INDEX: ECONOMIC SURVEY 2017-18

VOLUME - 1 AND VOLUME - 2 OF ECONOMIC SURVEY

Note for readers: Economic Survey 2018-19 has not been published yet. This document is summary of salient exam relevant points of Economic Survey 2017-18. However, as the year passes, the focal point of national and international economy also changes. For example, during Budget 2018-19, oil prices were booming, Insolvency and Bankruptcy code was evolving, GST had not crystallized and TBS challenge was looming over economy. However, when Budget 2019-20 was presented, oil prices had returned to normal, GST settled as an umbrella Indirect Tax, IBC was hailed for solving the problem of exit in the economy and TBS challenge had tapered. Therefore, we have summarized this document in the light of emerging realities and new issues of current times.

How to read this book: This book is a stripped-down version of Economic Survey. The intention is to cover basic cause-effect relations of Economy in an exam-oriented manner without getting deep into the theoretical models and deep concepts of Economics. Each chapter will cover relevant concepts of economy in brief and list out relevant details in question-answer form. Whatever is irrelevant for this year, has been left out.

If you are an advance level reader then after reading the question, take a pause and think about it. Then read the answer. If you are at beginner level, then do not forget to make a summary of this summary. P stands for prelims, M for mains, and E for essay as well as Ethics. Capture trends and try to see where and in what part of syllabus could you use a fact or figure or observation. Last but not the least important is correlate, conceptualize (reflect), and consolidate.

Few Salient Observation: [Prelims, Correct/Incorrect MCQ's]

Number of indirect taxpayers in India added post-GST is more than 50% of pre-GST figures.

Top 1 percent of Indian firms account for 38 percent of exports which is more egalitarian than Brazil, USA, and Germany.

Parents continue to have children until they get the desired number of sons. This is termed as Son Meta-preference.

To re-ignite growth, raising investment is more important than raising saving.

The impact of weather is felt only with extreme temperature increases (Winter gets colder and Summer becomes hotter) and rainfall deficiencies. This impact is twice as large in un-irrigated areas as in irrigated ones.

State's share in collection of taxes is low in comparison to their counterparts in other federal countries.

INTRODUCTION TO THE ECONOMIC SURVEY:

What is Economic Survey? The Economic Survey of India is drafted by the government's Chief Economic Adviser. It is published by the Department of Economic Affairs (Ministry of Finance). **[P]** Survey is mostly a report card on the achievement of economic policies of government in given fiscal year. However, over time it has evolved as a major policy document as well. For past couple of years, it relies on Big Data mining to shed light on hitherto untouched sectors of the economy.

Why the pink cover? This year Economic Survey came in uncharacteristic pink colour cover as a symbol of support for the growing movement to end violence against women. **[P]**

The Survey takes into account that Gender equality is an inherently multi-dimensional issue. Accordingly, assessments have been made based on three specific dimensions of gender, i.e. Agency (relates to women's ability to make decisions on reproduction, spending on themselves, spending on their households and their own mobility and health), Attitudes (relate to attitudes about violence against women/wives, and the ideal number of daughters preferred relative to the ideal number of sons) and Outcomes (relate to ‗son preference' measured by sex ratio of last child, female employment, choice of contraception, education level, age at marriage, age at first birth and physical or sexual violence experienced by women) which aim to reflect the status, role and empowerment of women in the society.

The key findings of the assessment made in the Survey include: Over the last 10-15 years, India's performance improved on 14 out of 17 indicators of women's agency, attitudes, and outcomes. On seven of them, the improvement has been such that India's situation is comparable to that of a cohort of countries after accounting for levels of development. The Survey encouragingly notes that gender outcomes exhibit a convergence pattern, improving with wealth to a greater extent in India than in similar countries so that even where it is lagging, it can expect to catch up over time. The Survey, however, cautions that on several other indicators, notably employment, use of reversible contraception, and son preference, India has some distance to traverse because development has not proved to be an antidote.

QUOTES FROM THE SURVEY

The inevitable never happens. It's the unexpected always - **John Maynard Keynes.**

And then felt I like some watcher of the skies, When a new planet swims into his ken **John Keats, "On First Reading Chapman"sHomer."**

Investment calls the tune, and profits dance accordingly - **Hyman Minsky**

The village of which the people come together to earn for themselves their food, their health, their education, to gain for themselves the joy of so doing, shall have lighted a lamp on the way to swaraj - **Rabindranath Tagore**

My dear, here we must run as fast as we can, just to stay in place. And if you wish to go anywhere you must run twice as fast as that: **Lewis Carol, Alice in Wonderland**

Kaa barakhaa, jab krishi sukhaanee (What's the use of that untimely rain after the crop has dried up) - **Tulsidas, Ram Charit Maanas**

अबलाजीवनतेरीहाययहीकहानी !आंचलमेंहैदूधऔरआंखोंमेंपानी - **Mathili Sharan Gupt**

We need a spirit of victory, a spirit that will carry us to our rightful place under the sun, a spirit which can recognize that we, as inheritors of a proud civilization, are entitled to our rightful place on this planet. If that indomitable spirit were to arise, nothing can hold us from achieving our rightful destiny - **C. V. Raman**

For who would bear the Whips and Scorns of time, The Oppressor's wrong… the Law's delay **- Hamlet**

CHAPTER - 1

ANALYTICAL OVERVIEW AND OUTLOOK FOR POLICY

BACKGROUND:

Economic Survey of India (2017-18) projected India's GDP to grow at 7-7.5 % in FY 2018-19. World Bank projected the GDP growth figures at 7.3 % while the International Monetary Fund (IMF) had pegged it at 7.4 % in FY 2018-19. As per the latest WB Global Economic Prospects report, India economy grew by 7.3% in 2018-19. As per CSO 1st advance estimates 2019, economy is growing at 7.2%.

Q. List the changes which Indian economy is undergoing in last couple of years? [GK]

Currently, Indian economy is going through the process of economic reforms. These reforms include –

1. Introduction of path breaking Goods and Services Tax (GST)
2. Putting in place a sound monetary policy framework (macro stability and low inflation)
3. Measures taken to address recapitalisation of public sector banks (nearly 1.2% of GDP was pumped in to clean balance sheets)
4. Measures taken to bring formalisation and digitalisation (The JAM agenda) in the economy
5. Demonetization to promote formal sector
6. Aadhaar system of biometric accounts and targeted delivery of benefits through the Direct Benefit Transfer (DBT) system
7. Fiscal prudence (reduction of fiscal deficits from 4.5% of GDP in 2013-14 to 3.4% in 2019-20)
8. Promoting Ease of Doing Business
9. Simplifying exit for unviable firms, Insolvency and bankruptcy code of India
10. Promoting investment in various sectors of the economy

It is observed that Indian economy has recovered from the shock of demonetization and GST and is well set on the path of revival as reflected in the FDI and export figures. However, global risk and fiscal slippage threat is looming over the economy. This is termed as duality of the economy.

Q. How does the duality of revival and risk manifest in the economy? [Prelims]

A. The higher bond yield and simultaneously higher stock prices is direct manifestation of duality of revival and risk in the economy. Generally higher bond yield means confidence in the growth of economy is low. This could be due to higher fiscal deficit figures or volatility in the economic output, exports etc. On the other hand, higher stock prices reflect greater confidence in the economy. This peculiar short term phenomenon in manifested in Indian economy.

Q. What are some of the short term reforms measures suggested in Survey 17-18? [GK]

A. Survey suggests that over the coming year, the government will need to

1) Focus on the 4 R's, ensuring that the process of resolving the major indebted cases and recapitalizing the PSBs is carried to a successful conclusion, while initiating reforms of the PSBs that will credibly shrink the unviable ones and signal greater private sector participation in the future

2) Stabilize GST implementation to remove uncertainty for exporters

3) Facilitate easier compliance, and expand the tax base

4) Privatize Air-India

5) Stave off any nascent threats to macro-economic stability, notably from persistently high oil prices, and sharp, disruptive corrections to elevated asset prices.

Q. What are some important lessons government can learn for medium term growth strategy? [Mains]

1. **Cooperative Federalism:** Model of GST council could be used to create a common agricultural market, integrate fragmented and inefficient electricity markets, solve interstate water disputes, implement direct benefit transfers (DBT), make access to social benefits portable across states, and combat air pollution.

2. **Solving the "exit" problem:** The IBC resolution process could prove a valuable technology for tackling this long-standing problem in the Indian corporate sector. The recently proposed Financial Resolution and Deposit Insurance (FRDI) bill would do the same for financial firms.

3. **Focus on the outcome:** The pace and magnitude of government policy of directing resources away from subsidies to essential public goods will depend upon the extent to which increased physical availability is converted into greater actual use. For example usage of public toilets, bank accounts etc.

4. **Continuous battle for macro-economic stability:** We are facing two major macro-economic vulnerabilities namely fiscal vulnerability and current account vulnerability**.** For fiscal vulnerability, we need to increase the tax to GDP ratio and offload the responsibility of debts like state discom debt or public sector bank recapitalization. To Handle current account vulnerability, we need to improve export growth by way of boosting our manufacturing competitiveness.

5. **Minimize the lateral damage of addressing corruption:** There are significant social and economic benefits to attacking corruption and weak governance, but there are lateral damages. For example informal sector became the victim of Demonetization. Thus, policy design must minimize these costs wherever possible.

6. **Role of markets and state, private capital and public institutions:** India is in a grey zone of uncertainty on the role of state and markets. Limitations on state capacity (centre and states) affect the delivery of essential services such as health and education. However, the introduction of technology and the JAM (Jan Dhan - Aadhaar - Mobile) architecture, now enhanced by the Unified Payments Interface (UPI), holds the potential for significant improvements in such capacity.

7. **Meta-challenges:** Survey highlights three issues that need attention namely education, agriculture and employment. For agriculture, we need to bring science and technology to farmers, replace untargeted subsidies (power and fertiliser) by direct income support, and bring drip and sprinkler technologies. For employment, the biggest impediment is lack of data.<Put box 1 of chapter 5> and (Box 5)

Q. What are the preferences of various sectors with respected to Interest rates in the economy? **[Prelims]**

Group	**Preference**	**Reasons**
Manufacturers, services exporters	Low interest rates, weak	Profits increase, even if some inputs are imported, since market share grows. This applies both to

and farmers	currency	exporters (clothing) and firms producing for domestic market but competing with imports (steel, aluminium). Software exporters with high domestic value added will favour weak rupee
Exception: Import-intensive manufacturers	No strong preference	Weaker rupee increases export revenues but increases import costs
Domestically oriented firms	Low interest rates	Profits increase; debt burden declines
Infrastructure companies (especially power and renewables)	Strong currency, Low interest rates	Strong currency reduces costs without affecting revenues, which are earned in rupees. Costs fall because firms typically import capital equipment, financed with dollar loans. Low interest rates reduce debt service burden on domestic loans.
Households	High interest rates	Returns on savings increase. Household saving far outweighs household borrowing.
Equity Investors - Domestic	Low interest rates	Corporate profits increase, so returns rise
Equity Investors - Foreign	Low interest rates, strong currency	Combination boosts dollar returns. Tension: low rates typically lead to weaker currency
Bond Investors - Domestic	Falling interest rates	Generates capital gains. Banks prefer low rates; other investors (such as LIC) prefer high rates
Bond Investors - Foreign	High but falling interest rates, strong currency	Combination maximizes dollar returns. Tension: falling rates weaken currency
Government	Low interest rates	Low rates reduce debt service. Extra growth or inflation increases revenues
Non-economic actors	Strong currency	Strong currency equated with national economic strength

Q. Can there be a case where fiscal deficit remains same or decreases even when there is increase in market borrowings?

Q. What is the reason behind increase in the bond yield price of government securities despite high growth rates? [Prelims]

Do Government Market Borrowings Reflect the Underlying Fiscal Deficit?

Since late July 2017, interest rates on 10 year government securities (g-secs) have been climbing steadily, rising from about 6.4 percent to 7.3 on January 1, 2018. Over that period, the outlook for policy rates has deteriorated as the RBI has shifted from rate-cutting to a more hawkish stance. But this shift would not seem to warrant a nearly 1 percentage point increase in long-term rates. Neither would the changes in international rates, which have only increased modestly. So, what explains the sudden rise in g-sec rates?

The key factor seems to be financial market concerns that government issuances of g-sec will be greater than earlier anticipated. Certainly, concerns that fiscal deficits of the general (central and state) government might be larger than targeted are real. But even if fiscal over-runs do occur, this does not automatically mean that market borrowings will be greater than anticipated; put differently, market borrowings do not necessarily reflect the underlying fiscal deficit. That's because in India market borrowings are determined not just by the fiscal deficits but also by a distinctively Indian arrangement, the National Small Savings Fund (NSSF).

Essentially, the government gets deposits from the public - independent of its deficit-induced borrowings - in the form of various savings schemes to the public, encompassed in the NSSF. Currently, these schemes offer above-market rates, risk- free investment options, and favourable tax breaks, both at the time of deposit and withdrawal, not available in most-regular savings schemes. The Economic Survey of 2015-16 had estimated the magnitude of the implicit subsidies to small savers under the NSSF. But what is relevant here is that the flows into the NSSF are autonomous, determined by their perceived attractiveness, rather than the size of the fiscal deficits. The following identity captures the idea.

Net Market Borrowings = Fiscal Deficit - NSSF net flows

If NSSF net flows increase, for any given fiscal deficit, market borrowings should decline; and vice versa. Market borrowings and hence the supply of g-secs are endogenous to these autonomous flows. So it's perfectly possible for market borrowing to increase, even when the fiscal deficit decreases or remains constant.

The increase in bond yield means investors confidence in the economy is going down. This may be because of hawkish stance of rate (High policy rates) by central bank and negative sentiments emerging from other indicators of the economy like CAD, IIP, Inflation or FD.

What are bonds?

A bond is a debt instrument. It can be traded in financial markets like equities and other commodities. It is commonly used by governments to raise capital in order to fund domestic growth and development projects. Investors take on government debt, and in return, are assured a stream of revenue for the duration of the time it takes the bond to mature. Bonds issue coupons, which are interest payments made in part to the repayment of the capital that was borrowed. The final payment is made when the bond attains maturity. However, governments are not the only entities issuing bonds.

Who buys bonds and why?

Unlike equities, which are vulnerable to the vagaries of the stock market, investing in bonds is a relatively safer proposition since the capital is returned on maturity. The downside is that the returns on bonds may not be comparable to those of equities. Government bonds, also known as G-Sec, are issued by governments with maturity terms ranging from medium to long term.

Till recently, government bonds used to be bought and sold on the secondary market only by institutional investors like provident funds, mutual funds, insurance companies and banks. However, in 2017, the RBI changed the rules to allow retail investors, this is anybody with a PAN card, to buy government bonds in the primary market. The RBI is the institutional entity that has been mandated with selling sovereign debt securities, or government bonds.

Do only governments issue bonds?

Corporations also issue bonds to fund expansions and projects, or tide over budgetary deficits. Bonds issued by corporations are generally safer than equities, but some bonds offer an option to convert the instrument into stocks. Non-convertible corporate bonds offer coupons and function like any other bond.

Bond yields as an economic indicator

Conventional metrics used by economists to diagnose the health of a country's economy include inflation, lending rate of the central bank, growth rate, and national income. However, bond yields are also a very prescient means of gauging the trajectory of an economy. As investors sell government bonds, prices drop, and yields increase. A higher yield indicates greater risk. If the yield offered by a bond is much higher than what it was when issued, there is a chance that the company or government that issued it is financially stressed and may not be able to repay the capital. Enhanced risk with such bonds is offset by greater returns, adding to their appeal.

Government bonds are relatively more stable but low demand at auctions indicate low investor confidence in the country's economy.

The yield on a risk-free government bond can be defined as being roughly "equal the rate of growth in the economy, plus the rate of inflation." In this case, the bond yields would mirror GDP growth, but the relationship between yields and economic activity is more complex especially in the case of developing countries like India. A whole host of factors including recessions, inflation, and bank rate set by central banks can have an impact on bond yields.

In developing countries like India where the government is among the biggest investors in the economy, bond yields can be a useful parameter in assessing economic health. Unlike in countries where private enterprise drives the engine of growth, the trend of high bond yields is worrying in the case of India since it reflects on investor sentiment that is not entirely favourable to the prospect of the government taking on more debt.

Q. How is the health of the global economy? Where does India stand amid changing global scenario? [World Bank/IMF report] [Essay, Mains]

A. According to IMF, the global economy is experiencing a near-synchronous recovery, the most broad-based since 2010. In 2017, roughly three-quarters of countries experienced improvements in their growth rates, the highest share since 2010. Although rebounding, global growth is still well below levels reached in the 2000s.

Reasons for such growth are –

1. Increased Trade: The world trade in goods and services has improved significantly registering 4.7 percent growth (by volume) in 2017 compared with 2.5 percent in 2016.
2. Good Commodity Prices: The commodity producers such as Russia, Brazil, and Saudi Arabia, which for the past few years been suffering from depressed prices, have benefitted from the upswing in demand. Commodity prices increased smartly in 2017, led by petroleum, whose price rose by 16 percent to reach $61 per barrel.
3. Low Inflation: Even as global growth and commodity prices have surged, inflation has remained remarkably quiescent, remaining below 2 percent in the main advanced regions. Consequently, monetary policies in the US, Eurozone and Japan have remained highly accommodative despite a strong recovery.
4. Strong stocks and bonds: These unusual settings—rapid growth and ultra-low interest rates— have produced the rarest of combinations: record-high high bond prices and stock market valuations, both at the same time.
5. Increased investment: Companies are responding to buoyant demand conditions by stepping up investment fuelling further growth.

As per World Bank, World economy is under dark cloud however India is a shining spot with positive growth outlook. World economy is growing at 2.9% in 2018-19 whereas it grew at 3% in 2017-18. Developed economies grew at 2%. World economy is going through a phase of increasing fiscal pressure, economic risk and increased business tension. Anti-globalization measure and trade war between China and USA are threatening the economic output.

Risks to global growth are –

1. Geo-political risks: War in the Korean peninsula or a political upheaval in the Middle East is possible.
2. Geo-economic risks: Aggressive output cuts by Saudi Arabia (and Russia) in advance of the planned listing of the Saudi Arabian oil company, Aramco, which could force oil prices even higher.
3. Chinese factor: Sharp depreciation of Chinese currency may have consequences for the global economy. The slowdown in China's growth will impact the global economy.
4. Trade tensions: Trade tensions exist between many countries which could lead to skirmishes, and then spiral out of control.
5. Possible Asset Valuation Correction: Asset valuations (price-equity ratios) tend to revert to their mean. And the faster and higher they climb, especially so late in the economic cycle, the greater the risk of sharp corrections.
6. Increase in Interest Rates: Simultaneously high valuations of both bonds and equities tend to be briefly lived because they suffer from an acute tension: if future earnings and economic growth are so bright, justifying high equity prices, interest rates cannot be forever so low.

On the other hand, As per WB report, Indian economy is growing at 7.3% in FY 18-19. It is expected to grow at 7.5% in year 2019-20. Against the global outlook, investment and economic opportunities are increasing in India. Demonetization has resulted in the positive shift towards **formalization of the economy**. The infrastructural and procedural reforms have led to improvement in ease of doing business rank (77). GST has stabilized with periodic revision in rates over the last financial year.

Note: Decoupling phenomenon Previous year (Feb 2018) when Survey was published, it was observed that Indian economy was decoupled from the World economy in year 2017-18. At that time, world economy was heading for synchronised recovery but India was facing a slowdown. This was partly due to impact of demonetization (November 2016), impact of GST (July 2017), TBS challenge (NPA crisis) and oil price rise in late 2017 due to output production cuts by Russia and Saudi. All these factors impacted the economy badly, especially the informal sector of the economy.

Q. Why are interest rates so low globally? [GK]

In the words of Paul Krugman, in monetary policy circles, extraordinarily low interest rates have become ―an obsession in search of a justification." These were initially justified by the Global Financial Crisis, and then by large output gaps, they are now defended on the grounds that inflation remains weak. However, the slowdown in product and labour markets is disappearing rapidly. The output gaps are closing and employment is rising. Probably, these developments will dispel that obsession about extraordinarily low interest rates. **[Understand the implication of rise in global interest rate for India]**

Outlook for Indian Economy in 2018-19

Export and Investment are two wheels on which Indian economy can get set and rolling. In this context, all our efforts should directly or indirectly focus on boosting exports or brining new investments. Our policymakers need to keep watch of certain economic pointers in this regard.

1. What if IBC process kicks in? It will open path for private investment.
2. What if Oil prices increase? It has multiplier effect in the economy by way of increasing the logistics cost. Thus, it creates ―imported inflation" which acts as a drag on the consumption capacity of people.
3. Stock price corrections? It may trigger a capital outflow in the economy.
4. Scope for increase in the public investment is limited due to constraints of fiscal deficit.
5. Global economy: Boost in global economy may help us in increasing the exports.

CHAPTER - 2

A NEW, EXCITING BIRD'S-EYE VIEW OF THE INDIAN ECONOMY THROUGH THE GST

Q. Discuss the benefits which GST has brought to the understanding of Indian Economy?

A. GST has enormous benefit of creating one Indian market, expanding the tax base, and fostering cooperative federalism. It has created a vast repository of information, which will enlarge and surely alter our understanding of India's economy.

Some exciting new findings of GST includes:

1. There has been a large increase in the number of indirect taxpayers due to expectation of tax credits
2. The distribution of the GST base among the states is closely linked to their Gross State Domestic Product (GSDP), allaying fears of major producing that the shift to the new system would undermine their tax collections.
3. New data on the international exports of states suggests a strong correlation between export performance and states' standard of living.
4. India's exports are unusual in that the largest firms account for a much smaller share than in other comparable countries;
5. Internal trade is about 60 percent of GDP which is better than most developing nations.

The new insights from the GST data: [prelims]

1. Maharashtra>TamilNadu> Karnataka >UP >Gujarat are the states with the greatest number of GST registrants. UP and West Bengal have seen large increases in the number of tax registrants compared to the old tax regime.
2. More than 50% new registrations have happened. The total registrations are near 1 crore (as of 2017-18). Of this, nearly 80% are regular taxpayers and only ~15% are under the composition scheme.

Q. What are current GST exemption limits and composition scheme?

Taxpayers (with turnover less than 1.5 crore) registered under this scheme pay a small tax (1%, 2% or 5%) on their turnover. It reduces administrative burden of taxpayers but makes it difficult for them to sell to larger firms as they are not eligible for input tax credits. Recently government has increased the GST exemption limit for SME upto 40 Lakh. The following people cannot opt for the scheme: **[Prelims]**

- Supplier of services other than restaurant related services
- Manufacturer of ice cream, pan masala, or tobacco
- Casual taxable person or a non-resident taxable person
- Businesses which supply goods through an e-commerce operator

Interesting trends: **[Prelims]**

Largest exporting states of India: Maharashtra > Gujarat > Karnataka > Tamil Nadu > Telangana

Largest importing states of India: Maharashtra > Tamil Nadu > Uttar Pradesh > Karnataka > Gujarat

Largest Net export state of India: Haryana > Gujrat > Odisha > Maharashtra > Delhi

Largest internal trade surplus states: Gujarat> Haryana> Maharashtra> Odisha> Tamil Nadu.

