



**PRAYAAS**  
INSTITUTE OF  EXCELLENCE



# **ECONOMIC DEVELOPMENT**

**GENERAL STUDIES - 3**

**Class Notes**

**UPSC MAINS**



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**ECONOMIC DEVELOPMENT**  
**GENERAL STUDIES - 3**  
**(Class Notes)**

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**Year 2022 - 23**



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## Economic Growth & Development

This is one of the most important topic from general studies paper 3. The importance can be attributed to mainly its nature which is broader and wider in its approach. Therefore understanding the basics and components of this topic is crucial to attempt tricky economics questions in mains.

### Previous Year Questions.

Year	Questions	Context/Theme/Inspiration
2021	Explain the difference between computing methodology of India's Gross Domestic Product (GDP) before the year 2015 and after the year 2015.	<b>A kind of tricky and difficult question inspired from recent controversy related to computation of GDP. Such type of question are hard to address and we need not to lose sleep over it.</b>
2021	Do you agree that the Indian economy has recently experienced V- shapes recovery? Give reasons in support of your answer.	<b>Directly inspired from post-COVID economic revival. Here, we also need to mention the debates surrounding the shape of economic recovery which was in news.</b>
2020	Define potential GDP and explain its determinants. What are the factors that have been inhibiting India from realizing its potential GDP?	<b>More of a theoretical concept but can be tackled through general understanding of GDP and its components.</b>
2019	Do you agree with the view that steady GDP growth and low inflation have left the Indian economy in good shape? Give reasons in support of your arguments.	<b>This question is asking about the relation between economic growth and inflation in economy. Here prelims knowledge can be helpful.</b>
2017	Among several factors for India's potential growth, savings rate is the most effective one. Do you agree? What are the other factors available for growth potential?	<b>Relationship between savings rate and economic growth is asked with its limitations.</b>

**From the above analysis of PYQs, we can see that this topic has high importance in general studies 3 paper with lots of questions being asked from this single topic. Therefore we need to understand this topic in holistic manner and following notes will help you in this.**

### What Is Economic Growth?

Economic growth is an increase in the production of economic goods and services in one period of time compared with a previous period. It can be measured in nominal or real (adjusted to remove inflation) terms. Traditionally, aggregate economic growth is measured in terms of gross national

product (GNP) or gross domestic product (GDP), although alternative metrics are sometimes used.

Other words and terms for economic growth include "boom," "prosperity," "economic development," "economic upswing," "economic upsurge," "industrial development," and "buoyancy of the economy."

### **Phases of Economic Growth**

The economy moves through different periods of activity. This movement is called the "business cycle." It consists of four phases:

- Expansion – During this phase employment, income, industrial production, and sales all increase, and there is a rising real GDP.
- Peak – This is when an economic expansion hits its ceiling. It is in effect a turning point.
- Contraction – During this phase the elements of an expansion all begin to decrease. It becomes a recession when a significant decline in economic activity spreads across the economy.
- Trough – This is when an economic contraction hits its nadir.

### **How to Measure Economic Growth**

The most common measure of economic growth is the real GDP. This is the total value of everything, both goods and services, produced in an economy, with that value adjusted to remove the effects of inflation. There are three different methods for looking at real GDP.

- Quarterly growth at an annual rate – This looks at the change in the GDP from quarter to quarter, which is then compounded into an annual rate.
- Four-quarter or year-over-year growth rate – This compares a single quarter's GDP from two successive years as a percentage. It is often used by businesses to offset the effects of seasonal variations.
- Annual average growth rate – This is the average of changes in each of the four quarters.

### **How to Generate Economic Growth**

Generating economic growth is dependent on the four areas stated above that contributed to it. To generate growth, a society needs to:

#### **Increase Physical Capital Goods**

- The first is an increase in the amount of physical capital goods in the economy. Adding capital to the economy tends to increase productivity of labor.
- Newer, better, and more tools mean that workers can produce more output per time period.
- Someone in the economy must first engage in some form of saving (sacrificing their current consumption) in order to free up the resources to create the new capital.
- In addition, the new capital must be the right type, in the right place, and at the right time for

workers to actually use it productively.

### **Improve Technology**

- A second method of producing economic growth is technological improvement.
- Improved technology allows workers to produce more output with the same stock of capital goods by combining them in novel ways that are more productive.
- Like capital growth, the rate of technical growth is highly dependent on the rate of savings and investment, as they are necessary to engage in research and development.

### **Grow the Labor Force**

- Another way to generate economic growth is to grow the labor force. All else being equal, more workers generate more economic goods and services.

### **Increase Human Capital**

- The last method is to increase human capital.
- This means laborers become more accomplished at their crafts, raising their productivity through skills training, trial and error, or simply more practice.
- Human capital in this context can also refer to social and institutional capital.
- Behavioural tendencies toward higher social trust and reciprocity, along with political or economic innovations such as improved protections for property rights, are types of human capital that can increase the productivity of the economy.

### **Why Does Economic Growth Matter?**

In the simplest terms, economic growth means that more will be available to more people, which is why governments try to generate it. However, it's not just about money, goods, and services. Politics also enter into the equation. How economic growth is used to fuel social progress matters.

### **There are some more things-**

- To address the issues like poverty, inequality and socio economic backwardness in country.
- To improve the situation of poor Industrial Development of Indian industrial sector.
- India's bulk of Population is largely dependent on a stagnating, low productivity semi-feudal agriculture sector that needs to move in high income and high productivity sectors.
- High Rate of Growth of Population leading puts extra pressure on limited resources of the country, that need to rationalise so the economy can perform at optimum speed.
- Various issues like illiteracy, digital divide, are still prevalent in India, which requires sustainable economic growth to tackle efficiently.
- Lack of infrastructure is hindering economic growth, there is fear in economists that due to such issues India might be stuck in the middle-income trap.



- Lopsided development as seen from regional inequality in socio economic terms which can be addressed by continuous economic growth.

### **Key Takeaways**

- Economic growth is an increase in the production of goods and services in an economy.
- Increases in capital goods, labor force, technology, and human capital can all contribute to economic growth.
- Economic growth is commonly measured in terms of the increase in aggregated market value of additional goods and services produced, using estimates such as GDP.
- The four phases of economic growth are expansion, peak, contraction, and trough.
- Tax cuts are generally less effective in spurring economic growth than increases in government spending.
- If the rewards of economic growth go only to an elite group, then it is unlikely that the growth will be sustainable.

### **Conclusion**

Economic growth occurs when there is a rise in the production of goods and services for a certain period as compared with a previous one. It is generally measured in terms of GDP and is an indicator of the economic health of a country. However, how widely the fruits of the growth are shared is an important factor in its sustenance, not to mention societal health and progress.

### **Development**

Economic development, the process whereby simple, low-income national economies are transformed into modern industrial economies. Although the term is sometimes used as a synonym for economic growth, generally it is employed to describe a change in a country's economy involving qualitative as well as quantitative improvements. The theory of economic development—how primitive and poor economies can evolve into sophisticated and relatively prosperous ones—is of critical importance to underdeveloped countries, and it is usually in this context that the issues of economic development are discussed.

### **Indicators of economic development**

To know the level of economic development of a country there are a different indicators which are used. These indicators help in understanding the level of development, comparisons with other countries, or different time periods. These indicators help in better planning towards achieving economic development.

### **The indicators of economic development are :**

- Growth rate of National Income:
  - In this indicator real income is calculated on constant prices

- If there is rise in national income, this indicates economic development.
- When there is high rate of national income, development rate is high and vice versa
- Per Capita Income (PCI):
  - The average income of the people living in the country is the per capita income.
  - A rise in PCI is an important indicator of economic development
  - The rise in PCI indicates economic welfare of the country
- Per Capita Consumption (PCC):
  - The increase in consumption of goods and services by the people is measured in PCC.
  - Example clothing, food, education, health etc.
  - An increase in PCC shows better quality of life of people and higher economic development of the country.
- Physical Quality Life Index (PQLI) and Human Development Index (HDI):
  - PQLI is the overall welfare of the people in life expectancy, infant mortality rate, standard of living.
  - HDI measures life expectancy, education and standard of living.
  - A rise in PQLI and HDI shows an improvement in quality of life of people and therefore economic development.
- Industrial progress:
  - Industrial progress is an important indicator of the economic development of a country. It helps to increase per capita income and the national output of the country.
- Capital formation:
  - It means investing in transport, irrigation, roads, electricity, technology etc. higher capital formation will lead to higher economic development.

The indicators under economic development are more towards the qualitative improvement of people in the country. A higher rate of these indicators shows a higher level of economic development

### **Relation with economic growth**

- Even though the terms economic development and economic growth sound similar, there is a significant difference between the two. While both economic growth and economic development are important indicators of a country's economic health, there are important distinctions between the two.
- Economic growth is a relatively narrow concept. It entails a quantitative increase in output, whereas economic development includes qualitative changes such as social attitudes and

customs, in addition to quantitative growth in output or national income. Economic development is nearly impossible to imagine without growth.

Let us understand the difference between the two.

### Difference between Growth and Development

Growth	Development
It is Quantitative in Nature	It is both Quantitative & Qualitative in Nature
The term 'Growth' refers to physical changes of an individual like an increase in height, size, length, weight, etc.	Development refers to overall changes in a physical organ or the structure that results in improved functioning of the physical organ
Growth is Purely physical Sense	Development is overall, Physical, Mental, Emotional, Social, moral, or any other
Growth is only a part of the developmental process	Development is a complex and comprehensive process
Growth is limited to a certain age it stops when maturity has been attained	Development is a continuous process starting from the time of conception and continuing until the end of life (Womb to Tomb)
Changes produced by growth can be observed and measured directly	Developmental changes that result in improved behaviour or functioning cannot be measured directly
Growth focuses only on one aspect i.e. increase in a child's body size	Development focuses on various aspects like interpersonal skills, and intelligence.
Growth is an external process	Development is an internal process.
Growth is structural	Development is considered a functional
Growth is influenced by the development	Development is independent it does not depend upon growth

After the above discussion, we can say that economic development is a much bigger concept than economic growth. In other words, the economic development includes economic growth. As the former uses various indicators to judge the progress in an economy as a whole, the latter uses only specific indicators like gross domestic product, individual income etc.

### Issues associated with economic growth and development in India

- Majority of population is still under lower middle income group and poverty is a big challenge

that yet to be addressed completely.

- Resource mobilisation is poor in economy as seen from underdeveloped primary and industrial sector.
- Presence of high level of regional, intra generational inequality which is a big constrain to growth and development in country.
- Presence of informal sector in great proportion of total economy of country which limits the spill over impact of economic growth in one sector to other.
- Low level of per capita income which hampers the standard of living of population.
- Issues like high MMR, IMR, stunting in population adversely impacts development processes in socio-economic sectors.
- Political apathy towards developmental goals which divert government actions towards less important things.
- Poor collaboration and cooperation strategies between states and centre on following developmental goals which causes delays in implementation.
- Bureaucratic red tapism accompanied by corruption and lack of empathy in governance also makes development processes slow and inefficient.
- Due to external and internal factors, there is drop in foreign investment. This is broadening Current Account Deficit.
- Reliance on foreign raw goods by domestic industries for industrial manufacturing which makes exports costly and incompetent in global market.
- For providing welfare schemes, subsidies and defence expenditure, India is borrowing. The Fiscal Deficit of India is widening.
- Huge population growth and underdeveloped labour force which leads to inefficient exploitation of demographic dividend in country.
- Growth is not entirely inclusive. There are still a significant portion of people below poverty line.
- The sustainability in development process is still missing as seen from high inequality.

#### **WAY FORWARD :**

- Inclusive growth and development: making the whole process all inclusive by addressing socio-economic inequality which is present in society.
- Gender Equality: It is important to strengthen women's voice and leadership, eliminating violence and harassment at work and implementing pay transparency policies in order to achieve gender equality.

- Protection to vulnerable group: A guaranteed social protection from birth to old age that supports people's need over the life cycle should be provided
- Institutionalisation of the development : Investments in the institutions, policies and strategies that will support people through future of work transitions should be increased.
- Human friendly economic model: Distributional dimensions of growth, the value of unpaid work performed in the service of households and communities and the externalities of economic activity, such as environmental degradation should be taken into account for a human centric business and economic Model.
- Labour justice: to protect fundamental worker's rights, an adequate living wage, limits on hours of work and safe and healthy work places.
- Right to learning : It is important to provide a universal entitlement to life long learning that enables people to acquire skills and to reskill and up skill.

## SUSTAINABLE DEVELOPMENT GOALS



### What is sustainable development?

“Sustainable development is development that meets the needs of the present, without compromising the ability of future generations to meet their own needs.”

The concept of sustainable development can be interpreted in many different ways, but at its core is an approach to development that looks to balance different, and often competing, needs against an awareness of the environmental, social and economic limitations we face as a society.

All too often, development is driven by one particular need, without fully considering the wider or future impacts. We are already seeing the damage this kind of approach can cause, from large-scale financial crises caused by irresponsible banking, to changes in global climate resulting from our

dependence on fossil fuel-based energy sources. The longer we pursue unsustainable development, the more frequent and severe its consequences are likely to become, which is why we need to take action now.

### **So is it all just about the environment?**

Living within our environmental limits is one of the central principles of sustainable development. One implication of not doing so is climate change.

But the focus of sustainable development is far broader than just the environment. It's also about ensuring a strong, healthy and just society. This means meeting the diverse needs of all people in existing and future communities, promoting personal wellbeing, social cohesion and inclusion, and creating equal opportunity.

### **If sustainable development focuses on the future, does that mean we lose out now?**

Not necessarily. Sustainable development is about finding better ways of doing things, both for the future and the present. We might need to change the way we work and live now, but this doesn't mean our quality of life will be reduced.

A sustainable development approach can bring many benefits in the short to medium term.

### **How does it affect me?**

The way we approach development affects everyone. The impacts of our decisions as a society have very real consequences for people's lives. Poor planning of communities, for example, reduces the quality of life for the people who live in them.

Sustainable development provides an approach to making better decisions on the issues that affect all of our lives. By incorporating health plans into the planning of new communities, for instance, we can ensure that residents have easy access to healthcare and leisure facilities. (By encouraging more sustainable food supply chains, we can ensure the India has enough food for the long-term future.)

### **How do we make it happen?**

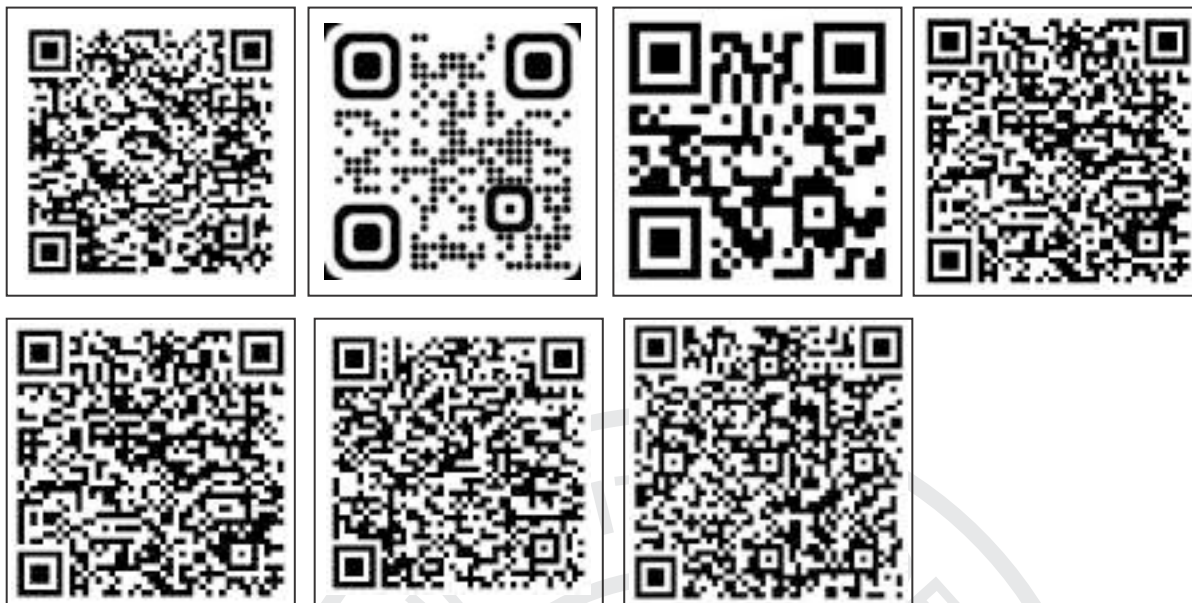
We all have a part to play. Small actions, taken collectively, can add up to real change. However, to achieve sustainability in the India, we believe the Government needs to take the lead. The SDC's job is to help make this happen, and we do it through a mixture of scrutiny, advice and building organisational capacity for sustainable development.

