving the health outcomes.

**Coverage** - Sanitation coverage in rural India is stated to have increased from 39% in 2014 to 76% in January, 2018.

- It is mainly attributed to Swachh Bharat Mission (SBM) (Gramin) launched in 2014.

**ODF** - The number of persons defecating in open in rural areas has significantly declined, creating positive health and economic impact.
• So far, 296 districts and around 3 lakh villages all over India have been declared Open Defecation Free (ODF).
• 8 states (Sikkim, Himachal Pradesh, Kerala, Haryana, Uttarakhand, Chhattisgarh, Arunachal Pradesh, Gujarat) are declared ODF completely.
• 2 Union Territories (Daman & Diu and Chandigarh) also join this category.
• The NSSO and Quality Council of India’s surveys reported more than 90% of individuals, who have access to toilets, using them.
• UNICEF report, ‘The Financial and Economic Impact of SBM in India’, estimated that a household in an ODF village saves Rs 50,000/- a year.

10.24 Fiscal Federalism

Concern

• **RLGs** - The Survey highlights the low level of tax collections by the Rural Local Governments in India.
  - RLGs received about 95% of their revenues from the devolved funds from the Centre/State.
  - RLGs in India generate only about 6% of revenues from own resources compared to 40% in Brazil and Germany.
• **ULGs** - On the other hand, the urban local governments generate 44% of their total revenue from own sources.
  - ULGs also collect 18% of total revenues from direct taxes, much closer to International norms.
  - This highlights the difference in fiscal empowerment between urban local governments and rural local governments in India.
• **Direct Taxes** - Direct Taxes account for only about 35% in India as against 70% in Europe.
  - Indian States generate only about 6% of their revenue from direct taxes as against 19% and 44% in Brazil and Germany respectively.
  - Moreover, unlike in other countries, reliance on direct taxes in India seems to be declining.
  - This trend will only be reinforced if GST proves to be a buoyant source of revenue.
• **Development** - Economic and political development has been associated with a rising share of direct taxes in total taxes.
  - When countries rely on non-tax sources of government revenues, economic and institutional development could remain stunted.

Cause

• Some State Governments have not devolved enough taxation powers to the Panchayats.
• Notably, permissible taxes for Panchayats include Property and Entertainment Taxes but not Land Taxes or Tolls on roads.
• Even in cases where more powers are devolved, land revenue collection remained low.
• This is due to low base values applied to properties and also low rates of taxes levied.
• Other reasons that the Economic Survey suspects are
  i. unwillingness to tax by the state, possibly due to close proximity between the state and the citizens
  ii. unwillingness by abled citizens to pay because of dissatisfaction with the quality of services they are receiving
  iii. Centre and States’ desire to use their devolution powers to control lower levels of government
Suggestion

- Low tax collections at lower levels are certainly posing a challenge in reconciling fiscal federalism and accountability.
- The Survey calls for better data and evidence to evaluate the impact of 73rd and 74th Constitutional Amendments.
- This is to assess the fiscal empowerment of Rural and Urban local governments, India’s federal structure, its governance and accountability.
- The Survey emphasized the importance of fiscal decentralization.
- Fiscal decentralization is grounded on the idea that spending and tax decisions must reflect local preferences as far as possible.
- This is essential to address the issue of low tier governments remaining stuck in a ‘low equilibrium trap’ depending largely on outside resources.

10.25 Financial Savings & Investment

- India witnessed an unprecedented climb to historic high levels of investment and saving rates in the mid-2000s.
- However, this has been followed by a gradual decline and slowdown still continues.
- **Savings** - The ratio of domestic saving to GDP fell from the peak 38.3% in 2007 to about 29% in 2016.
- **Investment** - In India, the investment slowdown started in 2012.
- There is an overall investment decline of the 6.3 percentage points over 2007-08 and 2015-16.
- Out of this, the private investment accounts for 5 percentage points.
**Trend in India** - The current slowdown where both investment and saving have slumped is the first in India’s history.

India’s current investment/saving slowdown episode has been lengthy compared to other cases and it still continues.

The cumulative fall over 2007 and 2016 has been milder for investment than saving.

However, India’s investment slowdown is unusual.

It is so far relatively moderate in magnitude, long in duration, and started from a relatively high peak rate of 36% of GDP.

Moreover, it has a specific nature, in that it is a balance sheet-related slowdown indicating financial stress of companies.