Export concentration by firms is much lower in India than in the US, Germany, Brazil, or Mexico

Q. What are the trends on Informal nature of our economy as per Survey?

There are many different definitions of formality/informality.

- whether a worker has a formal contract
- whether a worker is a regular/salaried worker (as opposed to self-employed or casual)
- whether a worker receives social security
- whether a firm is registered with any branch of the government for example, EPFO or ESIC **[Prelims: read about this]**
- whether the firm pays taxes example, it is under GST Net

Trend: In terms of Tax-defined formality, 53% firms in non-farm payroll are under formal sector

ILO on Informal Sector of Economy

The informal sector represents an important part of the economy, and certainly of the labour market, in many countries and plays a major role in employment creation, production and income generation. In countries with high rates of population growth or urbanization, the informal sector tends to absorb most of the expanding labour force in the urban areas. Informal employment offers a necessary survival strategy in countries that lack social safety nets, such as unemployment insurance, or where wages and pensions are low, especially in the public sector. In these situations, indicators such as the unemployment rate and time-related underemployment are not sufficient to describe the labour market completely. Statistics on the informal economy are key to assess the quality of employment in an economy, and are relevant to developing and developed countries alike.

CHAPTER - 3

INVESTMENT AND SAVING SLOWDOWNS AND RECOVERIES: CROSS-COUNTRY INSIGHTS FOR INDIA

Q. What is the importance of savings rate, investment rate and gross capital formation in the economy?

A. Savings = Income - Consumption whereas Investment = Income- consumption, assuming that entire savings is invested. In simple terms, Investment is that part of the income which is spent to increase the total income (add to the stock of real capital). When income increases, savings increase, when savings increase investment also increases. Savings and investment although do not increase proportionately.

More savings -> More investment -> Increase production -> more demand for factor inputs -> more Income -> more demand -> more investment -> Rapid economic growth -> Increased savings

Q. What are the various sources of savings? (Domestic savings)

Sector	Description	Source of savings
Public Sector	Includes central government, state government, local authorities	Tax revenue and savings of public sector enterprises
Private Corporate Sector	Includes banks, private companies, co- operative institutions	Profits of these institutions
Household Sector	Rural and urban households, non-profit-making institutions	Physical assets: fixed investments in agriculture, constructions, etc. Financial assets: currency, deposits, gold, etc.

Income is the major source of savings in household sector.

Q. What is capital formation and why is it important?

A. Capital formation refers to adding to the capital stock of a country. It is surplus production over consumption.

Capital formation= domestic savings+ net inflow of funds from abroad

Capital formation is necessary for economic growth.

- It enables establishment of industries which require heavy capital investment and are basic in nature.
- Large capital stock enables the country to make use of latest techniques of production.
- With the help of large capital stock, a country acquires the capacity to change, innovate and adjust to new ideas and technological advances.

Gross fixed capital formation (GFCF) refers to the net increase in physical assets (investment minus disposals) within the measurement period. It does not account for the consumption (depreciation) of fixed capital, and also does not include land purchases. It is a component of expenditure approach to calculating GDP. **Historical context:** Indian Economy's take-off in the mid-2000s was propelled by the twin engines of exports and investment. These two are still continuing to run below take-off speed. To re-ignite growth, we need to boost the dual pillar of export and investment. In this regard, we must understand that for a growing emerging economy with high needs, ―raising investment is more important than raising saving".

Capital formation is a term used to describe the net capital accumulation during an accounting period for a particular country. The term refers to additions of capital stock, such as equipment, tools, transportation assets and electricity. Countries need capital goods to replace the ones that are used to produce goods and services. If a country cannot replace capital goods, production declines. Generally, the higher the capital formation of an economy, the faster an economy can grow its aggregate income. In order to add capital stock, a country needs to generate savings and investments from household savings or based on government policy. Countries with a high rate of household savings can accumulate funds to produce capital goods faster, and a government that runs a surplus can invest the surplus in capital stock.

Q. India"sinvestment and savings pattern have witnessed a boom and bust in a quick period?

A. The following table shows swings in saving and investment rates in India:

	2003	2007	2016-17
Domestic Saving to GDP ratio	29.2%	38.3%	29%
Gross Fixed Capital Formation to GDP ratio	26.5%	35.6%	26.4%

Cumulative fall over 2007 and 2016 has been milder for investment than saving, but investment has fallen to a lower level.

Q. Which sectors are responsible for the saving/investment decline in India? [Prelims, Mains]

Fall in savings: The fall in saving, by about 8 percentage points over 2007-08 and 2015-16. It has been driven almost equally by a fall in household and public saving. The fall in household saving has in turn been driven by a fall in physical saving, partly offset by an increase in the holding of financial assets. Within the latter, there has been a shift from currency and bank deposits towards market instruments, viz. shares and debentures.

Fall in private investments - Private investment accounts for 5 percentage points out of the 6.3 percentage point overall investment decline over 2007-08 and 2015-16.

It is not just that the overall saving and investment rates have changed but their compositions have also changed. A large share of the fall goes to private investment and household/government saving.

Q. The simultaneous slump in saving and investment gives rise to a question. Should policies that boost investment (viz. substantial infrastructure push, reforms to facilitate the ease of doing business or the ‗Make in India' program) be given greater priority over those that boost saving? **[Prelims]**

A. The issue is about relative importance and urgency. The survey along with other studies observes that policies should focus on encouraging investment, rather than saving, to boost growth.

Q. How do we promote investment? [Mains]

Policy priorities over the short run must focus on reviving investment. Government should –

1. Step-up public investment in infrastructure and other areas
2. Decisively resolve the TBS challenge to promote private investment.

3. Promote ease doing business further
4. Creating a clear, transparent, and stable tax and regulatory environment.
5. Creating a conducive environment for small and medium industries to prosper and invest will help revive private investment.
6. Outward Direct Investment (ODI) from India has grown to US$15 billion per annum. Government should make investments in India easier to retain some of these investments.
7. Give the right signals to the market to conjure its ‗animal spirits‘ again.
8. Timeliness in resolution and acceptance of the IBC solutions must be a priority to kick-start private investment.

Q. What do you mean by „India-type‟ Investment Slowdowns? Suggest some remedies for recovery from it. [Prelims]

In the past nearly 10 years, India has seen a peculiar fall in savings and investment rates. India‘s investment slowdown is unusual in the sense that -

1. It is so far relatively moderate in magnitude
2. Long in duration
3. Started from a relatively high peak rate of 36 percent of GDP.
4. Furthermore, it has a specific nature, in that it is a balance-sheet related slowdown.

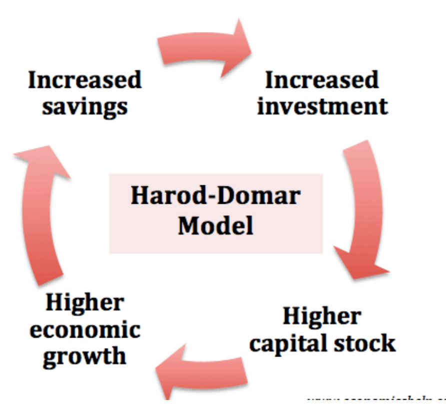
In other words, many companies have had to curtail their investments because their finances are stressed, as the investments they undertook during the boom have not generated enough revenues to allow them to service the debts that they have incurred.

Q. What are the problems of balance-sheet slowdowns?

Investment declines flowing from balance sheet problems are much more difficult to reverse. In these cases, investment remains highly depressed, whereas in case of non-balance-sheet slowdowns the shortfall is smaller and tends to reverse. India‘s investment decline so far (8.5 percentage points) has been unusually large when compared to other balance sheet cases. Due to this, it has paid moderate costs in terms of growth. Between 2007 and 2016, rate of real per-capita GDP growth has fallen by about 2.3 percentage points.

Lesson: Therefore, resolving the TBS challenge along with easing of doing business are necessary for boosting investment. **<The deeper the slowdown, the slower and shallower the recovery>**

Q. More Savings is not equal to faster growth? Comment [Economics, GK]



Broader cross-country experience suggests that additional savings may not necessarily boost growth. In fact, a competitive exchange rate that boosts investment and growth will elicit its own saving. In other words, there is economic evidence suggesting competitive exchange rates are more important for export-led growth. Divorced from this reality, India has since long focused more on improving the savings rate and has not given adequate attention to the investment rate. It can be seen now that we need to boost investments and mere savings will not automatically convert into economic growth.

CHAPTER - 4

RECONCILING FISCAL FEDERALISM AND ACCOUNTABILITY: IS THERE A LOW EQUILIBRIUM TRAP

Q. Describe the relation between Taxation and Accountability? [Essay, Ethics]

A. Taxation is the economic glue that binds citizens to the state in a necessary two-way relationship as part of the social contract. The citizen's part of the contract is to hold the state accountable when it fails to honour that contract.” If he does not pay, he loses the moral right to complain. If he exits (not using the service at all), he loses interest in holding the state accountable. Thus, in simple terms, relation is summarized as ―No representation without taxation”.

Q. Describe the relation between Taxation and Development? Why the Direct Tax assumes importance in this regard?

A. Taxation helps in generating money for the government which is invested back in the development work. Data reveals that advanced economies relies more on the direct tax for this purpose (nearly 70% share). As the direct tax impinges directly on the person, thus it reduces person‘s disposable income hence it gains importance and hogs the public discourse. Economic and institutional development is stunted when countries rely on non-tax sources of government revenues as illustrated by ―aid” and ―natural resource” curses.

Q. What is “aid curse”? Is it similar to “natural resource curse”? [GK, Essay]

The ―aid” and ―natural resource” curses illustrate what happens when countries rely on non-tax sources of government revenues. The economic and institutional development in these countries is stunted. The institutions and practice of fiscal accountability do not develop in these places. Once the aid or the natural resource dries up, the concerned governments are not able to sustain themselves. Also, in the absence of accountability, authoritative and exploitative regimes come up in these places.

India‟s case: India has the comparatively lower share of direct taxes in total taxes.

Q. What is the share of direct taxes in revenue collection at the second tier of governance in India? [Prelims]

A. India stands out as a country where the second tier generates very less tax revenues on their own from direct taxes. This is evident that ULGs have emerged more fiscally empowered than RLGs so far in India.

Country/ Share of revenue in direct taxes	**2nd Tier**	**3rd Tier (Rural)**	**Urban Local government**
India	6%	4%	18%
Brazil	19%	19%	19%
Germany	44%	26%	26%

Since, the Tier 2 and Tier 3 governments do not collect sufficient taxes and minimal direct taxes; they tend to escape this fiscal accountability. Central government devolves nearly 50% of its resources to local level but public accountability is missing. Thus, our federal structure lacks the fiscal autonomy as well as fiscal accountability at sub-federal level.

Q. What impacts does the lack of fiscal accountability has on resource usage?

A. Before GST, fiscal decentralization was devolutionary in nature. Centre was giving a share of Income Tax and Custom duty as per recommendations of Finance Commission. After GST the nature of tax partnership has changed slightly as now the GST revenue is shared between centre and state.

Given the overwhelming reliance on devolved funds which, to a large extent, are tied to sectors and schemes, it is not surprising that Gram Panchayats spend the bulk of such funds on earmarked areas, such as roads, other basic services, sanitation and community assets. The spending on purely local public goods like irrigation is not a priority out of such funds.

Q. What are the possible reasons for low tax collection at lower levels?[Essay, Ethics, Mains]

A. It is a fact highlighted by Economic Survey 2017-18 that —Own direct tax collections by Indian states and local governments are significantly lower than those of their counterparts in other federal countries". It is not just that they have been provided with lesser power but even with whatever taxation powers have been provided, their share is low.

There are many possible explanations for this.

1. The extent of tax and functional devolution to these tiers is not very substantive. The Constitution divides taxes in a way that the Centre gets more taxes. Many state governments have not devolved substantive powers to the third-tier governments. In many states, RLGs and ULGs have not been devolved enough taxation powers though expenditure assignments may have been given.
2. Successive Devolution Reports of the Ministry of Panchayati Raj (MoPR) show that the share of revenues assigned to local governments in many states are much less vis-à-vis expenditure assignments. As per the latest MoPR Devolution Report (2015-16) the percentage of acceptance of such recommendations varies from as low as 11% in Karnataka to around 50% in West Bengal, Andhra Pradesh and Rajasthan to full acceptance in Kerala.
3. Even relative to the powers that they have, tier III governments under-collect direct taxes.
4. Middle class exit phenomenon: Middle class is switching to private facilities thus constraining the collectible pool of money.
5. Heavy reliance on devolved funds. It is noticeable here that ULGs seem to be doing much better in terms of own revenue generation. They generate about 44 per cent of their total revenue from own sources. RLGs, in contrast, rely overwhelmingly (about 95 percent) on devolution.
6. The principal sources of direct tax revenue at the third tier of government are Property taxes and Professional taxes. The collections from these potentially buoyant sources of revenue are generally low because of archaic base values which are far below market values.
7. Below potential levy and collection of Land Tax: Different states follow different methodologies to assess land values and apply different rates of land tax. However, in most of the cases, the levy is based on notional values of land which is much below the market values of land. Therefore, the land tax collection is merely 7% to 19% of the estimated potential. Similar is the case with taxes collected on house property and commercial property where collection is estimated to be around 20% of the estimated potential.

Low equilibrium trap: All of this has resulted in a self-reinforcing phenomenon of Low equilibrium trap. The weak direct tax collection leads to inadequate service delivery provision, which results in middle class exit phenomenon which in turn leads to weak collection and accountability.

The low-level equilibrium trap is a concept in economics developed by Richard R. Nelson, in which at low levels of per capita income people are too poor to save and invest much, and this low level of investment results in low rate of growth in national income. As per capita income rises above a certain minimum level at which there is zero saving, a rising proportion of income will be saved and invested and this will lead to higher rate of growth in income.

The phrases 'low level equilibrium trap' and 'vicious circle of poverty' have become popular in economics. Most of the economists agree that if the underdeveloped countries have to get out of low level equilibrium trap they must undertake investment programmes of such magnitude that the growth of per capita income breaks the population barrier.

Survey highlights there is a broader challenge—afflicting all tiers of government—in the limited ability to collect direct taxes. Given the quality of public service delivery, such taxes are often viewed as a "tribute" to a state rather than a contribution to and acknowledgement of the state in raising the quality of life.

[Prelims]

Devolution Index ranking: Kerala > Maharashtra > Gujarat> Karnataka

States derive their power to tax land from the Seventh Schedule of the Constitution. The third tier derives the power to tax properties from the respective State Panchayati Raj Act.

CHAPTER - 5

IS THERE A "LATE CONVERGER STALL?" IN ECONOMIC DEVELOPMENT? CAN INDIA ESCAPE IT?

[Useful for Essay, GK]

Q. Survey points out "we are living in the best times of the history". What do you understand by this?

A. Survey highlights that for all the economic times in humanity, the global ―bads" – war, violence, deprivation and poverty – are at unprecedentedly low levels whereas the global ―goods" – standards of living, access to essential services, and material well-being more generally – have improved at a historically unprecedented pace to reach levels never witnessed in humanity's history. Thus, we are in the economically best times of history.

Survey has classified the countries around the world on an economic scale based on per capita GDP as percentage of that in the USA on PPP terms

Low-Income Countries	Less than 5% of that in the U.S.
Lower-Middle Income Countries	5-15% of that in the USA
Upper-Middle Income Countries	15-35% of that in the USA
High-Income Countries	More than 35% of that in the USA

Q. What is termed as "Late Converger Stall" in Economic Development?

A. In the modern world, the developing countries have been performing very well to reduce the gap with the developed world. It happens because poorer countries are growing much faster than richer countries and are closing the gap in standards of living. This closing of developmental gap is termed as **"economic convergence".**

Countries like Japan and Korea achieved it and were termed as early convergers. The convergence process has been broadening and accelerating for the last 20-30 years with late convergers like India growing at a fast pace to catch up with the developed world.

The **idea of convergence** in economics (**catch-up effect**) is the hypothesis that poorer economies' per capita incomes will tend to grow at faster rates than richer economies. As a result, all economies should eventually converge in terms of per capita income. Developing countries have the potential to grow at a faster rate than developed countries because diminishing returns (in particular, to capital) are not as strong as in capital-rich countries. Furthermore, poorer countries can replicate the production methods, technologies, and institutions of developed countries.

"Late Converger Stall": There can be a possible slowdown in this process of convergence for lower-middle-income countries such as India. The possibility of such a ―Late Converger Stall" arises because of four possible headwinds (explained later) in the post-Global Financial Crisis era. These threats were largely absent for the early convergers such as Japan and Korea.

Q. Trace the journey of India"sdevelopment on the income scale?

A. In 1960, India was a low-income country with a per capita income (in 2011 purchasing power parity (PPP) terms) of $1,033. This was equivalent to about 6 percent of U.S. per capita income at the time. However, India attained lower middle-income status in 2008 and today has a per capita income of

$6,538, which is 12 percent of the USA. If per capita income in India grows at 6.5 percent per year, India would reach upper-middle income status by the mid-to-late 2020s.

Q. Explain the phenomenon of Low-Income Trap and Middle-Income Trap?

A. Low-income trap: For a long time, many poor countries were not catching up at all; they were growing more slowly than richer countries. Middle-income trap is Mid income countries would grow more slowly than what would be expected given their level of income (i.e., slower than richer countries), impeding the transition from middle income to high income status.

The reasons for the trap/stall were supposed to be twofold –

1. As countries attained middle income status, they would be squeezed out of manufacturing and other dynamic sectors by poorer, lower-cost competitors.
2. On the other hand, they would lack the institutional, human, and technological capital to carve out niches higher up the value-added chain.

Thus, pushed from below and unable to grasp the top, they would find themselves doomed to, well, middle income status.

Some economists dispute the Middle-Income Trap theory and show that many economies like Korea, Portugal, Poland, etc. have actually crossed the Middle-Income Levels to reach to the High-Income Group. In fact, the convergence process was actually accelerating after 2008. The poorest have been growing faster than lower middle-income countries, which have been growing faster than upper middle-income countries that in turn have been growing faster than the richest. This phenomenon is termed as ~~-c~~onvergence with vengeance".

Effect of the Global Financial Crisis (GFC): The GFC represented a watershed event, marked by a sharp decline in rates of growth across the world. The world growth declined from 4.3 percent in the ten-year period prior to the GFC to 2.9 percent in the decade after the GFC. This highlights four headwinds which may stall convergence process of late convergers.

> The global financial crisis (GFC) refers to the period of extreme stress in global financial markets and banking systems between mid 2007 and early 2009. During the GFC, a downturn in the US housing market was a catalyst for a financial crisis that spread from the United States to the rest of the world through linkages in the global financial system. Many banks around the world incurred large losses and relied on government support to avoid bankruptcy. Millions of people lost their jobs as the major advanced economies experienced their deepest recessions since the Great Depression in the 1930s. Recovery from the crisis was also much slower than past recessions that were not associated with a financial crisis.

1. Hyper-Globalization repudiation (The backlash against globalization which reduces exporting opportunities**):** Early convergers benefited from the process of rapid globalization or hyper globalization, reflected in dramatic increases in the world trade-GDP ratio. As a result, Japan, South Korea and China were all able to post average export growth rates of over 15 percent for the 30 years of their convergence periods. But this globalization has led to a backlash in advanced countries reflected in the decline in world trade-GDP ratios since 2011. This means that the trading opportunities available to the early convergers, specifically the ability to export at double digit rates of growth for three to four decades consistently, may no longer be available.

Q. Think of some recent examples of anti-globalization?

2. Structural transformation (The difficulties of transferring resources from low productivity to higher productivity sectors): Successful development requires two kinds of structural transformations:

1) A shift of resources from low productivity to high productivity sectors

2) A larger share of resources devoted to sectors that have the potential for rapid productivity growth.

In many cases, however, resources do not shift in this way. They shift instead from informal, low productivity sectors to ones that are marginally less informal/more productive. These are cases of “thwarted structural transformation." For this reason, “premature de-industrialization” (the tendency for manufacturing in late convergers to peak at lower levels of activity and earlier in the development process) is a cause of concern.”

Q. What is the concern of “Less good growth” which late convergers are facing post-GFC?

Scholars have divided different sectors of economy as per their desirability in the process of structural transformation from the perspective of growth. ‘Dynamic sectors‘ are those with high levels of productivity and potential for unconditional convergence. For India, such a list comprises manufacturing, finance, telecommunications, and professional services. “Less Good” growth comes from sectors like hotels, restaurants, transport, etc. ‘Good growth‘ comprises growth accounted for by labour share shifts into these good sectors and their productivity growth.

It is observed that for China, the average share of good growth over the period 1980-2010 is 53% while India‘s is 37%, falling to about 32% since the Global Financial Crisis. Economies are facing the threat of “Less Good Growth”.

3. **Human Capital Regression** (The challenge of upgrading human capital to the demands of a technology-intensive workplace): There is one key difference between early and late convergence and that relates to human capital. In early convergence, it was the alignment of human capital endowment (educated but relatively unskilled labour) with the sector associated with structural transformation, namely manufacturing. The late convergers are doubly challenged - They failed to provide even the basic education and their failure will prove increasingly costly. This is because the human capital requirement for the new structural transformation requires higher standards of education and skills. With the onset of the automation, more and more sectors are now becoming the preserve of the highly skilled workers.

4. **Climate change-induced agricultural stress (**Coping with climate change-induced agricultural stress.**)**

Structural transformation requires the release of resources from agriculture into the modern sector under conditions of rising agricultural productivity. Also, the third world needs to produce enough food to a growing population. Data suggests that there has been divergence on agricultural productivity. In agriculture, growth rates for richer countries have been consistently greater than for developing countries. Indian agricultural productivity growth has been stagnant, averaging roughly 3 percent over the last 30 years. Further, Indian agriculture is vulnerable to temperature increase and still heavily dependent on precipitation. If climate change raises temperatures and the variability of rainfall, farmer revenues could decline by up to 20 percent to 25 percent in non-irrigated areas.

Human capital is a quantification of the economic value of a worker's skill set. This measure builds on the basic production input of labour measure where all labour is thought to be equal. The concept of human capital recognizes that not all labour is equal and that the quality of employees can be improved by investing in them; the education, experience and abilities of employees have economic value for employers and for the economy as a whole.

Conclusion: Since 1980, India has been rapidly catching up, posting an average per capita GDP growth rate of 4.5 percent. But this fast growth has occurred with limited transfer of labour resources from low productivity to high productivity and dynamic sectors. The agricultural growth has remained modest. The risk for India is that resources (especially labour) will move from low productivity, informal sectors to other sectors that are marginally less formal and only marginally more productive. That is the ―late converge stall" that India must avoid.

Way Forward: It is utmost important to rapidly improve human capital and agricultural productivity in India. We need to make our agriculture resilient to climate change and water scarcity. There is no late converger stall for India as yet but it would be wise to act to head it off.