### **Prayaas Tips-**

- Get familiar with the concepts discussed in the notes in holistic manner.
- The wider nature of topic makes it more tricky to tackle therefore we must have command over the basics first.
- Regular reading of newspaper is crucial to understand issues associated with the growth and development in economy.

- Watching Sansad TV programmes with reading magazines like Kurukshetra and Yojana will also help to fetch good marks in GS3.

Some important links –



# Employment And Issues Associated With It

## Previous year questions

Year	Questions	Context/Theme/Inspiration
2022	Economic growth in the recent past has been led by increase in labour productivity". Explain this statement. Suggest the growth pattern that will lead to creation of more jobs without compromising labour productivity.	The unemployment rate was climbed to very high in post-pandemic economy. This question basically inspired from the same.
2017	Account for the failure of manufacturing sector in achieving the goal of labor-intensive exports rather than capital-intensive exports. Suggest measures for more labour-intensive rather than capital-intensive exports	Straightforward question on labour intensive manufacturing sector and its relation with exports.
2015	The nature of economic growth in India in described as jobless growth. Do you agree with this view? Give arguments in favor of your answer	Inspired from economic survey and recurrent debates on employment and economic growth in media.
2015	"Success of 'Make in India' programme depends on the success of 'Skill India' programme and radical labour reforms." Discuss with logical arguments	The newly launched Make In India program and its relationship with the Labour reforms.
2014	While we found India's demographic dividend, we ignore the dropping rates of employability. What are we missing while doing so? Where will the jobs that India desperately needs come from? Explain	Straightforward question on the falling employment rate and its impact on economy.

*The analysis of PYQs suggests that employment is always a hot topic for news as well as UPSC mains. Rather than preparing theoretically, this topic needs broader understanding of linkages with other components of economy. Therefore studying it assumes significance.*

## Introduction

In the terms of economics, employment means the state of having a job or being employed. If one has



to employ someone, they have to pay them. The one who employs is called the employer, and the one who is getting paid for providing services is the employee. Employers can be an organization or an individual, etc. People can also be self-employed where they work for themselves and earn money through their business.

India's sustained average growth rate of 7% over the last decade has not been accompanied by sufficient growth in employment. While half of India's population is below the age of 26, the increasing demand for jobs is not being met by the creation of sufficient new economic opportunities.

The employment conditions in India are suffering from many challenges which is affecting overall growth and development of Indian economy.

**Some of the major issues are following –**

- **High unemployment rate:**

The term unemployment refers to a state in which an individual actively seeks employment but is unsuccessful. The unemployment rate is the most widely used method to determine a country's unemployment rate. This can be found by simply dividing the number of people without jobs by the total population included in a nation's labor force.

- **Jobless Economic Growth :**

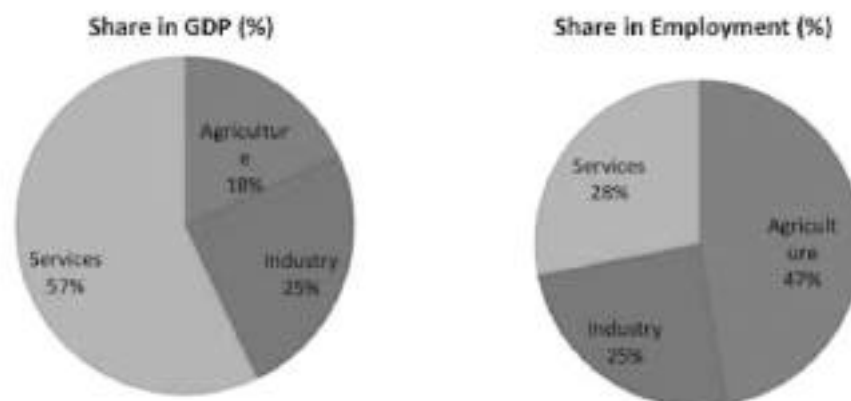
- Jobless growth is a situation when the economy is able to produce more goods and services without a simultaneous increase in employment opportunities.
- It is a dominant issue in the Indian economy more so because of the decreasing window from when the demographic dividend becomes the demographic burden.
- There is the involvement of a greater population in the agriculture sector even though the sector contributes very less to the overall GDP of the country.
- The tertiary sector contributes the largest to the overall GDP of India, however, the job creation by this sector is mostly of formal type due to which inclusion of informal workforce in this sector is reduced.
- **Decline of Small Scale and Cottage Industries:** Industrial policy of British government curtailed the growth of small scale and cottage industries. Independent India's preference to large scale industry and new industrial policy of 1990's resulted in decline of small scale industries.
- **Informal nature of Indian economy** - 90% of workers in India remained informally employed. Such nature of economy also put limits on future economic growth.
- **Joint Family System:** It encourages disguised unemployment. In big families having large business establishments, many such persons are found who do not do any work and depend on the joint income of the family. Joint family system is more prevalent in rural areas; hence a high degree of disguised unemployment there.

- *Stagnant Education system in India* : Although literacy rates have risen in the last few decades, there still remains a fundamental flaw in the education system in India. The curriculum is mostly theory-oriented and fails to provide vocational training required to match up with current economic environment. The degree-oriented system fail when it comes to produce human resources skilled enough to specific job profiles in the economy.
- *Population growth* : Rapid growth of population is the major reason for increasing unemployment in the country.
- *Agriculture*: Agriculture remains the biggest employer in the country contributing to 51% employment. But the sector contributes a meagre 16% to the country's GDP. The problem of disguised unemployment is the biggest contributor behind this deficit. Also the seasonal nature of employment in the sector lead to recurring cycles of unemployment for the rural population.
- *Lack of skills*: The dynamic nature of employment sector in country demands variety of new age skill sets. But Indian workers do not have such skills which also reduces employment opportunities in economy.
- *Poor Industrialisation* : The industrial sector in India still lags behind. Agriculture still remains as the biggest employer in the country.
- *Labour Underutilisation*: Mismatch between labour supply and demand extends far beyond the 188 million unemployed.
- *Rush for government jobs*: Many educated youth run behind government jobs due to job profile and security. This lead to many remain unemployed due to students preparing for government jobs.
- *Lack of Investment*: Inadequacy of capital investment has been a key contributor in not generating enough industry that in turn provides employment to the labour force.
- *Faulty planning*: The five-year plans implemented by the government have not contributed proportionately towards generation of employment. The assumption was that growth in economy will automatically generate enough employment. But in reality there are gaps between the required number of jobs and the actual numbers generated.
- *Issue of getting decent work*: Having a paid job was not a guarantee of decent working conditions or of an adequate income.
- *Social issues* : Regressive social norms that deter women from taking/continuing employment. Ethnicity, race, age etc. in the workplace are other factors.

### **Changing Structure of Employment in India**

- The slow growth of employment in India during the post-liberalization period has been a striking feature of the country's economic transformation.

- Over this time, economic growth has been highly uneven across sectors and regions.
- Agricultural and manufacturing sector growth has been sluggish for the majority of the post-liberalization period.
- Not only has average employment growth been low over this period, but the uneven pattern of growth has resulted in significant changes in employment structure.
- Since the second half of the 2000s, the number of people employed in agriculture has decreased significantly.
- Government measures through the programs like MGNREGA did result in an increase in employment opportunities in rural areas, particularly in the early years of its implementation.
- On the other hand, a slow increase in children's school attendance rates is said to have resulted in the exodus of a group of young people from the labor force.
- There is shift from manufacturing based employment to service based. The share of secondary sector has decreased continuously as employment providing sector in economy.
- Emergence of new kind of employment opportunities in the form of gig economy, platform workers and freelancing.
- The role of COVID 19 pandemic in destabilising the employment structure is also important to understand the trends in India's employment sector.



### Steps taken by the Government

- **Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)**
  - It was initiated in the 10<sup>th</sup> five-year plan in 2005 and works under the Ministry of Rural Development.
  - It is a centrally sponsored scheme with the pattern 90:10.
  - It provides a legal guarantee of at least 100 days of unskilled manual work in rural areas.
  - Any member greater than 18 years of age of a rural household, willing to do unskilled manual

work can apply to the local Gram Panchayat (which will issue a Job Card).

- **National Career Service**

- It was envisioned for transforming the National Employment Service to provide various employment-related services such as job matching, career counselling, vocational guidance, information on skill development courses, apprenticeships, internships, etc through an online portal.
- National Career Service (NCS) focuses on a one-stop solution to provide various services related to employment and career-related services to the citizens of India.
- This program is implemented by the Directorate General of Employment, Ministry of Labour & Employment.

- **Pradhan Mantri Mudra Yojana (PMMY)**

- It was undertaken by the government to encourage self-employment. Under this scheme collateral-free loans up to Rs. 10 lakh, are provided to small/micro business enterprises and to individuals to enable them to set up or expand their business activities.

- **Pradhan Mantri Rojgar Protsahan Yojana**

- It was initiated in 2016-17 by the Ministry of Labor and Employment. Here government pays the entire employer's contribution (12% or as admissible) towards the EPS and EPF for all sectors to all eligible new employees for the next 3 years from the date of registration of the new employee.

- **Skill India Mission**

- It is implemented by the Ministry of Skill Development and Entrepreneurship with a focus to provide skilling to one crore people under Short Term Training (STT), Recognition of Prior Learning (RPL), and Special Project (SP) across the country for four years with an outlay of Rs. 12,000 crore.
- Under the scheme, a short-duration skill development training program is being imparted to all prospective candidates including candidates belonging to BPL in the country.

- **PM SVANidhi**

- This scheme was initiated by the Ministry of Housing and Urban Affairs.
- It focuses to provide affordable working capital loans to street vendors to resume their livelihoods that were impacted during the Covid-19 lockdown.
- The vendors can avail of a working capital loan of up to Rs. 10,000, which is repayable in monthly instalments in the tenure of one year.

- **National Rural & Urban Livelihood Mission (NRLM & NULM)**

- It was brought in to decrease poverty, gain self-employment and skilled wage employment, and build strong grassroots level institutions.
- **Aatmanirbhar Bharat package**
  - This is to provide stimulus to business and to mitigate the adverse impact of pandemic.
  - Under this package, the Government is providing fiscal stimulus of more than Rs. Twenty Seven lakh crore.
  - This package comprises of various long term schemes/ programmes/ policies for making the country self-reliant and to create employment opportunities.
- **Make in India program**
  - A focused long term program on manufacturing sector revival where large scale employment generation is possible through new investment in economy.
- **RojgarMela**
  - A government driven employment providing initiative where 10 lakh jobs will be provided to youth.

#### Way forward

- Accelerating Investment in Agriculture
  - An important reason for slow growth of employment in agriculture and rural sector has also been a shortfall in investment or capital formation in agriculture.
  - It is worth noting that investment not only generates employment directly but also has a multiplier effect which operates through backward and forward linkages.
- Overhaul of Education system
  - The education must be on the par with the current demands of the economy. Future Generations must be able to analyse the demands of the work environment.
  - The new Education Policy of 2020 is good step towards vocationalisation of Indian education system.
- Need for National Employment Policy (NEP)
  - This would encompass a set of multidimensional interventions covering a whole range of social and economic issues affecting many policy spheres and not just the areas of labour and employment.
  - The policy would be a critical tool to contribute significantly to achieve the goals of the 2030 Agenda for Sustainable Development
- Decentralised Development

- It has been observed that unemployment is especially concentrated in certain regions.
- In order to overcome this geographical disparity, the government could incentivize firms to set up operations in these areas by giving tax breaks.
- Urban MGNREGA needed
  - India needs to formulate an urban national job guarantee scheme on the lines of the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) to help people recover from massive job and income loss following the corona virus outbreak, a parliamentary standing committee has recommended to the Union government
- Upgradation of rural economy:
  - More efforts are needed in transforming the rural economy from traditional agriculture to more value-added activities.
- Increasing public-private investment:
  - To raise the rate of investment from about 29 percent in 2017-18 to about 36 percent of GDP by 2022-23, a slew of measures will be required to boost both private and public investment.
- Labour intensive industrial development is needed to generate more jobs in economy:
  - The recent schemes like Production Linked Incentive (PLI) is right step in this direction

#### Conclusion:

Thus a collaborative effort is needed by government and industry to nudge an inclusive growth by supporting new sectors. The sustainable employment opportunities will not only improve economic growth but also improve standard of living of whole population.

#### Prayaas Tips

- Try to build understanding about the interconnectedness between various elements of economy like employment, inflation, growth and development.
- Regular reading of newspaper is must for this topic as seen from the types of questions asked in mains.
- We should keep track of current events related to economy and any debates happening around the important topics mentioned in the syllabus.

#### Some important links related to topic



## Inclusive Growth

Year	Questions	Context/Theme/Inspiration
2022	Is inclusive growth possible under market economy? State the significance of financial inclusion in achieving economic growth in India.	Interrelation between market economy and financial inclusion is asked with respect to economic growth.
2021	"Investment in infrastructure is essential for more rapid and inclusive economic growth." Discuss in the light of India's experience.	Here, we need to explain how availability of robust infrastructure leads to inclusive economic growth. We also need to give examples of recent past.
2020	Explain intra-generational and inter-generational issues of equity from the perspective of inclusive growth and sustainable development.	A bit tricky question which was inspired from the Economic Survey of that year. Here we must aware about the concepts like equity, inclusivity and sustainability.
2019	It is argued that the strategy of inclusive growth is intended to meet the objectives of inclusiveness and sustainability together. Comment on this statement.	Similar question around the theme of inclusivity and sustainability.
2017	What are the salient features of 'inclusive growth'? Has India been experiencing such a growth process? Analyze and suggest measures for inclusive growth.	Straightforward question on inclusive growth basics. Easy to tackle through these notes.
2016	Pradhan Mantri Jan-Dhan Yojana (PMJDY) is necessary for bringing unbanked to the institutional finance fold. Do you agree with this for financial inclusion of the poorer section of the Indian society? Give arguments to justify your opinion.	Directly inspired from current events. The PMJDY was launched during 2015-16. The question here is mainly focused on financial inclusion.
2016	Comment on the challenges for inclusive growth which include careless and useless manpower in the Indian context. Suggest measures to be taken for facing these challenges.	Again simple question on repeated theme.

2014	Capitalism has guided the world economy to unprecedented prosperity. However, it often encourages short-sightedness and contributes to wide disparities between the rich and the poor. In this light, would it be correct to believe and adopt capitalism driving inclusive growth in India? Discuss.	A bit difficult question as it is both – opinion based and conceptual also. We need to explain the capitalism and its limitations and connect it with inclusive growth.
2013	With a consideration towards the strategy of inclusive growth, the new companies' bill, 2013 has indirectly made CSR a mandatory obligation. Discuss the challenges expected in its implementation in right earnest. Also discuss other provisions in the bill and their implications.	A current affairs inspired question.

*The analysis of PYQs highlights the importance of this topic of General Studies 3. Nearly every year there is minimum one question on inclusive growth. Therefore preparing it with the aim of writing good answers becomes important. Similarly, this topic has wide range of application in GS1, GS2 and also in GS4. Therefore studying these note will help you to fetch good marks in UPSC mains.*

### **Introduction**

The United Nations Development Program (UNDP) defines inclusive growth as "the process and result of all groups of people participating in the organisation of growth and benefiting equally from it." This indicates that inclusive growth should include all segments as both beneficiaries and collaborators in growth and that the excluded should be included in the process.