**Response** - Policy priorities over the short run focused on mobilizing the locked up savings.

This was through attempts like unearthing the black money and encouraging the conversion of gold into financial saving.

**Need** - The share of financial saving is already rising in aggregate household saving.

There is a clear shift visible towards market instruments, largely driven by demonetization.

The concern is that, investment slow downs are more detrimental to growth than savings slowdown.

So, given the changing trend in savings side through recent measures, the need now is to focus more on investment revival.

**Suggestion** - The policy conclusion is urgent prioritization of investment revival to arrest the more lasting growth impacts.

**10.26 Science & Technology**

The Survey records transformation of Indian Science & Technology in the last one year in the outputs.

**Publications** - In 2013, India ranked 6th in the world in scientific publications and its ranking has been increasing as well.

The growth of annual publications between 2009 and 2014 was almost 14%.

This growth increased India’s share in global publications from 3.1% in 2009 to 4.4% in 2014.

Broadly, the publication trends reveal that India is gradually improving its performance.

In addition to increasing publications, trends in quality are also stated to be slowly improving.

The Nature Index that assesses counts of high-quality research outputs ranked India at 13 in 2017.

**Patents** - According to the WIPO, India has the world’s 7th largest Patent Filing Office.

However, India produces fewer patents per capita.

One major challenge in India has been the domestic patent system.

While India’s patent applications and grants have grown rapidly in foreign jurisdictions, the same is not true at home.

Indian residents were granted over 5000 patents in foreign offices in 2015.
• But the number of resident filings in India was little over 800.
• Residential applications have increased substantially since India joined the international patent regime in 2005.
• However, the number of patents granted fell sharply post-2008 and has remained low.
• Measures - The government has recently hired over 450 additional patent examiners.
• It has also created an expedited filing system for Indian residents in 2017, which are welcome interventions.
• Beyond patent filing side, addressing patent litigation issues will be crucial to ensure patent system effectively rewards innovation.

10.27 Net Producer Of Knowledge
• The Survey calls for the need to gradually move from being a net consumer of knowledge to becoming a net producer.
• There is a sluggish pace and expansion of scientific research and knowledge on the one hand.
• On the other hand, generally higher importance is given to careers in engineering, medicine, management and government jobs.
• India thus needs to rekindle the excitement and purpose that would attract more young people to scientific enterprise.
• Laying this knowledge foundation is essential to address some of India’s most pressing development challenges.
• Investing in science is also fundamental to India’s security:
  i. the human security of its populations
  ii. national security challenges from emerging threats ranging from cyber warfare to autonomous military systems
  iii. the resilience to address the multiple uncertainties due to climate change

10.28 Late Converger Stall
• What - The present era is one of 'economic convergence'.
• It is a condition where the poorer countries have grown faster than richer countries and closed the gap in standards of living.
• E.g. India moved from being a low income country in 1960 to a lower middle income country in 2008.
• It is now attempting to make a transition to middle income status.
• Notably, India is one among the countries that are trying to make this transition after the global financial crisis (2008).
• There are now apprehensions that this process of convergence may slow down for the 'late converger' countries like India.
• This is termed as the fear of "late converger stall".
• Challenges - The Survey notes that India needs to take on four challenges to ward off this fear.
• The four challenges in the process of economic development are:
  1. the backlash against globalization which reduces exporting opportunities
  2. the difficulties of structural transformation of transferring resources from low productivity to higher productivity sectors
  3. upgrading human capital to the demands of a technology-intensive workplace
  4. coping with climate change-induced agricultural stress
• Globalisation - Some ‘early convergers’ were able to post average export growth rates of over 15% for 30 years of their convergence periods.
• These include the countries like Japan, South Korea and China.
• However, a backlash in advanced countries against rapid globalization has led to a fall in world trade GDP ratios since 2011.
• This means a decline in exporting opportunities.
• Thus the advantage of favourable trading environment that early convergers had has begun to reverse.
• This could be a challenge for the late convergers like India.
• Structural Transformation - There is a difference in correlation between overall growth and 'good growth' between the early and late convergers.
• Dynamic sectors are those with high levels of productivity and potential for unconditional convergence.
• Good growth comprises growth accounted for by labour share shifts into these good sectors and their productivity growth.
• In this context, manufacturing is a critically important sector for ensuring a desired, successful transformation.
• However, “premature de-industrialization” is the scenario with manufacturing in many late convergers.
• The tendency for late convergers in manufacturing is to peak at lower levels of activity and earlier in the development process.
• This is a cause for concern.
• Because the shift is from informal, low productivity sectors to sectors that are only marginally less formal and only marginally more productive.
• This is a case of “thwarted structural transformation” which India needs to reckon with.
• Upgrading human capital - Late convergers like India have failed to provide even the basic education necessary for structural transformation.
• Evidently, in India, roughly 40 to 50% of rural children in grades 3 to 8 cannot meet the basic learning standards.
• Technology-intensive workplace will increasingly favour skilled human capital in the coming years.
• However, given the skilling shortfall, human capital frontier for the new structural transformation will shift further away.
• There is, however, some optimism that the trend has started to improve since 2014.
• Climate change - Growth rates of agricultural productivity for richer countries have been consistently greater than for developing countries.
• For India, agricultural productivity growth has been stagnant, averaging roughly 3% over the last 30 years.
• India is also vulnerable to temperature increase and still heavily dependent on rainfall.
• For late convergers, agricultural productivity is critical for feeding the population.
• But more importantly, it is essential in human resource aspect.
• This is given the transfer of human resource from agriculture to the modern sectors.
• Also, improving agricultural productivity is a key to achieving sustainable growth, given climate change and water scarcity.
• The Survey concludes that as of now India may not be faced with a “Late Converger Stall”, but need to act in time to ward it off.