CHAPTER - 6

CLIMATE, CLIMATE CHANGE AND AGRICULTURE

Q. Highlight the Importance of Agriculture in India? [Essay, GK, Mains]

It accounts for 16% of GDP, 49% of employment, and nearly 14.7 crore families depend on agriculture directly. Poor agricultural performance can lead to inflation, farmer distress and unrest, and larger political and social disaffection - all of which can hold back the economy. Prosperous farmers and productive farms are imperative for India's development.

Q. Discuss some challenges being faced by agriculture in India in past few years? [Mains, Essay]

1. **Fall in income of farmers**: Production has increased for a number of crops resulting in declining farm revenues. In fact, in some cases, the market prices fell below the Minimum Support Price (MSP).
2. **Productivity** in most areas has remained stagnant and it needs to be increased: Farm mechanization and crop productivity has a direct correlation as farm mechanization saves time and labor, reduces drudgery, cut down production cost in the long run, reduces post-harvest losses and boosts crop output and farm income. Use of improved implements has potential to increase productivity up to 30 per cent and reduce the cost of cultivation up to 20 per cent.
3. **Price and Income volatility** needs to be reduced. Insurance is a proven way to hedge uncertainties. [Read PMFBY]
4. **Resource constraints**, especially shortages of water and land, needs to be resolved.
5. **Soil**: Deterioration in soil quality.
6. **Irrigation**: Agriculture in India even today continues to be vulnerable to the vagaries of weather because close to 52 percent (73.2 million hectares area of 141.4 million hectares net sown area) of it is still un-irrigated and rainfed.
7. **Real agricultural growth** since 1960 has averaged only about 2.8% in India.
8. Apart from growth being low, variability is also high in India. By comparison, China's agricultural growth has exceeded that of India by a substantial 1.5% on average and has low variability.
9. **Temperature and rainfall variability**: Climate change-induced temperature increases and rainfall variability. Between the 1970s and the last decade -
   - Temperature has increased by about 0.45 degrees and 0.63 degrees in the Kharif and Rabi seasons, respectively.
   - Kharif rainfall has declined on average by 26 mm and Rabi rainfall by 33 mm. Annual average rainfall for this period has on average declined by about 86 mm.
10. **Fluctuations in extreme days**: Economic Survey found that the proportion of days during the monsoon season in each year when the temperature was extremely high (defined as greater than the 95th percentile of the grid-point specific temperature distribution) is increasing. Similarly, the proportion of days with extremely low temperature is decreasing.
11. **Rainfall extremities:** Economic Survey found that the proportion of dry days (rainfall less than 0.1 mm per day), as well as wet days (rainfall greater than 80 mm per day) has increased steadily over time.

[Real agricultural GVA growth in India]

Years	Trend	Agricultural growth
1955-67	Malthusian period	1.99%
1967-90	Green revolution	2.91%
1990-2004	Focus on other crops	2.94%
Post-2004	Post-commodity price surge	3.56%

Period	Growth (%)	
	China	India
1960-2004	4.3	2.6
2004-2016	4.4	3.2

Q. Why is it important for Indian Economy to move beyond agriculture? [Mains, Essay]

1. There are constraints to raising productivity and agriculture in present land distribution pattern cannot provide sufficient incomes to the vast masses.
2. Economic development is always about getting people out of agriculture and of agriculture becoming over time a less important part of the economy (in terms of share of GDP and employment).
3. Agriculture cannot be the dominant, permanent source of livelihood for too many people. Given its production constraints it cannot provide living standards in a manner that manufacturing and services can.
4. Another non-economic argument came from Dr Ambedkar who warned about the dangers of romanticizing rural India. He famously derided the village as "a sink of localism, a den of ignorance, narrow mindedness and communalism." Therefore, in the long run people need to move out of agriculture and villages.

Therefore, in future we need fewer farmers and farms but more productive ones. We need to facilitate rising productivity in agriculture and enable good urbanization and industrialization.

Q. Under what conditions, to what extent, and where will the agricultural impact of climate change most felt? [Prelims]

There is a clear long-term trend of rising temperatures, declining average precipitation, and increase in extreme precipitation events. Intergovernmental Panel on Climate Change (IPCC), predict that temperatures in India are likely to rise by 3-4 degree Celsius by the end of the 21st century. There are at least three main channels through which climate change would impact farm incomes –

1. An increase in average temperatures
2. A decline in average rainfall
3. An increase in the number of dry-days(rainfall less than 0.1 mm per day)

Such adverse change in climate affects agriculture in various ways including –

1. The problem is that unlike other catastrophic events, impact of temperature and rainfall change is felt only in the extreme; that is, when temperatures are much higher, rainfall significantly lower, and the number of "dry days" greater, than normal.
2. Further, these impacts are significantly more adverse (almost twice) in unirrigated areas (defined as districts where less than 50 percent of cropped area is irrigated) as compared to irrigated areas. Hence, rainfed crops are much more affected than cereals which are predominantly grown in irrigated lands.

Climate change could reduce annual agricultural incomes in the range of 15-18% on average, and up to 20-25% for unirrigated areas. As per survey, average kharif crop yield will decline 4% due to extreme temperature and 12.8% due to extreme rainfall shocks. Similarly, average Rabi crop yield will decline by 4.7% due to extreme temperature and 6.7% due to extreme rainfall.

Spatial distribution: Temperature increases have been particularly felt in the North-East, Kerala, Tamil Nadu, Kerala, Rajasthan and Gujarat. On the other hand, Punjab, Odisha and Uttar Pradesh have been the least affected. Rainfall deficiencies are more concentrated in Uttar Pradesh, North-East, and Kerala, Chhattisgarh and Jharkhand. While, there has actually, been an increase in precipitation in Gujarat, Odisha and Andhra Pradesh. **[Visualize on map]**

Q. Is the impact of temperature and rainfall fluctuations different on different crops? [Prelims]

Economic Survey studied the susceptibility of different crops to temperature and precipitation. It studied the effects of extreme temperature and rainfall shocks on the yields of individual crops. A clear pattern that emerges is that crops grown in rainfed areas—pulses in both Kharif and Rabi—are vulnerable to weather shocks while the cereals—both rice and wheat—are relatively more immune. Pulses, Chickpea, and Soya production are particularly vulnerable.

	Decline in crop yield due to Temperature extremes	Decline in crop yield due to Rainfall extremes
Kharif crop	Soya > Pearl Millet > Sorghum > Rice > Groundnut	Pulses > Pearl millet > Sorghum > Rice > Groundnut
Rabi crop	Chickpea > Linseed > Wheat	Chickpea > Linseed > Wheat > Barley > Rape and Mustard seeds

Q. What is the impact of extreme weather shocks on farm revenues?

Extreme temperature shocks reduce farmer incomes by 4.3 percent and 4.1 percent during Kharif and Rabi respectively, whereas extreme rainfall shocks reduce incomes by 13.7 percent and 5.5 percent.

IMF also found that for emerging market economies a 1-degree Celsius increase in temperature would reduce agricultural growth by 1.7 percent, and a 100 millimetres reduction in rain would reduce growth by 0.35 percent.

Q. Are there two kinds of agriculture like India and Bharat existing in India?

In thinking about agricultural policy reforms in India, it is vital to make a clear distinction between two agricultures in India.

1. There is an agriculture—the well-irrigated, input-addled, and price-and-procurement-supported cereals grown in Northern India. Here the challenge is for policy to change the form of the very generous support from prices and subsidies to less damaging support in the form of direct benefit transfers.
2. Then there is another agriculture (broadly, non-cereals in central, western and southern India) where the problems are very different: inadequate irrigation, continued rain dependence, ineffective procurement, and insufficient investments in research and technology (non-cereals such as pulses, soyabeans, and cotton), high market barriers and weak post-harvest infrastructure (fruits and vegetables), and challenging noneconomic policy (livestock).

Q. What is the way forward for Indian agriculture to be effective in dealing with the threats posed by climate change?

1. Minimizing susceptibility to climate change requires drastically extending irrigation via efficient drip and sprinkler technologies.
2. We should also focus on replacing untargeted subsidies in power and fertilizer by direct income support.
3. Agricultural research will be vital in increasing yields but also in increasing reliance to all the pathologies that climate change threatens to bring in its wake: extreme heat and precipitation, pests, and crop disease.
4. Agricultural Research will be especially important for crops such as pulses and soyabean that are most vulnerable to weather and climate.
5. The cereal-centricity of policy needs to be reviewed.
6. Crop insurance program such as Pradhan Mantri Fasal Bima Yojana should be promoted and technologies such as drone should be used to determine losses more effectively and provide compensation faster.

Since agriculture is a state subject, the cooperation of states is necessary in bringing reforms. The cooperative federalism ―technology" of the GST Council that brings together the Centre and States could be promisingly deployed to further agricultural reforms and durably raise farmers' incomes.

Climate Smart Agriculture – World Bank

Climate-smart agriculture (CSA) is an integrated approach to managing landscapes—cropland, livestock, forests and fisheries--that address the interlinked challenges of food security and climate change. CSA aims to simultaneously achieve three outcomes:

1. Increased productivity: Produce more food to improve food and nutrition security and boost the incomes of 75 percent of the world's poor who live in rural areas and mainly rely on agriculture for their livelihoods.
2. Enhanced resilience: Reduce vulnerability to drought, pests, disease and other shocks; and improve capacity to adapt and grow in the face of longer-term stresses like shortened seasons and erratic weather patterns.
3. Reduced emissions: Pursue lower emissions for each calorie or kilo of food produced, avoid deforestation from agriculture and identify ways to suck carbon out of the atmosphere.

While built on existing knowledge, technologies, and principles of sustainable agriculture, CSA is distinct in several ways. First, it has an explicit focus on addressing climate change. Second, CSA systematically considers the synergies and tradeoffs that exist between productivity, adaptation and mitigation. Finally, CSA aims to capture new funding opportunities to close the deficit in investment.

CHAPTER - 7

GENDER AND SON META-PREFERENCE: IS DEVELOPMENT ITSELF AN ANTIDOTE?

[Mains, Essay]

Q. What are the different dimensions of Gender Equality in India?

Importance of Gender equality: Women‘s participation in the workforce to the level of men can boost the Indian economy by 27 percent. In developing countries, working women also invest more in the schooling of their children. Gender equality is an inherently multidimensional issue. But, embracing multidimensionality indiscriminately can impede understanding. Accordingly, assessments in this chapter are made on three specific dimensions of gender:

1. Agency: Agency relate to women‘s ability to make decisions on reproduction, spending on themselves, spending on their households, and their own mobility and health.

2. Attitudes: Attitudes relate to attitudes about violence against women/wives, and the ideal number of daughters preferred relative to the ideal number of sons.

3. Outcomes: Outcomes relate to son preference (measured by sex ratio of last child), female employment, choice of contraception, education levels, age at marriage, age at first childbirth, and physical or sexual violence experienced by women.

Q. Is women empowerment really taking place in India? [Essay] Data source: Demographic and Health Survey (DHS)

Points on women empowerment are following:

- Nearly 75% women are involved in the decision making about their health, shopping and visits to family members.
- 94% of the women report that they do not suffer from sexual violence

Points against women empowerment are following:

- Only 24% of the women are employed and only 28% are employed in non-manual jobs
- For 46% of the women, wife beating is acceptable
- 18% women are not even involved about decision of their own earnings
- Female contraception: nearly 47 percent of women do not use any contraception
- Only 39% last child are females

Over the last 10-15 years, India‘s performance has improved on 14 out of 17 indicators. Data reveals that Gender indicators improve as nations get wealthier. At present, Women work participation, use of contraception and preference for son are major issues which need to be addressed urgently.

Q. What are the reasons behind decline in female work force participation?

Participation in workforce - too has declined because- On supply side, increased incomes of men allow women to withdraw from work force. On demand side, there is a lower demand for women due to social norms, neo middle-class phenomenon, security concerns, farm mechanization, automation (high skilled nature of jobs)

Q. How are different parts of the country performing with respect to women empowerment?

Within India, there is significant heterogeneity, with the North-Eastern states (a model for the rest of the country) consistently out-performing other states and not because they are richer; hinterland states are lagging behind but the surprise is that some southern states such as AP and TN do less well than their development levels would suggest. The states that lag behind are Bihar, Rajasthan, Madhya Pradesh, Uttar Pradesh, Jharkhand & Andhra Pradesh.

Q. What is meta preference for a son in Indian society and who are the unwanted girls?

There are two set of data which shows bias against girl child in India -

Missing Women: Number of women who could not take birth due to sex selective abortion and differential survival are ―missing women". It directly manifests in skewed sex ratio in the society. An estimated number of 63 million ―missing" women in 2014 (either due to sex selective abortion, disease, neglect, or inadequate nutrition).

Son meta-preference: Parents may choose to keep having children until they get the desired number of sons. This is called son ―meta" preference. A son ―meta" preference – even though it does not lead to sex-selective abortion – may nevertheless be detrimental to female children because it may lead to fewer resources devoted to them. This notionally creates ―unwanted" girls, estimated at about 21 million. It is measured by the Sex Ratio of the Last Child (SRLC).

For India, the sex ratio of the last child for firstborns is 1.82, heavily skewed in favour of boys compared with the ideal sex ratio of 1.05. This ratio drops to 1.55 for the second child for families that have exactly two children and so on.

Q. What are the reasons for son preference in the Indian society?

A number of reasons for such a son preference, including

1. Patrilocality (women having to move to husbands' houses after marriage)
2. Patrilineality (property passing on to sons rather than daughters)
3. Dowry (which leads to extra costs of having girls)
4. Old-age support from sons and rituals performed by sons

Prelims fact: Son Preference- India's sex ratio (males for every female) during the period between 1970-2014 increased substantially from 1060 to 1108. However, a negative correlation has been observed between income and sex ratio in the country.

Conclusion: Despite economic growth and rapid development in the past 25 years, the regressive patriarchal mindset has not changed in India. Targeted interventions and policy solutions are required to focus more effectively on social problems. It cannot be taken for granted that mere increase in educational certificates and incomes will result in improvement in thought process also. The government's Beti Bachao, Beti Padhao and Sukanya Samridhi Yojana schemes, and mandatory maternity leave rules are all steps in the right direction.

CHAPTER - 8

TRANSFORMING SCIENCE AND TECHNOLOGY IN INDIA

[Use this content in essay, Mains exam introduction para and improve general understanding]

Innovations in science and technology are integral to the long-term growth and dynamism of any nation. The pursuit of science also creates a spirit of enquiry and discourse which are critical to modern, open, democratic societies. Historically, India can point to many contributions to global scientific knowledge and technological achievement. However, India under-spends on research and development (R&D), even relative to its level of development. A doubling of R&D spending is necessary and much of the increase should come from the private sector and universities.

To recapture the spirit of innovation that can propel it to a global science and technology leader from *„net consumer to net producer"* of knowledge India should invest in educating its youth in science and mathematics, reform the way R&D is conducted, engage the private sector and the Indian diaspora, and take a more mission-driven approach in areas such as dark matter, genomics, energy storage, agriculture, and mathematics and cyber physical systems. Vigorous efforts to improve the ―ease of doing business" need to be matched by similar ones to boost the ―ease of doing science."

Prelims facts: The first use of zero found in the Bakhshali manuscript (carbon dated to AD 200–400) Important mathematicians. In ancient era - Aryabhata, Brahmagupta, Bhaskara, Madhava of Sangamagrama. In modern era – CV Raman, S. N. Bose, Srinivasa Ramanujan

Q. What is contribution of India to Science and Technology in recent years?

1. The space program, including the Mangalyaan mission which highlighted India‘s niche of doing cost-effective, high-technology research
3. India‘s important participation (involving three major Indian research institutions) in the Laser Interferometer Gravitational-wave Observatory (LIGO) experiment successfully detected the existence of gravitational waves
4. The Hybrid seeds program that underpinned the Green Revolution
5. India‘s vaccines and generic-drugs industry and Nuclear energy program

Evaluation of India‟s performance:

- **Underspending on research:** India under-spends on (R&D), even relative to its level of development. As a fraction of GDP, public expenditures on research have been stagnant – between 0.6-0.7 %of GDP – over the past two decades. This is well below other countries such as US (2.8), China (2.1), Israel (4.3) and Korea (4.2).
- India currently ranks 60th out of 127 on the Global Innovation Index (GII) 2017, improving from 66th rank in 2016.

  The Gross Expenditure on R&D (GERD) was around Rs. 1,04,864 crores in 2016-17. Around 60% of this comes from the public expenditure. The public expenditure on GERD is Israel (5%), Japan (10%), USA (12%) and China (20%).
- **Lack of private sector participation:** India‘s case is also different because the government is not just funding research but is also running research. In most countries, the private sector carries out the bulk of research and development even if government must play an import funding role.
- **Limited role of Universities and prominence of specialized research institute:** There is a disconnect between the teaching and research enterprise with research being concentrated in

specialized research institutes (CSIR, ISRO, ICAR, ICMR, DAE) under different government departments limiting universities to largely play a teaching role.

- Private enterprises in India do not focus adequately on research. There are 26 Indian companies in the list of the top 2,500 global R&D spenders compared to 301 Chinese companies.

Public Investments in R&D = Central Government Ministries/Department + Public Sector/joint sector industries + State Government + Higher Education

- **Low PHD intake:** Students doing Ph.D. in STEM (Science, Technology, Engineering and Management) will become researchers of tomorrow. In comparison to China, there are less than half Indian STEM Ph.D. students in the US. India has 150 researchers per million against USA (~4000), China (~1200) and Israel (~8000).
- **Delay in domestic patent system:** There is a severe backlog and high rate of pendency for domestic patent applications. Due to manpower shortages and other inefficiencies, there is a backlog of almost 2 lakh patents pending examination. This has meant that patent examination and granting can take 5 or more years which will render the technology obsolete by the time patent is granted.
- **Preference of Rat race over research:** Indian society also attaches higher importance given to careers in engineering, medicine, management and government jobs than careers in research

Recent status after policy interventions:

- Ph.D. in India: There has been an increase in Ph.D. enrolments in India. In 2015-16 126,451 students were enrolled in Ph.D. programs in India, of which 62 percent were in STEM fields.
- Journal Publications: In 2013, India ranked 6th in the world in scientific publications with a global share of 4.4%. The average annual publication growth is about 14%. With respect to citations, the rank is 13^{th}.
- Patent filing: If journal publications reflect a country's prowess in science then patents reflect its standing in technology. According to the WIPO, India is the 7th largest Patent Filing Office in the World. In 2015, India registered 45,658 patents in comparison to China (11,01,864), USA (5,89,410) and Japan (3,18,721)
- Government support schemes: PM fellowship scheme, Deeksha, Science, Technology and Innovation scheme

Way forward:

1. **Catch them young:** Improve math and cognitive skills at the school level. India should invest in educating its youth in science and mathematics.
2. **Encourage Investigator-led Research**: India needs to gradually move to have a greater share of an investigator-driven model for funding science research. A step in this direction occurred in 2008, with the establishment of the Science and Engineering Research Board (SERB), a statutory body of DST. This body has sanctioned about three and half thousand new R&D projects to individual scientists.
3. **Funding:** Increase funding for research from private sector and state governments.
    - A doubling of R&D spending is necessary and much of the increase should come from the private sector and universities.
    - Current tax law already favours CSR investment into R&D, but the types of R&D activities eligible can be expanded.

- 50:50 partnership with SERB for industry relevant research under the Ucchatar Avishkar Yojana (UAY) is a good example of public-private partnership in R&D
- There is a need for greater State Government spending, especially application-oriented R&D aimed at problems specific to their crops, ecology, economies and populations

4. **Research network:** Link national labs to universities and create new knowledge eco-systems
   - The separation of research from teaching has been an Achilles heel for Indian science
   - We need to bring students from universities and faculty from research institutes together in spatial, geographic, professional and personal sense
5. Mission driven approach to R&D (6 missions suggested in survey are following) **[Prelims, Mains, Essay]**

A. National Mission on Dark Matter –

- India is one of the leading countries in high energy physics and relevant mathematics.
- The payoffs from this research will have implications on space missions, quantum computing, newer solutions to energy problems, etc.
- India already has strong international collaboration including that in the LIGO, Neutrino, CMS/LHC projects, etc.

B. National Mission on Genomics –

- Genomic research lies at the heart of the future of the life sciences.
- Currently several countries have launched ambitious national genomic research projects e.g. UK Biobank Study and China Kadoori Biobank. These studies are collecting detailed phenotype information, as well as blood and tissue samples, to study the determinants and life-course of biological pathways and disease.
- India already has a strong foundation of life science research institutes which together can make significant contributions in this area

C. National Mission on Energy Storage Systems

- Renewable energy is the future and India has made a major commitment to investment in renewable energy.
- Energy storage technologies (e.g., batteries) help in energy management and power quality in electric power systems.
- India has lagged in manufacturing renewal energy generation systems while we have great potential including that in exports.
- This will be especially helpful to provide round-the-clock electricity to villages using off-grid renewable energy systems.

D. National Mission on Mathematics

- A National Mission of Mathematics will improve mathematics teaching at all levels of higher education.
- It will seek to establish five institutes of mathematical sciences within existing institutions
- It will conduct annual district, state and national math Olympiad competitions and will provide scholarships.

E. National Mission on Cyber Physical Systems

- The term Cyber Physical System (CPS) refers to machine-based communication, analysis, inference, decision, action, and control in the context of a natural world (―Physical" aspect).
- This is hugely multidisciplinary area including deep mathematics used in Artificial Intelligence, Machine Learning, Big data Analytics, Block Chains, Expert Systems, Contextual Learning going to integration of all of these with intelligent materials and machines, control systems, sensors and actuators, robotics and smart manufacturing.
- Together these are the building blocks of future industry that will throw up both new challenges and opportunities.

F. National Mission on Agriculture

- Major aims will involve improving Indian agricultural productivity
- Creating resilience to the looming challenges in terms of rising temperatures, variable precipitation, water scarcity, increase in pests and crop diseases
- Removing the weaknesses in existing institutions of agricultural research and technology

6. **Leverage scientific Diaspora:** There are today more than 100,000 people with PhDs, who were born in India but are now living and working outside India (more than 91,000 in the U.S. alone).
   - In the US, there were 950,000 scientists and engineers from India. However, with the strength of India's economy and growing anti-immigrant atmosphere in the West, India has an opportunity to attract back more scientists.
   - There are a number of government programs which can do so –
     - Ramanujan Fellowship Scheme
     - Innovation in Science Pursuit for Inspired Research (INSPIRE) Faculty Scheme
     - Ramalingaswami Re-entry Fellowship for qualified Indian researchers residing in foreign countries, to work in Indian institutes/universities
   - Visiting Advanced Joint Research Faculty Scheme (VAJRA).
   - The inducements should be such as to allow them to do good research (laboratory resources, ability to hire post-docs, housing etc.) rather than financial, to ensure that home grown talent has a level playing field.
7. **Improve the culture of research:** Indian science and research institutes need less hierarchical governance systems
   - Encourage risk-taking and participation of younger scientists in decision making.
   - We need to simplify systems and boost the ―ease of doing science"
8. **Greater public engagement of the science and research establishment:** Much of science is a public good, and hence that will always require substantial public funding.
   - Scientists need to engage more vigorously with society to gain more public support.
   - This will require greater efforts at science communication through media, regular tours and lectures for school and college students as well the general public.