The strategy of inclusive growth is intended to meet the objectives of inclusiveness and sustainability together.

Pranab Mukherjee once said, "Inclusive growth should not be a mere slogan but a fundamental driving force for sustainable development."

Inclusive growth focuses on ecological friendly economic growth which is a necessary and crucial condition for poverty reduction and sustainability.

Its intimately interconnected and explicable elements referring to the whole are:

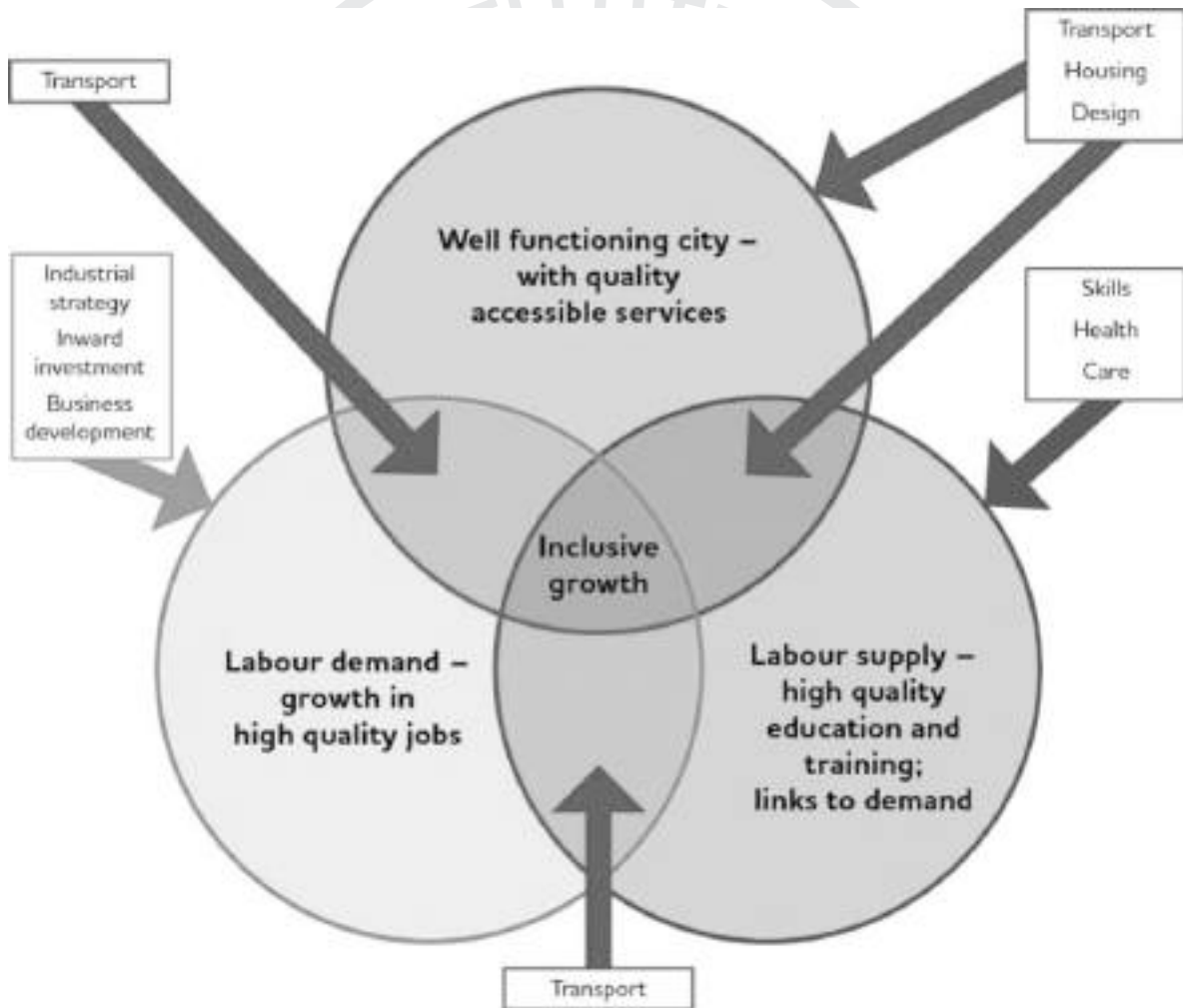
- It adopts a long term perspective and is concerned with sustained growth.
- For growth to be sustained in the long run, it must be broad-based across sectors. Issues of structural transformation for economic diversification, therefore, take a front stage.
- It must also be inclusive of the large part of the country's labour force, where inclusiveness refers



to equality of opportunity in terms of access to markets, resources and unbiased regulatory environment for trade, businesses and individuals.

- It focuses on both the pace and pattern of growth.
- It focuses on productive employment rather than income redistribution.
- It has not only the firm but also the individual as the subject of analysis.
- It is in line with the absolute definition of pro-poor growth, not the relative one.
- It is not defined in terms of specific targets such as employment generation or income distribution. These are potential outcomes, not specific goals.

By following some of these parameters, over the past two decades, India's contribution to global economic growth has increased. Besides, income poverty levels have declined, resulting in millions of people being lifted out of poverty in the past two decades.



### Elements of Inclusive Growth

- Employment Generation: Generation of stable employment is a sign of political, economic and social progress.
- Poverty Alleviation: To be inclusive of all sections of society, the most vulnerable, poverty-stricken

individual have to be brought above the poverty line.

- **Skill Development:** Skill development enables an individual to increase his or her choices in life such as educational scope or career development.
- **Agriculture and Industrial Development:** Around 50-55% of people in India have agriculture-related employment but its contribution to the Indian GDP is only 16.5% which leads to widespread poverty.
- **Good Governance:** measured by the eight factors of Participation, Rule of Law, Transparency, Responsiveness, Consensus Oriented, Equity and Inclusiveness, Effectiveness and Efficiency, and Accountability.
- **Access to Essential Services:** such as basic health, education, defence services, sanitation etc.
- **Economic Growth:** the target of becoming a \$ 5 trillion economy by 2024-25 can allow India to reduce inequality, increase social expenditure and provide employment to all.
- **Social Development:** It means the empowerment of all marginalised sections of the population like SC/ST/OBC/Minorities, women and transgenders.
- **Financial Inclusion:** Financial inclusion is necessary for inclusive growth as it leads to the culture of saving, which initiates a virtuous cycle of economic development.

#### **Challenges to achieving inclusive growth**

- India is still suffering from the tag of developing nation and despite high growth, unable to achieve inclusive growth.
- India's sustained growth has been tilted in favour of service sector which is less job giving.
- Natural inequality within the country on the basis of geography, climate, natural resources and agricultural output.
- **Underdeveloped Agricultural sector :** Poor land & water productivity, vagaries of monsoon and markets along with poor infrastructure base and processing ecosystem means that there is a structural imbalance between the labour force employed and the GDP contribution by Agriculture.
- Social divisions based on caste, class, religion, language, ethnicity, etc hampers the social capital necessary for inclusive growth and promotes parochial loyalties.
- **Corruption:** India ranks an abysmal 86th out of 140 countries on Corruption Perception Index by Transparency International.
- **Red Tape and Unfriendly Business Environment:** Despite massive gains, India is still 63rd in World Bank's Ease of Doing Business ranking. It is lagging significantly in sectors such as Enforcement of Contracts.
- **Women indicators:** Poor Labour Force Participation Rate (LFPR) among women (under 25% as per

NSSO) along with poor nutritional indicators (e.g. at least 50% women are anaemic) combined with numerous restrictions due to patriarchal society is cause of the under performance of the economy.

- Curtailed social welfare expenditure: India's total spending on sectors such as Health (target 2.5% of GDP) and Education (target 6% of GDP) is far from achieved. This is due to the impact of neo-liberal policies and budget constraints.
- High vulnerability of majority of India's landmass to natural disasters making the achievements from economic development insufficient as gains are lost every year.

### Measures Taken In India to achieve Inclusive growth

The government is implementing a number of measures to promote equitable growth, including the following:

Measures	Objectives
State sponsored social sector services like schools, hospitals, public transport, etc.	To fulfil essential needs of people who are socio-economically backward in society.
Support to economically weaker section of society through schemes and programmes like MGNREGA, Mid Day Meal, PM Garib Kalyan Yojana, etc.	To create level playing field in accessing the basic services needed for an individual.
Schemes like PM Jan Dhan Yojana	For financial inclusion of all sections of society to bring them in mainstream economy.
Setting up of dedicated platforms for backward States, regions	The separate ministry for North East, recognition for tribal rights, forest dwellers rights, etc.
Setting of of NITI Ayog	A model for cooperative federalism where inclusive growth become the basis of economic growth.
Social sector schemes	PM JAY- health security PM Krishi Sinchayi Yojana - to include agriculture in India's growth story Digital India- Digital inclusion and reducing digital divide.
Finance commission	To help proper devolution of tax revenue with all the organs of government. The unbiased allocation of central grant helps in achieving inclusive and fair growth
Other	Subsidy provisions, agriculture extension services by State, food security to poor from PDS, etc.

## NITI Aayog's Strategy for New India @ 75 Goals

- To achieve inclusive, clean, sustained, and structured rapid development that reaches 9-10 percent by 2022-23.
- By 2022-23, we want to use technology to promote inclusive, sustainable, and participatory development.
- To ensure that the urban poor and slum inhabitants, especially new migrants, can use city services, cities must have an inclusive development strategy.
- To make schools more inclusive by removing barriers in the physical environment (for example, accessible restrooms), admission procedures, and curriculum design.
- To make higher education more accessible to those who are most marginalized.
- To deliver high-quality ambulatory services in a community setting for a comprehensive package of diagnostic, curative, rehabilitative, and palliative care.
- To develop a policy framework that is inclusive and puts citizens first.

### Tools for measuring inclusive growth

#### • **Inclusive Development Index (IDI)**

- India was placed 62<sup>nd</sup> out of 74 emerging countries in the World Economic Forum's Inclusive Development Index (IDI), and was among the least inclusive countries in the Group of 20 (G-20).
- The IDI is based on the assumption that most people measure their country's growth by their personal level of living rather than GDP.
- It gives a measure of inequality based on three parameters :
  - Growth and development
  - Inclusion
  - Inter-generational equity and sustainability.
- India was also not among the top ten most inclusive emerging and developing economies, a list that included Nepal, China, and Sri Lanka.
- India ranked 44<sup>th</sup> in terms of "intergenerational equity and



sustainability," which can be ascribed to the country's demographic dividend.

- **Social Progress Index (SPI)**

- It is a composite index that includes the following social and environmental indicators:
  - Basic human need
  - Foundation of well being
  - Opportunity

- **Global Slavery Index**

- The Walk Free Foundation of Australia has released it.
- Slavery in the modern sense refers to a scenario in which one person has taken away another's freedom in order to control their body and exploit them.
- Factors that contribute to modern slavery include:
  - Absence of rights
  - Lack of physical safety
  - Access to necessities such as health care, education, food, etc
  - Pattern of migration

### **Conclusion**

**The basis for any development therefore remains at the inclusivity of the action. Without inclusive approach, the progress will only be temporary. For achieving sustainable development, inclusive growth is necessary.**

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# Infrastructure

## Previous year Questions

Year	Questions	Context/Theme/Inspiration
2022	Do you think India will meet 50 percent of its energy needs from renewable energy by 2030? Justify your answer. How will the shift of subsidies from fossil fuels to renewable help achieve the above objective? Explain.	Recently PM inaugurated Gandhinagar railway station which was renovated with the help of PPP model.
2018	With growing energy needs should India keep on expanding its nuclear energy programme? Discuss the facts and fears associated with nuclear energy	Simple question on the pros and cons of nuclear energy. A opinion based question need to be tackled carefully.
2018	Access to affordable, reliable, sustainable and modern energy is the sine qua non to achieve Sustainable Development Goals (SDGs). Comment on the progress made in India in this regard.	Based on maintaining the careful balance between energy security and sustainability of natural resources.
2017	Examine the developments of Airports in India through Joint Ventures under Public-Private Partnership (PPP) model. What are the challenges faced by the authorities in this regard?	Straightforward question on the challenges associated with the PPP model wrt airport development.
2014	National urban transport policy emphasizes on moving people instead of moving vehicles. Discuss critically the success of various strategies of the government in this regard.	Question on urban mobility and urban infrastructure and challenges associated with them.

*Though this topic is small as per the syllabus wise, but it is very wide in nature and therefore it becomes tricky to handle. We need to prepare basic information about various infrastructure sectors as well as facts and figure related to them. These notes are enough to cover all the basic things and regular newspaper can help to get a holistic view of this topic.*

## Energy

### Introduction

The energy sector is fundamental to growth and development. Availability of electricity, petrol, diesel and gas at competitive prices is essential for the efficient functioning of energy user sectors, which include households, transportation, industry, agriculture and the government and comprise nearly

the entire economy. But being a large sector, energy also contributes directly to the growth of the economy in a major way.

With multiple markets (coal, gas, oil, renewables, electricity, petrol and diesel) and infrastructure requirements for delivery to the final consumer (transmission and distribution grids, gas pipeline and petrol pumps), energy is one of the most complex sectors of the economy. The presence of scale economies in many sub-sectors, interconnected nature of different sources of energy, different environmental implications of different fuels and social objective of access to energy at affordable prices greatly add to the complexity of policy making in this sector. Therefore, it is no surprise that the sector is characterized by myriad, often highly inefficient, policy interventions.

### **Some facts about India's energy infrastructure sector**

- Over 80% of India's energy needs are met by three fuels: coal, oil and solid biomass.
- The all-India installed power capacity is about 334 GW, including 62 GW of renewable energy .
- The Per Capita Electricity Consumption which was a mere 16.3 units in 1947, has increased to 1208 units in 2019-20.
- Fossil fuels supply around three-quarters of India's primary energy demand and around 80% of it is imported.
- India is the 3<sup>rd</sup> largest energy consumer in the world after USA and China. (With a share of 5.8% of the world's primary energy consumption)

### **Issues and challenges associated with energy sector in India**

- Inadequate Electricity Generation: India's installed capacity to generate electricity is insufficient to support the country's 7-8 percent annual economic growth.
- Poor Performance of State Electricity Boards (SEBs): The losses incurred by State Electricity Boards (SEBs), which distribute electricity, exceed 20,000 crores. Transmission and distribution losses, incorrect electricity pricing, and other operational inefficiencies are to blame.
- Interstate Disputes: Due to the federal structure of India's polity and because rivers cross state boundaries, constructing efficient and equitable mechanisms for allocating river flows has long been an important legal and constitutional issues. Due to this there is not availability of water all the time to operate hydro plants. Inter- state disputes also restrict the excess power exchange between the states. For example, Mahanadi water dispute.
- Aging Power Plants and Transmission network: Since most of the power plants and transmission lines have been installed immediately after independence, they have become old and inefficient. This is the main reason for low growth and transmission rate in electricity generation and transmission during the recent years. About half of the power plants need to be upgraded or shut down as quickly as possible.
- Overlapping of functions and regulations: Multiple ministries and agencies are currently involved in managing energy related issues, presenting challenges of coordination and optimal resource utilization.
- Highly dependent on fossil fuel like Coal: India's 90% of primary energy supply is fulfilled by fossil fuel. Currently, over 80% of its electricity comes from burning coal, oil and biomass.

- Variety of subsidies and taxes: They distort the energy market and promote the use of inefficient overefficient fuels. They also make Indian exports and domestic production uncompetitive as energy taxes are not under GST.
- Coal supply: The coal sector has failed to match production with the growth in coal-based generation capacity. This has created a gap between the demand and supply of coal.
- Limited role of Private and Foreign Entrepreneurs Foreign investors and private sector power generators have yet to play a significant role. In the power generation sector, the government almost has a monopoly. The public sector is unable to meet the challenges of power generation due to a lack of management facilities. The opportunity for private and foreign entrepreneurs to demonstrate their abilities has been denied.
- Shortage of Inputs: Thermal power plants, which are India's main source of electricity, are running out of raw materials and coal. Thermal capacity expansion is hampered by the industry's growing concerns about fuel availability. Due to a lack of gas, a significant gas-based capacity of more than 20,000 MW is idle.
- Policy Paralysis: there is no clear policy formation towards India's energy sector. On one side there is push for renewables, on other side high dependence on imported coal making energy security poor.
- Security issues : recent cyber attacks on strategically important nuclear power plants like Kudankulam in Tamil Nadu shows vulnerability of Indian energy sector.