11. MISCELLANEOUS

11.1 Nobel Prize for Economics 2017

Why in news?
Recently Richard H. Thaler, an American received Nobel Prize for his behavioural Economic theory.

What are the bases of economic theories?
• Most economic theories are based on a certain set of assumptions without which it would be difficult to talk in a coherent fashion about any theory; these assumptions simplify the complex everyday reality.
• So an economic model could assume that economic agents have perfect information or that the transaction costs are zero.
• In a similar vein, one of the dominant assumptions has been about economic agents being rational.
That is to say, they only act in self-interest, but often enough there are gaps between the behaviour as predicted by the model and as it is in reality.

**What is the finding of Thaler?**

- He has refined economic analysis by taking into account three psychological traits
- **Limited rationality** - It underlines that it is not realistic to assume that individuals could be completely rational and think of all possible effects of their choices.
- Thaler built on this insight to come up with his theory of mental accounting, which describes how people organise, formulate and evaluate financial decisions.
- For instance, this tendency to create separate mental accounts for day-to-day expenses and holiday expenditure explains why individuals might not dip into their long-term savings and instead use a credit card to tide over some imbalances in daily expenses.
- **Perceptions about fairness** - Full rationality assumption of traditional theories cannot explain behaviour when it deviates to accommodate an individual’s sense of fairness.
- Through large experiments, Mr Thaler shown how people can set aside personal gain and concern themselves with questions of fairness.
- For instance, Consumers judge negatively a company which is seen to be unjustly raising prices in times of pressure.
- **Lack of self-control** - Actual human behaviour has shown that people may, contrary to notions of rationality, choose something that goes against their interest.
- For instance, a smoker who chooses to yield to an immediate temptation instead of favouring better health in the longer term.

**Why Thaler’s contribution is significant?**

- His contribution goes to the very heart of economic modelling and has a profound impact on many areas of economic research.
- Since field of economics concerns itself with how human behaviour explains the deviations from the established theoretical model, it has wide-ranging impact.
- Studying the so-called “irrationalities” has implications for
  1. Financial behaviour - Something like unjustified market volatility
  2. Marketing - The “buy two get one free” schemes providing a sense of having gained.
  3. Public policy making - Wherein politicians “nudge” individuals towards a societal improvement.

### 11.2 Paradise Papers - Offshore Companies

**Why in news?**
Centre reconstitutes the Multi-Agency Group formed in 2016 to investigate disclosures on Paradise Papers.

**What is the Multi-Agency Group?**

- The latest report comes a few months after a similar ‘Panama Papers’ disclosure that came in 2016.
- The Panama Papers named several prominent Indian politicians, actors, and businessmen as having offshore undisclosed bank accounts.
- Following this, a Multi-Agency Group (MAG) was constituted.
- The government has now reconstituted this MAG led by the Central Board of Direct Taxes (CBDT), to investigate cases relating to the ‘Paradise Papers’ data disclosure.
This will have representatives from CBDT, Enforcement Directorate, Reserve Bank of India and the Financial Intelligence Unit.