Conclusion:

- According to the Global Competitiveness Report 2017-18, India's capacity for innovation has been lower than that of many countries like the USA, the UK, South Korea, but it is better than that of China.

- The professional scientific & technical activities, which include R&D services, grew by 17.5 per cent and 41.1 per cent in 2014-15 and 2015-16 respectively.
- India-based R&D services companies account for almost 22 per cent of the global market
- India's share in global satellite launch services revenue have also increased to 1.1 per cent in 2015-16 from 0.3 per cent in 2014-15

India can build upon the strong base that it has in terms of demographic dividend and human capital in STEM to promote knowledge economy.

CHAPTER - 9

EASE OF DOING BUSINESS NEXT FRONTIER: TIMELY JUSTICE

Q. What are the components of ease of doing business; where does India stand right now? [P]

What *Doing Business* measures—11 areas of business regulation

Indicator set	What is measured
Starting a business	Procedures, time, cost and paid-in minimum capital to start a limited liability company for men and women
Dealing with construction permits	Procedures, time and cost to complete all formalities to build a warehouse and the quality control and safety mechanisms in the construction permitting system
Getting electricity	Procedures, time and cost to get connected to the electrical grid, the reliability of the electricity supply and the transparency of tariffs
Registering property	Procedures, time and cost to transfer a property and the quality of the land administration system for men and women
Getting credit	Movable collateral laws and credit information systems
Protecting minority investors	Minority shareholders' rights in related-party transactions and in corporate governance
Paying taxes	Payments, time and total tax and contribution rate for a firm to comply with all tax regulations as well as postfiling processes
Trading across borders	Time and cost to export the product of comparative advantage and import auto parts
Enforcing contracts	Time and cost to resolve a commercial dispute and the quality of judicial processes for men and women
Resolving insolvency	Time, cost, outcome and recovery rate for a commercial insolvency and the strength of the legal framework for insolvency
Labor market regulation	Flexibility in employment regulation and aspects of job quality

Q. Should the government and judiciary agree to a Cooperative Separation of Powers like the centre and states do in the form of Cooperative Federalism to improve the conditions of doing business? [Mains, Essay]

Yes. Currently our efforts to bring reforms in conditions of doing business are suffering from pendency, delays and backlogs in the appellate and judicial arenas. These are hampering dispute resolution and contract enforcement, discouraging investment, stalling projects, hampering tax collections but also stressing tax payers, and escalating legal costs. India continues to lag on the indicator on enforcing contracts, marginally improving its position from 172 to 164 in the latest report, behind Pakistan, Congo and Sudan. A clear and certain legislative and executive regime backed by an efficient judiciary that fairly and punctually protects property rights, preserves sanctity of contracts, and enforces the rights and liabilities of parties is a prerequisite for business and commerce. A cooperative separation of powers will resolve law‘s delay and boost economic activities.

Q. What are the steps taken by the government till now to expedite and improve the contract enforcement regime?

- The government has scrapped over 1000 redundant legislations. It has rationalized tribunals and improved their functioning
- The Arbitration and Conciliation Act, 1996 has been amended. The Commercial Courts, Commercial Division and Commercial Appellate Division of High Courts Act, 2015 has been passed
- Efforts have been made to reduce intra-government litigation. The Lok Adalat Programme has been expanded to reduce the burden on the judiciary.
- Only prospective legislative regime has been maintained to ensure legal consistency and to reduce chaos due to unpredictable changes in retrospective regulations.
- The judiciary has simultaneously expanded the seminal National Judicial Data Grid (NJDG) and is close to ensuring that every High Court of the country is digitized.

Q. What are the causes behind delays in enforcing contracts? [Mains]

- Delays and pendency stem from the increase in the overall workload of the judiciary
- This is also caused due to expanding jurisdictions and the use of injunctions and stays
- In the case of tax litigation, this stems from government persisting with litigation despite high rates of failure at every stage of the appellate process
- Low spending on the administration of justice – The total spending on Administration of Justice by States and the Centre constitutes approximately 0.08- 0.09% of GDP which is very low when compared to other countries
- Nearly 36% seats are vacant in high court and supreme court

Status of pendency: There is a high level of pendency across the six prominent appellate tribunals that deal exclusively with high stakes commercial matters. It is estimated at about 1.8 lakh cases. The average pendency of tax cases is particularly acute at nearly 6 years per case.

Some possible reasons behind pendency and delay specifically in High Courts are –

- Burden from Expansion of Discretionary Jurisdictions - economic and commercial cases are usually complex, require economic expertise in their handling and disposal, and hence, require more judicial time.

- Article 226 provide writ jurisdiction. High Courts have permissively and expansively interpreted this provision over a period of time, which has resulted in a substantial increase writ cases.
- Burden from Original Side Jurisdiction is significant in some High Courts which retain a unique original jurisdiction.

Some possible reasons behind pendency and delay specifically in Supreme Court is –

- Expansion of Special Leave Petition (SLP) Jurisdiction is a major cause for pendency
- Misuse of SLP: Article 136 empowers any party to approach the Supreme Court directly from any court or tribunal.
- Recourse to Injunctions and Stays - The average age of cases waiting for final judgment is inordinately high at 7.9 years, showing that more attention needs to be given to cases pending at the stage of final disposal

Cost of Pendency & Delay-

Numerous projects currently stayed by the court injunction and their average duration of stays lead to high amount of losses (close to 52,000 crores in six infrastructure ministries).This has also led to a spiralling of legal expenses of corporate India.

Q. "Pendency, arrears and delays are not just a feature of courts and tribunals, but also the Tax Departments and their multi-layered process." Comment [Mains]

Together, the claims for indirect and direct tax stuck in litigation (Appellate Tribunal and upwards) by the quarter ending March, 2017 amounted to nearly 7.58 lakh crores, over 4.7 percent of GDP. The success rate of the Department at all three levels of appeal-- Appellate Tribunals, High Courts, and Supreme Court-- and for both direct and indirect tax litigation is under 30%. In some cases, it is as low as 12%. Nonetheless, the Department is the largest litigant and its appeals constitute nearly 85% of the total number of appeals fled in the case of direct taxes.

Q. Is there a need for subject matter specific benches in higher courts? [Case study ethics]

The Supreme Court's recent experiment with constituting an exclusive bench for taxation produced impressive results, which may be replicated for other subject matters, and can also be emulated by other High Courts.There are profound benefits of dedicated subject- matter benches. Such benches ensure that the Supreme Court speaks in one voice, and there is continuity and consistency of legal jurisprudence. Further, they create efficiencies by allowing the judge to focus on the specialized branch of law placed before her.

Q. Suggest some policy solutions to reduce tax litigation in the country. [Mains, Essay, Interview]

- Expanding judicial capacity in the lower courts and reducing the existing burden in the higher courts
- Downsizing or removing original and commercial jurisdiction of High Courts, and enabling the lower judiciary to deal with such cases
- Courts may revisit the size and scale of their discretionary jurisdictions and avoid resorting to them unless necessary.
- The tax department exercising greater self-restraint by limiting appeals, given its low success rate.

- Increasing state expenditure (currently 0.08% of GDP) on the judiciary, particularly on their modernization.
- Subject-matter and stage-specific benches that allow the Court to build internal specializations.
- Cooperative Separation of Powers with focus on institutional independence and legitimacy.
- Court case management and court automation systems on the lines of UK crown court management service.

Conclusion: The present government came with a big discourse on reducing ‗Tax Terrorism'. The tax litigations take the form of harassment of tax payers. It is important to have a system in place which reduces tax evasion but litigation is not the apt way for it. It clogs the judiciary and puts imposing cost both on the government and on the taxpayers. A very small fraction of cases actually contains high demand value and a lot of cases add up to small demand value. The tax department can earn greater revenues by focusing more efficiently on a few bigger cases.

Data Points

Economic Indicator	Value	Remarks
GDP (18-19) (CSO data estimates)	7.2%	Survey projected 7-7.5%, Full year estimate by CSO, on nominal basis: projection of 12.3%
GDP (17-18) (CSO data estimates)	7.2 %	Survey projection was 6.75. Boost observed because of farm sector.
GDP (16-17) (CSO data estimates)	8.2%	Revised CSO data based on updated figures on new data related to crop production and financial data.
GDP (19-20) (WB projection) - India	7.5%	As per World Bank Global economic prospects ―Darkening Skies report”
GDP (19-20) (IMF projection) - India	7.4%	Source: World Economic Outlook, IMF (Highest in the World, China at 6.2%)
Advanced economies (19-20)	2.1%	Source: World Economic Outlook, IMF
GDP size	$2.6 trillion	Budget 2019-20
Export (April-Nov)18-19	$351 billion	15.5% jump Source: Ministry of Commerce
Import (April-Nov) 18-19	$428 billion	17% jump Source: Ministry of Commerce
Forex (till Jan 2019)	$400 billion	Source: RBI
India-China Bilateral trade	$85 billion	40% increase in exports to China
Current Account Deficit (19-20)	2.5%	Budget 19-20
Revenue Deficit (19-20)	2.2%	Budget 19-20
Primary Deficit (19-20)	0.2%	Budget 19-20
Fiscal Deficit (19-20)	3.4%	Budget 19-20
Effective Revenue Deficit (19-20)	1.3%	Budget 19-20
Per capita Income (FY 2018)	1,12,835 Rs.	Source: CSO (2018). Estimated 30% increase since FY 2015 The latest CSO figure put it at ~ 1,25,000 (Current price). At constant price it is ~ Rs. 91,000.
IIP growth rate	4.6%	From April to December 2018. Nov 2018 (0.3%) but December 2018 (2.4%) growth registered
Core Inflation	5.4%	As per January 2019 data
Headline inflation	2.05%	As per January 2019 data. Due to sustained deflation in food items and drop in energy prices
Repo rate	6.25%	RBI Feb Monetary policy meet reduced from 6.5 to 6.25 and changed policy stance to neutral

Reverse repo rate	6.00%	
MSF	6.50%	
Savings rate (FY 15-16)	32.3%	Source: Survey, At present it declined further due to low household savings
Investment rate (FY 15-16)	33.3%	Source: Survey NITI@75 years argues for increase it to 36% of GDP by 2022 from 29%
Gross Fixed capital formation	32.9%	CSO (1st Advanced estimates), Component of Investment used for fixed capital formation
National Income (in Crore)	Rs.167 Lakh	Source: CSO 1st Advance estimate (Jan 2019), Figure at current price, Growth of 12.5%
Human development	130	
Global Hunger	103	
Ease of doing business	77	
Gender gap	108	
Global innovation	57	
Climate change performance index	11	
Women participation in parliament	12%	
Unemployment rate (17-18)	6.1%	PLFS survey of NSSO, 45 years high. Though EPFO, ESIC data, McKinsey report show otherwise
Labour force participation (17-18)	36.9%	NSSO
Ideal sex ratio of last child	1050	Male: Female

Quotes from the Survey

Supporting iconic, growth-oriented industries, combined with tax policies that encourage small business growth and investment, represents a potent combination and is the basis of our entire administration”. **- Larry Hogan**

“We need to stop thinking about infrastructure as an economic stimulant and start thinking about it as a strategy. Economic stimulants produce Bridges to Nowhere. Strategic investment in infrastructure produces a foundation for long-term growth”. **- Roger McNamee**

Economists have long known that people are an important part of the wealth of nations.- T.W. Schultz

CHAPTER - 10

AN OVERVIEW OF INDIA'S ECONOMIC PERFORMANCE IN 2017-18

(With few additional points from 2018-19)

Q. What were the major economic reforms undertaken in the past few years?

2017-18:

- **Taxation:** Goods and Services Tax (GST), E-assessment for taxation system
- **Banking:** Twin Balance Sheet (TBS) problem was decisively addressed by sending the major stressed companies for resolution under the new Indian Bankruptcy Code, Recapitalization package to strengthen the public sector banks
- **Ease of doing Business** (77th rank in 2018): Boost to FDI, Infrastructure, GEM portal for government procurement
- **Corruption:** Natural resources are now allocated in a transparent and honest manner. E.g. coal blocks, Spectrum
- **'Ease of Leaving'** for the common men of this country. A few initiatives in this direction are
  - More than 800 medicines are being sold at lower price through more than 3 thousand Jan Aushadhi Centres
  - Cost of stents have been controlled
  - Special scheme for free dialysis of poor have been initiated
  - Persons belonging to poor and middle class are also being provided a great relief in interest rates on housing schemes
- **Urban development:** Funds for Urban Development are being mobilized through private sector also. 482 cities have started credit rating of which 144 cities have got investment grade rating.
- **Digital technology:** It is being leveraged to provide services and benefits to citizens. E.g. – Aadhaar, DBT, etc. Efforts are being made to provide all government services, whether bus or train tickets or individual certificates online.

2018-19:

- MSME announcements, Agri export policy, NBFC reforms, Ayushmaan Bharat, Pradhan Mantri Annadata Aaya Sanrakshan Yojana (MSP revision)

Overview of Indian Economy at present: India achieved an average growth of 7.5% last three years (2014-17). Indian economy is now ~$2.7 trillion economy. Ten years back we were half of France but today we have left behind France. As per NITI Aayog, India is expected to become $4 Trillion economy by 2022-23. On Purchasing Power Parity (PPP) basis, we are already the third largest economy and it is expected to become 5th largest economy soon on basis of GDP. However certain concerns remain.

Q. What are the major concerns before the Indian economy?

The elevated stock prices may get corrected sharply, provoking a ―sudden stall" in capital flows. The interest rates are rising throughout the world (increased from 1% to 2.5%). It may lead to flight of money and thus the correction in the stock prices. Growing anti-globalization and protectionist tendencies are also a major concern. Though oil price was also a concern but current forecast reveals that prices of oil in 2019-20 will be lower than 2018-19. As a general rule, it is estimated that a $10 per barrel increase in the price of oil reduces economic growth rate by 0.2-0.3 percentage points, increases WPI inflation by about 1.7 percentage points and worsens the CAD by about $9-10 billion dollars.

Q. List the trend of GVA and GDP growth figures for the economy in 2018-19 (1st Advance estimates)?

A. Reference: http://pib.nic.in/PressReleaseIframePage.aspx?PRID=1558931

Reference: https://www.thehindu.com/business/Economy/gdp-growth-rate-for-2017-18-revised-upwards-to-72/article26140013.ece

Central Statistics Office (CSO), Ministry of Statistics and Programme Implementation has released the First Advance Estimates of National Income at Constant (2011-12) and Current Prices, for the financial year 2018-19. These are presented in Statements 1-4. These are generally used by survey each year for making the report on the economy. The four statements are National Income and expenditure statements of GDP at current and constant price and estimates of GVA at basic price at current and constant price. GDP is derived by adding Taxes on Products net of Subsidies on Products to GVA at Basic Prices (i.e. Market price of GVA at Basic price).

GDP: The growth in GDP during 2018-19 is estimated at 7.2% as compared to the growth rate of 6.7% in 2017-18.

GDP at current price ~ 190 Lakh Crore (Growth rate: 12.3%) [current price means no discounting for inflation]

Gross Value Added (GVA) at Basic Prices: Anticipated growth of real GVA at Basic Prices in 2018-19 is 7.0% as against 6.5% in 2017-18. The growth rate in different sectors of the economy is:

Sector of economy	Growth rate 2018-19	Growth rate 2017-18	Remarks
Agriculture, Forestry and Fishing	3.8%	3.4%	Kharif target achieved for 2018-19.
Mining and Quarrying	0.8%	2.9%	Coal production registered growth but crude oil was negative.
Construction	8.9%	5.7%	Production of cement and finished steel registered growth.
Manufacturing	8.3%	5.7%	Private corporate sector has 75% share in manufacturing.
Financial, Real Estate and Professional Services	6.8%	6.6%	Key indicators are corporate sector for real estate, computer related activities, bank credits etc.
Electricity, Gas, Water Supply and Other Utility Services	9.4%	7.2%	IIP data is picked for this calculation.
Public Administration, Defence and Other Services	8.9%	10.0%	Key indicators are Union Government Expenditure, Net of Interest Payments and Subsidies
Trade, Hotels, Transport, Communication and	6.9%	8.0%	This is estimated using cargo data, shipment data, sales of commercial vehicles, GST and Railways data. GST shortfall, low shipment cargo

Services related to Broadcasting			and sea port may have led to decline.

Note: The differences in the nominal growth of GVA and GDP have also increased in the last few years. This is indicative of an increase in the share of indirect taxes.

GDP calculation can also be done from expenditure calculations. The two main components of expenditure calculations are Private final consumption expenditure and Government final consumption expenditure. PFCE includes the consumption of households and non-profit institutions (except expenditure on land) whereas, GFCE includes the expenditure on employee's compensation, services, defence etc.

[prelims] A general trend within the composition of private final consumption expenditure is

Services > Non-durable goods > semi-durable goods > Durable goods

Engel elasticity relates to consumption expenditure behaviour.

As per CSO estimates, PFCE and GFCE accounts for 55.4% and 11% of GDP respectively. While PFCE registered a decline, GFCE registered an increase. Exports accounted for 21.1% of GDP which is an improvement over previous year

Q. Chart out the trends in Savings and Investment rate (Gross capital formation as % of GDP)?

The following table shows swings in saving and investment rates in India:

	2011-12	2012-13	2013-14	2014-15	2015-16
Investment rate	39.0	38.7	33.8	34.4	33.3
Savings rate	34.6	33.9	32.1	33.1	32.3
Saving Investment gap	-4.3	-4.8	-1.7	-1.3	-1.0

Source: Based on data from CSO

Investment rate decline in 2013-14 is attributed to difficulties in acquiring land, delayed and cumbersome environmental clearances, problems on infrastructure front. However, the faster decline in investment rate vis-à-vis the savings rate has led to lower level of current account deficit (Savings Investment gap) from 2013-14 to 2015-16.

Trends in savings: Savings come from majorly three sectors namely Public, private corporate and household. Household is further divided into household physical and household financial. Over the years, share of household has declines from 68% of total savings to 59%. Even within household savings, the movement has happened from physical assets to financial assets (Pension funds, Life insurance etc.).

Trend (2015-16): Private Corporate (11.9%) > Household Physical (11.2%) > Household financial (7.4%) >Public (1.3%)

Trends in Investment: Investment happens majorly from three sectors namely public, private corporate, and household. General trend is Private corporations (13%) > Household (10.9%) > Public (7.5%). The decline in the investment rate is attributed to the twin balance sheet challenge in the economy.

[Concept building]

Q. What is capital formation? Discuss its importance in economic growth. [Prelims]

Capital formation refers to adding to the capital stock of a country. It is surplus production over consumption.
[Capital formation= domestic savings+ net inflow of funds from abroad]

Capital formation is necessary for economic growth. It enables establishment of industries which require heavy capital investment and are basic in nature. Large capital stock enables the country to make use of latest techniques of production. With the help of large capital stock, a country acquires the capacity to change, innovate and adjust to new ideas and technological advances.

Q. What are the components of capital formation? (Gross domestic fixed capital formation)

Components of capital formation are:

a. Gross fixed capital formation (GFCF):

1. Construction of residential and non-residential buildings.
2. Other constructions, including land improvement, plantation and orchard development.
3. Transport equipment.
4. Machinery and other equipment.
5. Breeding stocks, draught animals, dairy cattle, and other livestock.

b. Increase in stock or changing stock

1. Unutilized raw materials
2. Unsold goods
3. Semi- finished goods
4. Stock of strategic and other important materials held by government. Example: buffer stock of food grains, arms
5. Livestock, except breeding stock

Reference: http://economicsclass.weebly.com/savings-investment-and-capital-formation.html

CHAPTER - 11

REVIEW OF FISCAL DEVELOPMENTS

Q. What are some major fiscal indicators of macro-economic stability in the economy?

A. fiscal indicators-Revenue buoyancy, expenditure quality, devolution to states and deficits (Fiscal, primary, current account and revenue)

Q. What are the major patterns in the receipts and expenditure of central government?

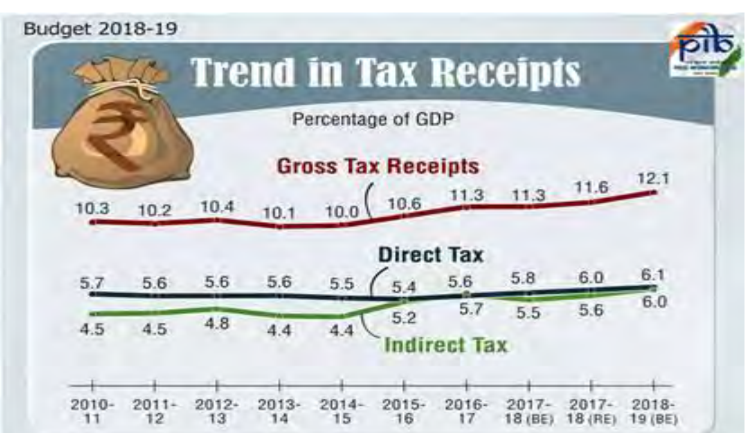
A. First, the gross tax collections are reasonably on track. Second, the non-tax revenues have visibly under-performed. Third, non-debt capital receipts, mainly proceeds from disinvestment, are doing well.

Interim Budget 2019-20: For the year 2018-19, Direct tax collection is expected to cross the targets by 50000 crores however, GST shortfall of nearly 1 Lakh crore is projected. Budget documents showed the government has revised its direct tax collection target to Rs 12 lakh crore in revised estimate from budgeted estimate of Rs 11.5 lakh crore. The government has met close to two-thirds of its revenue collection target from direct taxes, garnering Rs 7.88 lakh crore from April, 2018 to January, 2019. In FY18, direct tax collection was Rs 10.02 lakh crore, which exceeded the then revised budgeted target of Rs 9.8 lakh crore.

The government has revised the goods and services tax (GST) collection target, making it easier to achieve. In the interim Budget, the central GST (CGST) estimate has been revised downward by Rs 1 trillion to Rs 5.04 trillion due to shortfall in the current financial year. A total of 1 crore taxpayers have been registered under GST till January 2019, of which 17.11 lakh are composition dealers who are required to file returns every quarter.

The non-tax revenues are estimated to have grown by 27.3 per cent in FY19 (RE). Despite a shortfall in dividend proceeds from public sector companies and proceeds from communication services, the government expects to marginally better its non-tax revenue target in FY19, as it expects an interim dividend of Rs 28,000 crore from the Reserve Bank of India (RBI). Centre also upped its disinvestment target to Rs 90,000 crore in FY20 (BE), up from Rs. 80,000 crore in FY19, which the Centre expects to meet even as concerns over a shortfall linger. At the aggregate level, the Centre‘s non-tax revenues are pegged at 1.3 per cent of gross domestic product (GDP) in FY20, similar to the level in FY19. However, this is lower than 1.82 per cent of GDP in 2015-16.