### Way forward

- Fuel Reforms:
  - Various aspects like ramping up coal production by both public and private sector in a time-bound manner.
  - increased participation of private sector in coal production
  - easing of regulatory framework, clearances and approvals for allocation and development of coal blocks & gas infrastructure need to be addressed while formulating such reforms.
- Arriving at an optimal fuel mix: There is a dire need to develop both conventional and non-conventional forms of energy, wherein, three key factors must be kept in view for developing an energy mix:
  - the pattern of energy demand seen in the country
  - the availability of fuels, and
  - fuel production and import costs.
- Balanced Regulatory Interventions:
  - Regulators need to be sensitized to the challenges faced by the sector and policy framework needs to be crafted and enforced to ensure a win-win situation for all the stakeholders.
  - They must pro-actively intervene to resolve the immediate issues ailing the power sector.
- Increased Financing Facilities for Energy Sector:



- A robust and sustainable credit enhancement mechanism for funding in Energy Sector needs to be put in place through increased participation by global funding agencies like The World Bank, ADB etc. in the entire value chain.
- Public private partnership model:
  - There is a strong need to push for wider-scale implementation of public private partnership models.
  - The private sector has been playing a key role in generating power, a more supportive environment will help in bridging the energy deficit of the country
- Renewable purchase obligations (RPO): RPO should be strictly enforced and inter-state sale of renewable Energy should be facilitated.
- Addressing coal shortage: liberalising the coal sector creating more space for private players. The recent reforms in coal mine allocation is right step in this direction.
- Taxation: Power-generating companies should not be saddled with the burden of cross-subsidising the renewable sector. This can be borne by the society (through taxation) and not by the entities that are already in trouble.
- Cooperative federalism: To resolve water disputes, government must help states to come to a common ground. Emphasis should be on cooperative federalism with shared benefit to all the states.
- Merger of ministries: There should be only one energy ministry to make coordination and implementation of policies better. It will remove policy paralysis too.
- Technology adaptation: adaptation of Smart Electricity Grid and Smart Meter Network in distribution network will address many issues related energy loss.
- Thrust on renewable energy generation and ensuring sustainable energy for India's energy security. Similarly more research and development is needed in energy storage solution technology.

### **Major government steps in energy sector**

#### **REVAMPED DISTRIBUTION SECTOR SCHEME**

- Objectives
  - Reduction of AT&C losses to pan-India levels of 12-15% by 2024-25.
  - Reduction of ACS-ARR gap to zero by 2024-25.
  - Developing Institutional Capabilities for Modern DISCOMs.
  - Improvement in the quality, reliability, and affordability of power supply to consumers
  - through a financially sustainable and operationally efficient Distribution Sector

#### **Ujwal DISCOM Assurance Yojana (UDAY)**

The scheme envisages:

- Financial Turnaround

- Operational improvement
- Reduction of cost of generation of power
- Development of Renewable Energy
- Energy efficiency & conservation

#### **Government also Announced Reforms In Coal Sector**

- Commercial mining of coal allowed, with 50 blocks to be offered to the private sector.
- Entry norms will be liberalised as it has done away with the regulation requiring power plants to use "washed" coal.
- Coal blocks to be offered to private companies on revenue sharing basis in place of fixed cost.
- Coal gasification/liquefaction to be incentivised through rebate in revenue share.
- Coal bed methane (CBM) extraction rights to be auctioned from Coal India's coal mines.

#### **PM-KISAN URJA SURAKSHA EVAM UTTHAANMAHA ABHIYAN (PM-KUSUM) SCHEME**

##### **Objectives**

- To provide financial and water security to farmers.
- 20 lakh farmers to be provided assistance for setting up stand-alone solar pumps.
- Another 15 lakh farmers to be helped to solarise their grid-connected pump sets.

#### **SCHEME FOR DEVELOPMENT OF SOLAR PARKS AND Ultra MEGA POWER PROJECT**

##### **Objectives**

- To facilitate the solar project developers to set up projects in a plug and play model.
- To provide a huge impetus to solar energy generation by acting as flagship
- Demonstration facility to encourage project developers and investors.
- To enable states to bring in significant investment from project developers to meet its Solar Renewable Purchase Obligation mandate and to provide employment to local population.
- To reduce carbon footprint by avoiding emissions equivalent to the solar park's installed capacity and generation.
- To avoid procuring expensive fossil fuels to power conventional power plants

#### **GREEN ENERGY CORRIDOR PROJECT**

##### **Objectives**

- For evacuation & integration of the renewable energy (RE) from generation points to the load centres i.e. to enable the flow of renewable energy into the National Grid Network.


**THE FINANCE  
MINISTRY OF  
FINANCE**

## Fuelling Growth through Power Sector Initiatives






Framework to let consumers have the freedom to choose their Power Distribution Company

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A comprehensive Hydrogen Energy Mission 2021-22 to be launched for generating hydrogen from green power sources

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Additional capital infusion of Rs 1,000 crore to be provided to Solar Energy Corporation of India and Rs 1,500 crore to Indian Renewable Energy Development Agency

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Revamped reforms-based result-linked power distribution sector scheme to be launched

- i. To provide assistance to DISCOMS for infrastructure creation
- ii. Outlay of Rs 3,05,984 crore over 5 years

### Port infrastructure

Ports infrastructure is key to development of any nation. India has a coastline spanning about 7,500 km. Around 90 percent of India's external trade by volume and 70 percent by value are handled by ports. Imports of crude petroleum, iron ore, coal, and other essential commodities are all through the sea route. Twelve major ports and 205 non-major ports operate on India's coast.



## Some facts about India's port infrastructure

- A port is a harbour or an area that can accommodate a large number of boats and vessels (transferring people or cargo) while also allowing for continuous or periodic shipments.
- Major ports are listed in the Union List and come under the jurisdiction of the Union Government, while Non-major ports are in the Concurrent List.
- According to the website of Ministry of Ports, Shipping and Waterways, India has 12 major ports and 200 non-major ports.
- Over 95% of India's trade by volume and 65% by value is done using maritime transport facilities at ports
- The capacity of India's major ports was 1,534.91 million tonnes per annum (MTPA) in FY20. All of India's major ports handled 672.60 million tonnes (MT) of cargo in FY21.
- In FY21, merchandise exports totalled US\$ 290.63 billion.
- Net profits at the major ports increased from INR 1,150 crore (US\$ 178.4 million) in FY13 to INR 3,413 crore (US\$ 529.6 million) in FY18

## Types of the port according to cargo handled

- Industrial ports: Industrial ports specialize in bulk goods such as grain, sugar, minerals, oil, chemicals, and other comparable products.
- Commercial Ports: These ports deal with general cargo, including packaged goods and manufactured items, as well as passenger traffic.
- Comprehensive Ports: These ports handle enormous volumes of bulk and general cargo. Comprehensive ports account for the majority of the world's major ports.

## Port-led development

Port-led development refers to the development of port infrastructure as well as the linkages between the port and the hinterland area. This model of regional industrial and infrastructural development centres on the development of ports. Ports with high capacities to handle import/export of goods with low turn-around time and fast clearances are essential to usher in port-led development.

## Significance of port development and port connectivity for India

- Better connectivity
  - Cheaper than the road and Airways.
  - Crucial for long distance, high volume trade.
- Reducing logistics cost
  - Efficient Port infrastructure leads to better logistics support and improves exports and international trade capabilities.
- Blue Economy
  - The term "blue economy" refers to all economic activity involving oceans, seas, and coastal areas, and it stems from a need for integrated conservation and sustainability in the maritime

domain's administration.

- India's blue economy, which relies on transportation to support 95% of the country's commerce, contributes about 4% of the country's GDP.
- India is also one of the world's top five producers of fish and farmed fish.
- Security
  - Ensure the security of strategic installations:
  - Port development will result in the development of India's coasts, which are home to a number of strategic installations such as naval bases, nuclear power plants, and satellite and missile launching ranges.
  - Curtailing transnational organized crime at sea:
  - India is vulnerable to narcotic drug trafficking because it is between the world's two main opium-producing regions, the Golden Crescent (Iran, Afghanistan, and Pakistan) to the west and the Golden Triangle (Myanmar, Thailand, and Laos) to the east.
  - Such illegal practices would be curtailed by port expansion and proper management of port resources, ensuring the safety of communication sea lanes (SLOC).
- Keeping an eye on maritime traffic
  - With 11,000 to 12,000 ships passing through at any given time, the Indian Ocean Region (IOR) is also the biggest maritime trade route.
  - Monitoring and regulating the movement of these vessels is difficult but necessary for the country's success.
- International relations
  - Countering the influence of China's Belt and Road Initiative and String of Pearl's.
  - Regional integration through multimodal connectivity in South Asia through platforms like BIMSTEC, SAARC, etc.
- Environment
  - Proper planning and environmental impact management of the port's development and operations activities are essential to tackle rising sea level and climate change.
- Social
  - Inclusive development and sustainable livelihood: ports are essential for India's coastal and Fishermen community.
  - Employment generation and livelihood maintenance is dependent on port led development.

India's infrastructure generally is in a bad shape and port development is not an exception. There are many issues the port infrastructure sector is facing.

### Issues

- For the development of ports, India needs huge investment and rapid economic growth. However, due to a decrease in saving, and investment rates, the development of ports does not get enough

investment.

- Port facilities in India have been uneconomic, with a lack of easy financing options for private sector investment.
- Delay in getting government approvals, environmental clearances, and compliance with coastal regulations.
- India has built many new ports but the port facilities do not match with global standards, loopholes such as inadequate cargo-handling equipment and machinery, insufficient dredging capacity, lack of technical expertise, etc. Still persists.
- The poor connectivity of ports to the hinterland of India make them inefficient.
- Problem of siltation: Due to siltation the river depth decreases and the water availability also reduces.
- Connectivity to ports: Weak hinterland connectivity between production centres and gateway ports often leads to higher costs and delays because of sub-optimal mode choices.
- High ship turnaround times: India's ports have long ship turnaround times. In Singapore, for example, the typical ship turnaround time is less than a day. In India, however, it takes more than two days.
- Port Congestion: Port congestion is a serious concern due to container tonnage, a lack of handling equipment, and inefficient operations, for example, the port of NhavaSheva.
- Environmental impact:
  - Spills or leaks from cargo loading and unloading, as well as pollution from oil spills, are widespread during port operations due to a lack of respect for environmental rules and standards.
  - The water discharged during ship cleaning and ballast water discharge pose harm to marine habitats.
  - Dredging has a negative impact on the environment (increased sedimentation), as well as the productivity of local waters and fisheries.
- Social impacts of Port Development:
  - The majority of port development and initiatives result in displacement (such as Gangavaram Port in Andhra and Mundra in Gujarat).
  - Another major issue raised by fishing communities is the restriction of access to fishing areas in the vicinity of a port.

### **Way forward**

- Focus on increasing investment through Public Private Partnership. Ensure transparent and effective contractual arrangements in PPPs
- Imparting corporate governance with the aim of ensuring efficiency in port administration.
- Port modernisation :Technology adaptation should be the next focus area. To reduce turn around time and increase competitiveness, new state of the art port operating system is must.

- Opening up the dredging market to attract more players, international players, in dredging activities to increase and maintain draft depth at ports to attract large vessels and enable them to become hub ports.
- Expedite the completion of various projects under Sagarmala, especially those aimed at improving port connectivity, setting up coastal economic zones (CEZs), and establishing new ports.
- Implement strengthened communication platforms for seamless information flow among stakeholders
- Strengthen system integration, ensure paperless clearance of procedures and transactions, develop user information portals, and so on.
- Financing for inland vessels could be made part of priority sector lending by banks.
- The setting up of a single-window facility for cargo clearance and putting in place fully mechanized cargo handling infrastructure will be critical to increase throughput.
- Integration of port development with hinterland development will ensure inclusive and sustainable growth of the region.

### **Government initiatives**

- Sagarmala program
  - It focuses on modernizing and developing ports, enhancing port connectivity, supporting coastal communities, and stimulating port-linked industrialization. Sagarmala aims to reduce the logistics costs for foreign and domestic trade. It also aims to double the share of water transportation in the modal mix.
- Jal Marg Vikas project
  - Jal Marg Vikas Project (JMVP) is a project for the development of National Waterways in India. JMVP was implemented as an initiative towards national integration with an aim to reduce rail and road congestion, carbon footprint, and minimal resource depletion.
- Project Unnati:
  - It has been started by Government of India to identify the opportunity areas for improvement in the operations of major ports.
- Draft Indian Ports Bill, 2022.
  - The draft Indian Ports Bill, 2022 seeks to repeal and replace the existing Indian Ports Act 1908, which is more than 110 years old, becoming imperative that the Act is revamped to reflect the present-day frameworks.



# Modern Ports and Waterways for a New India



To enhance private participation in the management of operational services, major ports to offer 7 projects worth more than Rs 2,000 crore on PPP mode



Scheme to provide subsidy support worth Rs 1,624 crore over 5 years to Indian shipping companies in global tenders floated by Ministries and CPSEs



Recycling capacity of around 4.5 million Light Displacement Tonne (LDT) to be doubled by 2024. To generate an additional 1.5 lakh jobs

## Road infrastructure

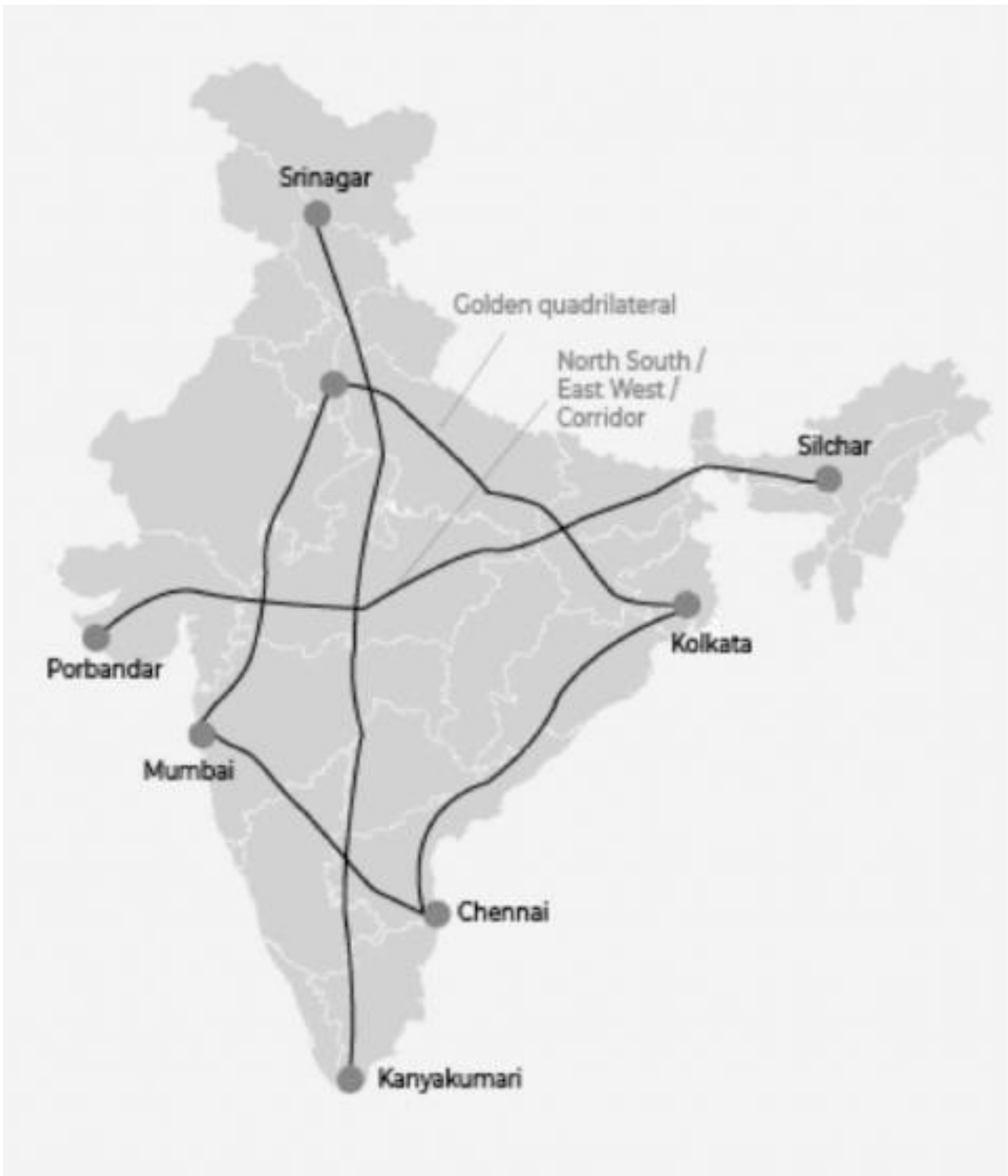
### Introduction

India has the world's second-largest road network, with a total length of 6.4 million kilometres (comprising national & state highways and urban & rural roads). Every year, highways carry around 85% of people and 70% of freight traffic. Short-distance travel is better served by road transit.