What are the concerns?

- **Legality** - It is not necessarily illegal to set up offshore companies.
- This is because India has double-taxation avoidance agreements (DTAAs) with several countries with lower tax rates than its own.
- The companies incorporated in such countries can use their tax residency certificates (TRC) to enjoy the tax benefits available legally.
- **Concerns** - However, increasingly, companies and bank accounts are created overseas, providing nominee office-bearers and facilitating bank loans or transfer of shares in multiple secrecy jurisdictions.
- This essentially means using or incorporating overseas shell companies to take tax advantages through illegal means.
- A company is generally entitled to arrange its financial affairs in whichever way it wishes, to reduce its tax liability.
- The fact that the motive for a particular transaction is to avoid tax does not necessarily invalidate the transaction unless the law of the land specifies so.
- There is a corporate army engaged in imaginative bookkeeping to discover and exploit legal loopholes to evade tax in most cases.
- The burden of justification thus is always on the financial regulators.
- **Revelations** - The recent disclosures help regulators overcome the obstacle of secrecy, enabling them to investigate instances of financial malpractices.
- The sheer size of the Paradise Papers disclosures and the corporate-centric leads they provide, mark a big step forward.
- Such insight into corporate ingenuity allows regulators to bring in better laws and global tax reforms.

11.3 Why MNEs need to recalibrate their strategies?

**Why in news?**

India recently signed a multilateral pact that would help it gain a better understanding on the way multinational enterprises (MNE) structure their operations around the world and allocate incomes and taxes paid.

**What is the issue?**

- The Base Erosion and Profit Shifting (BEPS) project represents a number of coordinated actions agreed upon by several countries, intended to avoid double “non-taxation” that comes to be when companies take recourse in tax treaties.
- However, its implementation and consequences go well beyond that and touch aspects of businesses that require MNEs to draw up a different set of strategies and restructure operating models.

**What is the need of BEPS?**

- The BEPS project is a response to several developments in the global economy that existing tax treaties had not envisaged, in addition to the overarching nature of the technological advances that allowed MNEs to conduct their businesses legitimately without significant presence on ground.
- In the process, MNEs took advantage of fiscal incentives provided by certain countries and retained the share of profits in such jurisdictions, not having to pay taxes where a majority of customers would transact with them digitally across jurisdictions, or structuring transactions by way of capital structures that allowed excessive deductions for cost of financing.
How BEPS is a solution for this?

- The 15 Actions arising out of BEPS are built on pillars of coherence, substance and transparency and rest on the foundations of the digital economy that represents the ecosystem and the Multi-lateral Instrument (MLI) that breathes life into these actions.

- The BEPS Actions and MLI are characterised by the OECD member countries and the G-20 nations to work in coordination in implementing the measures, that have been formulated and legislated globally in a record time of about 36 months.

What is the impact on India?

- One of the BEPS actions that impact decision-making for businesses in India, is interest limitation.

- By placing a ceiling of 30% of EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortization) on interest deduction, in respect of borrowings from or borrowings guaranteed by associated enterprises, MNEs will have to reconsider their capital structures, so as to either stay within this limit, or structure the debt in a manner that the interest can be effectively absorbed by the ebitda over a period of eight years.

What is equalization levy?

- Equalization levy is a measure introduced by India in response to the digital economy.

- The scope of equalization levy, charged at the rate of 6% on specified services, presently extends to payments made for online advertising and operates as a deduction from the consideration paid to non-resident e-commerce companies to put them on an even keel with residents; however, it is non-creditable under tax treaties.

- The scope of services could increase to include cloud services, for instance, and MNEs have to therefore factor this as a cost for doing business in India.

What is the role of Transfer pricing?

- Transfer-pricing aims at structuring transactions between enterprises within the MNE group as if they had been between unrelated parties in uncontrolled conditions.

- There are a raft of transfer-pricing measures that set up booby traps to prevent MNEs from following intra-group transaction structures that disconnect actual functions performed from the assumption of risk and control of capital.

How CBCR can be utilised?

- Country by country reporting (CBCR) and the maintenance of three-tier documentation will provide revenue authorities across the globe “world-on-a-page” profile of the MNE.