Under the broad rubric of non-tax revenues, proceeds from dividend/surplus of the RBI, nationalised banks, and financial institutions are expected to rise in FY 20. **[Prelims]**



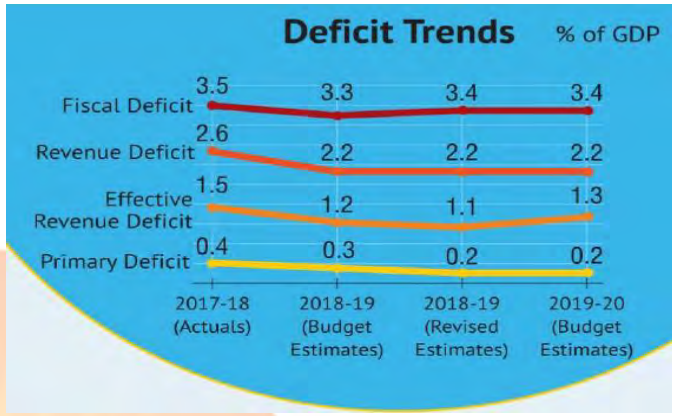
CENTRAL GST (₹ trillion)	
Revised annual target	5.04
Apr–Jan 2018–19	3.8
Requirement in Feb–Mar 2018–19	1.2
Integrated GST (₹ crore)	
Revised annual estimate	50,000
Estimate of unallocated IGST as of January 2019	18,000
Compensation Cess (₹ crore)	
Revised estimate	90,000
Transferred to states till Dec 2018	37,500
Likely portion of unused cess to add to Centre's account	15,000

Sources: Finance ministry, *Business Standard* calculations

Since 2015-16, Direct tax as % of GDP has continuously increased but indirect tax has a dip post-GST which now has recovered.

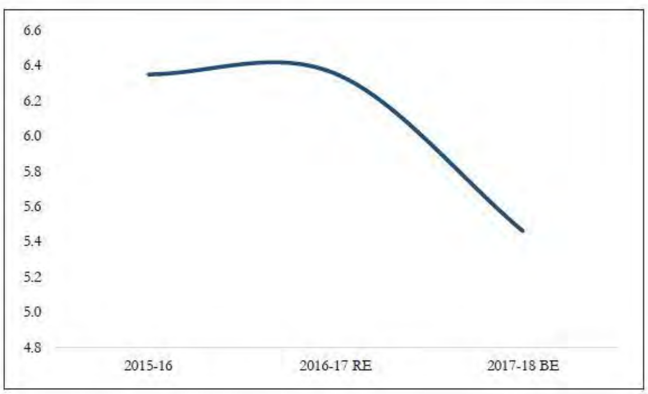
Reference:https://www.business-standard.com/article/interim-budget-2019/centre-s-non-tax-revenue-growth-pegged-at-11-2-to-rs-2-72-trillion-in-fy20-119020101655_1.html

Reference: https://www.business-standard.com/article/interim-budget-2019/interim-budget-eases-gst-estimate-collection-rises-to-84-of-target-119020200940_1.html



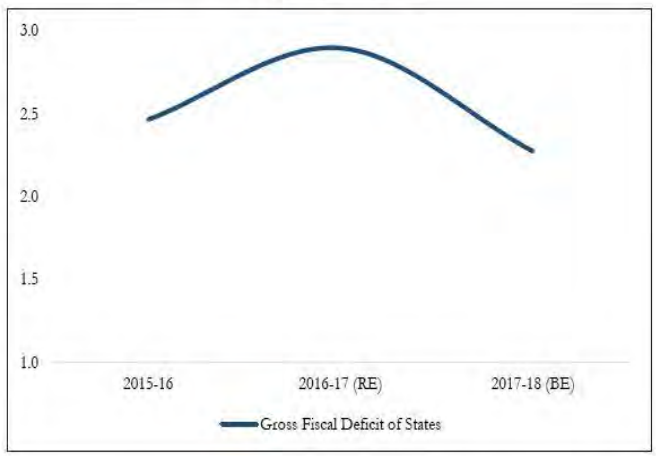
Fiscal deficit overshot for 2018-19. It has overshot for 2017-18 as well on the account of front-loading of some expenditure. This year it crossed the barrier because of schemes like PM-KISAN and PM Shram Yogi Maandan schemes. The impact of UDAY on the fiscal deficit of states have tapered now.

Figure 7 : Gross Fiscal Deficit of the general government (*) as per cent of GDP



Source: Reserve Bank of India;

Figure 4 : Fiscal deficits of States (*) as per cent of GDP



Q. Government initiatives to improve the fiscal parameters?

A. GST, Reduction in corporate tax for nearly 97% of companies, MSME reforms, Composition scheme, rationalization in GST rates (nearly 97% items having less than 18% tax), e-assessment scheme for online taxation, Mandatory linkages of Aadhaar with PAN, safe harbour regime, advancing of budget cycle, Custom duty incentives, increase in the GST threshold to 40 Lakh. For more, read the taxation provisions of Interim budget 2019-20.

Q. List the major policy initiatives for investment management in CPSE?

A. Budget 2016-17 propounded the philosophy of need to migrate from the “disinvestment-based approach” to “Investment based approach” for CPSE. Accordingly, DIPAM was established with expanded mandate. Earlier government announced listing of 14 CPSE on the stock exchange. Apart from this, new Exchange traded fund, Bharat 22 was announced so that pension funds and retail investors could invest in CPSE. The focus of the strategic disinvestment is on adopting a pragmatic approach for the Government to exit from non-strategic business to optimize economic potential which reflects the changed outlook of the government.

CHAPTER - 12

MONETARY MANAGEMENT AND FINANCIAL INTERMEDIATION

Q. What is M0, M1, M2, M3? [Prelims]

A. M0 = Reserve money = Currency in circulation + Banker's deposit with RBI + Other's deposit with RBI

B. M1 = Narrow money = currency with people + Demand deposit

C. M2 = M1 + Post office (only savings)

D. M3 = M1 + Time deposits

E. M4 = M3 + Post office (Total)

Liquidity sequence: M1 > M2 > M3 > M4

Policy Repo Rate	: 6.25%
Reverse Repo Rate	: 6.00%
Marginal Standing Facility Rate	: 6.50%
Bank Rate	: 6.50%
CRR	: 4%
SLR	: 19.25%

Latest update on Monetary policy committee: Reserve Bank of India's (RBI) monetary policy committee (MPC) in its last bi-monthly policy announcement for FY 19, changed its stance to “neutral” from “calibrated tightening”. This means rate hikes are unlikely in the near future and more cuts may be in the offing. The new rates are 6.25% from earlier 6.5%. The rate cut was triggered by low crude price, low food inflation, recovery in the global market and positive view of growth taken by the RBI. The retail inflation figures for December were 2.2%. It is first rate cut in last 18 months.

Q. Describe the impact of following situation on G-sec yield? [Prelims]

Sovereign rating upgrade	Yield reduces/Soften
Lower than expected inflation	Yield reduces/Soften
FPI inflows	Yield reduces/Soften
Positive monsoon forecast	Yield reduces/Soften
Dovish stance of monetary policy (Low policy rates)	Yield reduces/Soften
US interest rate hikes	Yield increase/Hardens
OMO sales of Securities	Yield increase/Hardens
Rise in oil prices	Yield increase/Hardens
Higher government borrowing	Yield increase/Hardens

Currently the yield is high (nearly 7.7%). It could be due to global recovery, fiscal slippage and low IIP figures which raises concern over the growth stability of the economy and hence the high rate of returns for buying G-sec.

Banking Sector: For the past couple of years, banking sector is facing a severe challenge of non-performing assets which led to Twin balance sheet problem. In the case of the TBS challenge, market exit had proved particularly intractable because of many conflicting, and politically difficult objectives. We had to find a way to reduce the debts of stressed companies to sustainable levels. At the same time, we had to minimize the bill to taxpayers, limit moral hazard, and avoid the undue favouring of promoters. The Insolvency and Bankruptcy Code, 2016 (IBC) passed in May 2016 was the right answer. The IBC aimed to solve these problems through the expedient of transparently auctioning off stressed firms to the highest bidders. It excluded those assets which are completely non-viable. This procedure is still a work in progress and it is important that transparency and objectivity should be maintained in this process. The act has changed the debtor-lender relationship.

Critical points of Insolvency and Bankruptcy Code [M]: In housing and real estate projects, the bill places the beleaguered house owners, who invested in the project, at the lowest priority of creditors after financial institutions, ancillary industry lenders. Thus, earning the wrath of Supreme Court who instructed the central government to look into the matter.

- During the first 6 months of the bill‘s implementation, 75% of insolvency proceeding were filled by unsecured operational creditors and not by financial creditors.
- There is the uncertainty of regulatory norms for banks and fear of scrutiny by anti-corruption investigation agencies and other bodies among bank management.
- The law doesn‘t have any provisions regarding synergy among Indian and foreign courts over the issue of overseas insolvency proceedings.
- The law favours excessive government checks with regard to appointment, termination, and scrutiny of Insolvency professionals. Reference: Quora

Latest update on Banking Sector: Government‘s sustained 4 R‘s strategy i.e. (Recognition, Recapitalization, Reform, and Resolution) is delivering good results. Since the commencement of clean-up in 2015-16, the recapitalization has crossed over Rs 3 Lakh Crore through a mix of budgetary support and market raising helping banks to make adequate provisions for bad loans. The Insolvency and Bankruptcy Code has helped in recovering nearly 70K crore through the legal procedure and nearly 2 Lakh crores without going to courts. RBI‘s PCA (prompt corrective action) framework automatically kicks in when breach any of the three parameters namely, capital to risk weighted asset ratio, net performing assets (NPA) and return on assets (ROA). RBI revoked PCA from three banks namely Bank of Maharashtra, Bank of India and Oriental bank of commerce recently. As part of reform process, government has announced slew of measures to improve credit to MSME and Agriculture sector.

NBFC sector: The NBFC sector, as a whole, accounted for 17 per cent of bank assets and 0.26 per cent of bank deposits. The consolidated balance sheet size of the NBFC sector is around Rs 20 lakh crores with 5% per annum growth. NBFCs depend largely on public funds for funding their balance sheets.

Latest update on NBFC: In previous financial year i.e. FY 18 The Reserve Bank had introduced a new category of Non-Banking Financial Company (NBFC) called NBFC-P2P (NBFC- Peer to Peer Lending Platform) to further financial inclusion through direct interaction between small lenders and small borrowers. One more category of NBFC had been announced – NBFC – Account Aggregator. The new categories of NBFCs will bring in diversity and efficiency to the financial sector and make it more responsive to the needs of the customers. The P2P platform would ―target the missing middle in the credit ladder" and ―bring a major shift in the crowdfunding activity". These will promote direct interaction between small lenders and small borrowers. It will also address the associated consumer protection issues. The emphasis is on adequate disclosures and only light touch regulation

Regulations related to Peer to Peer Lending Platforms (NBFC-P2P) [Prelims]

- An NBFC-P2P cannot raise deposits or lend on its own and shall act as an intermediary
- The NBFC cannot permit international flow of funds
- Cash transactions are prohibited and all fund transfers must be through bank accounts
- The aggregate exposure of a lender/borrower to all borrowers/lenders at any point of time, across all P2Ps, would be subject to a cap of Rs 10 lakh.

- The exposure of a single lender/borrower to the same borrower/lender, across all P2Ps, must not exceed Rs 50,000.

IL&FS crisis [Mains]: The Company had the projects with long gestation period where loans were required for long term. But their borrowing was for the short term. However, the recent spike in interest rates led to hike in the cost of borrowing. This disturbed the cash flow for their projects and turned the projects unviable. The crisis spilled over the entire sector.

Insurance Sector [Prelims]: The performance of the insurance sector is assessed on the basis of two parameters –

1. *Insurance Penetration* – It is defined as the ratio of premium underwritten in a given year to the gross domestic product (GDP).The Insurance penetration which was 2.71 per cent in 2001, increased to 3.49 per cent in 2016 (Life 2.72 per cent and General 0.77 per cent).Insurance Penetration in some of the emerging economies in Asia, i.e., Malaysia, Thailand and China during the same year i.e. 2016 was 4.77, 5.42 and 4.15 per cent respectively. Globally insurance penetration and density were 3.47 per cent
2. *Insurance Density* – It is defined as the ratio of premium underwritten in a given year to the total population (measured in US$ for convenience of international comparison).The insurance density in India, which was US$ 11.5 in 2001, has increased to US$ 59.7 in 2016 (Life 46.5 and General 13.2). The comparative figures for Malaysia, Thailand and China during the same period i.e. 2016 were US$ 452.2, US$ 323.4 and US$ 337.1 respectively. Globally, the numbers are US$ 353 for the life segment in 2016 and 2.81 per cent and US$ 285.3 for the non-life segment respectively.

CHAPTER - 13

PRICES AND INFLATION

Q. How is the inflation scenario in the country?

Retail inflation declined from 3.4% in October 2018 to 2.2% in December, the lowest level in the last eighteen months. This was mainly aided by declining food prices and the lower rate for crude. Retail inflation forecast for January-March 2019 to 2.8%. This is based on favourable factors such as a normal monsoon. The estimate for the last quarter of this financial year ending March is comfortably under the central bank‘s target of 4%, plus or minus 2%.

Q. Which of the following can lead to upswing in the inflation? [Prelims]

- ✓ Rising global oil prices
- ✓ Unseasonal increases in the prices of fruits and vegetables
- ✓ Increase in housing rent allowances by 7th Pay Commission
- ✓ Firms are passing the incidence of GST on to the final consumers

Q. Which of the following can lead to downswing in the inflation? [Prelims]

- ✓ Advisories issued to State Governments to take strict action against hoarding & black marketing.
- ✓ Higher MSP announcement to incentivize production(May increase the money in farmer‘s hand so it can lead to upswing as well)
- ✓ Enhanced availability of food items may help moderate prices
- ✓ Imposition of stock holding limits on stockist/dealers and duty on export of sugar.
- ✓ Limitations on export of all varieties of onion.
- ✓ Price Stabilization Fund to control price volatility of agricultural commodities like pulses, onions
- ✓ Enhancement in buffer stock of pulses to enable effective market intervention for moderation of retail prices.
- ✓ Incentives for domestic production of oil,
- ✓ Removal of restriction on oil export except for palm oil, mustard oil and sunflower oil.

In terms of volatility: Headline inflation > Core Inflation > Refined core Inflation

Q. Is it time to move on to Producer Price Index (PPI)?

- Professor B. N. Goldar committee was set up in 2014 to suggest the methodology for introducing Producer Price Index (PPI) in India. It submitted report on 31.08.2017.
- PPI measures the average change in the prices of goods and services, either as they leave the place of production called Output PPI or as they enter the production process called Input PPI.
- The output indices measure the average change in prices that producers receive for their outputs while the input indices measure the average change in prices that producers pay for their inputs.

- PPI contrasts with other measures such as the Consumer Price Index (CPI) which measures changes in prices from buyers or consumers perspective.
- It is better than WPI as WPI often faces problem of Double Counting
- Goldar Committee recommended the detailed methodology for calculating PPI. Also –
  - Two separate sets of input PPIs may be compiled - one including services and the other excluding services
  - An additional set of output PPI based on Final Demand and Intermediate Demand framework may also be compiled
  - PPIs may be initially compiled on an experimental basis and switching over from WPI to PPI should be undertaken after the PPI series stabilizes

Conclusion

- The economy witnessed a gradual transition from a period of high and variable inflation to more stable prices in the last four years.
- With RBI keeping inflation control as the primary monetary policy goal, we can expect it to remain in manageable zone

CHAPTER - 14

SUSTAINABLE DEVELOPMENT, ENERGY AND CLIMATE CHANGE

Q. List the Sustainable Development Goals and their direct/indirect influence on social/environmental themes?

SUSTAINABLE DEVELOPMENT GOALS		Environmental and social engagement themes									
		Climate Change	Pollution & Waste Management	Water	Bribery & Corruption	Conduct & Culture	Cyber Security	Diversity & Human Capital Management	Human Rights	Labour Rights	Supply Chain Management
1	No poverty								(✔)	(✔)	
2	Zero hunger	(✔)		(✔)							(✔)
3	Good health and well-being		✔						✔		
4	Quality education							✔	(✔)		
5	Gender equality							✔	(✔)	(✔)	
6	Clean water and sanitation	(✔)	(✔)	✔							
7	Affordable and clean energy	✔	(✔)								
8	Decent work and economic growth		✔					(✔)	(✔)	✔	
9	Industry, innovation and infrastructure	(✔)	(✔)	(✔)			(✔)				
10	Reduced inequalities							✔	(✔)	(✔)	
11	Sustainable cities and communities	(✔)	✔	(✔)							
12	Responsible consumption and production	✔	✔	(✔)							
13	Climate action	✔									
14	Life below water		✔								(✔)
15	Life on land	(✔)		(✔)							(✔)
16	Peace, justice and strong institutions				✔	✔	(✔)	✔	(✔)		
17	Partnership for the goals	(✔)									

✔ Direct influence (✔) Indirect influence

Source: UN Sustainable Development Goals, Hermes EOS analysis

A. Key elements of Paris Agreement work programme included nationally determined contributions, adaptation communication, transparency framework, compliance, technology framework, finance and capacity building.

- There are many similarities between the path India has chosen for development and the UN goals (17 SDGs, 169 targets, to be achieved by 2030) for Sustainable Development.

- India presented its first Voluntary National Review (VNR) on the implementation of SDGs in July, 2017 in UN.
- The VNR report focused on 7 SDGs: SDGs 1 (No Poverty); 2 (Zero Hunger); 3 (Good Health and Well-Being); 5 (Gender Equality); 9 (Industry, Innovation and Infrastructure), 14 (Life below Water) and 17 (Partnerships for the Goals).
- **Key takeaway:** Enhanced pre-2020 actions can lay a solid foundation for enhanced post-2020 ambitions.
- The draft national SDG are developed by Ministry of statistical and program implementation. The National Institution for Transforming India (NITI) Aayog's role will be to collect, validate and document best practices in implementation of SDG.

Q. Urban India and Sustainable development [Essay, Give a thought to the structure of the essay]

[Note: Even though Essay topic is about urban India, do not forget to mention that sustainable development cannot be achieved without rural India.]

The SDG 11 states: ―make cities inclusive, safe, resilient and sustainable". India is now embarking on a fast rural to urban transition. As cities are the centres of economic activity, how cities deliver on a number of basic services will determine the path and progress of sustainable development.

According to World Economic and Social Survey, 2013, achieving the sustainability of cities entails integration of four pillars - social development, economic development, environmental management, and effective urban governance. According to the UN World Cities Report 2016, by 2030, India is expected to be home to seven mega-cities with population above 10 million. According to Census 2011, 377.1 million Indians comprising 31.16 per cent of the country's population live in urban areas. India's urban population is projected to grow to about 600 million by 2031.

Q. What are the problems faced by Urban India? List the government schemes and associated challenges?

A. Problems: Poverty, Inadequate provision of urban services, congestion, air pollution, sizeable slum population, lack of safety measures, and challenges in termsof garbage removal, sewage system, sanitation, affordable housing, and public transport.

Government schemes: Smart Cities Mission, National Urban Housing & Habitat Policy (2007), Swachh Bharat Mission (Urban), and management of Municipal Solid Waste (MSW).

Challenges: About Rs. 39 lakh crore (at 2009-10 prices) was required for creation of urban infrastructure over the next 20 years. In addition, we need another 20 Lakh crores for maintenance however our ULB are not able to recover service fees. We need to develop the culture of service payments among citizenry. ULBs should be encouraged to bring operational efficiency and financial viability in urban projects, raise resources through various innovative financial instruments such as municipal bonds, PPPs, credit risk guarantees etc. example, SEBI's municipal Bonds

Q. Clean energy is basic ingredient of good life. Explain with specific focus on gender dimension?

A. Clean energy is sine-qua-non to economic growth. It is directly and indirectly linked to other sustainable development objectives such as good health and well-being, gender equality, industry, innovation and infrastructure, sustainable cities and communities.

Relation with gender equality: the burden of collecting fuel wood and water and cooking falls disproportionately on the female members of households who end up spending nearly 374 hours per year in collecting fuels. Proportion of population without access to clean cooking was around 64 per cent in 2015 compared to a World average of 38 per cent and 33 per cent for China in the same year (International Energy Agency report). In addition, they also become victim of Indoor Air pollution. If we divert the time spent in collection of fuel to the education and employment, it may increase our per capita income in the economy.

Government launched ―Pradhan Mantri Ujjwala Yojana" (PMUY) in May, 2016 and upgraded it to provide 80 million LPG connections by 2020 to BPL households. ―Ujjwala Plus" was launched to address the cooking needs of deprived people who are not covered under the Socio-Economic Caste Census (SECC) 2011. Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) was launched to achieve 100 per cent village electrification and Saubhagya scheme for universal household electrification through last mile connectivity of electric connection. Kerala, Tamil Nadu are 100% electrified while Bihar Jharkhand are less than 50%. Till November 2017, 18% of the total installed capacity of electricity was from renewable energy sources. Government also mandated the Installation of energy efficient appliances in all Central Government buildings across India under Buildings Energy Efficiency Programme(implemented by Energy Efficiency Services Limited).

Q. What are the issues related to power purchase agreements?

A. The distributor companies are not able to realize the good tariff for renewable energy resources. However, they are already in pre-purchase agreement with state electricity board and electricity generation companies. Thus, they are seeking renegotiation. This can lead to legal issues, and may hurt investors sentiments.

Q. Write a short note on International Solar Alliance?

A. International Solar Alliance (ISA), was launched Paris in Nov 2015 and came into force in Dec 2017.

- ISA is a coalition of solar resource rich countries lying fully or partially between the Tropics of Cancer and Capricorn
- It aims at specifically address energy needs by harnessing solar energy. It is a trillion-dollar opportunity in solar energy.
- ISA is also the first International inter-governmental treaty-based organization headquartered in India.
- Currently, 46 countries have signed and out of these, 19 countries have ratified the ISA Framework Agreement.
- Major initiative of ISA includes development of ―Common Risk Mitigating Mechanism" (CRMM) for de risking & reducing the financial cost of solar projects and establishment of Digital Infopedia for communication.

India and Climate Change [Q. List the key initiatives taken by the government in this regard?]