Therefore robust and end to end road connectivity is crucial for country's overall development.

Roads are classified as National Highways for the purposes of construction and maintenance (NH), National Highways (NH), State Highways (SH) Major District Roads, and Rural Roads.





### Some facts about India's Road Infrastructure

- National Highways (NH) account for 2% of the total road network and carry over 40% of total traffic.
- There has been a consistent increase in the construction of National Highways, with 13,327 kms being constructed in 2020-21. The Government has set an ambitious target in Budget 2022-23 of expanding the National Highway network by 25,000 kms over the fiscal year.
- 1,40,152 KM Total length of National Highways as of Aug 2021
- Golden Quadrilateral: The Golden Quadrilateral is a 5,846-kilometer high-density transportation corridor connecting India's four major metro cities of Delhi, Mumbai, Chennai, and Kolkata.

- Rural roads account for approximately 80% of India's total road length.

### **Issues and challenges associated with the Road infrastructure**

- Delay in project awards – for the past few years only ~ 50% of projects planned were actually awarded.
- Systemic bottlenecks – land acquisition, environmental clearances, delays in procurement etc. Have added to project delays.
- There are regional variations in road density. Compared to cities and towns, rural areas have fewer roads.
- Issues related to dispute redressal – Over 1500 cases involving NHAI are under various stages of litigation. These add to a staggering figure of over 10k crore.
- The road density per thousand people is low, which raises traffic and fuel use. It leads to increased air pollution.
- There is widespread corruption due to the connections between contractors, bureaucrats, and politicians.
- Slowdown in core sector like cement & steel has delayed the supply of construction material.
- Construction of roads is more straightforward and less expensive in plain locations, while it is challenging and more expensive in hilly and plateau areas.
- 40% of the roads are unsurfaced, making them only usable in good weather and impractical for travel when it rains.
- India lacks adequate funding for road maintenance, leaving thousands of villages without access to all-weather roads.
- Company's debt ridden – Aggressive bidding during the high growth phase and subsequent slowdown has made their balance sheets highly debt ridden.
- Profit oriented private firms lost interest in stalled highways projects.
- Opaque investment policy & complex tax system has kept foreign investors aside.
- Lack of diversified source for funding has made the financier debt-ridden. Credit crunch – Banks are over leveraged, corporate bond market not sufficiently developed, public investing in gold and land rather than in equity or bond markets.

### **Way forward**

- Following cooperative federalism model in building road network in India which can help to remove inequality in road connectivity within the country.
- Simplifying the governance and regulatory structure of road infrastructure development in India to remove overlapping of powers and functions.
- Addressing systemic delays – swifter environmental clearances for big infra projects. Amendments to the land bill accordingly also need to be done.
- Overhauling dispute redressal – recommendations of BK Chaturvedi Committee which was constituted to design a framework for swift dispute redressal, should be taken into consideration

by the government.

- Plug-and-Play Mode – Govt. Recently introduced this scheme where regulatory clearances will be assured by government agencies prior to awarding infra projects. So that the winning bidder could straight-away get to implementation.
- Mobilizing resources – the new Gatishakti scheme is good step in mobilization of resources for infrastructure sector.
- Expanding the corporate bond market – Since long-term financing is required bank lending has limited capacity. Thus the corporate bond market must be deepened & expanded.
- Instruments such as Infrastructure investment trust (InvITs) for long term credit.
- Reforms in Public private partnership models where more emphasis on EPC model be given rather than BOT.
- Dedicated policy on road design and standards is necessary to ensure sustainable and efficient road network.
- Road safety education to assist with navigating challenging circumstances.

#### **Some government initiatives related to road infrastructure**

- Golden Quadrilateral: The 5,846 km long, high-density traffic corridor known as the "golden quadrilateral" connects India's four largest megacities of Delhi, Mumbai, Chennai, and Kolkata.
- The Bharat Mala Project is envisioned to span 5300 kilometers and 13 states. It has a strategic element that includes preventing the expansion of the Chinese network across the border and facilitating access to the border-hugging districts.
- Pradhan Mantri Gram Sadak Yojana (PMGSY): To connect all villages in India with good all-weather roads.
- Infrastructure Investments Trust (InvITs): By monetizing the assets of the National Highways that have been constructed and are in use, Infrastructure Investment Trusts (InvITs) are used as a mechanism to raise money for the construction of road infrastructure.
- The National Infrastructure Pipeline (NIP) is a five-year plan that will invest in highways.
- Fast Tag – to ensure seamless toll collection system based of digital technology

The image is an infographic from the Ministry of Finance, India. It features a portrait of Prime Minister Narendra Modi on the left, waving. The title is 'Augmenting Road Infrastructure - Pathways to growth'. The infographic lists several key financial commitments for road infrastructure:

- Enhanced outlay of Rs 1,18,101 crore for Ministry of Road Transport and Highways, of which Rs 1,08,230 crore is for capital, the highest ever
- 3,500 km of national highway works in Tamil Nadu at an investment of Rs 1.03 lakh crore
- 1,100 km of national highway works in Kerala at an investment of Rs 65,000 crore
- 675 km of highway works in West Bengal at a cost of Rs 25,000 crore
- Further works of more than Rs 34,000 crore covering more than 1,300 kms of National Highways will be undertaken in Assam in the coming three years

## Conclusion

Eventually, strong transport infrastructure is essential to economic growth. A robust road network will be one important pillar in India's speedy economic recovery and one would hope that the government's budgetary commitment to strengthening roadway infrastructure is accompanied by attractive private investment opportunities in the sector.

## Aviation Infrastructure



### Introduction

India's civil aviation industry has the potential to become one of the largest in the world.

Airways play an important role as a modern means of transportation. They are vital for the country's economic growth and to be globally competitive.

### Some facts about India's Aviation infrastructure

- India is predicted to overtake China and the United States as the world's third-largest air passenger market in the next ten years, by 2030.
- There were 153 airports in the country as of June 2020. Only 114 of the 153 airports were utilized for domestic flights.
- The nation's airplane fleet is projected to quadruple in size to approximately 2500 airplanes by

2038.

- Foreign investment up to 49% is allowed under the automatic route.
- Under Union Budget 2021-22, the government lowered the custom duty from 2.5% to 0% on components or parts, including engines, for manufacturing of aircrafts by public sector units of the Ministry of Defence.
- In the Union Budget 2022-23: Rs. 10,667 crore (US\$ 1.38 billion) has been allocated to the Ministry of Civil Aviation.
- Civil aviation is governed by the Ministry of Civil Aviation, which is overseen by the Directorate General of Civil Aviation (DGCA)

### **Challenges of Aviation Infrastructure**

- Unequal development of aviation infrastructure across the country. The major airports are concentrated only in already developed regions and regions like North East, central India, suffers from lack of airports and other infrastructure.
- Safety issues regarding civilian aircrafts: recent times have witnessed several instances of malfunctions before/during flights resulting in diversions/delays.
- Profitability of the Sector: Most airline operators have poor financial health. The situation worsened during the COVID-19 pandemic due to lockdowns and flight restrictions.
- There is a problem of unavailability of space and land to expand the airports and there are problems with the land acquisition process. Eg. Pune Airport land acquisition issue.
- The government approval processes frequently cause delays in the development of airport infrastructure.
- Lack of funds is a challenge the government is currently dealing with. Therefore, the development of the infrastructure is moving in the direction of PPP models.
- Another issue is privatisation of state owned airports and its politicisation in media which is affecting the trust factor.
- According to an audit undertaken by the International Civil Aviation Organization, India's air safety oversight is weaker than that of Bangladesh, the Maldives, Pakistan, Nepal, Sri Lanka, and North Korea.
- Ineffective administration of air navigation, air traffic, airline slots waiting, etc. Is some of the other issues.
- High pricing - In India, the cost of fuel accounts for 45% of operating expenses, compared to a global average of 30%.
- Due to heavy central and state taxation, India's aviation fuel prices are higher than those of ASEAN and the Middle East nations.
- The UDAN Scheme is not operating well because many planned routes have not yet become operational, leaving the country's hinterland partially disconnected from the aviation industry.
- Policy Lacunae: There are many policy gaps that remain to be addressed e.g., the Aircraft Act, 1934 and Aircraft Rules, 1937 have not kept pace with modern technology in aerospace.

- The cargo operations are also poorly developed which reduces its competitiveness in global market.

### **Way forward**

- More efforts are needed to make aviation industry more inclusive and sustainable.
- The existing programmes like UDAN, etc. should be strengthened to increase the domestic aviation industry and minimise the travelling time.
- The statutory regulatory authority, the Directorate General of Civil Aviation (DGCA) should be modernized, well-staffed and incentivised. Experts recommend that DGCA should be headed by aviation professionals rather than by bureaucrats from the government.
- Developing a manufacturing ecosystem in the nation through long-term initiatives to support advanced research in aviation technologies.
- There is a need for overhaul in technology domain for the effective operation of the air traffic control and navigation system with reducing the dependence on foreign technology companies.
- There is a need to modify the India's Aircraft Act, 1934 and Aircraft Rules, 1937 as it is necessary to keep pace with modern technology in aerospace, growth of industry and passenger.
- More investment in aviation technology sector to minimise the accidents is the need of the hour.
- To address the skilled labor shortage, businesses and educational institutions should work together to integrate the latest technology.
- Make India a transshipment hub by creating digital business enablers like e-contracting, e-multimodal transportation, e-compliances, and an e-grievance redressal module.
- State should create conditions for healthy and competitive aviation sector so that more acceptance of aviation as a mode of travelling will be ensured.

### **The NITI Aayog INDIA@75 suggested that:**

- Ease the Regulatory Environment for Airport:
  - Deregulate further and open up the aviation market to help increase passenger and freight traffic in India.
  - Adopt a consistent model for tariff determination so that it reduces passenger cost.
- Address Shortage of Skilled Manpower:
  - Expedite commencement of courses by the National Aviation University after due consultation with stake holders.
  - Facilitate greater involvement of the private sector in sponsoring aviation institutions, industrial training and R&D projects.
- Prioritize Aviation Safety:
  - Shift focuses on pre-empting and preventing accidents/incidents.
  - There should be zero tolerance of safety violations. DGCA should be given autonomy for an effective aviation safety oversight system.

## Government Initiatives

- Ude Desh ka Aam Nagrik (UDAN) Plan: To develop regional routes that are both inexpensive and profitable, so that even in small communities, the average person can afford to fly.
- 100% FDI is allowed in non-scheduled air transport services, flying schools, helicopter services, and seaplane services through an automated route.
- Digi Yatra Platform: Biometric digital processing technology to save travelers from multiple airport security procedures
- DigiSky: Online site that complies with the civil aviation rules for using drones for commercial purposes.
- The 2016 National Civil Aviation Policy: The policy is covering 22 areas of the aviation sector. Airlines must deploy 20 aircraft or 20% of their total capacity for domestic operations, whichever is higher. This will expand the reach of Indian airline services abroad.
- e-Sahaj: The Civil Aviation Ministry's online platform e-Sahaj offers 100% of security clearances.

## Conclusion

Airports are important to a community because they provide access to the worldwide market for local businesses. They aid in the retention and attraction of businesses to a town, resulting in the creation of jobs and economic success. They facilitate trade and employ a large number of people in supporting services, both directly and indirectly. In this context, the National Civil Aviation Policy 2016 and National Civil Aviation programme 2018 can help India to become a major civil aviation market in the world.

## Railways

### Introduction

The Indian railway system is regarded as the foundation and lifeblood of the economy. Indian railways span over thousands of kilometres practically covering the entire nation, making it the fourth largest in the world after the US, China and Russia. The Railways Board, which has a monopoly over the provision of rail services in India, is in charge of overseeing the whole infrastructure. Due to its low cost and effective operations, railways continues to be the most popular means of transportation for the majority of Indians when travelling long distances.

Some facts about India's Railways infrastructure

Nearly a third of passenger revenue comes from AC class passengers (who constitute just 1.3 per cent of the total number of passengers travelling in a year).

### Issues and challenges associated with railways infrastructure

- Organizational structure is a highly centralized. Delays in decision making, inadequate market orientation, and long project approval durations lead to slow turnover times and delays in the implementation of railways projects.
- The issue in organisational hierarchy and promotions due to technical vs non technical recruitment also making the railways less efficient as an institution.
- Subsidised passenger tariff due to political incentives. This leads to an increase in freight rate



which adds to inflation.

- Declining passengers in the upper classes as they have started preferring bus for short haul and flight for the longer haul.
- Congested networks: Over-stretched infrastructure with 60% plus routes being more than 100 percent utilized, leading to a reduction in the average speed of passenger and freight trains.
- Safety and poor quality of service delivery: There have been a number of accidents and safety issues. Poor cleanliness of trains and stations, delays in booking/train departures and arrivals and in booking tickets are key issues.
- The share of roads in freight transport is more than half in India; while in China, it is only 30%. As more highways are getting built rapidly, the share of roads in freight transport is increasing at accelerating rate.
- Freight contributes nearly two-thirds of Indian Railway's revenue and coal transport alone contributes to half of that. Decreasing dependency on coal compounded by increasing thrust on renewable energy has crippled railway revenue.
- The lack of scale economies especially impact management quality and system accountability.
- Lack of funds: Over 80 percent of this budget goes towards wages and salaries. Also due to a lack of funds, Indian Railways is forced to rely on market borrowings, which results in higher lease prices.
- Unfilled vacancies at the lower level (track men, line men, technicians) and slow recruitment processes like seen from 2019 NTPC exam.
- colonial work culture with rigid departmental SoPs are contributing to the opaqueness and snail's rate progress.
- Railways diverting from core issues of railway safety and operation and is diverting to populist needs like Wi-Fi, catering, etc.
- There are also issues like poor interior design of coaches, lack of basic amenities which affecting the overall brand value of the Railways.
- The new ventures of Indian railways like Bullet trains and Vande Bharat express are also suffering from delays.

### **Way forward**

- Better utilization of existing infrastructure to address congestion: Prioritize ongoing projects to improve capacity utilization. Ensure that the dedicated freight corridors (DFCs) are completed on schedule.
- Rationalize fare structures and subsidies, and monetize assets to generate revenues: Revisit IR's pricing model to make the passenger and freight segments sustainable. Freight tariffs should be competitive with the cost of road transportation.
- Enhance the safety of trains to reduce accidents and modernize stations: The government has created the Rashtriya Rail Sanraksha Kosh (RRSK) in 2017-18 to address critical safety-related issues. Eliminate level crossings and cattle crossings and fence railway tracks in areas with high levels of activity to prevent accidents.