- The CBCR is intended to be used as a risk-assessment tool, but its widespread usage and the possibility of making it public in the European Union, could make it a bone of contention for Revenue authorities, leading upto disputes on transfer-pricing or characterisation by adopting profit-split or similar approaches, in line with the principle that enterprises should pay tax where they actually make profits.

What is the way forward?

- Businesses have to therefore brace for more controversy in the wake of BEPS, and the unique construct of the MLI—that is to be read alongside existing treaties for the implementation of BEPS—to that end, facilitates dispute resolution by way of mutual agreement procedures.

- BEPS is a double-edged sword that promises to usher in an era of cooperative competition among Revenue authorities by eliminating harmful tax practices and treaty abuse, while requiring MNE businesses to re-calibrate their geographical presence, asset-allocation and people-deployment strategies in light of this new reality.

11.4 Bitcoins in India

How do Bitcoins work?

- Bitcoin was introduced in 2008 by still unidentified inventor who goes by the name ‘Satoshi Nakamoto’.

- Bitcoin has no central monetary authority.

- It is underpinned by a peer-to-peer computer network made up of its users’ machines called block chain.
Bitcoins are mathematically generated as the computers in this network solve various mathematical tasks.
This procedure is known as Bitcoin “mining”.
The mathematics of the Bitcoin system is set up in such a way that it becomes progressively more difficult to “mine” Bitcoins over time.
The total number that can ever be mined is limited to around 21 million.
For every verified number that is ‘mined’, the Bitcoin network allocates 12.5 bitcoins (~ $30,000) to the miner.
When more people accept bitcoin or other crypto currencies for goods and services, their value increases.
There is therefore no way for a central bank to issue a flood of new Bitcoins and devalue those already in circulation.
The entire network is used to monitor and verify both the creation of new Bitcoins through mining, and the transfer of Bitcoins between users.
A log is collectively maintained of all transactions, with every new transaction broadcast across the Bitcoin network.
Participating machines communicate to create and agree on updates to the official log.
Bitcoins can be bought and sold in return for traditional currency on several exchanges, and can also be directly transferred across the internet from one user to another using appropriate software.
This makes Bitcoin a potentially attractive currency.

What should the government do?
- It should follow China, South Korea, and Japan.
- It should enshrine minimum capital requirements, force segregation of customer accounts, and make potential criminal activity difficult.
- Failing to help structure the growth of crypto currencies will drive the whole enterprise underground beyond its control.

What is their true value?
- The real answer is no one knows.
- Unlike fiat currencies, whose long-term relative values are driven by differentials in purchasing power, we do not have a good understanding of what determines the long-term relative value of these crypto currencies.
- Yet investors have increased the acceptance of various versions of block chain technology and its currency units.

How prevalent are bitcoins?
- Since 2014, the American tax authorities have treated crypto currencies as ‘property’ subject to appropriate capital gains tax rate.
- Japan and Australia deemed bitcoin as a legitimate payment method in 2017.
- Chinese authorities have aggressively stepped in to ensure crypto currency exchanges function well.
- But the successive Indian governments have ignored crypto currencies.
- Only in April 2017 the Indian government constituted an inter-disciplinary committee to study regulatory frameworks for crypto currencies.

What is the current status of bitcoins in India?
- Bitcoins are classified only as movable property and more specifically as computer software.
- This in itself does not make bitcoins illegal.
- Neither did the government has formally brought bitcoins under the definitons of currency or prepaid payment instruments.
• It is thus right to say that currently the crypto-currency is neither illegal nor legal in India.
• The pros and cons of legalising them is currently debated among the government circles.

What are the benefits of legalising bitcoins?

• Trading of bitcoins would be brought under the stock market regulator, Securities and Exchange Board of India (SEBI).

• Bitcoins can be traded on registered exchanges which will promote a formal tax base. Returns from investment in Bitcoins would be taxed.

• Use of bitcoins for illegal activities such as money laundering, terror funding and drug trafficking can be checked.

• If any foreign payment is made through Bitcoins, it would fall under the purview of Foreign Exchange Management Act, FEMA Act.

What are complexities in taxing cryptocurrencies?

• Taxing as a currency - According to the Foreign Exchange Management (FEMA) Act, 1999, includes currency notes, postal notes, postal orders, money orders, cheques, drafts, traveller’s cheques, letters of credit, bills of exchange and promissory notes, credit cards and other such instruments, as notified by the RBI.