India's climate ranges from continental to coastal, from extremes of heat to extremes of cold, from extreme aridity and negligible rainfall to excessive humidity and torrential rainfall. The annual mean, maximum and minimum temperatures during the period 1901-2010 for India, show a significant increasing trend of 0.60°C, 1.0°C and 0.18°C per 100 years, respectively. India is an active partner in the United Nations framework for Climate Change (UNFCCC).Government of India is implementing the National Action Plan on Climate Change, which includes eight national missions covering solar, energy efficiency, agriculture, water, sustainable habitat, forestry, Himalayan ecosystem and knowledge. Other key initiatives are:

- Mission on strategic knowledge for climate change: India has established 8 Global Technology Watch Groups in the areas of Renewable Energy Technology, Advance Coal Technology, Enhanced Energy Efficiency, Green Forest, Sustainable Habitat, Water, Sustainable Agriculture and Manufacturing
- Climate Change Action Programme: for building and supporting capacity at central & state levels, strengthening scientific & analytical capacity for climate change assessment, establishing appropriate institutional framework and implementing climate related actions
- National Adaptation Fund on Climate Change: to support concrete adaptation activities which are not covered under on-going activities through the schemes of State and Central Government.
- Pradhan Mantri Krishi Sinchayee Yojana has been formulated with the vision of extending the coverage of irrigation and improving water use efficiency.
- Science Express Climate Action Special train with the aim to create awareness about climate change and its impact.
- Zero Effect, Zero Defect is a policy initiative to enhance energy efficiency and resources efficiency in Medium & Small Industries.
- The National Mission for Clean Ganga seeks to rejuvenate the river along its length of more than 2,500 km.
- India‘s forest and tree cover has increased and growth in cover is more than Indonesia and Brazil.
- Indian financial market also moved in the direction of greener actions. SEBI issued the circular on the disclosure requirements for Issuance and Listing of Green Debt Securities.
- Pradhan Mantri Fasal Bima Yojana (PMFBY) aims to increase the coverage under insurance from 30 per cent to 40 per cent in 2017-18 and 50 per cent in 2018-19.
- Bharat QR code option removes the need of print receipts.

The Global Climate Risk Index 2018 has put India amongst the six most vulnerable countries in the world. The Fifteenth Finance Commission Terms of Reference outlined climate change as an important aspect for consideration.

Case Study Delhi Pollution

Causes: Secondary particle, Coal and fly ash, Soil and road dust, Constructions material, Vehicle, Solid waste burning, Biomass burning(In winters the top 4 reasons are crop residues, biomass, industries and power plants)

Solution: London‘s clean air act 1956, Mexico‘s Proaire Package

Source	**Solution**
Crop residue, biomass burning (26-29 per cent) [Use of machine harvest and threshing leaves long stalks. Burning them saves money and effort for farmers.]	Sickle harvesting, Manual threshing-cum-cleaning National Policy for management of crop residue crop residue burning is punishable under the Air (Prevention and Control of Pollution) Act, 1981. Use technologies to convert agricultural waste into usable concentrated fodder or bio-fuels, develop and implement business models with private sector and communities and incentivize shift to

	non-paddy crop.
Vehicular emissions (23-28 per cent) and redistributed road dust (20-27 per cent)	Implement congestion pricing for vehicles, expand and improve public buses dramatically to reduce private vehicle use, and for connectivity to and beyond metro. Phase-out old vehicles, accelerate BS-VI (to commence in 2020) and expand modernized bus fleet
Massive construction, power plants, industry, other (19-35 per cent)	Shifting hazardous industry to outside city limits, Anti-pollution measures, Seasonal ban on construction
Winter temperature inversion, humidity and (absence of) wind	

Straw management system for rice and wheat farming. A technology called Happy Seeder machine could be a possible technological solution. It is a machine that sows seeds without the need to remove paddy straw and works well when the straw is spread evenly on the field through the straw management system.

CHAPTER - 15

EXTERNAL SECTOR

Total exports from India (Merchandise and Services) increased by 15.5% to US $ 350 Billion (April-Nov 2018), while total imports increased by 17% to US $ 428 Billion. However, the reports for December are not encouraging. Further, the Agri-exports have declined by nearly 50% in the same period. Exports from the country recorded their highest growth in 2017-18. India‘s forex reserves touched $400 in January this year. Our Current account deficit has increased from 1.8% of GDP to 2.5% due to lower Agri export and high crude oil price in the economy.

[Prelims] [General Information, not specific to 2017-18]

India‘s top 5 trade partners: China, USA, UAE, Saudi Arabia, Germany

India‘s top 5 import partners: China, USA, Saudi, UAE, Switzerland

India‘s top 5 export partners: USA, UAE, Hong Kong, China, UK

India‘s top 5 export sector: Engineering Goods, Agricultural Products, Chemicals, Marine Products, Petroleum products, Leather Goods, Textiles, Plantations (cash crops)

India‘s top 5 import sector: Crude oil, gold and jewellery, capital goods

Top five countries with negative bilateral trade balance: China, Switzerland, Saudi Arabia, Iraq and South Korea

Top five countries with surplus trade balance: USA, UAE, Bangladesh, Nepal and UK.

World economic outlook report (January 2019 update) reveals that currency and trade war between China and USA has darkened the global growth prospects bringing the global growth projections to 3.5% in 2019 and 3.6% in 2020. India remains the bright spot in this global game of push and pulls and is well poised to gain from the space vacated by China and USA‘s fight.

Note: [As the data for this year is not out, this chapter is a rough summary of previous years survey‘s chapter. Wherever possible, we have added the exam relevant details.]

India‘s performance in external sector in 2017-18 has been good as evident in

- Current account deficit (CAD) = 1.8 per cent of GDP [for 2018-19 the CAD is 2.5%]
- Merchandise exports growth = 12 per cent
- Net services receipts growth = 14.6 per cent
- Net foreign investment growth = 17.4 per cent

Status of out BOP: BOP = (Balance of Trade + Balance of Invisible) + Capital account surplus

Our BOP situation has become better. Our CAD increased in 2017-18 due to rise in crude price and gold imports. Net invisibles receipts were higher mainly due to the increase in net services earnings and private transfer receipts. Net services earnings increased primarily on account of the rise in net earnings from travel and telecommunications, computer & information services. Private transfer receipts, mainly representing remittances by Indians employed overseas also increased. Overall, increase in services and invisibles helped in bridging the widened gap in trade deficit. However downward risks remain. The structural factors viz tightening norms of hiring foreign workers in USA, labour market adjustment in GCC countries and rising anti-immigration sentiments in many source countries is a matter of concern.

Status of Trade: In 2017-18 (April - November) among the major sectors, there was good export growth in engineering goods and Petroleum crude & products; moderate growth in chemicals & related products, and textiles and allied products; but negative growth in gems and jewellery. With respect to imports, petroleum, electronic goods, Gems and Jewellery showed an increase whereas capital goods and agriculture and allied products witnessed a decline.

Q. How exchange rate affects external sector?

The Indian economy's competitiveness has had to contend with the real effective exchange appreciating about 21 percent since January 2014. Policymakers have struggled to come to grips with the international trilemma or the impossible trinity, whereby an independent monetary policy and an exchange rate objective cannot co-exist with an open capital account.

International Trilemma: The issue is that both competitive exchange rates and open capital accounts are helpful for growth. Open capital accounts attract foreign saving, providing additional funds for investment, which can help growth. Independent Monetary Policy is needed for obvious reasons.

Q. What impact did Demonetization and GST have on competitiveness?

Box 2 : Logistics: Challenges and suggested Action Plan

Some key challenges

- High cost of logistics – impacting competitiveness in domestic & global market
- Unfavorable modal mix (Roadways 60%, Railways 30%) and inefficient fleet mix
- Under-developed material handling infrastructure and fragmented warehousing
- Multiple regulatory/policy making bodies with procedural complexities including cumbersome and duplicate processes.
- High dwell time and lack of seamless movement of goods across modes.

Suggested Action Plan

- Formulation of National Integrated Logistics Policy to bring in greater transparency and enhance efficiency in logistics operations
- Develop integrated IT Platform as a single window for all logistics related matters. This portal will have linkages with the IT systems of Railways, Road transport & Highways, Shipping, Civil Aviation, CBEC, State Transport departments, etc. and act as a Logistics marketplace
- Usher in ease of documentation, faster clearance, digitization.
- Bring down logistics cost to less than 10% of GDP by 2022
- Faster clearances for setting up of logistics infrastructure like Multi-modal logistic parks (MMLPs), Container Freight Station (CFS), Air Freight Station (AFS) & Inland Container Depot (ICD).
- Introduce professional standards and certification for service providers
- Promote introduction of high-end technologies like high-tech scanning equipment, RFID, GPS, EDI, online Track & Trace systems in the entire logistics network.
- Improve Logistics skilling in the country and increase jobs in Logistics sector to 40 million by 2022.

Source: **Based on inputs from Logistics Division, Department of Commerce**

[Prelims] India leads the cases of anti-dumping. Products wherein anti-dumping duty has been imposed fall in the products group of Chemicals and Petrochemicals, Products of Steel & other metals and Rubber or Plastic Products

External Sector of India [Prelims]
September 2017: Total external Debt = $495.7 billion
Sovereign debt: non-sovereign debt = 21.6:77.4
Long term: Short term = 81.3:18.7
Debt coverage ratio =80.7%

Debt denomination = Dollar > Indian rupee > SDR > Japanese Yen > Euro

Q. Critically analyze the External Debt profile of India? [Prelims]

Long term debt grew due to increase in foreign portfolio investment in the debt segment. Short term debt also grew due to increase in trade related credits. Share of government in total debt increased to 21.6%.

Overall, few guiding principles when we are borrowing from external market:

- Prefer long term debts over short term debts.
- Prefer concessional debts (no-interest or less interest debt) over market price debts
- Prefer dollar or SDR debts which could be paid easily instead of debts in other currencies

International comparison of external debt situation based on World Bank data shows that Among the top 20 developing debtor countries in 2016, India‘s external debt stock to Gross National Income (GNI) ratio at 20.4 percent was the second lowest after China‘s 12.8 per cent. In terms of the foreign exchange reserves cover to external debt, India‘s position is the fifth highest and India‘s debt service rate is the eight lowest. Even though India is the third largest debtor country among developing countries (after China and Brazil), India‘s share of short-term debt to total debt (18.6%) is much less compared to China‘s 59.0%. It is 26th in the list if we include developed countries as well.

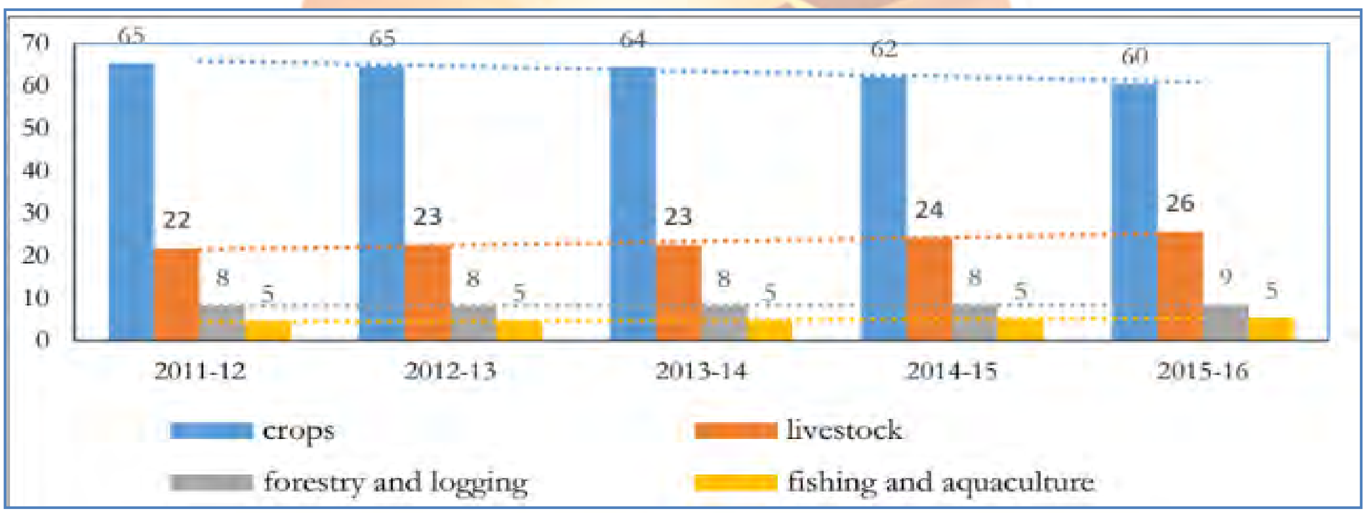
Overall, the prospects for India‘s External Sector in this and coming year look bright with world trade projected to grow at 4.2 percent and 4 percent in 2017 and 2018 respectively from 2.4 percent in 2016.

CHAPTER - 16

AGRICULTURE AND FOOD MANAGEMENT

Agriculture is not crop production as popular belief holds - it's the production of food and fibre from the world's land and waters. Without agriculture, it is not possible to have a city, stock market, banks, university, church or army. Agriculture is the foundation of civilization and any stable economy. -- Allan Savory

Agriculture Sector comprises of four main components – Crop Production, Livestock rearing, forestry and logging, and fishing and aquaculture.[Prelims] Share of crops in agriculture GVA is reducing constantly since 2011-12 to 2015-16 (66% to 60%) whereas share of livestock has increased from 22% to 26%. Similarly, share of forestry and logging has increased from 8 to 9%. However, fishing and aquaculture has remained at 5%.



The growth rates of agriculture & allied sectors have been fluctuating at 1.5 per cent in 2012-13, 5.6 per cent in 2013-14, (-) 0.2 per cent in 2014-15, 0.7 per cent in 2015-16 and 4.9 per cent in 2016-17 mainly because nearly 50% of the agriculture region is dependent on rains. Gross Capital Formation (GCF) in Agriculture and Allied Sectors relative to GVA in this sector has been showing a fluctuating trend primarily due to lack of private investment.

Latest update: Targets of food grain production is made by Department of Agriculture and Farmers welfare. FY 18-19 production target: 290.25 MT. Production achievement of FY 17-18: 284.83 MT. Total Rabi Rice and Wheat Productions have increased in 17-18, compared to 16-17 production as well as the last five years' average. Rabi Nutri/Coarse Cereals, Rabi Pulses, Rabi Oilseeds also registered growth in production during 17-18, with only marginal growth for oilseeds. Kharif 18-19 registered production of 141 MT. Kharif Maize, oilseed and sugarcane registered an increase. However, Kharif nutria/coarse cereals, and pulses decreased a little bit.

Over the years, share of wages and non-farm business in total farm income have gone down whereas cultivation and livestock income has increased. The change in the composition of agricultural GVA necessitates a policy re-orientation. In this direction, first step would be to recognize the role Women play in agricultural development and allied fields including in the main crop production, livestock production, horticulture, post-harvest operations, agro/social forestry, fisheries.

Size Group
Marginal (Below 1.00 ha.)
Small (1.00-2.00 ha.)
Semi-Medium (2.00-4.00 ha.)
Medium (4.00-10.00 ha.)
Large (Above10.00 ha.)

As per Census 2011, out of total female main workers, 55 per cent were agricultural labourers and 24 per cent were cultivators. However, only 12.8 per cent of the operational holdings were owned by women, which reflect the gender disparity in ownership of landholdings in agriculture.

With growing rural to urban migration by men, there is 'feminisation' of agriculture sector, with increasing number of women in multiple roles as cultivators, entrepreneurs, and labourers. Globally, there is empirical evidence that women have a decisive role 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 (FAO, 2011). This requires that women farmers should have enhanced access to resources like land, water, credit, technology and training which warrants critical analysis in the context of India. In addition, the entitlements of women farmers will be the key to improve agriculture productivity. The differential access of women to resources like land, credit, water, seeds and markets needs to be addressed. Towards this, Government has been implementing various schemes which help improve the entitlements of women farmers, which will prove to be advantageous in bridging the policy gaps which exist in the sector. The following measures have been taken to ensure mainstreaming of women in agriculture sector:

- Earmarking at least 30 per cent of the budget allocation for women beneficiaries in all ongoing schemes/ programmes and development activities.
- Initiating women centric activities to ensure benefits of various beneficiary-oriented programs/schemes reach them.
- Focusing on women self-help group (SHG) to connect them to micro-credit through capacity building activities and to provide information and ensuring their representation in different decision-making bodies.
- Recognising the critical role of women in agriculture, the Ministry of Agriculture and Farmers Welfare has declared 15th October of every year as Women Farmer's Day.

With women predominant at all levels- production, pre-harvest, post-harvest processing, packaging, marketing- of the agricultural value chain, to increase productivity in agriculture, it is imperative to adopt gender specific interventions. An 'inclusive transformative agricultural policy' should aim at gender-specific interventions to raise productivity of small farm holdings, integrate women as active agents in rural transformation, and engage men and women in extension services with gender expertise.

CROPPING PATTERN IN INDIAN AGRICULTURE

India ranks first, with 179.8 Mha (9.6 percent of the global net cropland area) of net cropland area. Index of Crop Diversification has been computed for major States and All India to examine whether there has been major changes in the cropping patterns across States. The index value ranges between 0 and 1 and higher the value, greater the diversification. Himachal and Jharkhand have shown increasing value of crop diversification. These monoculture practices have been the reason for declining productivity, lower response to fertilizers, degradation of soil health and declining profitability of cultivation.

There is a need to diversify into high value crops and horticulture crops for which Government has taken several measures. Crops Diversification Programme is being implemented by the Government in original green revolution states viz. Punjab, Haryana and in Western UP to diversify paddy area towards less water requiring crops like oilseeds, pulses, coarse cereal, agro-forestry and shifting of tobacco farmers to alternative crops/cropping system in tobacco growing States viz. Andhra Pradesh, Bihar etc. Crop diversification needs to be encouraged to improve soil health, productivity and thereby profitability of cultivation.

Input management in Agriculture: Agricultural productivity is determined by appropriate use of critical inputs like irrigation, seeds, fertilizers, credit, machines, technology and extension services. Input management helps in improving the productivity without losing soil fertility and causing environmental damages. However, lack of educational level of farmers have impacted their capacity to adopt and inculcate new methods of cultivation and input management.

Irrigation: Only 34.5% of total cropped area is irrigated in India. Government has launched Pradhan Mantri Krishi Sinchayee Yojana for this.

Agriculture Mechanization: Farm mechanization and crop productivity has a direct correlation as farm mechanization saves time and labour, reduces drudgery, cut down production cost in the long run, reduces post-harvest losses and boosts crop output and farm income. As per world bank estimates, 50% of Indian population would be urban by the year 2050, It is estimated that percentage of agricultural workers of total work force would drop to 25.7% by 2050 from 58.2% in 2001. Thus, there is a need to cater the increasing food security need by enhancing the level of farm mechanization in the country which has the potential to increase productivity up to 30% and reduce the cost of cultivation up to 20%. Survey suggests rental model by institutionalization for high cost farm machinery like tractor on rent and Land holding consolidation as primary first steps.

The benefits of the DBT Scheme are: (a) The proposed DBT framework is a beneficiary driven subsidy payment mechanism being initiated at national level. (b) It creates Aadhaar seeded data base of beneficiaries and provides transaction visibility at the level of buyers. (c) By linking the actual sales to subsidy payments, it facilitates a more transparent and faster tracking of funds along the value chain i.e. from manufacturers to beneficiaries. (d) Diversion of fertilizers is expected to be minimized.

Crop Insurance and crop loss: Government launched a revised farmer friendly ―Pradhan Mantri Fasal Bima Yojana (PMFBY)"; covers various types of risks from pre-sowing to post harvest, provision for nominal premium of 2% for all Kharif crops and 1.5% for all Rabi crops and 5% for commercial and horticultural crops with no upper limit on subsidy or claims. PMFBY provides comprehensive coverage of risks from pre-sowing to post harvest against natural non-preventable risks. However, most farmers are either unaware or lack education about need of Insurance

Agriculture credit and marketing Initiatives: Credit is a critical input in achieving high productivity and overall production in the agricultural sector. For market E-NAM is introduced. For credit availability Kisan Credit Card, PM-Asha scheme to ensure MSP to farmers for oilseeds, pulses and copra, Interest subvention schemes are there. Loan waivers are also given to farmers. Institutional Credit helps in delinking the farmers from non-institutional sources of credit, and increases financial inclusion.

Food Management: The food security system in India is managed by intertwined organizational framework between Centre and States that involves centralized and decentralized procurement of food grains through price support operations, allocation and distribution of food grains at reasonable prices to consumers/beneficiaries through TPDS (Targeted Public Distribution System) and the maintenance of buffer stocks for price stabilization. This system helps in providing fair price to farmers, making foodgrains affordable to low income consumers, provisioning for contingencies/shortages by maintaining buffer stocks and to reduce food price volatility. The procurement at MSP is open-ended, while distribution is governed by the scale of allocation and its offtake by the beneficiaries.

Conclusion: Successful economic and social transformation has always happened against the background of rising agricultural productivity. In the last four years, the level of real agricultural GDP and real agriculture revenues has remained constant, owing in part to weak monsoons in two of those years. Climate change—whose imprint on Indian agriculture is already visible—might reduce farm incomes by up to 20-25 percent in the medium term. The government's laudable objective of addressing agricultural stress and doubling farmers' incomes consequently requires –

1. Radical follow-up action on programs already announced or launched
2. Decisive efforts to bring science and technology to farmers
3. Replacing untargeted subsidies (power and fertilizer) by direct income support
4. Dramatically extending irrigation but via efficient drip and sprinkler technologies.

Box 7.3 : Policy to Promote Climate Smart Agriculture (CSA)

Climate change incidence on agriculture can be in the form of increased variability in temperature and rainfall and intensity of extreme weather events like drought and flood ultimately creating disturbance to agro-ecosystems, thereby impacting farmers and farming community. This necessitates the need to address adaptation and rural development in an integrated manner, so as to achieve climate resilient development. It is in this context that there is emergence of the concept and significance of 'Climate Smart Agriculture (CSA).

Climate Smart Agriculture (CSA)

Climate-smart agriculture (CSA) is an approach that helps to guide actions needed to transform and reorient agricultural systems to effectively support development and ensure food security in a changing climate. CSA aims to tackle three main objectives: sustainably increasing agricultural productivity and incomes; adapting and building resilience to climate change; and reducing and/or removing greenhouse gas emissions wherever possible.

CSA is an approach for developing agricultural strategies to secure sustainable food security under climate change. CSA provides the means to help stakeholders identify agricultural strategies suitable to their local conditions.

Open Market Sale Scheme (Domestic)

7.52 In addition to maintaining buffer stocks and for making a provision for meeting the requirement of the Targeted Public Distribution System (TPDS) and Other Welfare Schemes (OWS), FCI on the instructions from the Government sells excess stocks out of Central Pool through Open Market Sale Scheme (Domestic) [OMSS (D)] in the open market from time to time at predetermined prices to achieve the following objectives:-

- To enhance the supply of food grains during the lean season and deficit regions
- To moderate the open market prices
- To offload the excess stocks
- To reduce the carrying cost of food grains

The Interest Subvention Scheme (ISS) has been operational since 2006-07. Under this scheme, the farmers can avail concessional crop loans of upto Rs.3 lakh at 7 per cent rate of interest. It also provides for an additional subvention of 3 per cent for prompt repayment within a period of one year from the date of advance. The scheme for 2017-18 will help farmers to avail of short term crop loans up to Rs. 3 lakh payable within one year at only 4 per cent per annum.

As a measure to check distress sale, post-harvest loans for storage in accredited warehouses against Negotiable Warehouse Receipts (NWRs) are available for upto 6 months for KCC holding small & marginal farmers. The Interest Subvention Scheme will continue for one year and it will be implemented by NABARD and RBI.