- Set up an independent regulator for the Indian Railways: An independent regulator is required to make decisions regarding price regulation and enhancement of non-fare revenue, Protect consumer interests, promote competition, help attract investment and promote efficient resource allocation.
- Ease organizational rigidity through structural reforms such as Privatisation: There is an urgent requirement of bringing in private players in this industry which would lead to better adoption of technology like Bullet trains.
- More efforts are needed in research and development domain to bring more efficiency and railways operations.

### **Bibek Debroy Committee on Restructuring of Indian Railways**

- Need for the creation of separate tariff regulator so as to keep railway away from politics.
- Railway's recruitment should be done by single entity instead of UPSC, SSC
- Further needs to decentralize railway operation to increase efficiency.
- Need to decrease cross subsidization by keeping a balance between freight and passenger fare.
- Railway budget should be merged with the annual budget. (implemented)
- Shifting towards online procurement and auctioning.

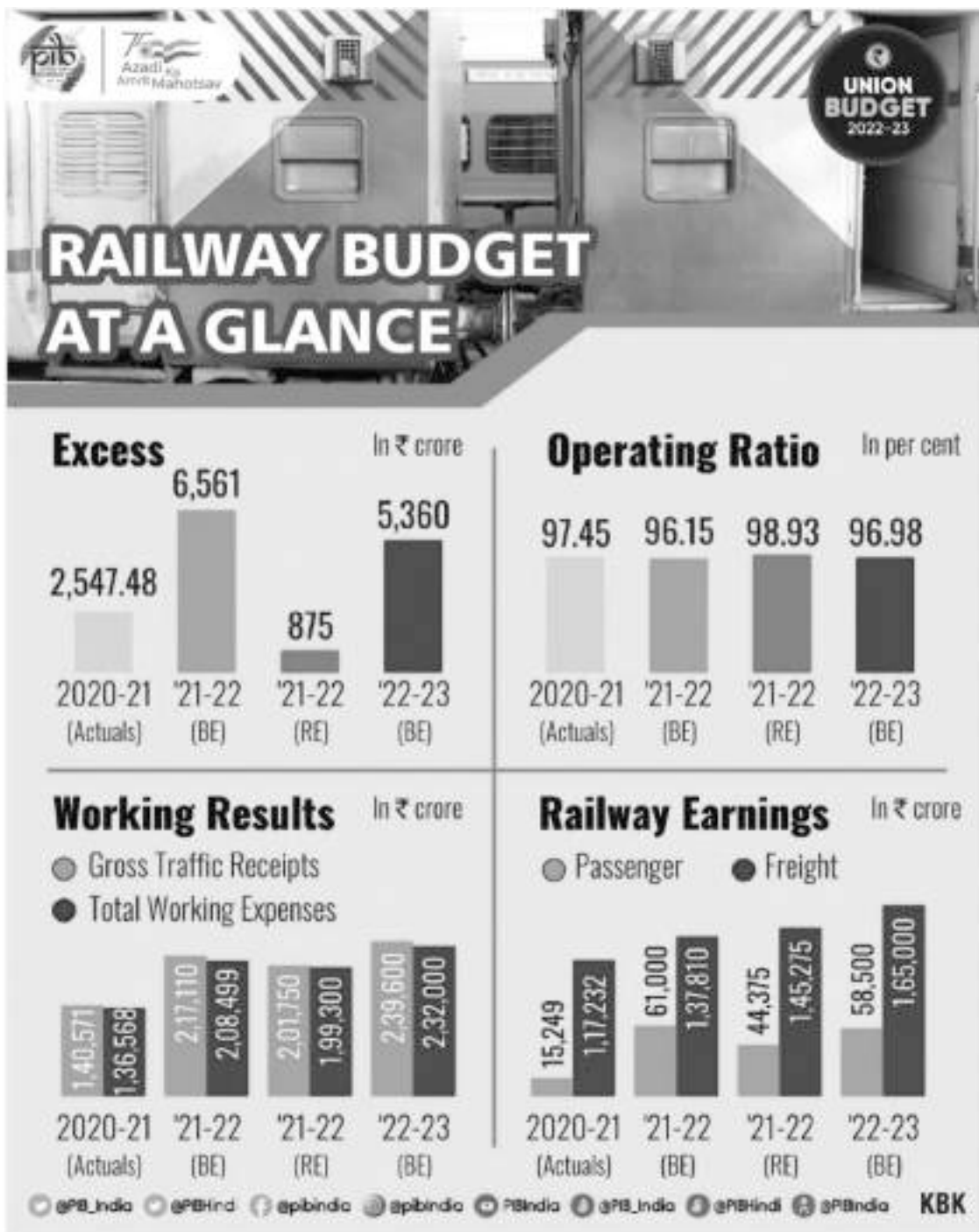
### **Anil Kakodkar Committee on Railway Safety**

- Need for an independent body like Railway Safety Authority under the government with chairman and experts from outside.
- Complete elimination of both manned and unmanned level crossings within the stipulated time.
- Need for advanced signalling system based on continuous track circuiting and cab signalling similar to European train control system Level-II on the entire trunk route of about 19,000 route kilometres.
- Continuous monitoring of all the bridges in terms of scientific measurements of deflections/displacements, water level and flow velocity on a continuous basis and data should be communicated to the office of the concerned Chief Bridge Engineer for monitoring.
- A robust and powerful Safety Architecture should be there to have a safety oversight on the operational mode of Railways.

### **Steps taken by the Government**

- Merging of railway budget with the general budget might provide much need cash boost to Indian Railways.
- Redevelopment of 400 major railway stations by tying up with private companies.
- Introduction of new high speed trains like Vande Bharat.
- Introduced the private players in railway operations through projects like Tejas express ‘
- Special Freight Train Operations Scheme' of the Ministry of Railway: allow private companies to run freight trains from their own private terminals may lead to the faster evacuation of cargo.

- IRCTC tied up with multiple e-commerce companies like Amazon, bookmytrain, Oyo, dominos pizza, paytm, etc. For better customer experience in ticketing, food, housing etc.
- The national operator recently moved the idea of leasing out its iconic hill railways, including Darjeeling, Kalka-Shimla, Matheran and Nilgiri, to private companies for operations.
- Mission Raftaar' to increase the speed of transportation: New high-speed trains like Antyodaya Express, DeenDayalu Coaches, Humsafar, Tejas, UDAY (Utkrisht Double-Decker Air-conditioned Yatri) have been launched.



## Enhancing Railway Infrastructure- Engine of Growth



Indian Railways has prepared a National Rail Plan for India - 2030. The Plan is to create a 'future ready' railway system by 2030



Western Dedicated Freight Corridor (DFC) and Eastern DFC expected to be commissioned by June 2022



Future dedicated freight corridor projects namely East Coast corridor from Kharagpur to Vijayawada, East-West Corridor from Bhusaval to Kharagpur to Dankuni and North-South corridor from Itarsi to Vijayawada



Indian railways to be provided with an indigenously developed automatic train protection system that eliminates train collision due to human error.



A record sum of Rs 1,10,055 crore is provided for Railways of which Rs.1,07,100 crore is for capital expenditure.

## Conclusion

There is a need to expand the railway network because it will always be low budget alternative to time-consuming and not frequently used airlines. Infrastructure development, Public-Private participation will, in turn, benefit the consumers with a wide variety, lower prices and will avoid amenity deterioration due to cash crunch in the future.

## Prayaas Tips-

- This topic is straightforward and requires general understanding of major issues associated with the infrastructure sector in country.
- The various mega projects and challenges associated with them are to be taken into account while preparing for this topic.
- The current developments like announcement of important government projects, schemes need to be studied carefully to tackle current inspired questions in exam.
- Preparing some important facts and data will be helpful to fetch good marks in exam.



## Investment Models

Year	Questions	Context/Theme/Inspiration
2022	Why is Public Private Partnership (PPP) required in Infrastructural projects? Examine the role of PPP model in the redevelopment of Railway Stations in India.	Inspired from current event where Gandhinagar railway station was renovated with PPP model.
2020	Explain the meaning of investment in an economy in terms of capital formation. Discuss the factors to be considered while designing a concession agreement between a public entity and a private entity.	A bit technical question but can be solved on the basic understanding of the topic.
2016	Justify the need for FDI for the development of the Indian economy. Why there is gap between MOUs signed and actual FDIs? Suggest remedial steps to be taken for increasing actual FDIs in India.	Direct question on the FDI. Prelims knowledge can be useful here to answer such question.
2015	There is a clear acknowledgement that Special Economic Zones (SEZs) are a tool of industrial development, manufacturing and exports. Recognizing this potential, the whole instrumentality of SEZs requires augmentation. Discuss the issues plaguing the success of SEZs with respect to taxation, governing laws and administration.	Straightforward question on the SEZ and issues related with it. The size of the question should not worry you.
2014	Explain how private public partnership agreements, in longer gestation infrastructure projects, can transfer unsuitable liabilities to the future. What arrangements need to be put in place to ensure that successive generations' capacities are not compromised?	Challenges and issues related with PPP
2013	Adaptation of PPP model for infrastructure development of the country has not been free from criticism. Critically discuss the pros and cons of the model.	Similar theme is repeating again.

*This analysis of PYQs underlines the focus points which are important for examination. We need not worry about the technicalities of the topic and general understanding about the investment and investment models are sufficient to answer question in mains. Therefore following notes will be helpful to cover all the important aspects of syllabus.*

## Introduction -

The investment models is one of the topic of GS3 syllabus which is little technical in nature. However after studying it for one time, you can address any questions related to it easily. Following notes are sufficient for UPSC mains examination.

### What does investment mean

- An investment involves putting capital to use today in order to increase its value over time.
- An investment requires putting capital to work, in the form of time, money, effort, etc., in hopes of a greater payoff in the future than what was originally put in.
- An investment can refer to any medium or mechanism used for generating future income, including bonds, stocks, real estate property, or alternative investments.
- Investments usually do not come with guarantees of appreciation; it is possible to end up with less money than with what you started.
- Investments can be diversified to reduce risk, though this may reduce the amount of earning potential.

Similarly, one of the responsibilities of the State is to ensure investment in economy for achieving socio-economic goals. Therefore, Building factories, construction of railways, roads and other infrastructural development, purchase of new machinery and technologies, building schools and hospitals, adding to the existing stocks, are those investments which assumes importance.

### Sources of Investment

There are mainly three sources of investing for the government. They are :

- Internal funding – Internal sources of finance refer to money that comes from within the government's accumulated profits from its industries or businesses. Internal funding can also be made through disinvestment.
- Borrowing – The government raises money for investment either from banks or through the issue of financial assets such as bonds or Commercial Papers.
- Issuing new "equity" shares – The government can also make use of the stock markets, sell its stocks to investors and raise funds. Two common types of public equity issuance are initial public offerings (IPOs) and secondary equity offerings.

### Investment models used in India –

- Harrod-Domar Model: The model is more of a One Sector Model where the factor of economic growth is dependent on the policies that will increase savings and technological advances.
- Solow Swan Model: It is an extension of the Harrod-Domar Model that laid special emphasis on productivity growth
- Feldman–Mahalanobis model : This model focuses on improving domestic consumption goods

sector where there is a high enough capacity in the capital sector goods. It later evolved into a Four Sector Model also known as Nehru-Mahalanobis model.

- Rao ManMohan Model : Named after Narasimha Rao and Dr. Manmohan Singh, this model employs the policy of economic liberalization and bringing in FDI in 1999. Lewis model of economic development by unlimited labour supply.

### **Types of investment**

#### **Public investment**

- Here, Government makes investments in specific goods and services, with the help of Public sector
- The investment for revenue mainly comes from taxes
- Properly targeted public investment can do much to boost economic performance, generating aggregate demand quickly, fuelling productivity growth by improving human capital, encouraging technological innovation, and spurring private-sector investment by increasing returns
- Though public investment cannot fix a large demand shortfall overnight, it can accelerate the recovery and establish more sustainable growth patterns

#### **Private investment**

- When there exists certain shortfall of earnings in the public sector, Government invites private players to invest in some of its ventures
- The private investment can be domestic or foreign in nature
- A foreign direct investment (FDI) can improve the current infrastructure and generate employment in the process.
- This model is one of the most sought after when it comes to external investment
- Also, Private investment can generate more efficiency by creating more competition, realization of economies of scale and greater flexibility than is available to the public sector

#### **Public Private Partnership Model:**

Public-private partnerships involve collaboration between a government agency and a private-sector company that can be used to finance, build, and operate projects, such as public transportation networks, roadways, research and development projects like vaccine development, etc. Financing a project through a public-private partnership can allow a project to be completed sooner or make it a possibility in the first place.

- Public-private partnerships allow large-scale government projects, such as roads, bridges, or hospitals, to be completed with private funding.
- These partnerships work well when private sector technology and innovation combine with public



sector incentives to complete work on time and within budget.

- Risks for private enterprise include cost overruns, technical defects, and an inability to meet quality standards, while for public partners, agreed-upon usage fees may not be supported by demand—for example, for a toll road or a bridge.
- Despite their advantages, public-private partnerships are often criticized for blurring the lines between legitimate public purposes and private for-profit activity, and for perceived exploitation of the public due to self-dealing and rent-seeking that may occur.

### **Public private partnership (PPP) Models**

The major types of PPP model are:

#### Management Contract Model

- Under this model, a private entity is given the contract to manage, either in part or in whole, a public facility or a service
- In this model, Ownership of the asset, or facility, remains with the public entity (government); while the day-to-day operations of such facility are transferred to the private entity
- The risk exposure for the private entity is low since it is not required to make any capital investments and the private entity is allowed to collect a fee which is predetermined

#### Lease Contract Model

- Under this model, the asset is leased, either to the private entity or to the public entity, depending on the situation
- The private entity is allowed to earn revenue from operations

#### Build-Lease-Transfer model

- The asset is owned by the private entity and is leased to public entity for medium term
- Here, public entity is responsible for making the capital investment

#### Build-Operate-Transfer (BOT) Model

- In BOT model, the public entity retains the ownership while the private entity bears the responsibility of construction(usually a greenfield project)
- In second type, known as Under this model, the asset is leased, either to the private entity or to the public entity, depending on the situation

#### BOT Annuity

- This model is adopted for the building highways, mainly for those projects where the potential for generating revenues is limited, by the NHAI
- The private entity is responsible for designing, building, managing, and maintaining the asset.

However, the risk for the private entity is low as it receives a fixed sum as annuity from the public entity at regular intervals throughout the duration of the contract

### **VIABILITY GAP FUNDING (VGF)**

- Aimed supporting infrastructure projects that are economically justified but fall marginally short of financial viability.
- Available only for infrastructure projects where private sector sponsors are selected through a process of competitive bidding.
- Project cost: total Viability Gap Funding under this scheme will not exceed twenty percent (20%) of the Total Project Cost; provided that the Government or statutory entity that owns the project may, if it so decides, provides additional grants out of its budget, upto a limit of a further twenty percent of the Total Project Cost.
- Funding : can be provided by both central and state governments

Other related PPP models

### **Engineering-Procurement-Construction(EPC) Model**

- In this model, the private entity is responsible for designing, financing and building the asset
- After building the asset, it is transferred to the public entity which remains the owner. The private entity does not have the responsibility of operations and management and receives a lump-sum money from the public entity for its role. This model is being used for the construction of highways by the NHAI

### **Hybrid Annuity Model(HAM)**

In this model, the public entity finances 40% of the project cost, and private entity has to finance the remaining 60%

The ownership, as well as operations, remain the responsibility of the public entity while the private entity only has to provide the engineering expertise

### **Issues associated with PPP models**

- Policy and regulatory gaps: Inadequate regulatory framework and inefficiency in the approval process have been considered as serious disincentives for developers and contractors.
- Delays sue to disputes : PPP projects have been stuck in issues such as disputes in existing contracts, non-availability of capital and regulatory hurdles related to the acquisition of land.
- Crony Capitalism: Metro projects become sites of crony capitalism and a means for accumulating land by private companies.
- Clearance issues for projects – land acquisition and environmental clearances for projects have been difficult to come by

- Performance: Across the world PPPs are facing problems, performance of PPPs has been very mixed according to study conducted by various research bodies.
- Political intervention: It is also argued that PPP is mere a "language game" by governments who find it difficult to push privatization, or when politically it is difficult to contracting out.
- Credit: Loans for infrastructure projects are believed to comprise a large share of the non-performing asset portfolio of public sector banks in India.
- Higher cost: PPP firms use every opportunity for renegotiating contracts by citing reasons like lower revenue or rise in costs which becomes a norm in India.
- Public resources: Frequent renegotiations also resulted into drain of larger share of public resources.
- Finance-The long term finance for PPP projects has dried up due to excessive dependence on banks and lack of proper corporate bond market in the country.