• As various entities accept bitcoin as a mode of payment, it appears that it is a currency.

• But it has not been termed as a currency under the FEMA Act, or as legal tender by the RBI, so it may not qualify as currency.

• Taxing as a capital asset - According to Section 2 (14) of the Income Tax Act, 1961, a capital asset means a property of any kind held by a person, whether or not connected with his business or profession.

• The term ‘property’ has no statutory meaning, yet it signifies every possible interest that a person can acquire, hold or enjoy.

• Still now there is no clear view in considering bitcoin as a capital asset.

• Taxing as capital gains from sale - If gains arising from transfer of bitcoins are treated as capital gains, their further classification into short-term or long-term gain will depend on the period of holding of bitcoins.

• If a bitcoin is held for more than 36 months, it will be considered a long-term capital asset.

• If the period of holding is lower, it will be treated as a short-term capital asset, thus bitcoins need to be taxed accordingly which is again making the process lengthy.

• Taxing bitcoins earned through mining - If profits earned from bitcoins are taxable as business income, then the bitcoins earned in the ‘mining’ process would also be taxable as business profits.

• If bitcoins are classified as capital assets, the virtual currency earned from bitcoin mining may not be taxed.

• Since bitcoins generated through mining process are classifiable as self-generated capital assets and the cost of acquisition of such bitcoins may not be available.

• Taxing sale of bitcoin by NRI - If Bitcoin is an intangible asset, income accruing or arising from its transfer outside India by a person who is not a resident in India cannot be taxed in India.

• Hence, sale of bitcoin by an NRI through an Indian bitcoin exchange may not be taxed in India.

• Taxing under GST - If bitcoin gets classified as a currency, it will be considered as ‘money’ in the CGST Act and no GST can be charged on its trading.

• However, exchanging bitcoin to rupees might be considered a service for the purpose of levy of GST under the category of ‘financial services’.

• Therefore, the supplier (who is selling the bitcoin) may be required to pay 18 per cent GST on the total value charged by him from the buyer.

What measures needs to be considered in bitcoin taxation?

• RBI need to clear its stand on considering bitcoin as a currency, If RBI declares it to be a currency, any trading in it will be subject to FEMA regulations.
• Bitcoins could be deemed a capital asset if they are purchased for investment and any gain arising on transfer of a bitcoin shall be taxable as capital gain.

• If the transactions in bitcoins are substantial and frequent, it could be held that the taxpayer is trading in bitcoins, and the income would be taxable as business income.

• Foreign transactions in bitcoin shall be treated as capital account transactions and any dealing in bitcoin could be mandated by the RBI.

11.5 Change in Financial Year

What is the issue?
The government is considering the proposal to change the financial year from April-March to January-December.

What are the merits?

• The shifting of financial year will align India with the prevailing practice of developed countries.

• This will be a **progressive, convenient transition** for the Indian economy as it gets increasingly integrated to the global economy.

• For MNC firms in India, which are currently dealing with two types of financial years here and at the parent country, a uniform structure will be a relief to manage their accounts.

• The change will also align the financial year with the monsoon cycle and also with the country’s crop harvests both for Rabi and Kharif seasons.

• Another important factor is that at present the **budget cycle suffers due to lack of sufficient data** on crop income, monsoon forecast etc.

• Presently, before the budget presentation in February, the government doesn’t get any solid data on monsoon forecast for new financial year.

• The rain gamble causes difficulties in formulating the budget.

• Most importantly, it is about time India **moved on from colonial tradition** and decided on issues based on merit.

What are the demerits?

• If we want the transition, then major changes like shifting Parliamentary Sessions, Budget presentation in Nov-Dec, etc., will be needed.

• The one time **implementation cost** along with major financial reforms like GST rollout and merger of plan and non-plan expenditure may be too big a burden to handle.

• Already, there is confusion in the industry with the change in the tax system when the GST finally happens.

• A shift to new fiscal year, too soon, will add to this.

• Also, a host of statutes and taxation laws will need to be amended for the change to take place.

• Thus, the move will be a **costly and cumbersome** administrative exercise for both companies as well as the government.

• The economic benefits would definitely outweigh the administrative difficulties that will arise initially for the implementation.

• The change will indeed be a progressive step it seems there is no urgency to implement when the GST is still facing multiple hurdles.

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