The interest subvention will be given to Public Sector Banks (PSBs), Private Sector Banks, Cooperative Banks and Regional Rural Banks (RRBs) on use of own funds and to NABARD for refinance to RRBs and Cooperative Banks. The salient

7-dimensional approach by doubling farmer's income

1. improvement in crop productivity
2. improvement in livestock productivity
3. savings in the cost of production
4. increase in the cropping intensity
5. diversification towards high value crops
6. improvement in real prices received by farmers
7. shift from farm to non-farm occupations

Schemes for doubling farmer income

Soil Health Card, Input Management, Per Drop More Crop in Pradhan Mantri Krishi Sinchai Yojana (PMKSY), PMFBY, e-NAM, PM-Asha, Rashtriya Gokul Mission, National Livestock Mission, National Mission on sustainable agriculture, Her Medh par Pedh, Gramin Haats

CHAPTER - 17

INDUSTRY AND INFRASTRUCTURE

Promoting inclusive employment-intensive industry, and building resilient infrastructure are vital factors for economic growth and development. Apart from structural reforms like Goods and Services Tax, Insolvency and Bankruptcy Code and measures to facilitate Ease of Doing Business, the Government has initiated sector specific reforms in Steel, Apparel, Leather and Power sectors to address specific challenges associated with each of these sectors. Consequently, Moody has upgraded our ratings from Baa3 to Baa2 and we have moved to 77th rank on Ease of doing Business (World Bank).

Q. List some of the reform measures taken by the government in making the country Business friendly?

A. Goods and Services Tax, Insolvency and Bankruptcy Code, initiation and simplification of online application for Industrial License and Industrial Entrepreneur Memorandum, integration of twenty services with the eBiz portal which functions as a single window portal for obtaining clearances from various Government agencies, limiting the number of documents required for export and import to three by DGFT and so on.

Champion sectors for Make in India

- Capital goods
- Auto and Auto Components
- Defence and Aerospace
- Biotechnology
- Pharmaceuticals and Medical Devices
- Chemicals
- Electronic System Design and Manufacturing
- Leather, Footwear, Textiles and Apparels
- Food Processing
- Gems and Jewellery
- New and Renewable Energy
- Construction
- Shipping and Railways

[PM announcement for MSME sector in previous years]

1. Loan up to 1 crore within 59 minutes through online portal
2. Bank discounting facility on supply invoices through TRADES portal (For companies > 500 crore turnover)
3. Online complaint portal for MSME invoice payment delay
4. All PSUs to buy 25% from MSME
5. All CPSU to buy though GEM purchase portal
6. PSU to buy 3% from women MSME
7. 6000 cr. for 100 technology training and upgrade Centre for MSME
8. 70 clusters for Pharma MSME
9. 8 labour laws returns only twice a year
10. Environment clearance based on self-certification. Common air and water clearance
11. Companies act amendment ordinance removing harsh punishments of jails.
12. Factory inspector visit assignment through computer based random selections

Index of Industrial Production: The Index of Industrial Production (IIP) is measure of industrial performance, released by Central Statistics Office (CSO). CSO revised the base year of IIP in May, 2017 from 2004-05 to 2011-12. The latest series with base year 2011-12 is more representative of the current structure of the industrial sector. The Index of Eight Core Industries measures the performance of eight core industries i.e. Coal, Crude Oil, Natural Gas, Petroleum Refinery Products, Fertilizers, Steel, Cement and Electricity. The industries included in the eight core industries comprise about 40 per cent weight in the IIP.

During April-December 2018, industrial output grew at 4.6% against 3.7% in the same period of the previous fiscal. The manufacturing sector, which constitutes 77.63% of the index, recorded a low growth of 2.7% in December as against 8.7% expansion in the year-ago month. The IIP has followed a Zig-Zag pattern of growth in last 4 years.

Read this: http://pib.nic.in/PressReleseDetail.aspx?PRID=1555538 [Latest update on Industry], read year end summary for all sectors from PIB

The Ministry of Commerce & Industry is creating an action-oriented plan which will highlight specific sector level interventions to bolster India‘s march towards becoming a USD 5 trillion economy before 2025. The focused plans will be on boosting services sector contribution to USD 3 trillion, manufacturing to USD 1 trillion and Agriculture to USD 1 trillion.

2. Services

Foreign direct investment: India for the first time received FDI of more than highest ever FDI inflow of USD 61.96 billion in FY 2017-18. FDI equity inflows in automobiles & auto components increased by 13% during FY 2017-18, as compared to FY 2016-17. FDI equity inflows in textiles sector have increased by 18% during FY 2017-18, as compared to FY 2016-17. General trend: In terms of share in FDI Equity inflows, Mauritius, Singapore and Japan have been top three countries. In terms of the Sectors receiving FDI Equity inflows, Services (Finance, Banking, Insurance etc.), Telecommunications and Computer Software & Hardware have been the top three sectors.

Key initiatives by government to boost Industrial performance:

IPR policy: This aims to improve Indian intellectual property ecosystem, hopes to create an innovation movement in the country and aspires towards ―Creative India; Innovative India". Cell for Intellectual Property Rights Promotion and Management (CIPAM) was established which has improved the handling of IPR matters.

Construction Permits - Municipal Corporation in Mumbai and Delhi have reduced the number of procedures to 8. Likewise, the time frame for approvals during the construction cycle of a building has brought down to 60 days. *Resolving Insolvency* - Reorganization of procedure for corporate debtors through insolvency eco-system, namely, National Company Law Tribunal (NCLT), National Company Law Appellate Tribunal (NCLAT), Insolvency Professionals (IP), Insolvency Professional Agency (IPA), Insolvency Professional Entity (IPE), and Insolvency and Bankruptcy Board of India has been carried out. *Trading Across Border* – Various steps have been undertaken to simplify trade. Noteworthy among these include online message exchange system for import clearances of agricultural commodities; limiting the number of documents for import and export to 3; establishment of Import Data Processing and Management System (IDPMS) for data processing for payment of imports and effective monitoring; and reduction in the "Gate in" time period for export containers from 5 days to 4 days. *Enforcing Contracts*- Various reforms have been undertaken to improve the enforcement of contracts. Maharashtra and Delhi High Court have established Commercial Division benches and Commercial Appellate Division benches. *Getting Credit* - The amended SARFAESI Act 2002 provides priority to secured creditors to be paid first over all other debts and all revenues, taxes, cesses and other rates payable to the Central Government or State Government or local authority. *Paying Taxes* – The Government has introduced project 'RAPID- revenue, accountability, probity, information and digitalization' for administrating the tax reforms to make tax compliances more taxpayer-friendly, transparent with the aim of widening the tax base.

Make in India: India has improved ranks on the Global Innovation Index (2015-16) (Source: World intellectual Property Organization) and Logistics Performance Index (2015-16) (Source: World Bank) and the Global Competitiveness Index (2014-16) (Source: World Economic Forum). Ministry of Commerce is making all efforts to ensure that in public procurement, preference is given to Make in

India like Exemption is given where estimated value of procurement is less than Rs. 5 lakhs and minimum local content shall ordinarily be 50%. Public Procurement Cell has been created in DIPP.

Start-up India: Start-up India is a flagship initiative of the Government of India, intended to build a strong ecosystem that is conducive for the growth of start-up businesses, to drive sustainable economic growth and generate large scale employment opportunities so that we become job creator rather than Job seeker. We have second largest number of start-ups in the country. The 19-Point Start-up India Action Plan envisages several incubation centres, easier patent filing, tax exemptions, ease of setting-up of business, a Rs. 10,000 crore corpus fund and a faster exit mechanism.

Some of the achievements of the Start-up India action plan are (i) simplification and handholding for compliance regime based on self-certification, rolling out of mobile app and portal, setting up of Start-up India hub, legal support and fast-tracking patent examination at lower costs, relaxed norms of public procurement for start-ups and faster exit for start-ups, (ii) providing funding support through fund of funds with a corpus of Rs. 10,000 crore, tax exemption on capital gains, tax exemption to start-ups for 3 years, removal of angel tax, (iii) promoting industry-academia partnership and incubation through launch of Atal Innovation Mission, harnessing private sector expertise for incubator setup, building 11 Technology Business Incubators, setting up of 7 new research parks modelled on the research park setup at IIT Madras, promoting start-ups in the biotechnology sectors and (iv) launching of innovation focused programmes for students.

[While reading through this section, make a sector-wise list of all the programs, schemes, facts, issues and case studies]

Steel Sector: In the backdrop of a slowing world economy and over capacity in production of steel, India witnessed rising imports of cheap steel from countries like China, South Korea and Ukraine into Indian markets at low prices since early 2014-15. This dumping of cheaper steel imports adversely affected domestic producers. In order to address this, apart from raising customs duty and imposition of anti-dumping duty, Minimum Import Price (MIP) on a number of items was introduced in February 2016 with a sunset clause of one year.

At the same time, significant cutback in China‘s production capacity of Steel has led to rising international prices of steel, especially post June 2017. The government has rolled out a New Steel Policy in May 2017. Further, a policy on preference to domestically manufactured selectiron & steel products has been enforced also since May 2017. This has increased the export of steel.

MSME sector: The share of MSME Sector in the country‘s Gross Value Added (GVA) is approximately 32%. MSMEs in India play a crucial role in providing large scale employment opportunities at comparatively lower capital cost than large industries and also in industrialization of rural & backward areas. As per the National Sample Survey (NSS) 73rd round, for the period 2015-16, there are 633.8 lakh unincorporated non-agriculture MSMEs in the country engaged in different economic activities providing employment to 11.10 crore workers. Schemes for this sector are MUDRA, Prime minister employment generation program, Credit linked capital subsidy scheme etc.

MSME sector faces a major problem in terms of getting adequate credit for expansion of business activities. Bank credit data shows that nearly 86% of credit was made to large enterprise while MSME received only 17% of outstanding credit. Growth of credit to Micro and Small enterprises increased by 4.6 per cent, while credit to Medium enterprises decreased by 8.3 per cent.

Textile and Apparel sector: The Textiles and Apparels sector has tremendous potential for growth in exports and employment, particularly, women‘s employment. The sector witnesses a historic opportunity with China losing market share in clothing exports due to rising labour costs. However, India has not been able to leverage this opportunity due to India‘s competitors i.e. Bangladesh, Vietnam, Ethiopia having duty free access to markets of EU and USA; high domestic taxes on manmade fabrics vis a vis cotton fabric; stringent labour laws; and high logistics cost. Various schemes like amended technology fund upgradation scheme has been launched which have had a positive impact on the sector.

Leather Sector: Leather sector is also highly labour intensive. Going by global market trend, it is a favourable time to promote the footwear industry. However, challenges persist. The global demand for footwear is moving towards non-leather footwear, while Indian tax policies favour leather footwear production. India also faces high customs tariffs in a number of developed country markets of leather goods and non-leather footwear.

Government initiatives: A scheme for promotion of employment in leather and footwear sector was launched. The scheme would lead to development of infrastructure for the leather sector, address environment concerns specific to the sector, facilitate additional investments, employment generation and increase in production. Enhanced tax incentive would attract large scale investments in the sector. Reforms in labour laws, in view of seasonal nature of the sector, will support economies of scale. The special package has the potential to generate 3.24 lakhs new jobs in 3 years and assist in formalization of 2 lakh jobs, as cumulative impact in Footwear, Leather& Accessories Sector. The scheme proposes to provide assistance for Placement Linked Skill Development Training to unemployed persons; incentives for investment for new plant and machinery; modernization of existing plant and machinery; support for up-gradation/installation of Common Effluent Treatment Plants (CETPs); brand promotion; and providing employer‘s contribution to Employees Provident Fund.

Gems and Jewellery Sector: India is one of the largest exporters of gems and jewellery. The industry is found to play a vital role in the contribution to total foreign reserves of the country. It is one of the fastest growing sectors and is export oriented and labour intensive. As per the 68th round of NSSO, the sector employed 20.8 lakh persons in 2011-12. Exports of the sector have risen from 0.7 per cent in 2014-15 to 12.8 per cent in 2016-17

Government initiatives: Creation of multiple jewellery parks (accommodating manufacturers, shared services, testing, banking, logistic support etc.) so as to promote production in a more organized environment. Jewellery training institutes, refineries, hallmark centres even in rural areas, promotion to public private partnership and so on.

Infrastructure Sector: A substantial step up of investment in infrastructure mostly on transportation, energy, communication, housing & sanitation and urban infrastructure sector is seen. Enhanced investment on infrastructure will help in creating jobs both directly and indirectly. Around US$ 4.5 trillion worth of investments is required by India till 2040 to develop infrastructure to improve economic growth and community wellbeing.

Issues: Financing is coming from institutions dedicated for infrastructure financing like National Infrastructure Investment Bank (NIIB) and also global institutions like Asian Infrastructure Investment Bank (AIIB), New Development Bank (erstwhile BRICS Bank).For some years, there was a fall in investment in infrastructure. The reasons behind the shortfall in investment were: collapse of Public Private Partnership (PPP) especially in power and telecom projects; stressed balance sheet of private companies; issues related to land & forest clearances.

Road Sector: India has one of the largest road networks of over 56.17 lakh km comprising National Highways, Expressways, State Highways, Major District Roads, Other District Roads and Village Roads.

- In 2016, the number of motor vehicles in India grew to 23 crores which is become unmanageable in cities.
- National Highways (NHs) /Express Ways in India accounted for 2.06 per cent of the total road length.
- In case of inland freight transport, road share is more than railways and other modes of transportation in India.

Bharatmala Pariyojana: Bharatmala Pariyojana is a new umbrella program for the highways sector.

- It includes development of Economic Corridors, Inter Corridors and Feeder Routes, National Corridor Efficiency Improvement, Border and International connectivity roads, Coastal and Port connectivity roads and Green-field expressways. A total of around 24,800 km are proposed to be constructed in Phase I. Estimated outlay for Phase I is Rs. 5,35,000 crore.

Issues: Increasing stalled Projects and NPAs in road sector mainly due to problem inland acquisition, utility shifting, poor performance of contractors, environment/ forest/wildlife clearances, arbitration/ contractual disputes with contractors etc. However, revival has been seen in 88% of the stalled project after one-time fund infusion by NHAI, streamlining acquisition and clearances, adopting Hybrid Annuity Model (HAM) and exploring alternative funding mechanism like Infrastructure Investment Trust, LIC, Long term pension fund etc.

Railway Sector: The share of Indian Railways in freight movement has been declining over a period of time primarily due to non-competitive tariff structure. While the passenger fare had remained more or less flat, the freight fare has increased sharply over the year.

- For capacity creation, investment of capital has continuously increased in railways.
- Metro Rail Policy, 2017: Higher capacity rail-based mass transit system is popularly called Metro Rail in India.
- 425 km of metro rail systems is operational in the cities of Delhi, NOIDA, Gurugram, Kolkata, Mumbai, Chennai, Bengaluru, Hyderabad, Jaipur, Lucknow and Kochi. Another about 684 km of metro rail is under construction in various cities. As metro rail projects are highly capital intensive, it is difficult to fund metro rail projects from Government exchequer only. The Metro Rail Policy wants to mobilize capital from various sources

Issues: Share of Indian Railways in freight movement has been declining over a period of time primarily due to non-competitive tariff structure and stiff competition from other modes of transportation. To make rail transportation attractive and arrest the declining trend various initiatives were taken like tariff rationalization, withdrawal of dual freight policy for export of iron ore, policy guidelines of Merry Go Round System, new delivery models like Roll-on Roll-off services etc. Government is also pushing for railway infrastructure development like completion of broad-gauge lines, Infrastructure Status to Station Redevelopment etc.

Civil Aviation: India is the 3rd largest and the fastest growing domestic aviation market in the world. In 2016-17, annual growth in domestic passenger departures was 23.5 per cent as compared to 3.3 per cent in the US and 10.7 per cent in China.

- International travel is also increasing at around 9% per annum.
- Domestic air cargo is increasing by 10.3% while international air cargo is increasing by 19%.
- Regional Connectivity Scheme – ‗Ude Desh ka Aam Naagrik' seeks to develop underserved airports. 27 states/ UTs have signed MoUs under the scheme. Many private sector airlines are actively participating under this scheme.
- Provision of Rs 4,500 crore for revival of 50 unserved and underserved airports/air strips has been taken up with budgetary support
- India-Afghanistan Air freight Corridor: The decision to establish an Air Freight Corridor between Afghanistan and India was taken in September 2016. The Corridor will provide Afghanistan, a landlocked country, greater access to Indian market especially for perishables, and will allow Afghan businessmen to leverage India's economic growth and trade networks for its benefit.

Shipping: Around 95 per cent of India's trade by volume and 68 per cent in terms of value is transported by sea. Ship-building is a manufacturing industry endowed with the unique feature of having nearly 65 per cent value addition coming from other technology/ancillary industries.

- Major Ports Authorities Bill, 2016 to replace Major Ports Trust Act, 1963 to modernize the institutional structure of Major Ports has been introduced in the Parliament in 2016.

Government schemes: To encourage the growth of Indian tonnage and for higher participation of Indian ships in Indian trade, the Government has implemented several measures which include reduction of GST from 18 per cent to 5 per cent on bunker fuel used in Indian flag vessels; brought parity in the tax regime of Indian seafarers employed on Indian flag ships vis-à-vis those on foreign flag ships; removing obstacles in the smooth implementation of the India Controlled Tonnage (ICT) scheme which allows Indian companies to directly own ships in foreign flags; and easing many procedural compliance issues like ship registration, procuring chartering permission and payment of chartering fees online.

Issues: Globally, the shipbuilding industry is dominated by three countries namely, South Korea, China & Japan, which together have more than 90 per cent share of the shipbuilding market. India has huge scope for shipbuilding and repair. In addition, port development is necessary for India‘s growth.

Sagarmala programme: The Sagarmala programme is the flagship programme to promote port-led development in the country through harnessing India‘s 7,500 km long coastline, 14,500 km of potentially navigable waterways and strategic location on key international maritime trade routes.

- The main vision of the Sagarmala Programme is to reduce logistics cost for international and domestic trade.
- Under the Sagarmala Programme, 508 projects at an estimated investment of more than Rs 8 Lakh Crore have been identified for implementation over the next 20 years.
- Of these, 289 Projects worth Rs 2.17 Lakh Crore are under various stages of implementation and development.
- These projects are being implemented primarily through the private players or PPP mode.

Inland Waterways Transport (IWT): The ‗Jal Marg Vikas Project‘ on National Waterways-I (NW-I) in river Ganga, a large integrated IWT project, has been launched between Varanasi and Haldia covering a distance of 1380 kms at an estimated cost of Rs 5369 crore.

- On NW-2 (River Brahmaputra), Ro-Ro services have commenced between Dhubri and Hatsingimari in July 2017.
- Under the National Waterways Act, 2016, 106 additional inland waterways have been declared as National Waterways (NWs).
- Eight new NWs have been taken up for development in 2017-18. These include, NW-16 (Barak river); three in Goa viz. NW- 27: Cumberjua, NW 68 – Mondovi, NW 111 – Zuari; NW-86 (River Rupnarayan); NW 97 (Sunderbans); NW-9 (Alappuzha–Kottayam– Athirampuzha Canal) and NW-37 (River Gandak).

Telecom: The total subscribers stood at 121 crores, out of which 50 crore connections were in the rural areas and 71 crores in the urban areas. The overall tele-density in India was 93.42 per cent including 56.78 per cent in rural areas and 172.86 per cent in urban areas.

- The telecom sector is going through a stress period with growing losses, debt pile, price war, reduced revenue and irrational spectrum costs.
- The flagship ‗Bharat Net‘ project to link each of the 2.5 lakh Gram Panchayats of India through optical fibre network is being implemented in two phases. March 2019 target is 1.5 Lakh. It will facilitate the delivery of various e-Services and applications including e-health, e education, e-governance and e-commerce in the future.

Issues: The major themes that new Telecom Policy shall try to address include Regulatory & Licensing frameworks impacting the sector, Connectivity for All, Quality of Services, Ease of Doing Business and

Absorption of New Technologies including 5G and Internet of Things. Telecom Regulatory Authority of India (TRAI) has also recommended new policy on ‗Net Neutrality' which prohibits discriminatory tariffs for data services.

- Net Neutrality: (TRAI) has also recommended new policy on ‗Net Neutrality' which prohibits discriminatory tariffs for data services. As per the policy, the service providers should be restricted from entering into any arrangement, agreement, or contract, with any person, natural or legal, that has the effect of discriminatory treatment based on content, sender or receiver, protocols or user equipment.

Power: All-India installed power generation capacity reached 330,861 MW as on Nov 30, 2017.

- The peak deficit i.e. the percentage shortfall in peak power supply vis-à-vis peak hour demand, has declined from around 9 per cent in 2012-13 to 1.6 per cent during 2016-17.
- Deen Dayal Upadhyaya Gram Jyoti Yojana was launched in 2014 to enhance power supply in rural areas. It extended financial assistance for capital expenditure by distribution companies (discoms) for strengthening and augmenting distribution infrastructure, including metering, in rural areas. The estimated outlay for the scheme is Rs 43,033 crore.
- A new scheme, Saubhagya (Pradhan Mantri Sahaj Bijli Har Ghar Yojana), was launched in September 2017 to ensure electrification of all remaining willing households in the country in rural and urban areas with an outlay of Rs 16320 crore. The scheme envisages electrification of around 4 crore households that do not have electricity connection by March 2019.
- For unelectrified households located in remote and inaccessible areas, solar photo voltaic based standalone systems with power packs of 200-300 Watt with battery backup are to be provided to allow maximum of 5 LED Lights, one DC fan, one DC power plug along with maintenance for five years.
- The prospective beneficiary households would be identified using Socio Economic Caste Census (SECC) 2011.

Logistics Sector: Exploring the Unexplored: Logistics including transportation, inventory management, warehousing, materials handling & packaging, and is related to management of flow of goods. India ranks 35th in the Logistic performance Index.

- The Indian logistics industry worth around US$ 160 Billion has grown at a compound annual growth rate (CAGR) of 7.8 per cent during last five years. Logistics sector provides employment to more than 22 million people.

Issues: Unorganized nature of sector, high cost of logistics impacting competitiveness in domestic and global market, inadequate basic infrastructure multiple regulatory bodies, lack of seamless movement of goods across modes, lack of integrated IT infrastructure/modern technology.

In order to develop this sector in an integrated way, it is important to focus on new technology, improved investment, skilling, removing bottlenecks, improving intermodal transportation, automation, single window system for giving clearances, and simplifying processes.

Initiatives for Logistic sector

- **Developing logistics portal** India has improved its global rankings on trading across borders from 146th rank in 2017 to 80th rank in 2018. Department of Commerce is working on reducing the logistics cost from the current 14% of GDP to 10% by 2022 through an integrated approach.
- Multi-modal logistics park
- Logistics Data Bank

Petroleum & Natural Gas: India has 26 sedimentary basins covering an area of 3.14 Million Sq. Km spread over onshore, shallow water and deep water. An area of about 1.502 Million Sq. Km i.e. 48% of total sedimentary basin area does not have adequate geo-scientific data. To support future Exploration and Production activities, appraisal of all un-appraised areas is underway. It will help in increasing investments in domestic production of oil and gas. Government has initiated schemes for increasing refining capacity, National Gas grid and PAHAL for boosting this sector

Issues: Our production in 2017-18 did not meet target due to declining production from old and marginal fields, delay in completion of some projects in western offshore, unplanned shutdown of wells, processing platform/plants and pipelines.