### Way Forward

**Kelkar committee** to evaluate PPP in India was a committee set up to study and evaluate the extant public-private partnership (PPP) model in India.

Amongst the recommendations made are:

- Establishment of 3 main pillars of the PPP framework viz. Governance, Institutions, and Capacity.
- Case based risk allocation formula for various project participants.
- Establishment of independent regulating agencies.
- An amendment in the Prevention of corruption act to differentiate between errors of judgement and willful corrupt practices.
- Use the PPP model for airport, port and railway projects.
- Banks and other financial institutions be allowed to issue zero-coupon bonds.
- The number of banks in a consortium be restricted.
- Banks develop improved capabilities for risk assessment and appraisal.
- Specific guidelines for encashment of bank guarantees.
- To provide for monetisation of completed projects.
- Create a procedure to resume stuck projects.
- PPP should only be used for large projects.
- Creation of an inbuilt mechanism for renegotiation.
- Model concession agreements in various sectors be reviewed.
- The public sector undertakings be dissuaded from participating in PPP

- Road toll be collected electronically
- Constitution of an Infrastructure PPP Project Review Committee (IPRC) comprising an expert in finance and economics, law, and at least one related technocrat with not less than 15 years experience.
- Constitution of an Infrastructure PPP Adjudication Tribunal (IPAT) headed by a former Supreme Court/ High Court Judge with at a minimum of one technical and financial expert each as members.

### **Conclusion**

The success of Public-Private Partnership to a large extent depends on optimal risk allocation among stakeholders, the environment of trust and robust institutional capacity to timely implementation of PPP projects. To foster the successful implementation of a PPP project, a robust PPP enabling ecosystem and sound regulatory framework is essential

Again, depending from where investment comes, there are two other investment models.

- Domestic Investment Model – It can be from Public, Private or PPP.
- Foreign Investment Model – It can be 100% FDI or Foreign-Domestic Mix.

### **Foreign Direct Investment**

- Foreign direct investment (FDI) is an ownership stake in a foreign company or project made by an investor, company, or government from another country.
- Foreign direct investments (FDIs) are substantial, lasting investments made by a company or government into a foreign concern.
- FDI investors typically take controlling positions in domestic firms or joint ventures and are actively involved in their management.
- The investment may involve acquiring a source of materials, expanding a company's footprint, or developing a multinational presence.
- The top recipients of FDI over the past several years have been the United States and China.
- Singapore and the United States have emerged as the top two countries in Foreign Direct Investment equity flows into India in the Financial year 2021-2022.

### **Foreign indirect investment**

- Foreign indirect investments involve corporations, financial institutions, and private investors buying stakes or positions in foreign companies that trade on a foreign stock exchange.
- In general, this form of foreign investment is less favorable, as the domestic company can easily sell off their investment very quickly, sometimes within days of the purchase.
- This type of investment is also sometimes referred to as a foreign portfolio investment (FPI).

- Indirect investments include not only equity instruments such as stocks, but also debt instruments such as bonds.

#### **Advantages of foreign direct investment:**

- Economic growth
  - The creation of jobs is the most obvious advantage of FDI, one of the most important reasons why a nation (especially a developing one) will look to attract foreign direct investment.
  - FDI boosts the manufacturing and services sector which results in the creation of jobs and helps to reduce unemployment rates in the country.
- Human capital development
  - Human capital involved the knowledge and competence of a workforce. Skills that employees gain through training and experience can boost the education and human capital of a specific country. Through a ripple effect, it can train human resources in other sectors and companies.
- Technology
  - Targeted countries and businesses receive access to the latest financing tools, technologies, and operational practices from all across the world. The introduction of newer and enhanced technologies results in company's distribution into the local economy, resulting in enhanced efficiency and effectiveness of the industry.
- Increase in exports
  - Many goods produced by FDI have global markets, not solely domestic consumption. The creation of 100% export oriented units help to assist FDI investors in boosting exports from other countries.
- Exchange rate stability
  - The flow of FDI into a country translates into a continuous flow of foreign exchange, helping a country's Central Bank maintain a prosperous reserve of foreign exchange which results in stable exchange rates.
- Improved Capital Flow
  - Inflow of capital is particularly beneficial for countries with limited domestic resources, as well as for nations with restricted opportunities to raise funds in global capital markets.
- Creation of a Competitive Market
  - By facilitating the entry of foreign organizations into the domestic marketplace, FDI helps create a competitive environment, as well as break domestic monopolies. A healthy competitive environment pushes firms to continuously enhance their processes and product offerings, thereby fostering innovation. Consumers also gain access to a wider range of competitively priced products.

- Climate
  - The United Nations has also promoted the use of FDI around the globe to help combat climate change

#### **Disadvantages of foreign direct investment:**

- Hindrance of domestic investment
  - Sometimes FDI can hinder domestic investment. Because of FDI, countries' local companies start losing interest to invest in their domestic products.
- The risk from political changes
  - Other countries' political movements can be changed constantly which could hamper the investors.
- Negative exchange rates
  - Foreign direct investments can sometimes affect exchange rates to the advantage of one country and the detriment of another.
- Higher costs
  - When investors invest in foreign countries, they might notice that it is more expensive than when goods are exported. Often times, more money is invested into machinery and intellectual property than in wages for local employees.
- Economic non-viability
  - Considering that foreign direct investments may be capital-intensive from the point of view of the investor, it can sometimes be very risky or economically non-viable.
- Expropriation
  - Constant political changes can lead to expropriation. In this case, those countries' governments will have control over investors' property and assets.
- Modern-day economic colonialism
  - Many third-world countries, or at least those with history of colonialism, worry that foreign direct investment would result in some kind of modern-day economic colonialism, which exposes host countries and leave them vulnerable to foreign companies' exploitation.
- Poor performance
  - Multinationals have been criticized for poor working conditions in foreign factories.

#### **Conclusion**

Foreign Direct Investment (FDI) is a major driver of economic growth and an important source of non-debt finance for the economic development of India. A robust and easily accessible FDI regime, thus,

should be ensured.

Economic growth in the post-pandemic period and India's large market shall continue to attract market seeking investments to the country.

**Prayaas Tips-**

- This topic needs certain minimum preparation and understanding of basic keywords and concepts.
- Therefore these notes are important to prepare the topic holistically.
- With these notes, we also need to refer to current developments in economy.
- Interconnections between investment and its outcome, issues and challenges with PPP will always be the main theme in upcoming questions.



## Issues Related To Planning

• Year	• Questions	• Context/Theme/Inspiration
• 2018	• How are the principles followed by the NITI Aayog different from those followed by the erstwhile Planning Commission in India?	• A long pending question since the formation of NITI Ayog in 2015.

- Though an important topic from the point of understanding the economic history of India, its not so important for Mains as seen from the analysis of previous year questions.
- Nonetheless, we should study this topic to get familiarise with the major themes in syllabus to tackle any questions.

### Introduction

- When the British left India in 1947 there was nothing to be proud of or be happy except for the 'freedom'. The problems were many before the Indian government. Besides mass poverty there was the problem of food shortage and inflation. Illiteracy, lack of health care, lack of infrastructure etc. were other serious problems facing the country.
- As a long term strategy, 'Planning' for economic development was the answer to solve these problems.

### What is Economic Planning?

- Economists have come up with a number of definitions since the time planning entered the domain of economics. However, a lot of them have agreed that the most significant was formulated by H D Dickinson. According to him, economic planning is – "the making of major economic decisions – what and how much is to be produced and to whom it is to be allocated by the conscious decision a determinate authority, on the basis of a comprehensive survey of the economic system as a whole".
- After it was introduced by the erstwhile Soviet Union, many countries started adopting the method of economic planning at different levels to achieve faster growth.
- *Let us now discuss the types of economic planning that emerged*





## **Types of Economic Planning**

- Planning by Direction and Planning by Inducement
- An integral part of the socialist society, planning by direction entails the absolute absence of a laissez-faire system. This type of economic planning has one central authority that plans, directs, and executes according to pre-determined economic priorities.
- Planning by Inducement, on the other hand, is more of democratic planning. It entails planning by manipulating the market. Although there is no compulsion, a certain degree of persuasion is practised in planning by inducement. In this type of planning, the enterprises have the freedom of production & consumption. However, these freedoms are controlled & regulated by the state through policies and measures.
- Financial Planning & Physical Planning
- In financial planning, resource allocation is done in terms of money; and it is essential to remove the maladjustments between supply and demand. Hence, it is instrumental in ensuring a balance between supply & demand, and in controlling inflation to bring about economic stability in the country.
- In physical planning, resource allocation is done in terms of men, machinery, and materials. An overall assessment of the available resources is done to ensure that bottleneck situations are eliminated during the execution of the plan. It is viewed as a long-term planning process.
- Indicative Planning & Imperative Planning
- Indicative planning is based on the principle of decentralization for the operation & execution of plans. In this type of planning, the private sector is neither completely controlled nor directed to meet the targets of the plan. But it is expected to fulfill those targets. Towards that end, the government facilitates the private sector but does not direct them in any way.
- In imperative planning, on the other hand, all economic activities are controlled by the state. There is complete control of the government over the factors of production. Even the private sector needs to strictly abide by government policies and decisions, which are rigid.
- Rolling Plans & Fixed Plans
- In a rolling plan, every year three plans are drawn up and acted upon. One of them is an annual plan, which entails the planning for one year; the second is a 5-year plan; while the third is a 15-year plan in which broader goals and objectives are listed, which are in consonance with the previous year planning.
- In contrast to the rolling plan, a fixed plan refers to planning for a certain period of time — say 4, 5, or 10 years ahead. It lays down definite goals and objectives that are to be met in the due course of time. Except under an emergency situation, the annual objectives are met (those listed in the fixed plan).

- Centralized & Decentralized Planning
- Under the centralized planning system, planning is made a restrictive prerogative of the central planning authority. This authority is solely responsible for the formulation of the plan, and fixing its objectives, targets, and priorities. There is no economic freedom; and the entire economic planning is under bureaucratic control.
- In contrast, decentralized planning refers to execution of the plan from the grassroots. In this type of planning, the central planning authority formulates the plan in consultation with the different administrative units for the central and state schemes. The state planning authority formulates the plan for district and village levels.
- **History of Planning in India**
  - First and mainly, the concept of a planned economy emerged in the **1930s** when our national leaders were influenced by socialist theory. The tremendous progress made by the USSR through five-year plans impacted India's five-year plans greatly.
  - **Sir M. Visvesvaraya** wrote "**Planned Economy in India**" in **1934**, in which he proposed a positive plan for India's growth over the next ten years. His main goal was to devise a strategy for shifting labor from farm to industry and doubling the national GDP in ten years. This was the first substantial scholarly work in the field of planning. Between the 1931 Karachi session of the Indian National Congress and the 1936 Faizpur session of the India National Congress, the economic viewpoint of India's freedom movement was developed.
  - **National Planning Committee**: In 1938, the first attempt was made to develop a national plan for India. In that year, Congress President Subhash Chandra Bose established a National Planning Committee, which was chaired by Jawaharlal Nehru. However, the committee's findings were unable to be written, and only a few papers were published for the first time in 1948-49.
  - **Bombay Plan**: Mr JRD Tata, GD Birla, PurshottamdasThakurdas, LalaShriram, Kasturbhai Lalbhai, AD Shroff, Ardeshir Dalal, and John Mathai, eight Bombay industrialists, worked on "A Brief Memorandum Outlining a Plan of Economic Development for India" in 1944. This is referred to as the "Bombay Plan." This strategy called for doubling per capita income in 15 years and tripling national income in the same time frame. Despite the fact that Nehru did not officially adopt the plan, many of its principles were incorporated into later designs.
  - **People's Plan**: MN Roy drafted the People's Plan. This strategy covered a ten-year span and gave agriculture top attention. The fundamental feature of this plan was the nationalization of all agriculture and production. M N Roy, on behalf of the Indian federation of Lahore, created this proposal based on Marxist socialism.
  - **Gandhian Plan**: Sriman Nayaran, the principal of Wardha Commercial College, created the Gandhian Plan. It prioritized economic decentralization with a focus on rural development

through the development of cottage enterprises.

- **Sarvodaya Plan** : Jaiprakash Narayan designed the Sarvodaya Plan in 1950. This plan was influenced by VinobaBhave's Sarvodaya Idea and Gandhian Plan. Agriculture and small and cottage enterprises were highlighted in this plan. It also emphasized land reforms and decentralized participatory planning as well as freedom from foreign technologies.
- **Planning and Development Department**: The British Indian government established the "Planning and Development Department" in August 1944, under the leadership of Ardeshir Dalal. However, in 1946, this section was abolished.
- **Planning Advisory Board**: The Interim Government established a planning advisory board in October 1946 to assess plans and future projects and make recommendations.
- **The Planning Commission of India** was set up by a Resolution of the Government of India in March 1950.
  - Prime minister was the ex officio chairman.
  - The planning commission was an autonomous body, which worked closely with union and state cabinets and had full knowledge of their policies.
- Institutionally it was a part of the cabinet organization and the 'demands for grants' for the PC was included in the budget for the cabinet secretariat.
- Objectives of the government while starting PC were the following:
  - Promote a rapid rise in the standard of living of the people by efficient exploitation of the resources of the country.
  - Increase production.
  - Offer opportunities to all for employment in the service of the community.
- Functions and Responsibilities of the Planning Commission
  - Make assessment of all resources of the country
  - Augment deficient resources
  - Formulate plans [Five Year Plans (FYP)] for the most effective and balanced utilization of resources and determining priorities.
  - Determine the stages of plan implementation
  - Determine the nature of machinery required.
  - Indicate the factors which tend to retard economic developments.
  - Monitor and evaluate the processes.
- **Objectives of Economic Planning**

- Economic Development: This is the main objective of planning in India. Economic Development of India is measured by the increase in Gross Domestic Product (GDP) and Per Capita Income.
- Social Justice: This objective of planning is related to all the other objectives and has been a central focus of planning in India. It aims to reduce the population of people living below the poverty line and provide them access to employment and social services.
- Increased Levels of Employment: An important aim of economic planning in India is to better utilise the available human resources of the country by increasing the employment levels.
- Self Sufficiency: India aims to be self-sufficient in major commodities and also increase exports through economic planning. The Indian economy had reached the take-off stage of development during the third five-year plan in 1961-66.
- Economic Stability: Economic planning in India also aims at stable market conditions in addition to the economic growth of India. This means keeping inflation low while also making sure that deflation in prices does not happen. If the wholesale price index rises very high or very low, structural defects in the economy are created and economic planning aims to avoid this.
- Social Welfare and Provision of Efficient Social Services: The objectives of all the five year plans as well as plans suggested by the NITI Aayog aim to increase labour welfare, social welfare for all sections of the society. Development of social services in India, such as education, healthcare and emergency services has been part of planning in India.
- Regional Development: Economic planning in India aims to reduce regional disparities in development. Planning in India aims to study these disparities and suggest strategies to reduce them.
- Comprehensive and Sustainable Development: Development of all economic sectors such as agriculture, industry, and services is one of the major objectives of economic planning.
- Reduction in Economic Inequality: Measures to reduce inequality through progressive taxation, employment generation and reservation of jobs has been a central objective of Indian economic planning since independence.
- Increased Standard of Living: Increasing the standard of living by increasing the per capita income and equal distribution of income is one of the main aims of India's economic planning.
- Indian planning strategies can be split into two phases: pre-1991 phase and post – 1991 phase.

### **Pre 1991 reforms Phase**

- Heavy Reliance on Public Sector compared to the private sector.
- Regulated Expansion of Private Sector-Private sector was restricted to few areas of activities.

New legislations were created for the restriction for the restriction of the private sector.

- Development of Heavy Industries-Government invested heavily in the development of Heavy industries like the iron and steel industry.
- Protection of Small Scale Industry- Small scale industry was protected by means of the establishment of boards for different small-scale industries and reserving few areas of products exclusively for the small-scale industry.
- Domestic industry was protected from competition in the international market. Heavy import duty was imposed to curb competitive imports, while domestic industries were encouraged to produce domestic substitutes of essential imports.
- Thrust on Savings and Investment- Promotion of savings and investment was the undisputed objective of monetary and fiscal policies of the government. Savings are induced through the high rate of interest. Tax concessions were to mobilize savings.
- Restriction on Foreign Capital- Several types of restrictions were imposed on foreign direct investment. To control and regulate it, Foreign Exchange Regulation Act (FERA) was enforced.
- Adherence to Centralized Planning- State level plans were aligned in sync with the overall objectives and strategy of growth as specified in Five Year Plans.

#### **Post-1991 Phase (Post-reform Phase)**

- The strategy of planning in India witnessed a marked shift in the year 1991. Following are main changes observed under NEP (new economic policy):
- Fiscal policy and monetary policy have been reoriented to facilitate the free play of market forces.
- **Foreign capital in the form of FDI (Foreign direct investment) and FII (Foreign Institutional Investment)** are encouraged.
- **Import restrictions are restricted to the minimum**, while export promotion has been accorded a high priority.
- **Competition rather than controls** have become the fulcrum of the growth process.
- **Direct participation of the government** is significantly tempered and confined only to strategic industries such as atomic energy, minerals, and railways.
- **Partial convertibility of Indian Rupee.**

#### **Achievements of planning –**

- Higher growth rate- first 2 five year plan saw positive growth rate.
- Focused growth in infrastructure development like irrigation, agriculture infra, etc.
- Development of Basic and Capital Goods Industries. During the Second Plan period, some basic

and capital goods industries like iron and steel witnessed spectacular growth.

- Agricultural sector saw higher economic growth.
- The rise in the domestic savings rate from 8.9% of GDP in 1950-51 to 22.3% in 1999-00
- The Import substitution policy from 2<sup>nd</sup> FYP led to economic self reliance.
- Development of Science and Technology: In the era of planning, India has made much progress in the field of science and technology. India stands among the top 50 countries in the Global Innovation Index (GII) 2020.
- Social and Miscellaneous Services: It consists of such vital services as education, health and family planning, Housing, labour welfare and welfare of backward classes etc. and a considerable amount has been allotted in our five-year plans for the provision of these services.

### Limitations of planning

- Unsatisfactory growth in production Sector: Capital intensive industries in urban areas were given precedence over small scale industries in the rural areas, which also led to regional inequality
- Agriculture sector-The five-year plans failed to pay attention to the agricultural sector except for the first five-year plan. In agriculture, the green revolution continues to be confined largely to wheat and rice crops.
- Rise in Prices: almost all the plans witnessed considerable rise in price-level.
- Increase in unemployment: During the period of five-year plans, unemployment went on rising. At the end of the first five-year plan 53 lakh persons were unemployed.
- The share of agriculture in GDP declined from about 50 percent during 1950-51 to about 21% percent of the GDP in 2020.
- Inequality in Distribution of Income and Wealth: One of the main objectives of five-year plans has been to minimise inequality in distribution of income and wealth. But the plan witnessed only an increase in inequality. This inequality is found not only in the industrial sector but in the agriculture sector also.
- Widespread Poverty: Failure to address the problem of unemployment has resulted in widespread poverty in the country.
- Inefficient Administration: Plans are formulated after a good deal of discussion and deliberation but their targets are not achieved due to inefficient administration, dishonesty, vested interest and red-tapism etc.

- **Political Instability:** Political instability and inefficient administration are the major hurdles in successful implementation of the plans.
- **Extra Ambitious:** Indian plans are criticised on the ground that their targets are very ambitious mainly due to first shortage of resources & faulty implementation of the plans.
- **No increase in the Standard of Living:** All the five-year plans of India aimed at raising the standard of living of the people and even the basic necessities have not yet been provided to the people.
- The gap between the targets and achievements underlines the failures of the plans.

### Issues with Planning Commission

- No structural mechanism for regular engagement with states.
- Ineffective forum for the resolution of centre-state and inter-ministerial issues.
- Inadequate capacity expertise and domain knowledge; weak networks with think tanks and lack of access to expertise outside government.
- Failed to implement land reforms.
- It was a toothless body, was not able to make union/states/UTs answerable for not achieving the targets.
- Designed plans with 'one size fit for all' approach. Hence, many plans failed to show tangible results.
- Weak implementation, monitoring and evaluation.

**NITI Aayog** or National Institution for Transforming India was established via a Union Cabinet resolution on January 1, 2015, as a premier Policy Think Tank of the Union Government. It's an extra-constitutional, non-statutory, and advisory body.

### • Objectives of NITI Aayog -

- States' active participation in "light of national objectives" and the provision of a framework 'national agenda'.
- To foster cooperative federalism on an ongoing basis through well-organized assistance programs and procedures with the states.
- To develop ways for developing a sustainable plan at the village stage and subsequently aggregating them at various levels of government.
- An economic program that takes into account national security concerns is among the objectives of NITI Aayog.

- Develop strategic and long-term policy, program, and initiative frameworks and initiatives and evaluate their development and success.
- To provide guidance and foster collaborations between key stakeholders, national and international think tanks, and educational and political research organizations.
- To develop knowledge, creativity, and a support system for entrepreneurs through a shared network of "national and international" professionals.
- To maintain a cutting-edge Resource Centre, serve as a repository for research on excellent governance and best practices in socio-economic development, and assist in disseminating to participants.
- To focus on technology advancement and capacity growth to carry out programs and projects.

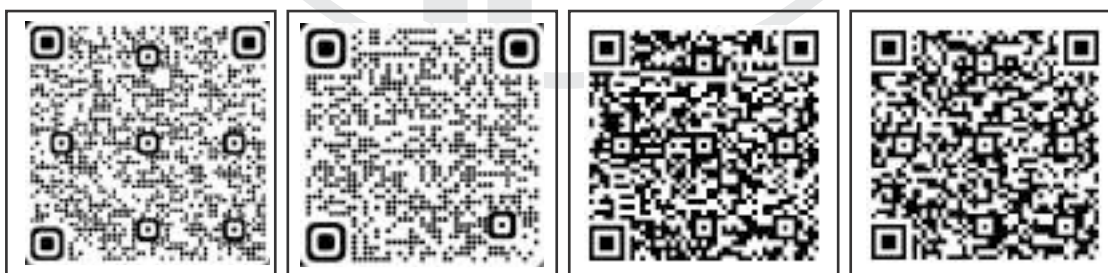
Old vs New	
Planning Commission	NITI Aayog
• Top down approach for planning	• Formulate National Development Strategy in a integrated market economy
• Setting growth targets, goals and strategies	• Evolve National Development Strategy in consultation with the States
• Fundamentally a Central Government institution without State representations	• Partnership with the State Governments to promote co-operative federalism
• Discussions with states on annual plan	• States will continue to receive support for removing bottlenecks and impediments. They will also be able to approach the new institution for consultancy and capacity building
• Allocation of Central Assistance to State Plans in Budget Estimate for 2014-15. Approximately 59% (44% under Centrally Sponsored Schemes and 15% under block grants) flows to States	• States will tailor their plans to suit their needs under more than 40 Centrally Sponsored Schemes. Greater flexibility for States-specific needs in each scheme.

- To carry out any other actions required to execute the public investment schedule and objectives of Niti Ayog.

### Comparison between NITI Ayog & Planning Commission

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# Mobilisation Of Resources

## Previous Year Questions

Year	Questions	Context/Theme/Inspiration
2017	Among several factors for India's potential growth, savings rate is the most effective one. Do you agree? What are the other factors available for growth potential?	Saving is one of the component from where resources are mobilised.
2015	Craze for gold in Indians have led to a surge in import of gold in recent years and put pressure on balance of payments and external value of rupee. In view of this, examine the merits of Gold Monetization Scheme.	Gold monetization was seen as an effort to mobilise the resource which is generally hidden and dormant.

As we see from the analysis of PYQs, we can notice that this topic do not has direct questions asked in mains. However we can expect indirect questions inspired from the topic which is explicitly mentioned in syllabus.

So we need to prepare only broad topics which are given in these notes.

## Introduction

Resource Mobilization, for a government or a non-government organization, is *the identification, organization and utilization of the available material resources* within the country (including financial resources) *to further its objectives of development missions and plans.*

## It also includes following -

- In accordance to a government, mobilization of resources is essentially efficient collection of funds and effective allocation of the above resources to multiple development schemes and plans.
- It is the *process of making unavailable or locked resources free for use* with the motive of attaining a collective goal.
- Mobilization of resources involves *a series of systematic steps* that must be implemented to acquire various useful resources *in a cost-effective and timely manner.*
- The objective behind the process is *optimal utilization of the resources*, i.e., to have the right resources at the right time, available at the right price and used exclusively for the right purpose.

## Why is Resource Mobilization so Important?

- It is helpful in maintaining Organizational Sustainability.
- It keeps a check and guarantees continuation of the organization's (government or non-

government) service provision.

- It paves the way for improvement of the available services and products.
- It supports the expansion of the organization's products and services.
- It is crucial to any organizations existence, as any organization, be it in the public sector or private sector, must continually generate new business to maintain a perpetual presence.
- The proper utilization of these resources leads to generation of economic resources –savings, investment capital, tax, etc.

Now, let us understand various types of resources that needs to be mobilize for carrying out developmental works.

### **Mobilization of Natural Resources**

- This involves identification, organization and utilization of natural resources like mineral wealth, metallic and non metallic resources, Petroleum and other resources.
- The abundance of natural resources helps the country in improving its domestic capabilities to generate production power.
- Therefore scientific and efficient mobilization of these natural resources are important for economic growth and development of a country.

### **Mobilization of Financial Resources**

- This involve efficient generation of financial resources which include – tax and non tax resources, debt mobilisation, building robust tax collection system which ensures sustainability in financial planning.
- Investment in economy is also an important part of financial mobilisation which generates a spill over effect in economic production, which again gives impetus to resource generation.
- The four factor a production, vis a vis, labour, land, organization and capital must be combined to create the right atmosphere of investment and growth.
- The production in a country is carried on in its private sector, public sector, or in PPP. The production of these goods and services is essential for the economy to grow.

### **Mobilization of Human Resources**

- Human resource is the potential of the people in a country. Mobilization of human resources involves identification and utilization of demographic potential.
- Human resources are crucial and must be prepared for ready use. With such a significant population at its disposal, India has started to focus much on mobilizing its human resources.
- Human resources mobilization is clearly the empowerment of the human resources.
- There is an increasing need to utilize the huge demographic dividend.

### **Public sector mobilises resources in following ways :**

- Taxation
- Public revenue generation for investment in social services and infrastructure.
- Foreign aids and loans

### **Private sector mobilises resources in following ways :**

- The private sector mobilizes the savings of households and firms through financial intermediaries, which allocate these resources to investment in productive activities.

### **Issues with mobilisation of resources**

Issues with mobilisation of resources include all those issues and problems highlighted in – mobilization of natural resources, human resources and financial resources. Some of them are discussed here :

- **Limited Domestic public resources:**
  - It makes least developed countries (LDCs) highly dependent on external resources which limit their policy space and create some dependency.
  - Their economic vulnerability is further exacerbated by indebtedness.
- **Weak Domestic taxation and fiscal policies:**
  - The fiscal discipline is hardly seen in developing countries. They often resort to deficit financing to pursue development.
  - The taxes are not broad-based and tax evasion is common in developing countries which squeeze out the chances for public expenditure.
- **Lack of National and sub-regional development banks with rural penetration :**
  - Though India has the presence of big national and international banks but the financial inclusion at rural level has been a myth.
- **Illicit financial flows from developing countries:**
  - Illicit financial flows involve resources that have been obtained, transferred or used illegally or illicitly.
  - A common concern with regard to illicit financial flows from developing countries is the identification of flows considered potentially damaging to economic development.
- **International tax cooperation is weak**
  - In a world of hyper globalization, in which tax systems in some countries can affect public revenue collection in other countries.
  - Such cross-national effects can result from tax evasion, as well as from illicit financial flows arising from the creative accounting or transfer pricing practices of multinational

enterprises.

- **Lack of Multilateral development Banks which are capable of ensuring regular flow of finance to countries.**
- **Structural problems of political governance: it is closely related to the idea that illicit capital flows from-** Developing economies are indicative of deeper structural problems of political governance in these countries.

### **Steps taken to make resource mobilisation efficient**

- Indian Resource Panel (InRP): GOI has established the Indian Resource Panel (InRP) — an advisory body under the MoEFCC to assess resource-related issues facing India and advise the government on a comprehensive strategy.
- Enactment of FRBM Act – it put statutory responsibility on government's fiscal policy.
- Paris climate change: Utilisation of resources can help meet India's Nationally Determined Contributions (NDC) commitments under the 2015 Paris Climate Change Agreement.
- Manufacturing Stage: flagship programmes like "Make in India" that provide special assistance to energy efficient, water efficient and pollution control technologies through Technology Acquisition and Development Fund (TADF).
- Reduced waste generation: It will contribute towards fulfilling the goals of Swachh Bharat.
- Reduce, Reuse and Recycle: There are policies existing to tackle all types of waste ranging from hazardous waste to Municipal Solid Waste (MSW), Construction and Demolition (C&D) waste, plastic waste and e-waste.
- Digitization of governance, tax collection, and financial inclusion which encourages efficiency in resource mobilization.

### **Way forward**

#### **Promotion of:**

- Efficient organisational practices in all the spheres of administration and economy
- Right employment opportunities for human resources
- Skill development programs through schemes like PM KSY, etc.
- Technology development to promote quality in manufacture and performance of product.
- Improve availability and lowering costs of green products in the markets.
- Green public procurement which will ensure sustainability of resources.
- Culture of savings, investments, and financial literacy.

#### **Regulation, Economic Instruments:**

- Viability Gap Funding (VGF) that can help businesses overcome the barriers and become

competitive over time by building scale and upgradation of technology.

- Policy reforms across life cycle stages focussing on their design, emphasis, integration or implementation.
- Tax reforms can play an important role in steering the economy towards resource efficient practices and circular economy. Value-added taxes should be levied on value-added activities like mining, construction, and manufacturing.

### **Institutional Development:**

- A dedicated institutional set up for development, assessment of resources measures should be established.
- Four factors of production- land, labour, capital and organization – should come to together. There should be an atmosphere for growth and investment.

### **Other measures:**

- In India, tax collected is very less. The tax base has to be widened.
- Greater reliance on Domestic Resource Mobilisation (DRM) is vital to elevating economic growth, accelerating poverty reduction and underpinning sustained development.
- Encouragement to new age investment practices which involves private sector to the great extent.
- More spending on research and development to reduce dependence on foreign technology which will help to build more resource efficient economic system in India.

### **Conclusion**

Resource in the form of investment is the most important factor affecting growth. Hence, resource mobilization to boost investment has always been a priority. The task of mobilizing resources involves deliberate decisions on selection of major investments, control of expenditures, monitoring of performance and realization of planned level of economic activity. Going further, it also includes prevention of tax evasion and tax avoidance.

### **Prayaas Tips-**

- This topic does not need special study for mains examination.
- However regular reading of newspaper and economy section will surely help to tackle any indirect questions inspired from this topic.
- The elements of resource mobilisation like taxation, technology adaptation, and government budgeting need to be studied carefully to write good answers for questions based on this topic

### **Some news articles to learn more**

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