National Gas Grid: Government has envisaged developing an additional 15,000 km long pipeline network to have an ecosystem of National Gas Grid in the country.

- Construction of 2650 km Jagdishpur-Haldia & Bokaro-Dhamra Pipeline (JHBDPL) natural gas pipeline project, popularly known as Pradhan Mantri Urja Ganga of Eastern India is underway.
- This project will connect Eastern part of the country with National Gas Grid and will ensure the availability of clean and eco-friendly fuel, Natural Gas, to the industrial, commercial, domestic and transport sectors in eastern states.
- It will also help in the revival of many fertilizer plants namely Gorakhpur (U.P.), Barauni (Bihar) and Sindri (Jharkhand) along the route of these pipeline projects.

Housing: Housing for all is top government priority. In this regard, lot of untapped policy and operational space in lying in form of rental housing. Rental market is an important part of the urban eco-system, hence some issue needed to be resolved like rent control, unclear property rights and difficulties with contract enforcement.

Another issue faced by the sector is Vacant housing. According to the census, around 12% of the total urban housing stock remains vacant due to the difficulties mentioned in rental housing. Maharashtra tops the chart. We need to resolve this as our localities may become a ghost town.

CHAPTER - 18

SERVICES SECTOR

Q. Highlight the importance, contribution and key sectors of Services industry? List some government initiatives?

Services sector in India has immense employment potential. implementation of focused and monitored Action Plans will enhance the competitiveness of India's service sectors, thereby creating more jobs in India, contributing to a higher GDP and exports of services to global markets.

The services sector with a share of 55.2% in India‘s gross value added continued to be the key driver of India‘s economic growth contributing almost 72.5% of gross value-added growth in 2017-18. The share of India's services sector in global services exports was 3.3% in 2015 compared to 3.1% in 2014. Based on this initiative, a goal of 4.2 % of global service exports and 67% of GVA (including constructions) has been envisaged for 2022. Share of FDI equity inflows to the services sector is 69.6% in 2017-18 but this varies depending on what we include in definition of services.

12 Champion services sectors [identified by Ministry of commerce]**:**

- Information Technology & Information Technology enabled Services (IT &ITeS)
- Tourism and Hospitality Services
- Medical Value Travel
- Transport and Logistics Services Accounting and Finance Services
- Audio Visual Services
- Legal Services
- Communication Services
- Construction and Related Engineering Services
- Environmental Services
- Financial Services and Education Services

Budget 2019-20: Real Estate sector

- Tax exemption on notional rent earned by a person on two self-occupied houses;
- Non-taxability of notional rental income on unsold inventories for two years;
- benefits of rollover of capital gains up to INR 20 million (approx. USD 280,000) from investment in two residential houses.
- Tax exemptions for development of housing projects are extended by a year

The Government has taken many initiatives in the different services which include digitization, e-visas, infrastructure status to Logistics, Start-up India, schemes for the housing sector, services export from India Scheme etc. which could give a further fillip to this sector. In order to make India as an attractive investment destination, reforms like announcement of National Intellectual Property Rights (IPR) policy, implementation of GST, reforms for ease of doing business were undertaken. Government has allowed 100 per cent FDI under automatic route for Single Brand Retail Trading. Foreign airlines also have been allowed to invest up to 49% in Air India.

Q. What is state wise trend in the service sector?

Services sector is the dominant sector, contributing to more than half of the gross state value added (GSVA) in 15 states and UTs. The major services in most of the states are trade, hotels and restaurants, followed by real estate, ownership of dwellings and business service.

In terms of Services GVSA share, Delhi and Chandigarh are at the top with over 80% share, while Sikkim is at the bottom with 31.7% share. In terms of services GSVA growth, Bihar is at the top and Uttar Pradesh at the bottom with 14.5% and 7.0% growth respectively in 2016-17.

Q. India"sservice export in global perspective?

A. India remained the eighth largest exporter of commercial services in the world in 2016 (WTO, 2017) with a share of 3.4 %, which is double the share of India's merchandise exports in the world at 1.7 percent. Moreover, the ratio of services exports to merchandise exports increased from 35.8% in 2000-01 to 58.2%. Notwithstanding the pricing pressure on traditional services and a challenging global business environment facing domestic software companies, software services exports increased by 2.3%, a mild improvement over the previous period.

Although world trade volume of goods and services is projected to accelerate in 2018, enhanced global uncertainty, protectionism and stricter migration rules would be key factors in shaping India's services exports.

[Prelims]: Baltic Dry Index, a freight index and a good proxy for the robustness of trade and shipping services

Sub-Sector wise assessment:

Tourism: In India, Foreign Tourist Arrivals (FTAs) during 2017 were 10.2 million, with a growth of 15.6%. Foreign Exchange Earnings (FEEs) from tourism were US$ 27.7 billion, with a growth of 20.8%. Domestic tourist visits grew by 12.7 per cent to 1,614 million in 2016. In terms of number of domestic tourist visits, Tamil Nadu, Uttar Pradesh, Andhra Pradesh, Madhya Pradesh, and Karnataka were the top 5 destination States. ‗Paryatan Parv' and ‗Dekho Apna Desh' program was launched to encourage Indians to visit their own country.

Most visited monument: Taj Mahal > Agra Fort > Qutub Minar [2016]

# of domestic tourist visits: Tamil Nadu> Uttar Pradesh> Andhra Pradesh>Madhya Pradesh> Karnataka [2016]

IT–BPM Services: India's Information Technology – Business Process Management (IT-BPM) industry grew by 8.1 per cent in 2016-17 to US$ 139.9 billion (excluding E-commerce). IT-BPM exports grew by 7.6 per cent to US$ 116.1 billion. USA, UK and EU account for around 90 per cent of the total IT-ITES exports. The IT-BPM industry is estimated to employ nearly 3.9 million people. E-commerce market is estimated at US$ 33 billion, with a 19.1 per cent growth in 2016-17

Issues: New challenges surfacing in the traditional geographies of USA, UK and EU, demand from APAC, Latin America and Middle East Asia is growing and new opportunities are emerging for expanding in continental Europe, Japan, China and Africa, increasing competition from Ukraine, Israel, and Philippines.

To further promote this sector, many initiatives have been taken. These include the establishment of BPO Promotion and Common Services Centres to help create digital inclusion and equitable growth and provide employment to 1.45 lakh persons, mostly in the small towns; setting up a separate Northeast BPO promotion scheme with 5000 seats and having employment potential of 15000 persons; preparing the draft open data protection policy law; besides long-term initiatives like Digital India, Make in India, Smart Cities, e-Governance, push for digital talent through Skill India, drive towards a cashless economy and efforts to kindle innovation through Start-up India.

Real estate and Housing: The share of real estate sector which includes ownership of dwellings accounted for 7.7 per cent in India's overall GVA in 2015-16. The % growth of this sector reduced due to decline in ownership of dwellings. The growth of the construction sector which includes buildings, dams, roads, bridges, etc. has decelerated to 1.7 per cent in 2016-17 from 5.0 per cent in 2015-16. Real estate and construction together, is the second largest employment provider in the country, next only to agriculture. It is slated to employ over 52 million workforce by 2017, and 67 million workforce by 2022.

Issues: Rising NPAs, higher risk provisioning assigned to real estate sector and dwindling profits in the real estate sector, have made banks reluctant to lend to the sector. As a result, share of bank lending for organized funding to real estate sector has dropped significantly from over 68 per cent in 2013, to 17 per cent in 2016. Interestingly, Private Equity (PE) funds and financial institutions such as pension funds and sovereign wealth funds have replaced banks as the largest source of this sector. Recent NBFC crisis has worsened the affairs for this sector as real estate had the largest exposure to NBFC's.

Government initiative: Pradhan Mantri Awas Yojana (PMAY) for affordable housing in urban area, Credit Linked Subsidy Scheme (CLSS) under PMAY was extended to the Middle-Income Group (MIG) segment, Enactment of Real Estate (Regulation & Development) Act, 2016: it is anticipated that accountability would lead to higher growth across the real estate value chain, while compulsory disclosures and registrations would ensure transparency, PPP policy for affordable housing, ‗Housing for all by 2022' mission were some of the major initiatives.

Research and Development: India-based R&D services companies, which account for almost 22 per cent of the global market, grew at 12.7 per cent. However, India's gross expenditure on R&D has been low at around 1 per cent of GDP. India currently ranks 60th out of 127 on the Global Innovation Index (GII) 2017, though this ranking has improved from 66th rank in 2016. Among the BRICS countries only South Africa is behind India in R & D expenditure ranking.

India is estimated to grow at a CAGR of 14 per cent to reach US$ 42 billion by 2020. India is also expected to witness strong growth in its agriculture and pharmaceutical sectors as the government is investing large sums to set up dedicated research centres for R&D in these sectors. The Indian IT industry is expected to add to the development of the R&D sector

Space Services: ~~3~~ Three main roles - Communication, navigation and earth observation. ISRO is pursuing a project to support ASEAN Member states including Myanmar to receive and process data from Indian remote sensing satellites (Resourcesat-2 and Oceansat-2)

Conclusion: As the Services sector contributes significantly to India's GDP, exports and job creation, increased productivity and competitiveness of the Champion Services Sectors will further boost exports of various services from India. Embedded services are substantial part of 'Goods' as well. Thus, competitive services sector will add to the competitiveness of the manufacturing sector as well. Based on purchasing manager index, the prospects look bright with good performance of sub sectors like Tourism, Aviation, and Telecom, robust services trade performance with even growth of major services like software returning to positive territory. The downward risk, however, lies in the external environment for software and business services.

CHAPTER - 19

SOCIAL INFRASTRUCTURE, EMPLOYMENT AND HUMAN DEVELOPMENT

―To engineer an inclusive and sustainable growth, creation of human capital through social infrastructure like education, health and social protection should be the utmost priority"

Items	2012-13	2013-14	2014-15	2015-16	2016-17 RE	2017-18 BE
						(₹ in lakh crore)
Total Expenditure	26.95	30.00	32.85	33.78	40.60	43.96
Expenditure on Social Services	6.58	7.46	7.68	7.90	9.84	10.94
i) Education	3.13	3.48	3.54	3.31	3.95	4.41
ii) Health	1.26	1.39	1.49	1.52	2.26	2.25
iii) Others	2.20	2.59	2.65	3.07	3.63	4.27
As percentage to GDP						
Total Expenditure	27.1	26.7	26.4	24.7	26.7	26.4
Expenditure on Social Services	6.6	6.6	6.2	5.8	6.5	6.6
i) Education	3.1	3.1	2.8	2.4	2.6	2.7
ii) Health	1.3	1.2	1.2	1.1	1.5	1.4
iii) Others	2.2	2.3	2.1	2.2	2.4	2.6

Figure: Trends in Social Services Expenditure by General Government (Centre and States)

It can be seen from the table above that the expenditure on social services by the Centre and States as a proportion of GDP has remained around 6 per cent of GDP.

1. ***Education for all:***
   - Sustainable Development Goal **(SDG- 4)** for education – ―Ensure inclusive and quality education for all and promote lifelong learning" by 2030
   - While India has made significant progress in quantitative indicators such as enrolment levels and physical infrastructure, much needs to be done about quality of education
   - The Pupil Teacher Ratio at primary level and upper primary level should be 30:1 and 35:1 respectively. Some states like Bihar and UP have these around 60.
   - The Central government provides assistance to the State Governments for additional teachers to maintain appropriate PTR through Sarva Shiksha Abhiyan (SSA) at elementary level and Rashtriya Madhyamik Shiksha Abhiyan (RMSA-Integrated) at secondary level
2. ***Gender Parity Index (GPI):***
   - It is a valuable indicator which reflects the discrimination against girls in access to educational opportunities
   - Beti Bachao Beti Padhao scheme has been introduced for promoting survival, protection and education of girl child. It aims to address the issue of declining Child Sex Ratio (CSR) through a mass campaign targeted at changing social mind set and creating awareness
3. **Progress in Labour Reforms:**
   - The draft Code on Wages Bill 2017 has been introduced in Lok Sabha in August 2017

- It seeks to rationalize 38 Central Labour Acts by framing relevant provisions of existing laws into 4 labour codes viz Code on Wages, Code on Safety and Working Conditions, Code on Industrial Relations, and Code on Social Security and Welfare.
- Shram Suvidha Portal – To bring Ease of Compliance to maintain registers under various Labour Laws/Rules.
- Universal Account Number - To reduce the complexity in compliance and to bring transparency and accountability for better enforcement of the labour laws.
- National Career Service portal - linking all employment exchanges of the country, registration and posting of jobs for job-seekers and to provide employment related services like career counselling, vocational guidance, information on skill development courses and internships.
- Employee‘s State Insurance (ESI), Act has been extended to all 325 complete districts and partially in most other places now. The target is to extend it across the country by 2022. Under the scheme, insured persons are entitled to various cash benefits in the event of abstention from work due to sickness, temporary disablement, permanent disablement, dependent benefit, unemployment allowance, maternity benefit, etc. It also provides medical benefit through a network of 152 hospitals and 1467 dispensaries.

> ESI is a self-financing social security and health insurance scheme for workers. This fund is managed by the Employees' State Insurance Corporation (ESIC) according to rules and regulations stipulated in the ESI Act 1948. ESIC is an autonomous corporation by a statutory creation under Ministry of Labour and Employment.

4. Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA):

- There has been highest ever budget allocation of Rs 48000 crore under MGNREGA during 2017- 18.
- About 4.6 crore households were provided employment during 2017-18.
- Out of this, 54 per cent were generated by women, 22 per cent by Schedule Castes and 17 per cent by Schedule Tribes.

5. Mahila E-Haat

- It provides an e-marketing platform for showcasing product made/manufactured/sold by women entrepreneurs/SHGs/NGOs. It is directly and indirectly linked with 26000 SHGs and 3.75 lakh beneficiaries

6. Reducing Gender gap in Labor Force Participation Rate:

- As per the Maternity Benefit (Amendment) Act, 2017, the women are entitled to enhanced maternity leave for a period of 26 weeks (6 months) working in registered establishments.
- It has been made mandatory for the establishments employing 50 or more employees to provide crèche facility, either separately or along with common facilities within a prescribed distance
- Pradhan Mantri Matru Vandana Yojana (PMMVY): for providing partial compensation for the wage loss so that the woman can take adequate rest before and after delivery of the first child. It provides cash benefit of Rs 5,000 in DBT Mode during pregnancy and lactation.
- National Nutrition Mission (NNM): The Government of India has approved setting up of National Nutrition Mission (NNM) commencing from 2017-18 The NNM, as an apex body, will monitor, supervise, fix targets and guide the nutrition related interventions across the Ministries. The programme through the targets will strive to reduce the level of stunting, under-nutrition, anaemia and low birth weight babies.

7. **Political Empowerment:**

- Lok Sabha has 64 (11.8%) and Rajya Sabha had 27 (11%) women MPs. Out of a total 4118 MLAs across the country, only 9 per cent are women. Trend of highest % of women MLA: Bihar > Haryana > Jharkhand
- Article 243D of the Constitution provides that not less than 33% of the total number of seats be reserved for women. There are 13.72 lakh elected women representatives in PRIs which constitute 44.2 percent of total elected representatives.
- Mahila Shakti Kendra scheme has been launched at the village level. Over 300 thousand student volunteers are being sent out in 115 most backward districts under this new scheme. District Level Centres for Women are also being set up in 640 districts which will provide convergence of all initiatives related to women.

8. **Health for All:**

- Ensuring healthy lives and promoting the well-being for all at all ages is essential to sustainable development (SDG-3)
- Although Out of Pocket Expenditure on health has been declining, it is still around 62%
- National Free Diagnostic Service Initiative began in 2015 and around 759 crore was spent in 2017-18 on this under National Health Mission (NHM)
- NHM also provides free drugs and generic drugs are being promoted nationally
- The report ‗India: Health of the Nation‘s States‘, 2017 provides the first comprehensive set of findings for the distribution of diseases and risk factors across all States from 1990 to 2016.
- The concept of Disability Adjusted Life Years (DALYs) provides a framework for analyzing the disease burden and risk factors. DALYs is the sum of years of potential life lost due to premature mortality and the years of productive life lost due to disability.

9. **Controlling Antimicrobial resistance (AMR):**

- It occurs when microorganisms such as bacteria, viruses, fungi and parasites change in ways that render the medications used to cure the infections they cause ineffective.
- It occurs naturally but is facilitated by the inappropriate use of medicines, for example using antibiotics for viral infections such as cold or flu, or sharing antibiotics Low-quality medicines, wrong prescriptions and poor infection prevention and control also encourage development and spread of drug resistance.
- India has finalized a comprehensive and multi-sectoral National Action Plan to control AMR. It has initiated series of actions including setting up a National Surveillance System for AMR, enacted regulations (Schedule-H-1) to regulate sale of antibiotics, brought out National Guidelines for use of antibiotics, etc.

10. **Reducing Open Defecation through Swachh Bharat Mission:**

- According to the World Bank estimates, the lack of sanitation facilities costs India over 6 per cent of GDP.
- The number of persons defecating in open in rural areas, which were 55 crores in October, 2014 declined to 25 crore in January, 2018
- **India** has achieved 98% rural sanitation coverage and as many as 5.45 lakh villages have been declared **open defecation** free (**ODF**) [declared in 2019-20 budget]

- Quality Council of India's survey showed over 90% usage of constructed toilets. This shows a phenomenal success story in behaviour change.
- The following figure shows that sanitation coverage has improved from 31% to 74% in rural areas since 2011.

Reducing wasteful expenditure:

For past some time, successive governments have tried to rationalize expenditure of government resources, redirecting them away from subsidies towards public provision of essential private goods and services at low prices, especially to the poor.

Progress has been made in providing bank accounts, unique identifier, cooking gas, housing, power, toilets, etc. The pace and magnitude of the improvement in the lives of people will depend upon the extent to which increased physical availability is converted into greater actual use. That is, toilet building into toilet use, bank accounts into financial inclusion, cooking gas connections into consistent gas off-take, and village electrification into extensive household connections.

Jan Dhan Yojana:

The data suggests that over 30 crore bank accounts have been opened in 3 years since Dec 2014. The number of zero balance accounts has also fallen steeply and is now around 10% of the total PMJDY accounts. This is great success story in financial inclusion and will become the driving force in bringing transparency and effectiveness in all government welfare programmes. Further, the rapid increase in Aadhaar linked bank accounts show that pilferage, ghost beneficiaries and corruption will reduce using these technological solutions.

Pradhan Mantri Ujjwala Yojana – success or failure?

- A support of Rs 1600 per connection is provided to BPL families
- It has been a flagship scheme and is said to alleviate the drudgery of millions of women.
- But is it a onetime exercise where people just take free connections and never use them after the first free cylinder gets exhausted?
- The data suggests that 79% consumers come back for refills and take around 5 cylinders each. Therefore, it can be said that the scheme is truly a popular and successful one.
- Enthused by this, the government in budget 2018-19 has increased the target of Ujjwala scheme from 5 crore to 8 crore beneficiaries.

Home for everyone – Dream or reality:

It is more important to have sustainable change rather than having grand numbers on board. The present government focused more on completing the incomplete houses for which some amount was allocated rather than allocating money to new beneficiaries. This resulted in more completion of houses as given in the following figure. The scheme also got revamped as Pradhan Mantri Aawas Yojana in November 2016 and is now based on the SECC data.

Public or Private Debate invigorated:

The classic debate has been renewed in the international and national circles. It mainly pertains to the role of markets and states, private capital and public institutions. All over the world, there is a reassessment of the respective roles of the two with a clear tilt toward greater state involvement. The new international thinking is based on the need to redistribute to check growing inequality and cushion against the impact of globalization. It is also based on the need to regulate, for example, the financial sector to minimize risks and the technology sector to check growing market power and its misuse as a communications medium. But India is in a grey zone of uncertainty on the role of states and markets. Limitations on state capacity (centre and states) affect the delivery of essential services such as health and education. At the same time, the introduction of technology like UPI/BHIM and the JAM architecture shows the government can still play significant role.

Crony Socialism to Stigmatized Capitalism:

The Stigma: In India, capitalism in not seen very positively. The ambivalence relating to the private sector relates to the experience with Indian capital. The private sector has always had to struggle with the stigma that came because of the crony ~~capitalism~~ socialism era during the license-quota-control Raj.

Positive role of the IT industry: Some of this stigma was washed away during the IT boom that started in the 1990s, because the sector had developed on intrinsic competitive merit rather than proximity to government, had adopted exemplary governance standards, listed on international stock exchanges, and thrived in the global market place. All these developments improved the credentials of Indian capital.

Reinforcement of the stigma: The stigmatization was reinforced in the mid-late 2000s, because of the intense rent-seeking and corruption associated with the allocation of spectrum, coal, land, and environmental permits. The infrastructure boom of that period bequeathed the TBS problem of today. As a result, the public concluded that promoters had little skin in the game, and that India had “capitalism without equity,” and that instead of limited liability there was very little liability. These things further exacerbated the negative perception of Indian capital.

Harmful effects of the stigma: Now, even the IT sector is confronting governance challenges, as its model of providing low-cost programming for foreign clients comes under threat from rapid technological change. So, one might say that India had moved from “crony socialism to stigmatized capitalism.” It is that zeitgeist (or Maahaul) of stigmatized capitalism—an accumulated legacy inherited by the government—that made policy reforms so difficult and makes the recent progress in addressing the Twin Balance Sheet challenge noteworthy.

Case study: – Did the clothing incentive package, costing the exchequer over Rs 6000 crore, boost exports of readymade garments?

In June 2016, the Cabinet announced a Rs. 6,000 crore package for the apparel sector. The largest component of this package was rebates on state levies (ROSL) to offset indirect taxes levied by the states (the VAT) that were embedded in exports. The relief from embedded state taxes announced in 2016 boosted exports of ready-made garments (but not others) by about 16 percent.

Hence, it cannot be said that revenue forgone is a wasteful thing as revenues are only notional unless realized. The government has to balance between present revenue collection, employment generation, exports‘ promotion and overall development of specific sectors of economy. The tax exemptions given are at times good support systems as they boost manufacturing and exports.

<Some data points on efficacy of various schemes>

Public provision of private goods & services 74% of household in rural India have toilets. However, only 91% of these households actually use them More than 30 crores Jan Dhan accounts have been opened. Out of which approximately 22 crores have linked it with Aadhaar. Moreover, zero balance accounts have also reduced drastically.

As of January 2018, 16.3 lakhs houses have been built under Pradhan Mantri Awas Yojana Gramin and 3.2 lakh were built under Indira Awa Yojana Over 32 million gas connections have been provided under Ujjwala and 79% of these connections came back for refill.